

INDOT Categorical Exclusion Manual

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Office of
ENVIRONMENTAL
SERVICES
INDOT



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After May 1, 2009, new Categorical Exclusions must be prepared under the process outlined in this manual.

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I. Introduction

This manual has been developed to guide Indiana Department of Transportation (INDOT) environmental staff, Local Public Agencies (LPAs) and consultants in complying with the [National Environmental Policy Act](#) (NEPA) when preparing federally-funded Categorical Exclusions (CEs) and state-funded categorical exemptions. FHWA and INDOT may also determine that it is appropriate to utilize the CE Manual and CE Format for minor Environmental Assessments (EAs). However, preparers of EA documents also should use INDOT's [Procedural Manual for Preparing Environmental Documents](#) as their primary reference. Standard forms have been designed to provide a consistent process and format for preparing CEs and simple EAs, which will result in a more thorough analysis and more efficient advancement of projects that are expected to have minor environmental impacts.

CEs comprise most of the environmental documents prepared for transportation projects in Indiana. INDOT and the Federal Highway Administration (FHWA), through a programmatic agreement, have agreed to four levels of review and approval for these projects. The review and approval process outlined in the Programmatic Agreement is designed to align the level of review with the impacts of the project. The appropriate level of a CE is based on the type of action and the anticipated impacts of the project. The Programmatic Agreement provides for:

- A process that will allow INDOT Districts and INDOT's Office of Environmental Services (OES) to act on behalf of the FHWA in assuring compliance with all applicable federal environmental and related requirements pertaining to CEs.
- A process that will be consistent in documenting information that allows for defensible CEs on a statewide basis.
- A process that is concise and easy to follow.
- A process that allows those with limited exposure to the environmental process to follow, provide the proper information and make appropriate decisions within the bounds of the Programmatic Agreement; and
- A process that uses technological advances to reduce the amount of paperwork.

INDOT will ensure that all coordination, evaluations and decisions are adequately documented under the CE preparation process.

INDOT has developed three [Project Development Processes](#) (PDP) to guide projects from planning through construction. The three processes cover major projects, minor projects and maintenance activities. Each PDP provides a sequence of project steps from start to finish, describes the responsibilities of the different INDOT offices, and explains the relationships between different phases of the project. The NEPA process is integrated with the PDPs to ensure that it contributes to the overall success of highway improvements.

This manual was prepared with the combined efforts of the OES and the FHWA. If there are any questions regarding the contents of this manual, the CE/EA form or attachments, please contact the OES Manager. This manual and other relevant forms can be downloaded from INDOT's publications list at <http://www.in.gov/indot/3295.htm>.



Within INDOT, all projects are reviewed for NEPA compliance either in one of the district offices (Crawfordsville, Fort Wayne, Greenfield, Seymour, LaPorte and Vincennes) or in the Central Office (Indianapolis). Each district office is responsible for preparation of the Categorical Exclusion-level projects developed in their district, as well as review of LPA projects within the district. Preparation and review of NEPA documentation for Central Office-managed projects is the responsibility of the Environmental Policy Section of the Office of Environmental Services (see organizational chart in Appendix D).

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I.A. Consultant Pre-qualification Criteria

Consulting firms desiring to function as the prime consultant for the NEPA phase of the PDP must identify a project manager who meets [INDOT's prequalification requirements](#). This person will act as the key professional managing the environmental process. Given the nature of NEPA as an interdisciplinary process, it is of great value for the manager to have a general knowledge of various environmental disciplines. The requirements reflect the most appropriate general educational backgrounds but are not exclusive to certain degrees or licenses.

1. **Formal Education** - The environmental project manager must hold a bachelor's degree or higher in environmental science, planning, engineering or a closely related field.
2. **Qualifying Experience** - The environmental project manager must demonstrate experience in the preparation of acceptable CEs. "Acceptable" means documents that have been formally approved by INDOT or the FHWA with minimum comments or revisions. CEs that require multiple revisions and re-submissions will not be considered acceptable for meeting prequalification requirements.

If the project manager has a Bachelor of Science or Arts degree, three years of experience are required. If the project manager has a Master of Science or Arts degree or higher, two years of experience are required.

3. **INDOT Training** – The environmental project manager must have current INDOT certification for CEs. This may be accomplished by successfully completing INDOT's one-day CE Class. As of December 31, 2008, completion of the three-day INDOT NEPA course and re-certification, may no longer be substituted for the one-day CE Class.

Prequalification materials must be submitted prior to responding to a Request for Proposals. Consultants must submit all pre-qualification materials demonstrating education and experience to the [Pre-Qualification Engineer](#) in the Division of Contract Administration. Contact the Division of Contract Administration for details concerning prequalification.

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I.B. Classes of Environmental Documents

The [National Environmental Policy Act](#) (NEPA) mandates that the type of documentation for federal actions be determined by the potential impacts projects may have on the surrounding natural, cultural, and social environment. The regulations that implement NEPA define these document types and explain their use. The Council on Environmental Quality (CEQ) regulations ([40 CFR 1500-1508](#)) implement NEPA as it applies to all federal agencies. The FHWA's regulations ([23 CFR 771](#)) further describe the FHWA's policies and procedures for implementing NEPA and the CEQ regulations.

There are three classes of action that prescribe the level of documentation required in the NEPA process for federal actions.

- Class I, [Environmental Impact Statement](#) (EIS): A detailed written report that provides “full and fair discussion on significant environmental impacts and [informs] decision-makers and the public of the reasonable alternatives that would avoid or minimize adverse impacts or enhance the quality of the human environment.”
- Class II, [Categorical Exclusion](#) (CE): A classification given federal actions that do not have a significant effect on the environment either individually or cumulatively.
- Class III, [Environmental Assessment](#) (EA): A document prepared for federal actions that is not eligible for a CE but does not appear to be of sufficient magnitude to require an EIS. This may be due to impacts to specific kinds of resources (such as those protected by Section 4(f) of the US Department of Transportation Act), or due to public controversy over the project. An EA provides the analysis and documentation to determine whether an EIS or a Finding of No Significant Impact (FONSI) should be prepared.

Projects which use only state and/or local funds and require no other federal approvals will follow the state environmental process instead. These will result in state Categorical Exemptions, Environmental Assessments or State Environmental Impact Statements. See I.C.3 for more information.

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I.C. The Four Levels of Categorical Exclusions

Categorical Exclusions (CEs) are actions which will not individually or cumulatively have a significant impact on the environment, as defined by the Council on Environmental Quality (CEQ) regulations in [40 CFR 1508.4](#). For transportation projects, the Federal Highway Administration's (FHWA) regulations in 23 CFR 771.117(a) specify that CEs are appropriate for actions which, based on past experience, have been shown to have insignificant impacts.

Any action may be classified as a CE if it meets the definition in 23 CFR 771.117(a) and does not exhibit any of the criteria in 23 CFR 771.117(b):

1. *Significant environmental impacts;*
2. *Substantial controversy on environmental grounds;*
3. *Significant impact on properties protected by Section 4(f) of the DOT Act or Section 106 of the National Historic Preservation Act; or*
4. *Inconsistencies with any federal, state, or local law, requirement or administrative determination relating to the environmental aspects of the action.*

In consultation with the Office of Environmental Services (OES), the preparer should consider the class of action and demonstrate that the project will not involve any of the four unusual circumstances in 23 CFR 771.117(b) shown above. If any of these situations arise during project development, it may be necessary to elevate the project to a higher class of document (Environmental Assessment or Environmental Impact Statement). Documentation must be provided to clearly show that the project is properly classified as a CE.

INDOT and the FHWA have agreed to four levels in which a project may qualify as a CE. The appropriate level of a CE is based on the type of action and the anticipated impacts of the project. These impacts will determine the appropriate level of NEPA class, as well as the appropriate level of CE. [Table 1](#) provides CE Level thresholds.

The following [forms](#) are used to document the NEPA process for CEs on transportation projects:

- **Environmental Screening/CE-1 Form (Attachment 1)** – This form is used to assess the level of documentation that will be needed for a federal-aid project. For CE Level 1 projects, the Environmental Screening/CE-1 Form completes the CE Process.
- **Categorical Exclusion/Environmental Assessment Document Form (Attachment 2)** – This form is completed for CE Level 2, 3, and 4 projects.
- **Environmental Consultation Form (Attachment 3)** -- Prior to project letting, the Environmental Consultation Form is completed by the designer to determine whether conditions of the project have changed and whether the NEPA classification remains valid for the action. The completed document, dependent upon the level of CE, is then submitted to either the district ESM/DPD or OES for review and approval. The approved Environmental Consultation Form is then returned to the designer for inclusion with the other contract documents. If the project has changed significantly, a re-evaluation of the environmental document may be necessary.



The appropriate review and approval path depends on the level of documentation. CE-1 and CE-2 documents may be approved at the district. They require limited or no right-of-way acquisition and are not reasonably anticipated to require detailed technical studies. If impacts are encountered during preparation of these documents that exceed the relevant thresholds in Table 1, the project should be elevated to a higher level of environmental document.

CE-3 documents must be reviewed by Central Office OES in addition to the district. They may involve larger acreage or impacts to resources that require more extensive or specialized study, such as noise analysis or Section 4(f) impacts. Projects that exceed the thresholds for a CE-3 or require specific federal approval (often by law or regulation) must be CE-4 documents. CE-4s must be approved by the district, OES and the FHWA.

Beyond these criteria, certain impact types (e.g. Section 4(f) programmatic or *de minimis* findings, or noise impacts) must be reviewed by the FHWA regardless of whether the CE itself requires their review; see the appropriate subject sections of this manual for further information on how this should be managed.

When the CE is complete, the applicable criteria should be highlighted in Table 1 on the form, showing that the document has been correctly categorized based on the impacts of the project.

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Table 1: Categorical Exclusion Level Thresholds

	Level 1	Level 2	Level 3	Level 4
Relocations	None	≤ 2	> 2	> 10
Right-of-Way¹	< 0.5 acres	< 10 acres	≥ 10 acres	≥ 10 acres
Length of Added Through Lane	None	< 1 miles	≥ 1 mile	≥ 1 mile
Permanent Traffic Pattern Alteration	None	None	Yes	Yes
New Alignment	None	None	< 1 mile	≥ 1 mile ²
Wetlands	< 0.1 acres	< 1 acre	< 1 acre	≥ 1 acre
Stream Impacts*	≤ 300 linear feet, ≤150 linear feet REC, ≤ 1 acre	> 300 linear feet, > 150 linear feet REC	>1 acre	>1 acre
Section 4(f)	None	None	Programmatic/ <i>de minimis</i> Findings ³	Individual 4(f)
Section 6(f)	None	None	Any impacts	Any impacts
Section 106*	“No Historic Properties Affected” or falls within guidelines of Minor Projects PA	“No Adverse Effect” or “Adverse Effect”	N/A	If ACHP involved
Noise Analysis Required	No	No	Yes ⁴	Yes ⁴
Threatened/Endangered Species	"No Effect", or Falls within Guidelines of USFWS 9/8/93 Programmatic Response	“Not likely to Adversely Affect”	“Not likely to Adversely Affect”	“Likely to Adversely Affect” ⁵
Sole Source Aquifer Groundwater Assessment	Detailed Assessment Not Required	Detailed Assessment Not Required	Detailed Assessment Not Required	Detailed Assessment Required
Approval Level				
• ESM⁶	Yes	Yes	Yes	Yes
• OES			Yes	Yes
• FHWA				Yes

*These thresholds have changed from the March 2008 Manual.

¹Permanent and/or temporary right-of-way.

²If the length of the new alignment is equal to or greater than one mile, contact the FHWA’s Air Quality/Environmental Specialist.

³The FHWA must review and approve Programmatic and *de minimis* Section 4(f) prior to CE approval.

⁴In accordance with INDOT’s Noise Policy.

⁵ If the project is considered Likely to Adversely Affect Threatened and/or Endangered Species, INDOT and the FHWA should be consulted to determine whether a higher class of document is warranted.

⁶Environmental Scoping Manager



I.C.1 CE Level 1 Projects

INDOT and the FHWA have identified specific project scopes that may qualify as CE Level 1 projects, provided the project impacts do not exceed the thresholds identified in [Table 1](#). While state and federal laws and regulations still apply, less coordination and review is required due to lower risk of impact to protected resources. Among these, there are two groups of project scopes that qualify for this level of documentation. The first, listed in [Table 2](#), contains projects that are defined by the FHWA in regulations ([23 CFR 771.117](#)) as CEs.

Table 2: CE Level 1 Projects Pursuant to 23 CFR 771.117(c)

1	Activities which do not involve or lead directly to construction, such as planning and research activities; grants for training; engineering to define the elements of a proposed action or alternatives so that social, economic, and environmental effects can be assessed; and Federal-aid system revisions which establish classes of highways on the Federal-aid highway system.
2	Approval of utility installations along or across a transportation facility.
3	Construction of bicycle and pedestrian lanes, paths, and facilities.
4 ¹	Activities included in the State's highway safety plan under 23 U.S.C. 402.
5	Transfer of Federal lands pursuant to 23 U.S.C. 317 when the subsequent action is not an FHWA action.
6	The installation of noise barriers or alterations to existing publicly owned buildings to provide for noise reduction.
7	Landscaping.
8 ²	Installation of fencing, signs, pavement markings, small passenger shelters, traffic signals, and railroad warning devices where no substantial land acquisition or traffic disruption will occur.
9	Emergency repairs under 23 U.S.C. 125.
10	Acquisition of scenic easements.
11	Determination of payback under 23 U.S.C. 156 for property previously acquired with Federal-aid participation.
12	Improvements to existing rest areas and truck weigh stations.
13	Ridesharing activities.
14	Bus and rail car rehabilitation.
15	Alterations to facilities or vehicles in order to make them accessible for elderly and handicapped persons.
16	Program administration, technical assistance activities, and operating assistance to transit authorities to continue existing service or increase service to meet routine changes in demand.
17	The purchase of vehicles by the applicant where the use of these vehicles can be accommodated by existing facilities or by new facilities which themselves are within a CE.
18	Track and railbed maintenance and improvements when carried out within the existing right-of-way.
19	Purchase and installation of operating or maintenance equipment to be located within the transit facility and with no significant impacts off the site.
20	Promulgation of rules, regulations, and directives.
21	Deployment of electronics, photonics, communications, or information processing used singly or in combination, or as components of a fully integrated system, to improve the efficiency or safety of a surface transportation system or to enhance security or passenger convenience. Examples include, but are not limited to, traffic control and detector devices, lane management systems, electronic payment equipment, automatic vehicle locaters, automated passenger counters, computer-aided dispatching systems, radio communications systems, dynamic message signs, and security equipment including surveillance and detection cameras on roadways and in transit facilities and on buses.

¹ These activities are non-infrastructure programs, such as educational programs to encourage seatbelt use.

² These activities may include general pavement markings, line painting, and installation of raised pavement markers, maintenance of signs, and maintenance of fencing.



While certain project types are specifically defined as CEs, 23 CFR 771.117(d) also allows the FHWA to propose additional project types for management as CEs. INDOT and the FHWA-IN have agreed to seven project scopes under this provision, based on past experience with projects in Indiana. These project types are listed in [Table 3](#).

Table 3: INDOT/FHWA CE Level 1 Projects

A	Culvert and pipe replacement/reconstruction. (All permits and coordination are still required.)
B	Modernization of a highway by resurfacing/reconstruction of pavement/sidewalks.
C	Guardrail projects where no new bank stabilization is required (except for end treatment areas) as long as work is within previous construction limits.
D	The replacement of traffic signals within existing rights-of-way.
E	Bridge deck overlays, bridge deck replacements, bridge painting projects and other bridge maintenance activities, within existing rights-of-way.
F	Herbicidal spraying within existing right-of-way.
G	Mowing or brush removal/trimming within existing right-of-way.

There may be other types of projects that qualify as a CE Level 1 based upon meeting the threshold limits, but are not listed above. If there are questions about applicability, please contact the OES. Decisions as to the proper level of CE documentation will be made on these types of projects on a project-by-project basis.

For Level 1 projects, the CE-1 Form (Attachment 1) completes the environmental documentation. For higher-level CEs, the CE-1 Form can provide an overview of potential issues that must be investigated and documented in the CE 2-4 Form. The CE-1 Form is not required if the project is clearly a Level 2 or higher project due to known resource impacts, although it may still be useful as a screening tool.

For information on CE-1 documentation, see [Section III, Completing the Environmental Screening/CE-1 Form](#).

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I.C.2. CE Levels 2 Through 4 Projects

The regulations ([23 CFR 771.117](#)) allow for CEs beyond those which INDOT has designated as CE-1s. However, these require additional analysis and review to verify that a CE is appropriate. The CE/EA Form should be used for any project which appears to be a CE but which exceeds the thresholds for a CE-1. The CE/EA Form covers the same resource categories as the CE-1 form, but in greater depth.

For some projects the level of documentation will change as environmental investigations progress. This may result in elevation to a higher-level of CE (or higher class of environmental document), or may result in a smaller document if the size and/or anticipated impacts of the project decrease. The preparer should assess the project against the thresholds as information becomes available. At any time, the OES or the FHWA may elevate a CE to a higher level or



different NEPA class based on considerations outside those in the thresholds chart, such as substantial public controversy or environmental justice impacts.

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I.C.3. State-Funded CE Projects

For projects that are developed, designed and constructed using only state funds, the project sponsor must comply with [Indiana's Environmental Policy Act \(IC 13-12-4\)](#). Depending on the range of impacts from the project, it may qualify for a State Categorical Exemption or may require a State Environmental Assessment or State Environmental Impact Statement as defined in [327 IAC 11-1](#). The OES should be contacted to determine the appropriate level of documentation to be completed.

Under [327 IAC 11-1-3\(f\)](#), a list of Categorical Exemptions was prepared by INDOT and filed with the Indiana Department of Environmental Management (IDEM, then called the Environmental Management Board) and on August 10, 1975 a list of accepted and not accepted "Categorical Exemptions" was issued. These are listed in [Table 4](#).

All state-funded projects should be documented on the Environmental Screening/CE-1 Form. If the project qualifies for one of the above-referenced Categorical Exemptions, the number of the applicable exemption should be provided in the CE-1 form. In order to reduce unnecessary repetition, these minor projects may be grouped on an annual basis. For example, one CE-1 may be produced covering all mowing work to be completed within the district in a given year.

Additional documentation beyond the CE-1 Form may be required for projects that do not qualify as Categorical Exemptions, either a state Environmental Assessment or state Environmental Impact Statement. See the [Procedural Manual for Preparing Environmental Documents](#) for more information.

**Table 4: State-Funded Categorical Exemptions**

1.	Pipe culvert replacement.
2.	Bridge painting.
3.	Mowing.
4.	Installation, modernization or maintenance of signs, traffic signals, pavement markings, highway lighting, and channelization within the existing right-of-way.
5.	Patching and crack sealing of roadway surfaces.
6.	Resurfacing existing pavement.
7.	Guardrail and fence installation or repairs.
8.	<i>Herbicide treatment. (NOT ACCEPTED BY IDEM)*</i>
9.	<i>Storage and winter application of ice melting chemicals or sand. (NOT ACCEPTED BY IDEM)*</i>
10.	Right-of-way abstracting, engineering appraising, property management and administration.
11.	Landscaping and erosion control.
12.	Safety projects such as pavement grooving, flare screen, safety barriers, and energy attenuators.
13.	Addition or reconstruction of railroad crossing protection.
14.	<i>Rest area construction or modernization. (NOT ACCEPTED BY IDEM)*</i>
15.	Reconstruction or replacement of an existing bridge crossing a stream, railroad, or roadway.
16.	Addition of special facilities to an existing highway for the exclusive use of buses.
17.	Slide correction measures which are not emergencies but are necessary to preserve the highway facility.
18.	Modernization of an existing highway by widening less than a single line (sic.) width, adding shoulders, adding auxiliary lanes for climbing, turning or weaving, and correcting substandard curves and intersections.
19.	<i>Construction of a new rural two-lane highway which does not provide new access to a new area and which would not be likely to precipitate significant changes in land use or development patterns. (NOT ACCEPTED BY IDEM)*</i>

* These project types originally nominated by INDOT were not accepted by IDEM. They have been retained in the list to maintain numbering.

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I.C.4. Re-evaluation of CE Projects and Mitigation Sites for CEs

After the CE has been approved, all changes in the project's scope/design (i.e. changes in number or types of lanes, right-of-way, and a change from a partial to a total take) will trigger the need for a re-evaluation of the project's impacts to the environment. The Additional Information (AI) document should discuss whether the changes in design result in additional impacts to the environment. An AI should be approved by the same agencies that approved the



original CE (i.e. if the CE is a level 3, the AI must be approved by the district ESM and OES or if the CE is a level 4, the AI must be approved by the district ESM, OES, and the FHWA).

Additionally, INDOT and the FHWA have prepared the Environmental Consultation Form (Attachment 3) to be used by the project sponsor prior to plan submission to determine whether the scope or impacts have changed. The project manager is responsible for ensuring that this review is completed at the appropriate stage of the project development process. On this form, the designer documents whether or not conditions of the project have changed and whether the project is still consistent with the CE. If this review shows that the CE is no longer consistent with the project's scope or impacts, a written re-evaluation is required.

A mitigation site should be documented in a separate CE if it is located outside the project area or if mitigation is coordinated prior to approval of the CE for the associated road project. Mitigation sites documented with a separate CE should have a separate INDOT project designation number. If there is already an approved CE for the project and the mitigation site is within or adjacent to the project footprint for the roadway, the mitigation site should be documented as a re-evaluation of the roadway.

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II. The Categorical Exclusion Process

II.A. Categorical Exclusion (CE) Development Process Defined

The majority of the environmental documents prepared for INDOT and Local Public Agency (LPA) sponsored projects are CEs. These projects may include such activities as pavement rehabilitations, bridge replacements, intersection improvements and even added travel lane projects. INDOT follows a [Project Development Process](#) (PDP) in developing all projects. LPAs must also, for the most part, follow INDOT's PDP, all applicable environmental manuals, and the environmental review processes to ensure that all statutory and policy requirements are met. By following the previously mentioned sources of guidance, the project sponsor will be assisted through the critical decision making areas typically encountered in the preparation of CEs. The minor differences between the development of LPA sponsored project CE and INDOT sponsored project CE will be discussed later in Section II.B.

Level 1 CE projects will not generally require the same level, intensity or diversity of study as may be required for CE Levels 2, 3 and 4. The processes involved in the preparation of a CE and the contents of a CE will be determined by the type of project and the severity and complexity of the impacts anticipated.

II.A.1. Step 1: Gather Preliminary Information

A. Identification and Notification of Landowners

As early as possible, the parcels of land that will likely be impacted by a programmed project will need to be identified. A complete and accurate list of the names and addresses of the landowners and tenants of the potentially impacted parcels should be compiled. This list should be kept on file at the District Office, Central Office (CO) or LPA consultant office and be made available for other uses as needed. There is more than one method that can be used for landowner identification including visiting the county courthouse or using the internet to review property owner information.

Prior to initiating and conducting any field studies that require physical entry onto privately owned land, the preparer of the environmental document will make sure that Notice of Entry (NOE) letters have been mailed to identified property owners and tenants notifying them of INDOT's intent and right to enter upon their property and conduct the necessary investigations. It is INDOT's policy that the preparer of the environmental document should make all effort to send a NOS letter to all potentially affected property owners and residents early enough so that they will have their letters in their possession for a minimum of five (5) days before the intended entry. This will provide an ample opportunity to ask questions should any of the NOE letter recipients desire to do so. A sample of the NOE letter is provided in the appendices as Appendix H. Public notification by NOS letter and the legal notices, that are later discussed in Step 3 ([Item C, Public Involvement](#)), are two of the first steps in the CE process.



All employees and representatives of INDOT shall present proper identification or authorization to the occupant of the property before entering onto the property ([IC 8-23-7-26 and 27](#)). A new NOE letter should be sent to the affected property owner and tenant if fieldwork is actually needed and the previous NOS letter is more than 6 months old. The address list for affected property owners should be updated every two years.

B. Request Red Flag Investigation

During the initial planning and development of the CE document, a red flag investigation should be conducted to determine areas of concern within the project study area. Areas of concern within a study area are called “red flags”. Conducting a red flag investigation early on in the process allows the preparer to more closely examine areas or items of concern that might be impacted as a result of the proposed action. For environmental documents prepared by INDOT district personnel, the Environmental Scoping Manager (ESM) or authorized representative should submit a red flag survey request for each project to the OES Red Flag Specialist, with a copy to the Hazardous Materials Unit Supervisor. For environmental documents prepared by OES staff, the individual preparer will submit the request to the Red Flag Specialist, with a copy to the Hazardous Materials Unit Supervisor. Contract consultants will perform the necessary red flag investigations on the behalf of INDOT and submit it to the Hazardous Materials Unit Supervisor for review and approval. The preparers of LPA sponsored projects are responsible for performing their own red flag investigations.

The purpose of the red flag investigation is to screen the project area and identify points of concern, including environmental, constructability, and engineering issues. Environmental issues can include hazardous materials and ecologically and culturally sensitive sites. The red flag investigation request should consist of at least a project description and a map of the project location. The red flag survey should be a research tool that helps to determine if any red flags (potential issues) are located with the project area. For every red flag item found, an appropriate specialist at OES should be consulted to determine the level of concern for each item.

An information tool that is helpful with red flag investigations is the [GIS Atlas for Indiana](#). Many of its 200 layers are pertinent to possible red flag items.

C. Conduct Site Visit

Site visits are made to assess and evaluate the existing conditions of the project area and to determine the impacts that are likely to occur as the result of the proposed project. It can also be determined during site visits whether or not most of the red flag items are present and whether or not those present are of concern and require additional investigation.

A site visit for a specific purpose will not be productive unless all of the necessary participants are in attendance. Those generally required to be present at the initial site visit include, at a minimum, the document preparer, the scoping engineer and the project manager. Others that could benefit from attending the initial site visit may include historians, archaeologists, ecologists, permittees, hazardous waste specialists and geologists. These optional attendees will be determined by the type of the likely impacts as the result of the proposed project. However, the requirements of those others’ specialized work and investigations may also be better served by visiting the site individually at a later date when the project footprint has been established.



D. Gather Secondary Source Documentation

The identification of environmental resources in the study area involves reviewing available secondary source information which provides an inventory of known environmental, social, and cultural resources. Specific resources which could be researched include, but are not limited to the following:

- Historic sites/districts and architecturally significant structures ([National Register of Historic Places](#) and county interim report).
- Archaeological sites (Records checks at the university(ies) closest to the project site and Indiana DNR, Division of Historic Preservation and Archaeology).
- Wetlands ([National Wetland Inventory](#)).
- Waterways (rivers, streams, ditches and other bodies of water).
- Threatened and endangered species ([US Fish and Wildlife Service](#)).
- Land use.
- [Section 6\(f\) resources](#).
- Potential Section 4(f) resources.
- Public water supplies ([IDEM](#), [IDNR, Division of Water](#)).
- Coal and other mines.
- Hazardous materials (Red Flag Investigation and additional investigations).
- Environmental Justice demographic data ([US Bureau of the Census](#)).

As previously mentioned in the red flag investigation discussion, a very useful source of information for the preceding resources is the [GIS Atlas for Indiana](#). This INDOT funded site contains over 200 layers of information. Information from the technical studies, the environmental secondary source review, site visits, and engineering review should be presented on maps, aerial photographs and other graphics whenever possible.

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II.A.2. Step 2: Determine Scope, Schedule, and Budget

A. Identify and Evaluate Conceptual Alternatives

The sponsoring INDOT District Office, Central Office or the sponsoring LPA is responsible for working with project stakeholders regarding their projects. The project sponsor or their consultant will identify, analyze and evaluate the conceptual alternatives and scope of the project to ultimately identify the best alternative to meet the identified Purpose and Need for the project. Except for some of the larger CE Level projects where the Purpose and Need may need to be revised as the project develops, the Purpose and Need, as stated in the Engineer's Report, will generally be sufficient for the environmental document.

Many projects will have and require only two alternatives, the "do nothing" and the "build." Projects types such as intersection improvements and bridge replacements are typically designed to utilize the existing roadway alignment if the horizontal and vertical curvatures are within current design standards. There would rarely be a need to introduce alternative alignments for



these projects. Larger CE level projects that are to be constructed on new alignment, require extensive improvements to the existing horizontal or vertical alignments or for some reason lend themselves to multiple design alternatives will very likely have more than just the two basic alternatives. For those projects that may have impacts to [wetlands](#), [Section 4\(f\)](#) or [Section 6\(f\)](#) resources, the inclusion of avoidance alternatives is required.

At the beginning of the CE process, the public involvement plan (PIP) is prepared at the same time as the Engineer's Report. Preliminary engineering is conducted to develop feasible alternatives concurrently with the necessary environmental studies. The preliminary engineering may include:

- Traffic data to determine the location of interchanges and other access points.
- Grade separations.
- Trip generators.
- Level(s) of service.
- Number of travel lanes.
- Other safety/capacity issues in the study area.
- Alignment and profile development to illustrate mainline curvature.
- Approximate work limits, points of access, cross-road separations, railroad crossing separations, service roads, retaining walls and structures.
- Complex/non-complex drainage conveyances.
- Landlocked properties.
- Identification of utilities and whether they will require relocation.
- Estimates for the total cost of utility relocation with State and utility owner costs separately listed.
- Estimates for the total cost of the project including preliminary engineering, right-of-way and construction.
- Current scheduling information including the contract letting date and the anticipated construction completion date.

Much, if not all of the preceding information and data will be included in the appropriate sections of the CE document.

B. Determine Level of Environmental Documentation

If a project qualifies as a CE-1, the NEPA requirements are satisfied when the CE-1 Screening Form is completed and approved. For CE-1 projects prepared at the district office by district environmental personnel or by their contract consultant, the INDOT District Environmental Scoping Manager (ESM) will approve the document and maintain project environmental files at the District Office. For CE-1 projects prepared at the CO by OES personnel, the Manager of the Environmental Policy Section will approve those environmental documents.

For those projects that will clearly exceed the threshold limits of a CE-1, the preparation of the CE-1 Screening Form is not required. The level of the CE is not known until impacts are determined and the associated investigations are completed and approved. The preparer should



highlight the applicable criteria in the CE Level Threshold Table ([Table 1](#)) to show the apparent document level.

It is possible, although very uncommon, for a project that started out with the preparation of a CE to be elevated to an Environmental Assessment/FONSI due to significant public controversy or a potentially significant impact. Such determining factors are, however, generally known prior to the initiation of the environmental process.

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II.A.3. Step 3: Perform Environmental Analysis

A. Early Coordination with Resource Agencies, Consulting Parties and Others

The sponsor of the project initiates the early coordination process with resource agencies, Section 106 consulting parties and other required groups and individuals to provide them with project information and to receive specific information regarding the probable impacts of the various alternatives. Included in the early coordination letter (ECL) should be the following information for each alternative under consideration:

- Description of the existing conditions of the project area, including the roadway deficiencies, alignment, right-of-way, and current land use.
- Draft Purpose and Need of the project.
- Project length.
- Vertical and horizontal alignment changes.
- Anticipated number of lanes and pavement widths.
- Proposed permanent and temporary right-of-way widths and total acreages of each type of land use required.
- Proposed in-stream work and channel changes.
- Access control.
- Environmental considerations.
- Project schedule.

The ECL should not mention the level of environmental document to be prepared for the proposed project. See Appendix I and the [Procedural Manual for Preparing Environmental Documents](#) for details concerning the preparation of an ECL and listing/addresses of the agencies and other recipients of an ECL. A comment period of thirty days is given to the recipients of the ECL to review and make comments regarding the proposed project. Extensions to the thirty day comment period may be approved if adequate justification is provided in the request for an extension. Attachments to the ECL should include graphics of the project area which include the following types of information:

- Topographic map indicating the location of the project.
- Aerial photos indicating the location of the project.



- Plan sheets, if available should be attached with proposed project limits, existing and proposed alignments, existing and proposed rights-of-way and locations of any potential areas of concern.
- Photographs of the existing roadway in multiple directions, all quadrants at any bridges, and up and downstream of all streams crossed.

A Programmatic Agreement regarding early coordination exists between INDOT and the USFWS (see Appendices N and O) and is to be utilized when appropriate. IDEM utilizes [electronic coordination](#). An invitation to attend or participate in any District/LPA meetings or conference calls with early coordination agencies should be extended to the appropriate section or sections of the OES, who will attend as appropriate.

Level 1 CEs may require no, partial or full early coordination. The decision on how much early coordination is required should be made subsequent to a review of the potential impacts. For level 1 CEs, if it is determined there are any possible impacts to archaeological resources due to the necessity for additional right-of-way or if there are National Register listed or eligible (historic) resources within the area of potential effect (APE), the Section 106 process should be immediately initiated. Additionally, if waterway resources are impacted, then early coordination with the permitting agencies is recommended. CEs level 2, 3 and 4 require full coordination.

B. Environmental Field Studies and Analysis

Based on the magnitude of the anticipated environmental impacts documented during the [secondary source review](#) in Step 1, the required level of environmental field studies and regulatory agency coordination is determined. The inventoried information is mapped on a study area exhibit (aerial photography or other mapping as appropriate). The exhibit should show all features identified in the study area, including the red flag areas identified earlier. Each resource should be labeled to assist in describing how it will be impacted. All decisions that are made at this stage should be well documented.

Field studies are conducted on the feasible alternatives to identify the characteristics of the natural and man-made resources within the study area. The information gathered in the literature search and the field studies will be used to avoid or minimize, where avoidance is not possible, potentially adverse impacts to sensitive resources. The amount of data collected and coordination required will vary according to the impacts associated with the project. Studies for this may include, but are not limited to the following:

- An [Ecological Evaluation](#) that identifies the biological resources found during the field studies of the project area should be prepared by a qualified person. This ecological survey tool will identify the anticipated impacts of each alternative on both the terrestrial and aquatic habitats and include a discussion on any known threatened or endangered species. This should be attached to the appendices of the CE level 2-4 document.
- A cultural resources survey that identifies both archaeological and historic sites that may be impacted is required for all projects except for the most minor of CE-1 level projects. This includes documentation and analysis of the cultural resource investigations in a specific survey area. For the specific contents of what should be included in a cultural resources survey, consult the [Indiana Cultural Resources Manual](#).



- A [wetlands](#) delineation must be prepared if it has been previously determined that wetlands are present.
- A [karst](#) feature study must be prepared if the project is located within the designated karst feature boundaries and karst features have been identified and may be impacted by the proposed project. If the project area is well outside of the designated karst features area, the need for such a study will be made on a case-by-case basis. Karst studies on LPA sponsored projects are discussed later in Section II.B.
- Additional studies may be prepared if other sensitive features or resources are present. For example, a recognized State's largest tree that is of local significance may require some investigation and may prompt some design considerations.
- A [Phase I hazardous materials investigation](#) will assess liabilities in property acquisition and identify properties impacted by regulated substances and/or hazardous waste. This assessment involves gathering parcel-specific information to determine whether a Phase II investigation will be required.
- A [community impact assessment](#) may be required to address social and economic impacts (environmental justice, community issues).
- A [Section 4\(f\)](#) evaluation to determine if protected resources including publicly owned parks, recreation lands and wildlife and waterfowl refuges and historic resources within the study area will be performed.
- A [conceptual relocation study](#) or business needs survey may be required if a sufficient number of relocations are associated with the proposed project.

Should any of the preceding studies or investigations indicate a potentially significant impact, INDOT should discuss the impacts with FHWA. INDOT and FHWA will jointly determine if the project should be raised to a higher level of environmental document such as an EA or EIS. For further details on the above studies, see the [Procedural Manual for Preparing Environmental Documents](#).

Once literature searches, individual environmental studies, and preliminary engineering are completed and resource areas are identified, potential impacts in the project area should be identified and quantified. An understanding of the location and intensity of environmental, social and cultural impacts will allow the project to avoid critical or protected resources. The project should be analyzed to determine how impacts may be avoided, or minimized if they cannot be avoided. Impact types include direct, indirect and cumulative. Direct impacts are those that are caused by an action and occur at the same time and place as the action. Indirect and cumulative impacts may or may not be associated with a project. Specific information and guidance regarding indirect and cumulative impacts can be found in Section III.C.7.b, [Indirect and Cumulative Impacts](#).

In determining the intensity of an impact, the following factors should be taken into consideration:

- Beneficial effects: improvements to the human or natural environment as a result of the project.
- Public health: the degree to which the proposed action affects public health or safety.



- Unique characteristics: unique characteristics of the geographical area, such as proximity to historical or cultural resources, parklands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.
- Degree of controversy: the degree to which the effects on the quality of the human environment are likely to be controversial.
- Degree of unique or unknown risk: the degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.
- Precedent-setting effect: the degree to which the action may establish a precedent for future actions with significant effects.
- Cumulative effect: whether the action is related to other actions with individually insignificant, but cumulatively significant, impacts.
- Cultural or historical resources: the degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in, or eligible for listing in, the National Register of Historic Places.
- Special-status species: the degree to which the action may adversely affect an endangered or threatened species or its habitat.
- Violations of federal, state, or local environmental law: whether the action will result in a violation of federal, state, or local law, or a requirement imposed for the protection of the environment.

C. Public Involvement

All projects require some level of a Public Involvement Plan (PIP) in accordance with INDOT's [*Public Involvement Manual*](#). A PIP must be prepared early in the project development process. It should be commensurate with the project's anticipated impacts. The public involvement plan could include as little as the placement of a legal notice announcing the intent to proceed with a CE-1 or involve a plan that includes a public hearing with possibly one or more public information meetings. More than one project can be discussed in a legal notice, particularly for CE-1 level projects.

For projects with multiple design alternatives, greater impacts or with anticipated public controversy, the PIP may also include measures to keep the public well informed regarding the development of a project. However, projects having one or more of the preceding may require preparation of an EA. If a need for a Community Advisory Committee (CAC), Project Management Team (PMT) or agency involvement in the Purpose and Need and alternatives screening process has been identified then the project should be prepared as an EA or EIS.

As project development continues, the public may be invited to make comments. The request for public comment can be made in a variety of ways including legal notices, newsletters and public radio and television broadcasts. One or more public information meetings may be held to disseminate information regarding the project and to obtain input from the public on the project and the alternatives under consideration. The designer should prepare a summary of the public hearing comments and responses for the file. Public hearings require verbatim transcription and Public Information Meetings do not.



A public hearing is required to be held for all projects involving impacts to National Register of Historic Places (NRHP) listed or eligible bridges. For the other types of projects that do not involve impacts to a NRHP listed or eligible bridge, the offering of the opportunity to request a public hearing is required when a project meets certain criteria (refer to the INDOT [Public Involvement Manual](#) for more information). If a public hearing or the offering of the opportunity to request a public hearing is required, the CE will be appropriately authorized to be advanced to the public involvement phase of project development. The CE can be approved immediately subsequent to the issuance of documentation that certifies that the public involvement requirements have been satisfied.

D. Selection of Alternatives for Further Study

CE projects with multiple design alternatives should include a matrix or summary of anticipated impacts for each reasonable alternative from both design and environmental perspectives. The information included in the summary or matrix should be drawn from information obtained from the environmental field studies and the project scoping report. The selection of the preferred alternative will ultimately be decided by both design and environmental factors. Many environmental, cultural and social resources require protection, some by complete avoidance and others by minimization and mitigation. By knowing the location of such resources, the designers will be able to avoid those that must be avoided and reduce the impacts to those for which mitigation will be required.

In compliance with NEPA and the CEQ regulations ([40 CFR 1508](#)), reasonably foreseeable indirect and cumulative impacts should be taken into consideration when evaluating options for a preferred alternative. At this time based upon the information and data gathered during project development, the selection of a preferred alternative will be possible for nearly every CE level project. If a preferred alternative can not be selected, each of the retained alternatives must be advanced to the same level of study.

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II.A.4. Step 4: Prepare Categorical Exclusion and Develop Design

A. Environmental Field Studies

Additional field studies may be required for the preferred alternative. If the environmental staff concludes that additional studies are warranted, they should be conducted only within the footprint of the preferred alternative. The following are typical studies conducted for the preferred alternative:

- Archaeology
- Historic Structures Survey
- Phase II Preliminary Site Assessment (PSI).
- Wetlands delineation/conceptual mitigation plan.
- Endangered Species).
- Data for waterway permits.
- Development of geometrics.



- Preliminary drainage.
- Interchange justification/modification (IJ/M).
- Finalization of surveys.
- Preliminary utility locations.
- Cost estimates for construction, utilities, mitigation and right-of-way.
- Review of preliminary engineering plans by District Design.
- Verification that the project's preferred alternative is included in the appropriate Transportation Plan (TP) and Transportation Improvement Program (TIP), if applicable.
- Conceptual right-of-way plans.
- Detailed line and grade and typical cross sections.
- Preliminary flood hazard evaluation studies.
- Karst feature impact mitigation, if needed.
- Noise analysis and noise barrier design.

B. Authorization of CE to be Advanced to Public Involvement

The CE document should now be prepared and submitted for review. All sections of the CE, except for the public involvement discussion, should be complete and the CE should be otherwise ready for approval.

If the project requires holding or offering the opportunity for a public hearing, the CE must be authorized to be advanced to public involvement. For CE-2 documents, this may be done by the ESM. CE-3 and CE-4 documents are released for public involvement by OES. Spaces for the appropriate initials are provided on the approval sheet of the CE.

Once the CE is authorized for public involvement, the project sponsor, for INDOT projects, will submit three (3) copies of the CE along with hearing plans and other required documentation and information to the INDOT Public Hearings Section. Either a public hearing will be scheduled or the opportunity offered by the placement of a properly worded legal notice in widely circulated project area newspapers. The Public Hearings Office should be contacted for questions of content and format for these notices. Subsequent to the satisfactory completion of the public involvement requirements, the necessary certification document will be prepared and distributed as appropriate by the Public Hearings Section.

For LPA sponsored projects, the LPA is responsible for the preparation and placement of the necessary properly worded [legal notices](#) in widely circulated project area newspapers. However, prior to the placement of the legal notices, the LPA should submit a set of hearing plans, the design summary report (if one has been prepared) and the authorized environmental document to the INDOT Public Hearings Office.

The hearing plans will be compared to the authorized environmental document to make sure that they are consistent, particularly with regards to the project footprint and amounts of permanent and temporary right-of-way. Subsequent to a satisfactory review, the Public Hearings Section will send the LPA a memorandum to proceed with the advertisement of either the opportunity to request a public hearing or to notify the public that a public hearing has been scheduled.



An INDOT representative, either from the Public Hearings Section or the INDOT district in which the project is located, will attend the public hearing to make sure that the public involvement requirements are satisfied. A checklist of those items to be included in the public hearing will be provided by INDOT to the LPA for their information.

Immediately subsequent to the completion of the required comment period, an information packet will be submitted by the LPA to the INDOT Public Hearings Section with a request that the public involvement requirements be certified. If all of the public involvement requirements have been satisfied, the requested certification document will be prepared and provided to the LPA.

C. Approval of Categorical Exclusion

If a project does not require that a public hearing be held or offered, the CE can be submitted for approval. If public involvement is required, the CE can be approved immediately subsequent to the certification of the public involvement requirements. Prior to the approval of the CE, the public involvement section of the CE should be appropriately updated with a discussion of the steps taken to satisfy the public involvement requirements. Table 5 identifies the signature(s) required for the approval of a CE. The preparer of the environmental document is responsible for the distribution of the environmental document.

Table 5: Distribution of Approved CEs

	CE Level 1	CE Level 2	CE Level 3	CE Level 4
Signature Authority	ESM	ESM	ESM, OES	ESM, OES, FHWA
Distribution Requirements for Approved CEs				
ESM or OES ¹	1 CD-ROM, 1 hard copy			
LPA Sponsor (if applicable)	1 hard copy	1 hard copy	1 hard copy	1 hard copy
US Fish and Wildlife Service ²	0	1 CD-ROM	1 CD-ROM	1 CD-ROM
District Public Information	1 CD-ROM, 1 hard copy			
Project Manager (for distribution to Design, Construction, and as needed)	1 CD-ROM, 1 hard copy	1 CD-ROM, 1 hard copy	1 CD-ROM, 1 hard copy	1 CD-ROM, 1 hard copy
FHWA	0	1 CD-ROM	1 CD-ROM	1 CD-ROM

¹ESM: District and Local Public Agency projects; OES: Central Office projects

²For projects located in the northern two tiers of counties in Indiana, the northern USFWS and Bloomington USFWS office each receive copies of the CE document. See the [Procedural Manual for Preparing Environmental Documents](#) for a list of these counties.



D. Commitments and the Commitments Database

During project development, the mitigation measures included in the CE must be incorporated in the project's plans, specifications and estimates (PS&E). The [commitments database](#) includes the commitments made during the environmental process and is initiated by the preparer of the CE. These commitments must match those in the Environmental Commitments section of the CE. The commitments link the environmental phase of the project to the later stages of the PDP to ensure follow through of commitments.

The commitments include information regarding resources that were specifically identified to be avoided, if possible, during preliminary development, a description of environmentally related actions that are required for the project, and commitments for additional public involvement. To assist with successful communication and incorporation of the mitigation measures, the ESM for district projects and the project manager for Central Office (CO) projects will review commitment(s) at various stages of plan preparation. Commitments may address the following issues and resources:

- Additional right-of-way.
- Discovery of human remains.
- Discovery of hazardous materials.
- Work in wetlands and borrow/waste areas.
- Wetland delineation (updated)/mitigation/monitoring plan.
- Section 106 mitigation, including archaeology.
- Cultural resource data recovery.
- Section 7, Endangered Species Act.
- Karst features.
- Section 4(f) avoidance, minimization, and mitigation.
- Any other Memoranda of Agreement and/or unresolved commitments.
- Hazardous materials plan notes/commitments.
- All conditions from early coordination response letters.

The preparer of the CE will forward an electronic copy of the commitments to the project manager upon document approval for upload to the commitments database. District Production/CO project managers must note the commitments within the project plans/bidding documents. Commitments should be implemented and updated as the project is developed. The District/CO project manager will enter the commitments into the INDOT electronic record-keeping system.

E. Re-evaluations of Environmental Documents (Additional Information Documents)

Once a CE has been approved, a project and its accompanying CE must be re-evaluated at each subsequent federal approval stage in order to verify that the environmental document continues to accurately describe the impacts of the project ([23 CFR 771.129\(c\)](#)). A re-evaluation should be performed prior to each time that INDOT requests federal funding for right-of-way and for construction. It is the responsibility of the project manager to provide the necessary plans to the OES, Document Review Unit.



The re-evaluation includes the completion of the [Environmental Consultation Form](#) (Attachment 3) by the designer for review by the OES or district prior to the request for construction funding. The completion of Attachment 3 should not be done too close to the request for construction authorization in case an Additional Information (AI) document needs to be completed. Projects that remain within the limits of the original CE need no further coordination. However, if the scope or impacts have increased, the designer and OES will need to work together to resolve the discrepancies. If modifications to the project's design cannot be made, the preparation of an AI will be required. Depending on the extent of change to the design of the project, the preparation of the necessary AI can be a lengthy process. The designer should contact the OES as soon as likely changes are identified.

The format for an AI document varies with the extent of change. In general, an AI may be described in a letter format, with technical documents (historic property reports, hazardous materials investigations, etc.) included as attachments. If changes to the project are significant enough that a letter format may not explain the additional impacts clearly, OES should be contacted to determine an appropriate alternate format. The AI should clearly describe what has changed since the original NEPA document was approved, detail the change in impacts, and reaffirm that the previous CE findings remain valid. Consult with FHWA if there are questions regarding the level of analysis or the need for additional public involvement. All re-evaluations should follow the same approval process that was used for the original CE.

In the unlikely event that a CE level project would require value engineering due the cost of the project being in excess of the \$25 million minimum amount, a re-evaluation should be performed to determine if the project's impacts to any sensitive resources have been increased.

F. Post Design

During any pre-construction meetings that take place for a project with an approved CE, the ESM should discuss mitigation measures included in the project with the meeting attendees. If appropriate during the pre-construction conference, the following environmental topics should be discussed:

- Environmental permit requirements, waterway permits, and mitigation.
- Soil and erosion control responsibilities.
- All environmental commitments and associated plan notes.
- Environmental monitoring during construction.

Changes that involve environmental issues must be coordinated through the district's environmental office for district-sponsored projects and the Environmental Policy Section for Central Office (CO) sponsored projects. LPA projects will be addressed according to the level of the CE with 1s and 2s being handled at the district level and 3s and 4s at CO.

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II.B. Local Public Agency (LPA) Categorical Exclusion Process

In an attempt to streamline the various processes associated with the preparation of CE level documents for LPA sponsored projects so that most LPA projects may be completed within a period of two years, a combined public/private effort has resulted in a document entitled the "LPA Process Guidance Document." This modified process will be applicable to all LPA sponsored projects that receive federal funding or require one or more federal permits. This guidance can be found on the INDOT web page under Doing Business with INDOT – Other Business – [Local Public Agency page](#)

The CEs for LPA sponsored projects must satisfy the same NEPA requirements as do INDOT sponsored projects. The documents prepared for LPA CEs will be in the same format as INDOT sponsored CEs. There will be no difference in the content of an LPA CE compared to that of an INDOT CE for a similar type of project.

The one notable exception to the previous statement is when an LPA project is either located within the designated potential karst features area of the State or may impact a karst feature. Since LPAs are not signatories of the October 13, 1993 Memorandum of Understanding governing the treatment of karst features, they are not bound by the stipulations contained in that document. However, the LPA must locate and document all karst features and insure that all runoff or other potential impacts to karst features are treated in a manner similar to that outlined in the MOU. Therefore, it is highly recommended that LPAs voluntarily comply with the MOU when karst features within the designated area will be impacted. The consideration and treatment of karst features will be addressed later in Section IV.C.1.e.

The other differences between LPA and INDOT sponsored CE preparation essentially involve an attempt to reduce the length and complexity of the review process. The submission of the Red Flag Investigation for INDOT CO review prior to the submission of the CE for release for public involvement or approval will no longer be required. The review and approval of noise studies and noise attenuation studies will not be performed by the INDOT noise specialist or noise wall committee. The noise studies will be part of the environmental document and reviewed at the submission of the CE for release for public involvement. Approval of the document will constitute the approval of the noise study. Concurrent instead of consecutive reviews by INDOT district and CO personnel for levels 3 and 4 CEs will now take place within 15 business days of receipt.

As with many of the other recently implemented processes, some modification to the LPA CE process is to be expected. Any revisions will be posted on the previously mentioned INDOT web page.

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III. Completing the Environmental Screening/ CE-1 Form

Background

The [Environmental Screening/CE-1 Form](#) (Attachment 1) is the environmental documentation required for CE-1 projects. The completion of the form documents that the proposed project will not have significant impacts and that a higher level CE, Environmental Assessment (EA) or Environmental Impact Statement (EIS) is not required.

Process

If the project qualifies as a CE-1, the Environmental Screening/CE-1 Form will represent the entire environmental documentation for the project. Therefore, the form should be written for the public and include enough narrative to make it a stand-alone document. All impact categories must be discussed to a level of detail that demonstrates the thought process behind determining whether protected resources are or are not likely to be impacted. All supporting documentation should be included in the appendix with a reference to the document in the CE-1 form.

If the project qualifies as a CE-1, then only the Environmental Scoping Manager's (ESM) signature is required to approve the project as a CE-1. The OES requires that the CE-1 form (Environmental Screening/CE-1 Form) and necessary supporting documentation, including coordination and ensuing permits, be completed and kept on file by the district.

If completion of the CE-1 Form shows that impacts will exceed the thresholds for this category, then the project should be elevated to a higher level and the corresponding documentation completed. The CE-1 Form should not be submitted if the CE 2-4 Form will be used.

Information

When completing the Environmental Screening/CE-1 Form, if there is no impact to a resource, check "No" and explain what data sources (NWI maps, GIS data, etc.) were consulted to make this determination and why this determination was made. If impacts are possible, the remarks box should include the type of impact expected, what measures were taken to avoid or minimize the impact, why the impact is not significant, and the source of information used to make these determinations. All remarks boxes within the CE-1 Form should include some information (even if the "No" box was checked). Be sure to indicate the presence of any threatened or endangered species in the project area even if no impacts are anticipated.

At completion of the CE-1 Form, the applicable criteria in [Table 1](#) should be highlighted to show that the project does not exceed the CE-1 thresholds.

The following items should be attached to the Environmental Screening/CE-1 Form as appendices, when applicable:

- Project location mapping and other illustrations that adequately show the project area.
- Photos, aerials and USGS quadrangle maps.
- Applicable preliminary design information.



- Maintenance of Traffic/Detour mapping.
- Data that supports the Purpose and Need.
- All coordination responses and forms.
- Hazardous Materials Site Visit Form/Checklist (Attachment 5).
- Section 106 Area of Potential Effect (APE), Eligibility and Effect findings.
- Public involvement documentation.

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IV. Completing the CE/EA Form

The [CE/EA Form](#) (Attachment 2) was developed to consistently document the NEPA decision-making process for federal-aid transportation projects in Indiana. It also documents that the project will not individually nor cumulatively have a significant impact on the human and natural environment, and that neither an Environmental Assessment (EA) nor Environmental Impact Statement (EIS) is required. The form also documents environmentally-related information that is important for design purposes. Once the CE is approved, the requirements of NEPA are satisfied for the project as described.

The CE/EA Form and its appendices are a public document; therefore, the CE/EA Form and supporting documentation must accurately reflect the decision-making process during project development. The preparer should include enough narrative to make the CE a stand-alone record of the environmental impacts of the project. The following are key guidelines to producing an accessible document:

1. The CE should be written for the general public, who are not transportation professionals and who are not familiar with the project.
2. If a resource is present, but there is no impact, provide enough information for the reader to draw the same conclusion.
3. The location of other documents that support the conclusions of the CE/EA must be noted and the relevant information summarized in the appropriate section of the form.

The CE/EA Form has five parts:

1. The cover page contains the project identifying information, identification of the document type (level of CE or EA), and signature lines for releasing the document for public involvement and for final approval. The cover page also begins the header and footer that identify the project and the date of submittal.
2. [Part I](#) contains a discussion of public involvement activities and a discussion of any public controversy about the environmental effects of the project.
3. [Part II](#) contains the project description and identification information, project design criteria, roadway characteristics, bridges and small structures, anticipated design exceptions and selected maintenance and protection of traffic measures.
4. [Part III](#) contains the evaluation of impacts of the proposed action on environmental resources
5. The threshold table identifies the level of CE relative to threshold criteria by highlighting the criteria that are met.

The project description information in Part II describes the area to be investigated for environmental impacts in Part III. The scope of work and the right-of-way requirements must be precisely defined. A thorough evaluation of resource involvement cannot be efficiently performed without adequate engineering to produce a defined scope of work.



Any supporting documentation that can be released to the public should be included in the document as an appendix. The individual resource sections of this manual will explain required documentation in more detail. For most projects, these documents include the following:

- Project location mapping and other illustrations to adequately visualize the area.
- The location of the project on aerial photographs and USGS quadrangle map.
- Preliminary design drawings information.
- Maintenance of traffic or detour maps.
- Purpose and Need data.
- Site photographs.
- A sample outgoing early coordination letter and all responses.
- The Environmental Site Assessment Screening/Checklist for hazardous materials.
- Section 106 documentation for historic properties.
- Ecological evaluations, wetland determinations, and waters reports.
- Public involvement documentation.

The rest of this manual explains how to use the CE/EA Form to investigate and document the environmental impacts of a project. In general, each discussion is divided into background information, a process discussion, and the information that must appear in the form. The background section contains an introduction to the topic and definitions, as well as appropriate legal references. The process section gives a brief explanation of the steps needed to be undertaken in the NEPA analysis. The information section describes what data and analyses should be included in the CE/EA Form and attached as appendices.

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IV.A. CE/EA Form - PART I (Public Involvement)

Public Involvement

Background

The Federal Highway Administration's laws and regulations ([23 USC 134 and 135](#) and [40 CFR 1500 through 1508](#)) require that each state department of transportation establish standard procedures to carry out their public involvement/public hearing program. INDOT's procedures to comply with these requirements are available on [INDOT's Public Involvement/Media website](#). While certain activities are standard to all projects, the need for and timing of others will vary with the impacts and controversy associated with the project.

Process

The preparer should review INDOT's [Public Involvement Manual](#) to determine what public involvement activities are required, based on the project's scope and potential impacts, and plan to implement them at appropriate stages of development.



The first step is development of a list of property owners. The list will also serve as a starting point for the project mailing list to distribute project newsletters and issue invitations to public meetings and hearings. Additions or removals from this list will often be necessary over the life of the project as land ownership or the project footprint change. The list of property owners can usually be obtained from the project manager.

For projects that are controversial, INDOT may choose to establish a Community Advisory Committee (CAC). The goal of the CAC is to inform and engage interest groups to resolve problems that have been identified. This is most appropriate for EA- or EIS-level projects; by their nature CE projects tend to not be controversial and not require this level of involvement. If significant controversy is developing around a project that is being managed as a CE, the Office of Environmental Services (OES) should be contacted to determine an appropriate course of action, in consultation with FHWA. This could include elevating the project to a higher class of document.

In addition to formal meetings and hearings, public notices are frequently issued, seeking public comments or offering opportunities to request additional meetings or hearings. These are triggered by a variety of criteria, in particular findings under Section 106 or Section 4(f), or applications for permits. INDOT encourages preparers to combine public notices and public comment periods when practical and convenient.

Many CEs will meet the thresholds in the policy that require the sponsor to either hold a public hearing or offer the opportunity for the public to request a public hearing before the environmental documents is approved. A CE may not be released for public involvement until it has been completed and deemed acceptable by INDOT. A hearing may then be scheduled if required or if requested by the public. After any public notice and hearing requirements have been met, the CE may be approved and necessary signatures obtained. The environmental document is not considered approved until the public involvement requirements have been satisfied.

Information

In the Remarks section, describe formal and informal public involvement that occurred during the development of the CE. Public involvement activities to satisfy Section 106 should be specifically outlined, including dates of notices and any responses that were received. If a hearing was required for the project based on public involvement manual, the date of the hearing should be noted along with a brief description of any substantive issues that were raised at the hearing. If additional public involvement activities are planned after completion of the CE, these should be listed here and in the commitments section.

The remarks should also discuss any special circumstances that affect public involvement, such as advance acquisition or the need to reacquire right-of-way.

When the document has been completed and is ready for public involvement, the document should be initialed by the INDOT personnel who will eventually approve the document. After public involvement requirements have been met, the document may be signed.



Attach to the CE:

- A copy of any public notices that were issued.
- Correspondence with locals, agencies and others.
- Information that was distributed to the public at public hearings, information meetings, etc.
- Summary of public comments received in response to public notice, at a public hearing, or at a public information meeting.
- Summaries of other meetings with stakeholders, including Community Advisory Committee meetings.
- A copy of the project's hearing certification.

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IV.B. CE/EA Form - PART II (General Information)

IV.B.1. General Project Identification, Description and Design Information

The level of detail needed in the Purpose and Need, project description, and alternatives discussion sections of Part II of the CE/EA Form (Attachment 2) will vary with the complexity of the project. For simple or small projects, these sections may be brief. However, for larger projects that involve many resources or alternatives, a more detailed discussion of the goals and nature of the project should be provided.

IV.B.2. Purpose and Need

Background

The Purpose and Need is a written description of the transportation problem(s) or other need(s) that the proposed project is intended to address. It lays out why the proposed action, with its inherent costs and environmental impacts, is being pursued. It must not identify a solution, but should describe the transportation problem in a data-driven, defensible manner.

The Purpose and Need should be re-examined periodically throughout the project development process to verify that it is still appropriate to current conditions. This also helps to make sure that the project's scope has not drifted away from the originally-identified need.

Process

The preparer should start with the key needs that the project will address and articulate the project purpose. These may include one or more of the following:

- System linkage, in terms of the project's place and importance in the road network.
- Capacity deficiencies, in terms of current and future level of service.
- Transportation demand as indicated in any statewide plan or adopted urban transportation plan.
- Federal, state or local governmental legislative mandates for the action.
- Social demands or economic development, in terms of infrastructure that will be necessary to support planned or proposed new development.



- Intermodal relationships, in terms of how the project will interface with and serve airports, rail and port facilities, or mass transit services.
- Safety, in terms of current safety hazards.
- Other roadway deficiencies, such as substandard geometrics, inability to meet load limits or high maintenance costs.

Information

In the remarks box, describe in detail the transportation problem or deficiency to be solved and the goals of the project. This should be described in terms of background data to support the need for the project. This data may include one or more of the following as appropriate:

1. Crash data (compare crash data to Statewide average of similar type of roadway).
2. Traffic data:
 - a. ADT/LOS (for year of study, estimated ready for letting date, and 20 years beyond ready for letting date).
 - b. Percent commercial vehicles.
3. Locations where roadway geometry is substandard and features that are substandard.
4. Relevant bridge data, such as:
 - a. Sufficiency rating.
 - b. Why the bridge is structurally deficient and/or functionally obsolete.
 - c. Estimated remaining life (years).
 - d. Potential for widening rather than replacement.

Additional information may be provided as necessary to strengthen the description of project need, such as amount of parking available, presence of recreational facilities requiring access, etc. Lengthy technical data may be included as an attachment and briefly referenced in the Purpose and Need section.

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IV.B.3. Project Description (Preferred Alternative)

Background

The [Council on Environmental Quality](#) (CEQ) considers the alternatives evaluation the heart of an environmental study, since it is the preparer's opportunity to explain why the preferred alternative was selected and others were discarded. This is done through a careful explanation of the range of alternatives that were assessed and the process by which those alternatives were evaluated.

Process

The Project Description (Preferred Alternative) section should contain a description of the preferred alternative, an explanation of its independent utility and selection of termini, as well as how it satisfies the Purpose and Need for the project. This section should also include a discussion of any measures that were implemented to minimize, avoid or mitigate for project



impacts. This could include replacement of impacted features or resources, or incorporation of special design features.

Information

This section should describe the current facility, then explain the preferred alternative, particularly with respect to the following information:

- Location and logical termini.
- Changes in lane configurations and right-of-way.
- Method of traffic maintenance, if known.
- Cost, constructability and other engineering criteria.
- A summary of environmental impacts.
- Ability of the alternative to meet success criteria (typically Purpose and Need).

Graphical representations of the project area are critical to communicating the features and impacts of each alternative. The following information should be provided as appendices to the CE and referenced within the text where relevant:

- Map of Indiana showing project location.
- Local map that shows legible street names, route numbers and project termini, etc.
- Aerial photography of project location.
- USGS topographic map of project location.
- Any appropriate preliminary design graphics that are available.
- Other graphical information that may be informative and relevant, such as pictures of drainage channels or potentially historic properties.

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IV.B.4. Other Alternatives Considered

Background

NEPA requires that the project developer consider a range of alternatives that is broad enough to include a wide range of solutions to the identified transportation problem. However, it is understood that this should be proportional to the size and potential impacts of the project. For very small or simple projects, this may only involve a comparison with the "do-nothing" scenario. For larger projects, such as those over new terrain, many more alternatives should be considered.

In many cases the selected range of alternatives is determined by professional judgment. However, in certain circumstances, the regulations require that specific kinds of alternatives be assessed to determine whether they are feasible and prudent.

Process

This section should include a discussion of the discarded alternatives and why each was determined not to be reasonable, or why it did not perform as well as the preferred alternative. It



must rigorously explore and objectively evaluate all reasonable alternatives, including the no-build or no-action alternative.

It is important to include a discussion of the no-build alternative in all environmental documents. Analysis of the no-build alternative can serve two purposes. First, it may be a reasonable alternative, especially for situations where the impacts are great and the need is relatively minor. More often, the no-build serves as a baseline against which the other alternatives can be compared.

If the preferred alternative will impact wetlands or Section 4(f) resources, the range of alternatives considered must include options to minimize or avoid these impacts. Likewise, if the preferred alternative involves replacement of a historic bridge, a review of rehabilitation options that would maintain historic integrity of the structure is required. If these alternatives are not selected, an explanation must be provided as to why they are not "feasible and prudent" for Section 4(f) resources and "practicable" for wetlands. This may be described in terms of such issues as:

- Substantial increase in community or business impacts.
- Substantial increase in roadway or structure costs.
- Unique engineering, traffic, maintenance, or safety problems.
- Difficulties in acquiring permits (for example: wetland or stream impacts).
- Failure to meet the Purpose and Need for the project.
- Relative significance of each protected resource (Section 4(f) resource or wetland) should more than one of either or one of each be present and be potentially impacted by the preferred alternative of the proposed project.
- Relative severity of the remaining harm, after mitigation, to the protected resource (Section 4(f) resource or wetland) should more than one of either or one of each be present and potentially impacted by the preferred alternative of the proposed project.

Information

A description of each discarded alternative should be included in the Remarks box. This information should include the following for each alternative:

- Location and logical termini.
- Changes in lane configurations and right-of-way.
- Method of traffic maintenance, if known.
- Cost, constructability and other engineering criteria.
- A summary of environmental impacts including wetlands and streams.
- Ability to meet success criteria (typically Purpose and Need).
- Any additional reasons why an alternative was not selected for detailed study.

If the range of alternatives under consideration is small, a simple comparison of alternatives in paragraph format is normally adequate. However, if multiple alternatives are being reviewed, or their impacts vary significantly, then an impacts matrix is recommended to clearly show differences between the alternatives under consideration.



If design or graphical information is available for discarded alternatives, these should be included as appendices to the CE.

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IV.B.5. Roadway Character

Background

Current and future roadway design parameters are helpful in explaining the need for the proposed project and the changes to the facility that are planned. In addition, this information is necessary to conduct certain environmental analyses such as air studies, noise abatement studies and prediction of secondary impacts.

Process

This section should list all of the relevant design criteria for the project, to the extent that they are known. Much of this information will be given to the preparer in the form of Engineer's Reports, scoping studies or environmental assessment/corridor studies and will simply need to be transferred into the CE.

Information

In the "proposed" column, list what features are proposed at this stage. If more than one roadway is involved, this section should be duplicated for each.

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IV.B.6. Design Criteria for Bridges

Background

Information about the size and type of existing and proposed bridges and small structures is used to determine environmental impacts and necessary permits. The bridge and small structure information reported in this section is particularly important if the bridge may be eligible for historic protection or requires channel work or relocation, and may also be a consideration when preparing permit applications.

Process

Structure design parameters will be prepared either in scoping or design and will be provided to the preparer in the engineers report. The preparer should determine the number and type of structures involved in the project, what work is planned for each, and what impacts each will have on environmental resources.

Information

Structure data should be entered in the form as provided by the Engineer's Report or as obtained from the designer. This should include the structure number, its sufficiency rating and any other parameters which will help to identify it or demonstrate deficiencies. For small structures



(structures with less than a 20 foot span), the preparer enters "small structure" for the structure number and "NA" for the sufficiency rating.

If the proposed action has multiple structures, this section should be duplicated for each structure. The remarks section should describe the structure, state whether it will be replaced and why, and explain the reasons for any channel work or relocation. The amount of information to include depends on the structure size. Small culverts could just be listed in general terms, but a large box culvert should have more detailed information. Be sure to also mention any structures parallel to the roadway that will be affected as well.

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IV.B.7. Maintenance of Traffic During Construction

Background

Transportation projects often require temporary closure of existing facilities to allow for construction. In addition to the inconvenience to the public of road closures, temporary roads and detours can have their own environmental impacts on the surrounding area.

Process

Information about maintenance of traffic will be provided by engineers designing the project.

Information

This section should include a discussion of what closures and/or temporary facilities (if any) will be provided for maintenance of traffic. Any known impacts from these temporary measures should be quantified to the extent possible, particularly with respect to properties such as Section 4(f) resources or wetlands. Any local concerns about access and traffic flow should be detailed as well. This information will be useful when assessing community impacts.

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IV.B.8. Estimated Project Cost and Schedule

Background

Cost and schedule are important considerations on any project, since cost overruns and schedule slippage will often affect delivery of other projects in the program. Estimates at this point will be very preliminary but are useful for planning purposes.

Process

Project costs will be provided by scoping or design engineers. The best cost and schedule data available at the time of document preparation should be entered in the boxes provided.



Information

The preparer enters the engineering, right-of-way, and construction costs for the project and the anticipated start date of construction. The year of the cost estimate should be noted. For example, if the construction cost is estimated to be \$2,000,000 in 2009 dollars, in the construction cost line write "\$2,000,000 (2009)".

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IV.B.9. Right-of-Way

Background

Accurate right-of-way information is critical to producing a satisfactory CE, since this information is needed to identify the area in which environmental impacts will be evaluated. Errors or unexpected changes in right-of-way can be both costly and time-consuming to resolve.

Two situations can result in complex right-of-way calculations. In the first situation, the project sponsor already owns right-of-way but it is not currently in a transportation use. This right-of-way is included when determining the CE level but is not usually counted when determining public involvement requirements (see discussion in the public involvement section above).

In the second situation, right of way was erroneously believed to be owned by the project sponsor. Generally, if documentation of ownership is ambiguous, the preparer should assume that the right-of-way includes only the area covered by pavement and the remaining right-of-way must be reacquired. It is not counted as new right of way in the CE threshold determination and is not counted toward public involvement thresholds.

Process

The most reliable information available should be used by the preparer in indicating right-of-way impacts. This will often come from scoping reports, but if design has advanced to a sufficient stage to provide a more current right-of-way footprint, this should be used instead. Changes to right-of-way should be monitored at the various review steps to identify changes quickly and resolve any additional investigation or documentation that may be needed.

The environmental document for the project was very likely prepared and approved long before the discovery of the need to re-acquire right-of-way. It is also very likely that most, if not all, of the right-of-way in question has been disturbed or modified by the existing roadway or structure. However, any undisturbed portions of the right-of-way to be re-acquired will be investigated and documented in an Additional Information (AI) document in the same way as normal environmental investigations are performed on additional right-of-way determined to be necessary subsequent to the design of a project.

Information

The purpose of the discussion in this section of the form is to present right-of-way amounts, both permanent and temporary, and describe their current use. Typical and maximum right-of-way widths (existing and proposed) should be described as well. The preparer should also discuss



any advance acquisition and reacquisition, either known or suspected, and their impacts on the environmental analysis.

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IV. C. CE/EA Form - Part III (Environmental Impacts)

Identification and Evaluation of Impacts of the Proposed Action

This section should identify the range of issues of concern and the scope of the environmental resources that would be affected by the project. The preparer should consider both the level of impacts as well as the type (negative, neutral or beneficial). The document should be written in such a way that the level of detail is commensurate with the impact and the importance of the resource. The CE should clearly demonstrate that the project results in no significant impact to the environment as defined by the CEQ regulations [40 CFR 1508.27](#).

IV.C.1. Section A - Ecological Resources

IV.C.1.a. Streams, Rivers, Watercourses and Jurisdictional Ditches

Background

There are many state and federal laws and regulations that protect water resources. Use this section of the CE/EA Form to list and describe these protected resources.

A stream is any channel which carries water for at least a minimal period of time and normally has an ordinary high water mark (OHWM). This can include ephemeral, intermittent, and/or perennial streams. A watercourse is a natural or artificial channel through which water flows. A river is a large natural stream of water emptying into another river, lake, ocean, or other body of water and usually fed along its course by converging tributaries. Generally, if a channel, ditch, and/or ephemeral stream does not have an OHWM, it is not considered a water of the US and it is not regulated by the US Army Corps of Engineers (USACE).

A ditch may be an excavated or naturally formed waterway. Jurisdictional ditches are those which have been determined by the USACE to be subject to regulation as waters of the US. A variety of circumstances may cause a ditch to be jurisdictional, such as the presence of an OHWM, location in hydric soils, or because it connects two other waters of the US. For more information on the regulatory status of streams, watercourses, rivers, and ditches, refer to the [Indiana Waterway Permits Manual](#).

Federal Wild and Scenic Rivers - In 1968, the Wild and Scenic Rivers Act ([16 USC 28](#)) was established by Congress, with the goal of preserving the character and surrounding environment of rivers that possess outstanding remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural or other similar values. Wild and scenic rivers are not designated by a federal agency; they are specifically added to the National Wild and Scenic Rivers System by Congress.



Publicly owned waters designated as wild and scenic rivers are protected by [Section 4\(f\)](#) of the USDOT Act of 1966, and public lands adjacent to these rivers may be subject to Section 4(f) protection as well. The regulations only apply to wild and scenic rivers and adjacent lands which are being used or designated on an approved land management plan for use as a park; recreation, wildlife, or waterfowl refuge; or for historic purposes. The determination of applicability of Section 4(f) is made through an examination of any adopted or proposed management plan for a listed river.

There are no rivers in Indiana that have been officially designated by Congress into the National Wild and Scenic Rivers System to date. However, if a river eligible for designation is present in or adjacent to the proposed project, coordination must take place with the relevant local office. The Maumee River (including tributaries) is the only river system in Indiana at this time that is designated for potential addition to the national wild and scenic rivers system. In accordance with [16 USC 1276\(d\)\(1\)](#) consideration shall be given by all federal agencies involved to potential national wild, scenic and recreational river areas.

State Natural, Scenic, and Recreational Rivers - State law ([IC 14-29-6](#)) designates the Indiana natural, scenic and recreational river system to be set aside and preserved for the benefit of present and future generations. In accordance with IC-14-29-6-10, the impact to the natural, scenic and recreational river system will be determined when planning for the use and development of water and associated land resources within the system. Indiana law [312 IAC 7-2](#) identifies three waterways included in the system:

- Cedar Creek from river mile 13.7 to the St. Joseph River
- Wildcat Creek
 - North fork from river mile 43.11 to river mile 4.82
 - South fork from river mile 10.21 to river mile 0.0
- Blue River from river mile 57 to river mile 11.5.

Outstanding Rivers List for Indiana (DNR) - In 1993, the Natural Resources Commission adopted its "Outstanding Rivers List for Indiana." The listing was published in the Indiana Register on March 1 of that year as Information Bulletin #4 in Volume 16, Number 6, page 1677 through 1680 (sometimes cited as 16 IR 1677). See Appendix K for a listing of Indiana's Outstanding Rivers and Streams.

Process

Determine whether any streams, rivers, and/or jurisdictional ditches are present and whether they will be impacted (i.e., work will occur below OHWM). Also determine whether the stream is included in the listing for Federal Wild and Scenic Rivers; State Natural, Scenic, and Recreational Rivers; or Indiana Outstanding Rivers and Streams. Determine whether navigable waterways are present and whether they will be impacted. Indicate stream quality and the methodology used to determine its quality. Once the impacts to the stream have been determined, the preparer will provide the Department of Natural Resources (DNR) with the opportunity to review these impacts.



The CE should identify any potential significant adverse effects on the natural, cultural, and recreational values of the inventory river. Adverse effects include alteration of the setting, restricting the free-flowing nature of the river or degrading the water quality. If it is determined that the proposed action could foreclose options to designate waterways on the National Rivers Inventory (NRI) under the Wild and Scenic Rivers Act, the CE should reflect consultation with the NPS and USDA on avoiding or mitigating the impacts. See the National Park Service's [web page](#) for a list of NRI waterways in Indiana, and see the [Procedural Manual for Preparing Environmental Documents](#) for more details on federal and state Wild and Scenic Rivers.

Information

List the streams, rivers and jurisdictional ditches in the project area and whether they will be impacted, either directly or indirectly. Describe any Federal Wild and Scenic Rivers; State Natural, Scenic, and Recreational Rivers; Outstanding Rivers for Indiana (see Appendix K); or navigable waterways (See Appendix J) in the project area and their impacts. For rivers on the Outstanding Rivers List for Indiana, the discussion should include a description of the characteristics of the river that qualify it as outstanding.

In the Remarks Section, if a stream is present but no impacts are expected, state why there will be no impacts. If stream impacts will occur, discuss what type of structure(s) is/are proposed compared to what is currently in place and quantify any impacts. Describe the extent of in-channel work both up and downstream of the project, including linear feet of work below ordinary high water. If stream work will be extensive, reference and attach additional sheets and include mapping and/or site plans to aid in impact interpretation. If a function and value methodology such as [Headwater Habitat Evaluation Index](#) (HHEI) or [Qualitative Habitat Evaluation Index](#) (QHEI) was conducted for the project area streams, reference the HHEI or the QHEI form(s) and state the score(s) and include the forms in the appendix.

Discuss what coordination has taken place to date and any commitments or design issues resulting from that coordination. Efforts to avoid and minimize impacts should be noted, as well as any mitigation that will be required due to unavoidable impacts. The location of the comment letter(s) within the CE appendices should be referenced.

Mitigation may be required for impacts to channels. Efforts to avoid, minimize and mitigate should be evaluated in the CE. Summarize any mitigation commitments in Section J (Environmental Commitments) and in the commitments database.

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IV.C.1.b. Other Surface Waters

Background

Other surface waters are natural and artificial ponds, impoundments, reservoirs, lakes, and detention and retention basins. These waters may or may not be subject to regulation by the USACE, IDNR, and IDEM.



Process

The preparer visits the project area to determine whether other surface waters are present in or near the project area. An aerial photograph and USGS quad map are helpful for planning the site visit.

The preparer determines the type of water body for each feature located in, adjacent to, and near the project area. The direct impacts to the feature, such as work within waters of the U.S. or waters of the state and the indirect impacts, such as runoff, siltation, or erosion, should be fully explored and documented. Connections to other water bodies and relationships to floodplains in the area should also be determined and documented.

Information

In the Remarks, the preparer lists by name all surface water features in, adjacent to, and near the project area. The preparer should state which features, if any, are subject to USACE jurisdiction and which, if any, are subject to the jurisdiction of state agencies or other federal agencies. Any direct and indirect impacts are described in full, including discharges of water or other material. If a water body is present in the project area but no impacts are expected, the remarks should explain why there will be no impacts. Any required or planned mitigation measures are summarized here and in Section J (Environmental Commitments).

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IV.C.1.c. Wetlands

Background

[Presidential Executive Order \(EO\) 11990](#), entitled *Protection of Wetlands* and dated May 23, 1977, established a national policy to avoid adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands to the extent possible. New construction includes draining, dredging, channelizing, filling, diking, impounding and related activities. The EO requires a Wetland Finding for all federal undertakings that will have any impact on a wetland, whether direct or indirect.

The USDOT, in implementing EO 11990, set forth its policy on wetlands in [USDOT Order 5660.1A](#), *Preservation of the Nation's Wetlands*, issued on August 24, 1978. USDOT Order 5660.1A requires the protection, preservation and enhancement of wetlands to the fullest extent possible during the planning, construction and operation of transportation facilities. The policy requires the avoidance of new construction in wetlands unless practicable alternatives do not exist and the proposed action includes all practicable measures to minimize impacts to the wetland. The consideration of economic, environmental, and other factors is included in the finding of no practicable alternative. However, additional cost alone is not sufficient to render an alternative or minimization measure impracticable.

The Federal Highway Administration (FHWA), through [Technical Advisory T6640.8A](#) (October 30, 1987), provides guidance on the preparation of environmental documents, including the assessment of project impacts on wetlands.



The Technical Advisory prescribes the following wetland evaluation methodology should be utilized:

1. The identification of all wetlands within a project corridor.
2. An evaluation of the significance, uniqueness and function/value of each wetland.
3. An evaluation of project impacts on each wetland.
4. An evaluation of all project alternatives including avoidance alternatives.
5. A formal wetlands finding stating that no practicable alternatives to the wetland taking exist, if such is the case.
6. An evaluation of all practicable measures to minimize harm to wetlands.
7. An evaluation of the reasonableness of mitigation measures proposed to reduce adverse impacts.

The [USFWS Classification System](#) (Cowardin, et al. 1979) is the national standard for wetland identification. Currently INDOT has not selected a preferred method for wetland function and value. As such, any of the following methods are acceptable. The [Wetland Evaluation Technique](#) (WET II), the Indiana Wetlands Rapid Assessment Protocol (INWRAP), the [Ohio Rapid Assessment Method](#) (ORAM), [Index of Biotic Integrity](#) (IBI), Floristic Quality Assessment (FQA), and the US Army Corps of Engineers (USACOE) approved [hydrogeomorphic \(HGM\) evaluation](#) model are also acceptable methods to evaluate the functions and values of each wetland. Indicate in the remarks section which method was utilized.

Mitigation is the replacement of wetlands by constructing another wetland and may be required if impacts cannot be avoided or minimized. See the [Procedural Manual for Preparing Environmental Documents](#) and the [Indiana Waterway Permits Manual](#) for more information on wetland mitigation and requirements.

Process

The first step in the process is to complete a wetland determination, which identifies all wetlands within and immediately adjacent to the project area using the National Wetland Inventory ([NWI](#)) maps, field visits and coordination with resource agencies (US Army Corps of Engineers (USACE), US Environmental Protection Agency, US Fish and Wildlife Service (USFWS), Indiana Department of Natural Resources (IDNR), and Indiana Department of Environmental Management). If potential wetlands are found, a wetland delineation is then required to determine the exact location and boundaries of each wetland. Though a wetland delineation is not required for the environmental document, it is strongly recommended to complete it at this time to allow for avoidance and minimization of impacts. Use the [U.S. Army Corps of Engineers Wetland Delineation Manual](#), January 1987 to perform wetland delineations. If a wetland area is identified, an alternative that does not impact wetlands must be considered here and in the alternatives section of the CE.

For INDOT projects, submit all wetland determination/delineation reports with any necessary Waters of the US reports to the OES, Ecology Unit for review and submittal to the USACE in support of a request for a formal Jurisdictional Determination (JD) from the USACE. This JD officially identifies whether the wetland is jurisdictional or isolated. The information included in the report and JD will help in determining which permits will be required and to avoid or



minimize impacts to wetlands in design. For LPA projects, the project sponsor is responsible for submitting the required reports to the USACE for a formal JD.

All federal undertakings that impact wetlands, either directly or indirectly, are required to have a Wetland Finding by the FHWA. If one or more acres of wetlands are impacted, the finding is incorporated into the CE, which is then reviewed and approved by the FHWA, indicating their approval of the Wetland Finding. If impacts are less than an acre and USFWS and IDNR have not expressed significant concern about the impacts, the project is covered by the Programmatic Agreement between INDOT and the FHWA and will not require the FHWA's approval.

Information

In the remarks section, include a summary of the wetland determination/delineation report that includes the type, quality, importance and function of all wetlands identified. Indicate whether the wetlands are jurisdictional or isolated. Describe the potential impacts for each alternative with respect to:

- Total wetland acreage impacted.
- Direct and indirect impacts.
- Short and long-term effects.
- Importance of any loss of function or value.

Explain why the do-nothing alternative is not practicable. Things to consider are:

- It would not correct existing or projected capacity deficiencies.
- It would not correct existing safety hazards.
- It would not correct existing deteriorated conditions and maintenance problems.
- It would result in serious impacts to the motoring public and the general welfare of the economy in the area.

Include a discussion on why alternatives that will not result in any wetland impacts are not practicable. Include the reason for this decision, such as:

- Substantial adverse community impacts to adjacent homes, businesses or other improved properties.
- Substantial increases in project costs.
- Unique engineering, traffic maintenance or safety problems.
- Substantial adverse social, economic or environmental impacts.
- The project not meeting identified needs.

Indicate the practicable measures to minimize harm considered and explain why each measure was accepted or eliminated. If avoidance and or minimization measures are not found to be practicable, include reasons that support that decision. Discuss all comments received during early coordination in relation to the wetland impacts. Summarize any mitigation commitments or resources to be avoided here, in Section J (Environmental Commitments) and in the commitments database. Also, include a commitment to complete a wetland delineation if one has not been completed.



All federal undertakings that impact wetlands, either directly or indirectly will require a wetland finding. For projects that have one (1) acre or more of wetland impacts, the following is required:

- A reference to EO 11990.
- This concluding statement:
Based upon the above considerations, it has been determined that there is no practicable alternative to the proposed new construction in wetlands and that the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use.

For projects that impact less than one (1) acre of wetlands, include a statement that the project is in compliance with the most current version of the wetland finding portion of the Categorical Exclusion Programmatic Agreement between the Federal Highway Administration and the Indiana Department of Transportation (Appendix G).

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IV.C.1.d. Terrestrial Habitat

Background

Transportation projects have the potential to impact aquatic and terrestrial habitat directly through right-of-way acquisition and indirectly through habitat modification and fragmentation. Consideration of these impacts is crucial because loss and degradation of habitat and connectivity continue to be threats for wildlife species.

Laws and executive orders that require the consideration of wildlife impacts for transportation projects include: the National Forest Management Act ([NFMA](#)), the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users ([SAFETEA-LU](#)), the [Fish and Wildlife Coordination Act](#), [Executive Order 13112](#), and the Migratory Bird Treaty Act ([MBTA](#)). See the [Procedural Manual for Preparing Environmental Documents](#) for more information on these requirements as they apply to transportation projects.

Process

During the site visit, identify the basic characteristics of each habitat community, including the representative flora and fauna species. Include amphibians, reptiles, birds, small and large mammals, aquatic organisms, and terrestrial and aquatic vegetation in the identification and on the Ecological Evaluation Form. For more information on procedures for conducting biological surveys, contact the Office of Environmental Services (OES) Ecology Unit.

In their response to early coordination, resource agencies may recommend or require mitigation measures to offset any impacts. These may include the replacement of impacted habitat, use of specialized construction techniques to minimize impacts, incorporation of wildlife crossings, adjustment of alignments, etc. The selection of mitigation measures should include



consideration of the value of the resources impacted, the severity of the impact and the scope of the project.

If a project has the potential to result in a take of birds/nests protected under the MBTA, a [take permit](#) from the US Fish and Wildlife Service (USFWS) office with local jurisdiction will be required. Do not attempt the removal of inactive nests of migratory birds prior to consultation with the USFWS.

Information

The CE document should include information that identifies sensitive biological resources and describes potential impacts to these resources. Issues to discuss include habitat flora & fauna, habitat fragmentation, wildlife crossings, invasive species, migratory birds and non-wetland wildlife habitat.

Descriptions of core forest (a patch of forest that is located far enough away from disturbances to ensure that species within them remain relatively unaffected by the activities that occur outside the forest) impacts should include a quantitative measurement of the change in core forest. It should also describe, to the extent practicable, the impact that this change will have on wildlife communities in the area (such as changes in nesting patterns). The discussion of fragmentation should address the potential for increased collisions between motor vehicles and wildlife and any proposed measures to mitigate these impacts, such as wildlife crossings. Various state agencies, including the DNR, require the consideration of wildlife crossings for projects that have the potential to fragment habitat. Motorist safety, connectivity of habitat and cost are important factors to consider and discuss in the environmental document. If DNR responds to early coordination indicating that wildlife crossings should be considered for an INDOT project, the OES Ecology Section should be contacted to make a project-level determination as to whether a crossing is appropriate.

A description of wildlife, including invasive species and migratory birds, identified within or adjacent to the project area should be included in the remarks section of the CE. Include in the description the types of species present and any potential impacts. Also, indicate if a take permit is required.

Include a discussion of the efforts to avoid, minimize, and/or mitigate project impacts. Summarize any mitigation commitments in Section J (Environmental Commitments) and in the commitments database. Photographs and maps with the identified communities should be included in the appendix.

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IV.C.1.e. Karst

Background

Karst regions are characterized by the presence of limestone, dolomite or other soluble rocks, where drainage has been largely diverted into subterranean routes. Sinkholes, swallowholes, sinking streams, large springs, and caves dominate the topography of such areas.

On October 13, 1993, the Indiana Department of Transportation (INDOT), the Indiana Department of Natural Resources (IDNR), the Indiana Department of Environmental Management (IDEM), and the U.S. Fish and Wildlife Service (USFWS) entered into a Memorandum of Understanding (MOU) to establish karst features treatment guidelines for the construction of transportation projects in a designated portion of Indiana. A map illustrating the agreed upon potential karst features area can be seen as Appendix P in the appendices of this document. The MOU governing the treatment of karst features can be seen as Appendix O. Additional information on karst is available in the [Procedural Manual for Preparing Environmental Documents](#).

Process

Projects located within the designated potential karst area must be reviewed to determine whether any features are located within or adjacent to the project. This should begin with a review of public and private sources of karst information, followed by a field reconnaissance of the area to identify and verify all karst features.

If karst features are present and will likely be impacted, the Ecology and Permits Section of the Office of Environmental Services (OES) must be contacted for further discussion and guidance. If a karst assessment is determined to be necessary, it must be carried out by a qualified expert who will determine the potential for impacts. The level of detail of the karst study will be determined by the number, size and complexity of the impacted features. Copies of the completed karst study will be distributed by the preparer of the CE to the resource agencies designated in the MOU for review and approval.

For those project located outside of the designated area, the need for such a study will be made by the OES on a case-by-case basis.

The USEPA considers some karst features (sinkholes and swallowholes) to be Class V injection wells if alterations are made to the drainage system which will affect the amount or type of runoff received by the feature. If a project causes one of these features to be in any way impacted, the project sponsor is required to provide the USEPA with some basic inventory information about the well and implement measures so as not to endanger any underground source of drinking water. Under existing federal regulations, Class V injection wells are “authorized by rule” ([40 CFR 144](#)). This means that Class V injection wells do not require a permit if they do not endanger underground sources of drinking water and they comply with the Underground Injection Control Program requirements. See the [Indiana Waterway Permits Manual](#) for further guidance.



Information

State in the remarks section whether the project falls within the potential karst features area, if any karst features are located within the project, and any potential impacts. If a karst study is completed, include a brief summary of the findings and recommendations. The BMPs and mitigation commitments will also be included in Section J (Environmental Commitments) of the CE and the commitments database.

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IV.C.1.f. Threatened and Endangered Species

Background

The [Endangered Species Act \(ESA\) of 1973](#) requires federal agencies to use their authorities to carry out their programs for the conservation of endangered species and their critical habitat. Section 7 of the Act requires that federal agencies (and recipients of federal funds) assist in the conservation of federally listed Threatened and Endangered Species (TES) and, in consultation with the US Fish and Wildlife Service (USFWS), ensure that their actions do not jeopardize listed species or destroy or adversely modify critical habitat.

Indiana Law [IC 14-22-34](#) protects species within the state that have a limited abundance or distribution or those species in danger of extinction. This law prohibits the taking, possession, transport, export, process, sale, or offer to sell non-game species. Take is defined as the harassment, hunt, capture, or kill; or the attempt to harass, hunt, capture or kill.

As efforts to protect threatened and endangered wildlife are successful, populations may increase enough to warrant de-listing a species. This was the case when the Bald Eagle was removed from the Federal Threatened and Endangered Species list on August 8, 2007. The Bald Eagle will continue to be protected under the [Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act](#), which prohibits the take or disturbance of nesting eagles. The final rule ([50 CFR 17](#)) on the delisting provides an explanation of the delisting, and a draft Post-Delisting and Monitoring Plan. The Office of Environmental Services (OES) should be contacted if a take of a Bald Eagle is anticipated.

Process

As a part of the early coordination phase (see [The Categorical Exclusion Process](#) – Step 3B), the USFWS (federally listed species) and Indiana Department of Natural Resources (IDNR) Office of Fish and Wildlife (state-listed species) must be informally consulted regarding the evaluation of impacts to federally threatened or endangered species. Ultimately, for federally-listed species, the USFWS must issue a written statement stating their opinion detailing whether the project would jeopardize the continued existence of any listed species or result in the destruction or adverse modification of critical habitat. If the USFWS opinion is one of the following, then the environmental analysis with respect to the Endangered Species Act is complete:



- Protected species are known to not occur in the project area.
- The project would result in "No Effect" to any federally listed or proposed endangered species or critical habitat.
- The project is "Not likely to adversely affect" any federally listed or proposed endangered species or critical habitat.

Any of the above opinions will conclude Section 7 consultation.

If the USFWS opinion is that the project is "Likely to adversely affect" any federally listed or proposed endangered species or critical habitat, then OES and the FHWA should be contacted. They will initiate formal consultation with the USFWS to coordinate the preparation of a Biological Assessment (BA). NEPA cannot be completed until formal consultation is concluded with a Biological Opinion (BO) and a finding of "No Jeopardy" by the USFWS. If the USFWS indicates that a project will jeopardize the continued existence of a protected species, the project may not proceed until the project has been sufficiently modified to receive a "No Jeopardy" finding.

INDOT currently has a Memorandum of Understanding (MOU) with the USFWS which streamlines the Section 7 process for certain projects. At times, coordination with the USFWS may consist only of project notification in accordance with the MOU, Streamlining and Reducing the Flow of Early Coordination Letters/Responses with the USFWS dated September 1993 (see Appendix N). If the project meets the criteria of the MOU, the appropriate USFWS letter dated September 8, 1993 (see Appendix M) may be used in the CE document and no additional coordination with the USFWS is necessary. Note that certain areas of the state (notably the potential karst region and the Lake Michigan watershed) are not eligible for programmatic coordination with the USFWS regardless of project type.

Information

In the CE/EA Form, indicate whether:

- The project is within the known range of any federal or state listed threatened or endangered species.
- The project will impact any critical habitat.
- Any federal or state-listed threatened or endangered species were found in the project area and whether they are expected to be impacted.
- Formal consultation (for federally-listed species) is required.

In Remarks, include a summary of:

- The informal consultation that has been done to date with the USFWS and the IDNR, including the "effect" opinion(s) for each species.
- Any avoidance or minimization options that were evaluated or will be further evaluated in later stages of project development for either federal or state listed TES.

Since the bald eagle has been delisted for purposes of the endangered species act, but continues to be protected, the following language (or equivalent) is recommended when impacts to bald eagles or their habitat are anticipated:



The Bald Eagle was removed from the Federal Threatened and Endangered Species list on August 8, 2007. The Bald Eagle is still protected under the [Bald and Golden Eagle Protection Act and Migratory Bird Treaty Act](#), which prohibits the take and disturbance of nesting eagles.

Summarize any mitigation commitments in Section J (Environmental Commitments) and the commitments database.

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IV.C.2. Section B – Other Resources

IV.C.2.a. Ground Water, Surface Water, Drinking Water, Wellhead Protection Areas and Sole Source Aquifers

Background

Every construction project has the potential to adversely impact water resources. Water resources exist both above and below ground. The identification and protection of all water resources is imperative not only because it is required by law, but also to insure that adequate supplies of clean potable water are available for numerous uses. Drinking water resources within the construction impact area or in close proximity to the project must be identified. Possible impacts to drinking water resources based on the proposed construction activities (i.e., installation of open drainage or detention/retention basins or underground high capacity runoff storage structures) should be determined. Residential wells may be directly impacted by construction if they are within close proximity or down gradient of the project.

Two specifically designated areas of underground water to be considered and protected include Wellhead Protection Areas (WHPAs) and Sole Source Aquifers (SSAs). Information regarding WHPAs can be found in Section II.C.4.d of the [Procedural Manual for Preparing Environmental Documents](#). The locations of the various other sources of drinking water can be obtained from the contact persons mentioned below in the process discussion.

A Sole Source Aquifer is a federally regulated aquifer where ground water protection is of the utmost importance. The [Sole Source Aquifer \(SSA\) Protection Program](#) is authorized by Section 1424(e) of the Safe Drinking Water Act of 1974 (Public Law 93-523, 42 USC 300 et. seq). Sole Source Aquifer designations are one tool to protect drinking water supplies in areas with few or no alternative sources to the ground water resource, and where if contamination occurred, using an alternative source would be extremely expensive. The designation protects an area's ground water resource by requiring the U.S Environmental Protection Agency (USEPA) to review any proposed project within the designated area that is receiving federal financial assistance. All proposed projects receiving federal funds are subject to review to ensure they do not endanger the water source. The FHWA and the USEPA signed a Memorandum of Understanding (MOU) in April 1989 to ensure that projects in the Sole Source Aquifer area are developed to prevent the



introduction of contaminants into the aquifer that might create a significant hazard to public health. The MOU describes applicability criteria, projects exempt from review, and procedures for reviewing projects in the Sole Source Aquifer area. Although projects qualifying as CEs under 23 CFR 771.117 are specifically exempted from review by the USEPA as per the MOU unless a review is specifically requested, it is INDOT policy that all CEs, level 2 and above for projects that are located in the SSA area shall include the USEPA on the list of early coordination recipients.

Indiana currently has only one Sole Source Aquifer, the St. Joseph Aquifer System, located in northern Indiana. The St. Joseph Aquifer System serves as the “sole or principal source” of drinking water for some residents in Elkhart, St. Joseph, LaGrange, Noble, and Kosciusko Counties.

Process

For all projects that require early coordination, the preparer should determine the presence of community drinking water resources, residential wells if they will be directly impacted, WHPAs, and water wells (public and private) within the project study area.

Note in the project file the locations of all WHPAs and water wells both public and private. However, WHPAs must not be shown on general maps of the project area that will be distributed to the public.

A process is currently in place to determine if the proposed project is located within a designated WHPA. The steps to follow to obtain this information are as follow:

- From the [IDEM web page](#), download the Wellhead Protection Proximity Request Form in pdf format.
- Fill out the form completely.
- Return the fully completed form to the IDEM Ground Water Section either by email, fax or mail.

Upon receipt and subsequent to review, IDEM mails back the Wellhead Protection Area Proximity Determination documentation for the site in question.

IDEM’s response to the submission of the Wellhead Protection Proximity Form will include only the location of WHPAs in the vicinity of the project. The preparer must coordinate with water districts, municipal engineers and other contact persons to obtain more specific information, including management measures and requirements. Contact and other relevant information can be found on the IDEM web page.

Should the preferred alternative potentially impact a WHPA, the environmental document should contain a discussion of how the project will comply with the management measures and requirements in the local wellhead protection program management plan developed for the community public water supply system (CPWSS). The potential impacts and possible mitigation measures should be evaluated for each alternative under consideration.



If the project is located within the designated boundaries of the St. Joseph Aquifer (Appendix L), the preparer must coordinate with the USEPA Sole Source Aquifer Specialist in the Ground Water Branch of that agency to provide him with an opportunity to make comment on the potential of the project to adversely impact the aquifer.

The USEPA's review will determine one of the following:

- The project does not require further review;
- A Groundwater Impact Assessment (GWIA) is necessary to determine the potential of the project to adversely affect the Aquifer, or;
- The project has a significant potential to contaminate the Aquifer and requires modification to eliminate that potential before federal funds can be committed.

Information

In the Remarks section, note whether the project is within the St. Joseph Aquifer System, whether the MOU is applicable, and a summary of coordination with USEPA. USEPA's review and acceptance of the GWIA should be attached to the CE along with all coordination with the USEPA.

Summarize any mitigation commitments in Section J (Environmental Commitments) and in the commitments database.

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IV.C.2.b. Floodplains

Background

The purpose of assessing impacts to floodplains is to determine whether a transportation project will encroach on the 100-year floodplain and whether any encroachment will be significant. A floodplain typically consists of a floodway, which is the channel of the waterbody that floods, and the fringe, which is the remainder of the backwater. The 100-year floodplain is the area that has a one percent or greater probability of flooding in any given year. The 100-year floodplain may also be called the base floodplain, the National Flood Insurance Program Zone A floodplain, the regulatory floodplain, or the Special Flood Hazard Area. The Federal Emergency Management Agency (FEMA) defines 100-year floodplains for most communities in the nation.

The analysis of floodway impacts is required for the CE document and is required to support permit requests. In Indiana, the Office of Water at the Indiana Department of Natural Resources (IDNR) regulates activities within 100-year floodplains. The floodway is always considered to be waters of the US, which means that work within the floodway requires additional permits from USACE. See the [Indiana Waterway Permit Manual](#) for more information on jurisdictional waters.

Floodplain impacts are categorized as transverse or longitudinal. Transverse impacts, which occur when roads or bridges cross floodplains, typically result in fewer impacts than longitudinal



impacts, which occur when roads or bridges travel along a floodplain. Projects that have significant longitudinal impacts usually do not qualify for CE-level documentation.

Process

The tools for a floodplain analysis are the project plans and the FEMA flood plain map for the project area. The preparer compares the location of the floodplain delineated on the map with the project area to determine the extent and type of encroachment. The most current map for a location is listed in FEMA's *Community Status Book* and is available for download from [FEMA's web site](#). The FEMA website has a graphical layout tool which may be used to create floodplain maps for the project area. Depending on the area, the map may be one of three types:

- A Flood Insurance Rate Map (FIRM), which shows several levels of flood risk.
- A Flood Hazard Boundary Map (FHBM), which shows only 100-year floodplain and which will have the logo of the US Department of Housing and Urban Development on it.
- A Digital Flood Insurance Rate Map (DFIRM), which is a digitized version of a FIRM or FHBM and which is available for viewing or for download as a GIS layer.

Each major drainage structure on the proposed project must be assessed for encroachments and a determination made as to the significance of any encroachments. If a project segment, feature, or structure will encroach on the floodplain, the preparer must coordinate with the local floodplain administrator during design to insure consistency with local flood plain planning. If this cannot be completed prior to approval of the CE, the commitments section of the CE form and the commitments database should contain a commitment to continue coordination in the design stage. Alternatives to avoid adverse effects, minimize potential harm to or within the floodplain, and avoid incompatible development in the floodplains must also be considered.

INDOT has established five (5) categories of projects based upon the size, scope, and impact to the floodplain. The preparer determines which category the project falls into. The five categories are:

- Category 1 – Projects which will not involve any work below the 100 year flood elevation. No additional field work or coordination is required.
- Category 2 – Projects which will not involve the replacement or modification of any drainage structures. If a profile grade change is proposed, an inspection of the floodplain is required to determine whether such an increase will result in a substantial change in damage or risks.
- Category 3 – Projects involving modifications to existing drainage structures. Modifications of existing structures may affect flood heights and flood limits and therefore an analysis may be needed to determine the effect of the modifications. Calculations should be made to determine any changes in capacity of existing structures and an inspection of the floodplain should be made to determine whether any expected increase in flood heights could result in substantial damage not expected under current conditions.
- Category 4 – Projects involving replacement of existing drainage structures on essentially the same alignment. The site must be inspected upstream and downstream to determine existing conditions that affect the design of the replacement structure. For major drainage structure (opening larger than 100 square feet), a hydraulic design study is prepared as part of the engineering assessment to assess the impacts of various structure sizes on the flood risk within the floodplain.



- Category 5 – Projects on new alignment. As for Category 4 projects, a hydraulic design study is required for all major structures. INDOT’s public involvement manual requires that the public be offered the opportunity to request a hearing if the project results in substantial floodplain impacts.

Information

The discussion in the remarks section must state whether the project will encroach on a floodplain, describe the resources consulted to make this determination, describe additional studies and coordination, and contain language specific to the project and impact.

Projects not located in the floodplain

For projects not located in a floodplain, the following statement should be included in the remarks section:

The project does not encroach upon a regulatory floodplain as determined from available FEMA flood plain maps (attached). Therefore, it does not fall within the guidelines for the implementation of 23 CFR 65, 23 CFR 771, and 44 CFR.

Projects located in a flood plain:

For projects located in a flood plain, the remarks section must indicate the category of impact and include the appropriate language based on the impact assessment. It is possible that a single project will involve two or more of the categories. When this occurs it is necessary to include information for each of the categories involved. If a given situation does not fit a particular category, these guidelines should be used as a basis for developing a reasonable approach to fit that situation.

The appropriate statement or statements should be included in the Remarks section based on the Category of impact:

- Category 1 – “Although this project involves work within the horizontal limits of the 100 year floodplain, no work is being performed below the 100 year flood elevation and as a result this project does not encroach upon the base floodplain.”
- Category 2 – “This project will not involve the replacement or modification of any existing drainage structures or the addition of any new drainage structures. As a result, this project will not affect flood heights or floodplain limits. This project will not increase flood risks or damage, and it will not adversely affect existing emergency services or emergency routes, therefore, it has been determined that this encroachment is not substantial.”
- Category 3 – “The modifications to drainage structures included in this project will result in an insubstantial change in their capacity to carry flood water. This change could cause a minimal increase in flood heights and flood limits. These minimal increases will not result in any substantial adverse impacts on the natural and beneficial floodplain values; they will not result in substantial change in flood risks or damage; and they do not have substantial potential for interruption or termination of emergency service or emergency routes; therefore, it has been determined that this encroachment is not substantial.”



Category 4 – If no substantial impacts are predicted then the following comment will be included:

(#) homes are located within the base floodplain within 1000 feet upstream and (#) homes are located within the base floodplain within 1000 feet downstream. The proposed structure will have an effective capacity such that backwater surface elevations are not expected to substantially increase. As a result, there will be no substantial adverse impacts on natural and beneficial floodplain values; there will be no substantial change in flood risks; and there will be no substantial increase in potential for interruption or termination of emergency service or emergency evacuation routes; therefore, it has been determined that this encroachment is not substantial. A hydraulic design study that addresses various structure size alternates will be completed during the preliminary design phase. A summary of this study will be included with the Field Check Plans.

If substantial impacts are determined, the following will be included:

Substantial impacts to the floodplain have been predicted, therefore, a hydraulic design study that addresses various structure size alternates will be completed during the preliminary design phase. A summary of this study will be included in the Field Check Plans.

- Category 5 – If the evaluation finds no substantial encroachment to the floodplain, include the following statement:

There will be no substantial impacts on natural and beneficial floodplain values; there will be no substantial change in flood risks; and there will be no substantial increase in potential for interruption or termination of emergency service or emergency evaluation routes; therefore it has been determined that this encroachment is not substantial. A hydraulic design study that addresses various structure size alternates will be completed during the preliminary design phase. A summary of this study will be included with the Field Check Plans.

If substantial impacts are determined, the following will be included:

Substantial impacts to the floodplain have been predicted, therefore, a hydraulic design study that addresses various structure size alternates will be completed during the preliminary design phase. A summary of this study will be included in the Field Check Plans.

The appendix must contain the appropriate floodplain maps and the hydraulic design study, if performed.



The preparer must discuss the public involvement activities for substantial impacts in Part I, Public Involvement. The preparer must include mitigation and coordination commitments in Section J (Environmental Commitments) and in the commitments database.

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IV.C.2.c. Farmland

Background

Congress passed the Agriculture and Food Act of 1981 containing the [Farmland Protection Policy Act](#) (FPPA). The FPPA is intended to minimize the impact federal programs have on the unnecessary and irreversible conversion of farmland to nonagricultural uses. It assures that, to the extent possible, federal programs are administered to be compatible with farmland protection measures implemented by the state and local units of government. For the purposes of FPPA, farmland includes lands with soils that are identified as prime and unique or of statewide or local importance. All land which is not submerged or urbanized is subject to FPPA requirements.

Process

If the project has the potential to convert farmland to non-farm use, the local office of the Natural Resources Conservation Service (NRCS) or United States Department of Agriculture (USDA) Service Center must be contacted. The NRCS uses a land evaluation and site assessment system to establish a farmland conversion impact rating score on proposed sites of federally funded and assisted projects. This score is used as an indicator for the project sponsor to consider alternatives if the potential adverse impacts on the farmland exceed the recommended allowable level.

The [Procedural Manual for Preparing Environmental Documents](#) includes Form NRCS-CPA-106, the document that is used to evaluate the project's impact to important farmland. The [Procedural Manual for Preparing Environmental Documents](#) includes instructions for completing the Form NRCS-CPA-106 and coordinating with the NRCS. Parts I and III of the form are completed by the preparer and sent to the NRCS, who will determine whether the site of the proposed project contains prime, unique, statewide, or locally important farmland. For sites where farmland covered by the FPPA will be converted by the proposed project, the NRCS will complete Parts II, IV, and V of the form. The NRCS will return the form to the preparer, who then will complete Parts VI and VII of the form and return the form with the final selected site to the NRCS. Part VII includes the total points for the project.

Information

The completed Form NRCS-CPA-106 must be attached to the CE. The Remarks should discuss existing farmland resources in the project area, impacts on farmland, and mitigation and minimization measures considered. For projects that receive a point value less than 160, the following statement should be included in the CE:

Farmland Conversion Impacts: As is required by the Farmland Protection Policy Act, the NRCS has been coordinated with and the Form NRCS-CPA-106 has been



completed. Since this project received a total point value of less than 160 points, this site will receive no further consideration for farmland protection. No other alternatives other than those already discussed in this document will be considered without a re-evaluation of the project's potential impacts upon farmland. This project will not have a significant impact to farmland.

For projects that result in a CPA-106 score of 160 points or greater, additional coordination with the NRCS should be initiated to resolve the impacts.

Summarize any mitigation commitments in Section J (Environmental Commitments) and in the commitments database.

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IV.C.3. Section C – Cultural Resources

Background

Cultural resources are any prehistoric or historic remains or indicators of past human activities, including artifacts, sites, structures, landscapes, and objects of importance to a culture or community for scientific, traditional, religious, or other reasons.

Section 106 of the National Historic Preservation Act (NHPA) and the associated regulations ([36 CFR 800](#)), promulgated by the Advisory Council of Historic Preservation (ACHP), requires Federal agencies to (1) take into account the effect of federal undertakings on historic properties and (2) provide the ACHP an opportunity to comment on the undertaking. Additional information regarding Section 106 can be found in the [FHWA Environmental Guidebook](#) and the [Indiana Cultural Resources Manual](#).

In addition, Indiana has several state laws that protect cultural resources. [IC 14-21-1-18](#), requires that a Certificate of Approval be obtained from the State Historic Review Board before impacting a historic structure or site using state funds or on state property. [IC 14-21-1-26.5](#) requires that a development plan be prepared and approved by the Department of Natural Resources' Division of Historic Preservation and Archaeology (DHPA) for most activities that disturb ground within 100 feet of any burial ground. These regulations apply to all projects in the state..

The resources addressed by Section 106 are also protected under [Section 4\(f\) of the USDOT Act of 1966](#) (See section [II.B.14](#)); however, these two laws use independent and complementary approaches to provide this protection. Section 106 is a procedural law which requires all federal agencies to evaluate the effect of federal undertakings on historic properties and which gives the federal ACHP an opportunity to comment on the undertaking. Section 4(f) is a substantive law that only applies to activities that are approved or funded by USDOT agencies, including the FHWA. Section 4(f) requires the consideration of avoidance alternatives and, if there are no



feasible and prudent alternatives to using the resource, requires that harm to the resource be minimized and mitigated.

The FHWA-IN Section 106 Consultation Procedures (Chapter 3 of the [Indiana Cultural Resources Manual](#)) explain how to implement these regulations for the FHWA projects in Indiana. It is important to note that the preparer of the Section 106 documentation must meet minimal professional qualification standards. These can be found in 36 CFR 800.2(a)(1). See the [Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation](#) for more information.

NEPA documentation cannot be finalized until the Section 106 process is completed, which means that Section 106 is often the critical path to completing CE projects. The process can take a little as two weeks for very simple projects that qualify for programmatic agreements or over a year for complex projects with multiple impacts. Therefore, the Section 106 process should be initiated as early as possible.

Process

The FHWA-Indiana Division (FHWA-IN) has created [Section 106 consultation procedures](#) that explain how the FHWA-IN Division satisfies its responsibilities under Section 106 of the NHPA. To the extent that Section 106 allows, the FHWA has delegated to INDOT and consultants the ability to conduct Section 106 coordination with the Indiana State Historic Preservation Officer (SHPO) and consulting parties. Section 106 must be completed for all Federal-aid undertakings, and the public must be given an opportunity to comment on the undertaking's effect on historic properties before the environmental document is completed. The outcome of the Section 106 process is a finding that describes the effect of the project on specifically identified historic properties. A historic property may be a structure, a collection of structures (such as a historic district), a geographic location, or an archaeological site.

The essential steps of the full Section 106 process are listed here. Steps that are starred must be executed by a qualified professional.

1. Establish an Area of Potential Effect (APE). *
2. Identify historic properties and archaeological sites within the APE. *
3. Make preliminary determinations of APE, Eligibility Determination, and Effect. *
4. Identify Consulting Parties and invite them to participate in consultation.
5. Review responses from Consulting Parties, hold Section 106 consultation meetings if necessary.
6. Prepare APE, Eligibility Determination, and Effect Finding for INDOT for review and INDOT/FHWA approval. *
7. Distribute the approved APE, Eligibility Determination, Effect Finding, and documentation to consulting parties and present to the general public through public notices.
8. Revise the APE, Eligibility Determination, Effect Finding, and supporting documentation based on Consulting Party and public comments.
9. Resolve any adverse effects on historic properties through a Memorandum of Agreement.

Each of these steps is discussed in more detail in the FHWA's procedures and the [Indiana Cultural Resources Manual](#). After identifying the APE and potential historic properties within



the APE, certain key organizations and individuals are invited to be consulting parties when the Section 106 process is initiated, and any others may ask to be a consulting party any time during the Section 106 consultation process. If the project will require approval (such as permitting) from another federal agency, the agency issuing that approval should be invited to be a consulting party.

After completing the appropriate Section 106 consultation, the project sponsor is required to develop the finding and submit supporting documentation for effect findings. The finding may be “No Historic Properties Affected”, “No Adverse Effect”, or “Adverse Effect”. The documentation includes the recommended APE, the properties within the APE that are believed to be eligible for or listed on the National Register of Historic Places, and the suggested finding of effect. For Adverse Effect findings, the documentation also includes a description of mitigation that is proposed to reduce the adverse effect. A draft memorandum of agreement for implementing the mitigation may also be included. The FHWA-IN has developed a template for these agreements, which is available through the, [Indiana Cultural Resources Manual](#). A checklist for submitting information to INDOT can also be found in [Indiana Cultural Resources Manual](#).

The FHWA, INDOT, and SHPO have developed two major programmatic agreements (PAs) to streamline the Section 106 process. The first addresses historic bridges and the second addresses certain categories of transportation projects. The preparer of the Section 106 documentation should review the project scope early in the NEPA process to determine whether these programmatic agreements apply or whether the full Section 106 process is required as described above.

Historic Bridge PA

The *Programmatic Agreement Among the Federal Highway Administration, the Indiana Department of Transportation, the Indiana State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding Management and Preservation of Indiana’s Historic Bridges*, executed in August 2006, applies to any federal-aid project that may result in the replacement or rehabilitation of a historic bridge in Indiana. A copy is available in [Indiana Cultural Resources Manual](#). The PA is based on an inventory of potentially historic bridges, which was used to determine the preservation status of each bridge. [The historic bridge inventory](#) covers all publicly owned Indiana bridges (state and local) built through 1965 and was completed in 2008. The process of determining which bridges will be preserved (called “select”) and those that may be rehabilitated or replaced (“non-select”) is expected to be completed in 2009. In essence, the Historic Bridges PA provides the research on NRHP eligibility and the finding of effect up front, which will significantly decrease the time needed to complete Section 106 for these resources.

Minor Projects PA

The *Programmatic Agreement Among the Federal Highway Administration, the Indiana Department of Transportation, the Advisory Council on Historic Preservation and the Indiana State Historic Preservation Officer Regarding the Implementation of the Federal Aid Highway Program In the State of Indiana*, also called the [Minor Projects PA](#), was established October 12, 2006 between the FHWA, INDOT, SHPO, and the ACHP. The Minor Projects PA has two



sections. The first provides an abbreviated Section 106 process for a set of common, minor projects. The second delegates FHWA's authority to make findings of effect (except adverse effect) to INDOT.

Minor projects are those that have little to no potential to cause effect to historic properties. If a project type, activity, or undertaking is listed in the Minor Projects PA, little or no further cultural resource investigation is needed and the project may follow an abbreviated Section 106 process. The PA does not exempt a minor project from the normal NEPA process and documentation. The NEPA documentation shall reference and include the description of the specific stipulation in the PA that qualifies the project as exempt. Many projects that are scoped as CE's are also sufficiently minor in impacts to historic properties to fall under the Minor Projects PA, but each project should be individually evaluated for suitability.

Projects covered by this PA fall into two categories: minor projects that do not require review by INDOT's Cultural Resources Section (CRS) staff (Category A); and minor projects that do require documentation and review by INDOT's CRS staff to assess the likelihood that historic properties exist in the area of potential effects or determine the degree of existing soil disturbance within the project area (Category B). The only minor projects that require consultation with, review by, or approval by the SHPO, INDOT and the FHWA are those in category B-6. These should be submitted to INDOT, which will coordinate with the other agencies for approval.

If the project manager, project sponsor, the INDOT District Office in charge of the environmental document, and/or the INDOT-CRS determines that the PA applies to a project, then no further work needs to be produced for review under Section 106 by SHPO or the FHWA. If there is a concern about the application of the PA to a specific project, INDOT-CRS should be consulted.

Through the Minor Projects PA, the FHWA has delegated to INDOT the authority to make determinations of the Area of Potential Effects (APE), the eligibility of affected resources, and findings of "No Historic Properties Affected" and "No Adverse Effect" for all projects. The FHWA will remain legally responsible for all findings and determinations required by federal law. If INDOT determines, in consultation with the SHPO and consulting parties, that the project will have an "Adverse Effect" on historic properties, the FHWA will continue to be responsible for making a finding of "Adverse Effect" and for the resolution of those effects.

The project sponsor or consultant must send the APE, eligibility determinations, and effect finding documentation to the Administrator of the Cultural Resources Section in the Office of Environmental Services in INDOT's Central Office for review. Two copies of the information should be submitted—one for INDOT's files and one to be signed and returned to the applicant or consultant.

If INDOT agrees with the recommendations of "No Historic Properties Affected" or "No Adverse Effect," it will approve the recommendations by signing and returning the effects documentation for distribution to the SHPO and consulting parties for review.



If INDOT agrees with recommendations of “Adverse Effect,” it will forward the recommendations to the FHWA for review and signature. After the FHWA signature, the document will be returned for distribution to the SHPO and consulting parties for review. See the INDOT Cultural Resources Manual for details on consultation to resolve adverse effects.

If INDOT disagrees with any recommendation, requires further information before reaching a decision, or requires revisions to the documents, it will issue a letter or send an e-mail to the applicant or their consultant setting forth its position.

Information

Check all appropriate boxes to show which cultural resource documents were produced for the project. In the remarks section, include the appropriate discussions under these headings:

- Description of the Area of Potential Effect
- Coordination with Consulting Parties.
- Archaeology (include the conclusions of the archaeology report).
- Historic Properties (include a description of each above-ground historic property and whether or not it is listed on or eligible for inclusion in the National Register).
- Documentation and Findings (summarize and provide submittal dates for the following: the finding and associated documentation, all correspondence with the SHPO and INDOT, and options considered to minimize harm and potential mitigation or enhancements). If applicable, include the executed Memorandum of Agreement to resolve adverse effects.
- Public Involvement (include the date the legal notice was published and whether any comments were received from the public or consulting parties, especially objections).

The following should appear in an appendix to the CE Document Form:

1. The FHWA approved APE, Eligibility determinations, and Effect finding. Include the date of each determination on the CE form.
2. Documentation that supports the effect finding.
3. If the FHWA has made an “Adverse Effect” finding, then attach a copy of the fully signed Memorandum of Agreement. Include the date the MOA was fully signed on the CE form.
4. Summary of Archaeology report (retain the entire report in the project file but do not include in the CE).
5. The historic properties report
6. All correspondence with consulting parties, SHPO, FHWA, and INDOT, including the outgoing invitation to consulting parties.
7. The affidavit of publication of the legal notice advertising the finding of effect and a copy of the notice.

Be certain that specific locations of archaeological sites are not included in the CE document or other public documents.

Summarize any mitigation commitments in Section J of the CE/EA Form (Environmental Commitments) and in the commitments database. If the effect is adverse, include the stipulations from the memorandum of agreement must be included in exact wording. Refer to the [Procedural Manual for Preparing Environmental Documents](#) and the [Indiana Cultural](#)



[Resources Manual](#) for more information on Section 106. Describe any additional archaeological work, such as excavations for data recovery, which may be completed after completing Section 106 or NEPA.

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IV.C.4. Section D - Section 4(f) and Section 6(f) Resources

IV.C.4.a. Section 4(f)

Background

[Section 4\(f\)](#) of the US Department of Transportation Act of 1966 prohibits the use of certain public and historic lands for federally funded transportation facilities unless there is no feasible and prudent alternative. The law applies to significant publicly owned parks, recreation areas, and wildlife/waterfowl refuges, and National Register eligible or listed historic properties. Lands that are subject to this law are called Section 4(f) resources. Each Section 4(f) resource has certain activities, features, and attributes that make it eligible for protection.

Land from a Section 4(f) resource may be used indirectly through constructive use or directly, by permanent or temporary occupancy. Direct use converts the land to a transportation facility through permanent easement or purchase. Constructive use occurs if the proximity of the project to the Section 4(f) resource substantially impairs the activities, features, and attributes of the land that make it eligible for protection. Before selecting an alternative that uses a Section 4(f) resource, the project sponsor must demonstrate that there is no feasible and prudent alternative to using land from the Section 4(f) resource and that they have engaged in all possible planning to minimize harm to the resource. This decision should consider input from other federal agencies that have an interest in the property (e.g. Department of the Interior, US Department of Housing and Urban Development).

The preparer evaluates any proposed use of a Section 4(f) resource for conformity with the law, and the evaluation document is submitted to the FHWA for approval. Many common uses of Section 4(f) resources can be documented and evaluated through one of five programmatic agreements. Very minor uses may qualify for a *de minimis* finding when the use does not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f). Documentation of these Section 4(f) impacts are contained in the CE document. Uses that do not meet the criteria for a programmatic evaluation or a *de minimis* finding must be documented with an individual Section 4(f) evaluation, which is separate from the CE document.

Section 4(f) involvements are uncommon but may occur in any project. Recreational Trails Program projects are specifically exempted from all requirements of Section 4(f). Other trail projects may be exempt if they meet certain criteria outlined in the FHWA's guidance.



Process

The preparer must search for Section 4(f) resources on all projects and resolve or document any use. The following steps are recommended to locate Section 4(f) resources:

1. Inventory possible Section 4(f) resources:
 - a. Determine the location of all parks, playgrounds, playing fields, wildlife and waterfowl refuges, and other recreational areas in the project vicinity from site visits and aerial photographs in the project vicinity.
 - b. Examine results of early coordination, especially from local government agencies and the National Park Service, for indications of possible Section 4(f) resources.
 - c. Determine the location of all National Register listed or eligible properties in the project vicinity from the Section 106 process.
 - d. Note the location of publicly owned parcels from the landowner records used for Notices of Survey.
2. Determine whether Section 4(f) applies:
 - a. Determine whether the project will use land from the resource, either permanently or temporarily.
 - b. Determine the amount and location of land that will be used, including constructive use.
 - c. Determine whether the park, recreational, and refuge lands are publicly owned.
 - d. Obtain written confirmation of significant public use from the official with jurisdiction over park, recreational, and refuge lands.

If a Section 4(f) resource will be impacted by a project, the preparer should refer to the [Procedural Manual for Preparing Environmental Documents](#) for detailed information on how to proceed and references to the FHWA's guidance on documentation.

If one or more Section 4(f) resources are involved in a project, the preparer generates a range of alternatives that must include avoidance and should include alterations to the project's configuration, features, and right-of-way requirements. The preparer and designer then evaluate the alternatives for feasibility and prudence and demonstrates that harm to the resource has been minimized. Minimization of harm includes modifying the design to reduce impacts and mitigation to compensate for residual impacts.

Five programmatic agreements are available for impacts to the following Section 4(f) resources:

1. Public parks, recreation lands, and wildlife and waterfowl refuges.
2. Historic sites.
3. Historic bridges.
4. Bikeways and walkways.
5. Projects that provide a net benefit.

In addition, a *de minimis* finding may be used when the use does not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f). Guidance on how to apply these programmatic agreements and on proposing a *de minimis* finding may be found in the [Procedural Manual for Preparing Environmental Documents](#) and on the [FHWA's Section 4\(f\) web site](#).



Most impacts from CE-level projects can be documented with one of the programmatic evaluations or a *de minimis* finding; projects using one of these documentation types are processed as a level 3 CE or higher. Projects that require an individual evaluation must be processed as a level 4 CE.

The preparer's activities to satisfy Section 106 of the National Historic Preservation Act will provide some useful information for satisfying the requirements of Section 4(f) for historic properties, but the outcome of Section 106 does not control the outcome of Section 4(f). A project may have an adverse effect on a historic property under Section 106 but, if it does not take land from the property, may not be considered a Section 4(f) use. Conversely, a project that has a "No Adverse Effect" finding under Section 106 may take land from that property, and therefore may be a Section 4(f) use.

Application of the Indiana Section 106 Historic Bridge Programmatic Agreement or a Section 106 memorandum of agreement for mitigating an adverse effect under Section 106 is required for applying the historic sites and historic bridges programmatic Section 4(f) evaluations. If there is a Section 4(f) use of a historic property, a Section 106 finding of "No Adverse Effect" qualifies the impact for a *de minimis* finding. Section 106 and the application of a programmatic Section 4(f) evaluation are documented simultaneously.

Each Section 4(f) evaluation must be reviewed by OES and approved by the FHWA before the CE is approved. The documentation submitted to OES for review varies with the type of evaluation. For a programmatic evaluation, the preparer submits the appropriate sections of the draft CE document and supporting documentation. For a *de minimis* finding, the preparer submits a memorandum that explains the applicability of the finding to project and supporting documentation. For an individual evaluation, the preparer submits a separate document in the format required by the FHWA, which includes supporting documentation. After review, OES provides the documentation to the FHWA for their review and approval.

Information

Section 4(f) resource involvement is documented in the Section 4(f) section, in the alternatives section, and in the project description. Within the Section 4(f) section, the preparer indicates which type of Section 4(f) evaluation applies by selecting the appropriate box and in paragraph form thoroughly describes the following:

1. Section 4(f) properties near the project, whether affected or not. This inventory will assist the designer and environmental staff in determining impacts if the project footprint changes after the CE is approved.
2. The Section 4(f) properties for which avoidance is not feasible and prudent and will, therefore, result in a use.

The appendices should include all applicable documentation, including the following:

1. Any plans and photographs of the 4(f) property that show how the property may be affected. Include property lines on these plans.
2. Correspondence from the official having jurisdiction regarding their views with respect to assessment of effects and mitigation
3. Coordination correspondence, if required.



The project alternatives described in the alternatives section must include all alternatives evaluated under Section 4(f) and the project description should state whether and how much impact the project will have on Section 4(f) resources.

Summarize any applicable commitments in Section J (Environmental Commitments) and in the commitments database.

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IV.C.4.b. Section 6(f)

Background

Section 6(f) resources are lands that were purchased with or improved using funds from the Land and Water Conservation Fund (LWCF). The fund was created through the [Land and Water Conservation Fund Act of 1965](#) to preserve, develop and assure accessibility to outdoor recreation resources, and to strengthen the health and vitality of the public. These public recreation lands are to be maintained for public outdoor recreation use. The program is administered by the National Park Service (NPS) at the national level and by the Department of Natural Resources' (DNR) Division of Outdoor Recreation at the state level.

Section 6(f) of the act prohibits the conversion of LWFC lands unless the National Park Service (NPS) approves substitution property of reasonably equivalent usefulness and location and of at least equal fair market value. The Section 6(f) regulations may be found at [36 CFR 59](#).

Process

All publicly owned land in or adjacent to the project area should be examined for LWCF involvement. This information may come from DNR or NPS in response to the early coordination letter or from [NPS's LWCF web site](#).

Once a potential 6(f) property is identified, DNR's Division of Outdoor Recreation should be contacted to determine the nature and location of the LWFC parcels or improvements. DNR will also provide information on the application of Section 6(f) conversion restrictions to the property.

Projects that take land from a Section 6(f) property must meet certain prerequisites before a conversion request will be considered by the NPS. The following must be documented for the NPS and the complete documentation must appear in the CE document.

1. All practical alternatives to the conversion (such as avoidance) have been evaluated and rejected on a sound basis.
2. The fair market value of the property to be converted has been established and the property proposed for substitution is of at least equal fair market value as established by an approved appraisal.



3. The property proposed for replacement is of reasonably equivalent usefulness and location as that being converted, and the property proposed for substitution meets the eligibility requirements for LWCF-assisted acquisition.
4. If a portion of a property will be taken, the effect of the conversion of the remaining property has been documented.
5. For federally funded projects, all necessary coordination with other federal agencies has been satisfactorily accomplished including, for example, compliance with Section 4(f) (above).
6. The proposed conversion and substitution are in accord with the Statewide Comprehensive Outdoor Recreation Plan (SCORP) and/or equivalent recreation plans.
7. The acquisition complies with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act.

OES should be contacted for additional guidance if a Section 6(f) conversion is proposed. It is at the NPS discretion to approve or deny conversion of LWCF property. Section 6(f) requirements must be completed before the environmental document is approved.

Information

The remarks section should describe the process by which the preparer determined whether the project will involve Section 6(f) resources, including all sources consulted. If the project will take land from a Section 6(f) resource, describe measures to comply with the conversion requirements. Provide all documentation in the appendices.

Summarize any commitments in Section J (Environmental Commitments) and in the commitments database.

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IV.C.5. Section E - Air Quality

Background

The [Clean Air Act](#) (CAA) and later amendments were enacted to protect public health and welfare by controlling air pollution and to assist state and local governments with air pollution prevention programs. The two aspects of the CAA regulatory program that are important for transportation projects are the regulation of air quality and the regulation of mobile sources of specific toxic substances. Air quality regulation is primarily concerned with six major pollutants, called criteria pollutants, which are controlled by programs implemented at the state level. Mobile source air toxics are also regulated under the CAA to protect human health and the environment.

Regulatory requirements of the CAA apply to CEs. The preparer of the document will record existing documentation in regards to the criteria pollutants and the conformity status of the project. The preparer will also identify any additional requirements beyond conformity (hot spot analyses and mobile source air toxics analyses) that may be applicable to the project.



Criteria Pollutants and Conformity

The CAA established six criteria pollutants and required the Environmental Protection Agency (EPA) to set National Ambient Air Quality Standards (NAAQS) for these criteria pollutants.

Criteria pollutants are those that adversely affect human health and welfare. The primary NAAQS for each pollutant are set at levels to ensure adequate protection of public health. The criteria pollutants are:

Pollutant Name	Chemical Abbreviation
Carbon Monoxide	CO
Ozone	O ₃
Particulate Matter (Coarse and Fine)	PM ₁₀ (Coarse) and PM _{2.5} (Fine)
Nitrogen Dioxide	NO ₂
Lead	Pb
Sulfur Dioxide	SO ₂

Three of the criteria pollutants, CO, O₃, and PM, have mobile sources. NO₂ is a transportation-related pollutant and has been included in the regulations of nitrous oxides, which are precursor pollutants for O₃. The remaining two criteria pollutants, lead and SO₂, are not transportation-related pollutants but may have to be considered in other environmental analyses for transportation projects.

The CAA established three designations for geographic areas based on ambient air quality conditions observed for each criteria pollutant:

- Nonattainment Area: areas that currently exceed the NAAQS for a criteria pollutant
- Maintenance Area: areas that were designated as nonattainment in the past but have since met the NAAQS for the exceeded criteria pollutant and have a maintenance plan in place.
- Attainment Area: areas that have never exceeded the NAAQS for any of the six criteria pollutants

The Indiana Department of Environmental Management (IDEM) develops a plan that demonstrates how the state will attain and maintain compliance with NAAQS. This plan, called a State Implementation Plan (SIP), must be reviewed and approved by the EPA.

The SIP provides implementation and enforcement of emission control measures for all sources of criteria pollutants. The SIP contains an inventory of emission sources, emissions budget for the on-road sources of each pollutant, and transportation control measures for these on-road sources. The transportation planning organizations determine whether proposed improvements are consistent with the motor vehicle emissions budgets in the SIP is called conformity.

Metropolitan Planning Organizations (MPOs) are the regional organizations responsible for comprehensive transportation planning and programming in urbanized areas, with the cooperation of state and local jurisdictions. Two MPO planning documents are involved in the conformity process. The Transportation Plan (TP) is the official intermodal metropolitan



transportation plan developed through the metropolitan planning process for the metropolitan planning area. The TP is a long-range, federally-required 20-year planning document. The Transportation Improvement Program (TIP) is a staged, four-year intermodal program of transportation projects that covers the entire MPO planning area and is consistent with the TP. All funded projects within the boundary of the MPO must be included in the TIP. The [Indiana Statewide Transportation Improvement Program \(INSTIP\)](#) contains all of the various MPO TIPs and covers four years of transportation projects.

The federal Transportation Conformity Rule, [40 CFR Parts 51 and 93](#), requires MPOs and FHWA to determine that TPs and TIPs conform to the SIP, including meeting the emissions budget and the implemented schedule of Transportation Control Measures (TCMs) established in the SIP for air quality. Conformity determinations for projects located in isolated rural areas (nonattainment or maintenance areas that do not have a MPO and are not included in the regional emissions analysis) are the responsibility of the project sponsor, usually INDOT.

In addition to this planning-level conformity, individual projects must also be in conformity. The project-level conformity process takes place during the NEPA process and ensures that federal funding and/or approval are only given to projects that are consistent with air quality goals. The conformity process ensures that transportation projects do not create any new violations, increase the frequency or severity of existing violations, or interfere with the purpose of the SIP, which is to meet the EPA standards for air quality.

Project-level conformity applies to nonexempt projects located in nonattainment or maintenance areas that receive federal funds/approval and are not exempt. Exempt projects are those that maintain existing transportation facilities or improve mass transit or air quality and have a neutral impact on air quality (refer to the Procedural Manual for more information). A project-level conformity determination is required prior to the approval of any environmental document. Only the project's long-term impact on air quality is considered unless any phase of construction will last longer than five years. In this case, temporary impacts due to construction must be evaluated as well.

The conformity regulations impose a four-year time limit on project-level conformity determinations. Conformity will have to be re-determined unless one of the following has occurred within four years of the original conformity determination:

1. NEPA process completion.
2. Start of final design.
3. Acquisition of a significant portion of right-of-way.
4. Approval of the plans, specifications and estimates.
5. Construction.

If the project has undergone significant change in design concept and scope since the conformity determination, or if the project requires supplemental environmental documentation for air quality purposes, a new conformity determination is required.

Nonattainment or maintenance areas for CO or PM may also be required to demonstrate that no new localized violations of these pollutants will result from project implementation.



Process

The air quality analysis that is required during the environmental process will vary considerably in content and in level of detail from one project to another based on the scope, size, geographic location, background conditions and anticipated impacts.

The first step in the transportation conformity process is to determine whether the project is in a nonattainment or maintenance area (refer to either the [EPA](#) or [IDEM](#) websites for current attainment status). The next step is to determine if the project is exempt from a conformity determination (refer to the [Procedural Manual for Preparing Environmental Documents](#) for more information). Although they do not have to show conformity, exempt projects with federal funding must be included in the TIP/INSTIP for a MPO area (INSTIP only for areas outside of a MPO). For larger projects, air quality impacts should be considered during the environmental process regardless of the attainment status of the area.

If the project is not exempt from conformity, the next step is to determine if the project is part of a conforming TP and TIP. The project must be accurately reflected in both documents. For projects located within a MPO boundary, the MPO will determine if the project is included in the TP and TIP. If a nonexempt project is located in an isolated rural area, the project sponsor is responsible for obtaining the conformity determination during the environmental process. See the Procedural Manual for more information.

If the project is nonexempt and is not included in the conforming TP and TIP, the project will need to be amended into the MPO's TP and TIP (if programmed within 4-year horizon of TIP) before conformity determination can be given. It is important to identify these changes early, because the amendment process could take up to a year or more to complete. Each MPO has their own schedule for updating the TP and TIP and any revisions will have to wait until the next scheduled revision. The NEPA document cannot be approved until the project is in a conforming TP and TIP (if phase is programmed within the 4-year horizon of the TIP).

Information

The following information needs to be included in the environmental document:

- The attainment status of the county in which the project is located.
- Whether the project is exempt from conformity determination.
- If the project is not exempt from conformity, information about the TP and TIP and the source should be provided (either reference MPO website or name of the person who provided the information).

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IV.C.5.a. Hot Spot Analyses for Criteria Pollutants

Background

A hot spot analysis, as defined in [40 CFR 93.101](#), is an estimation of likely future localized PM_{2.5}, PM₁₀, or CO pollutant concentrations and a comparison of those concentrations to the relevant air quality standards. A hot spot analysis assesses the air quality impacts of criteria pollutants on a scale smaller than an entire nonattainment or maintenance area. Such an analysis is a means of demonstrating that a transportation project meets the CAA conformity requirements to support state and local air quality goals with respect to potential localized air quality impacts.

Hot spot analyses are required for all nonexempt projects that are located in CO nonattainment or maintenance areas. For projects located in PM nonattainment or maintenance areas, a hot spot analysis is required for all projects of air quality concern. See [Figure 1](#) for a flowchart of when a hot spot analysis is required.

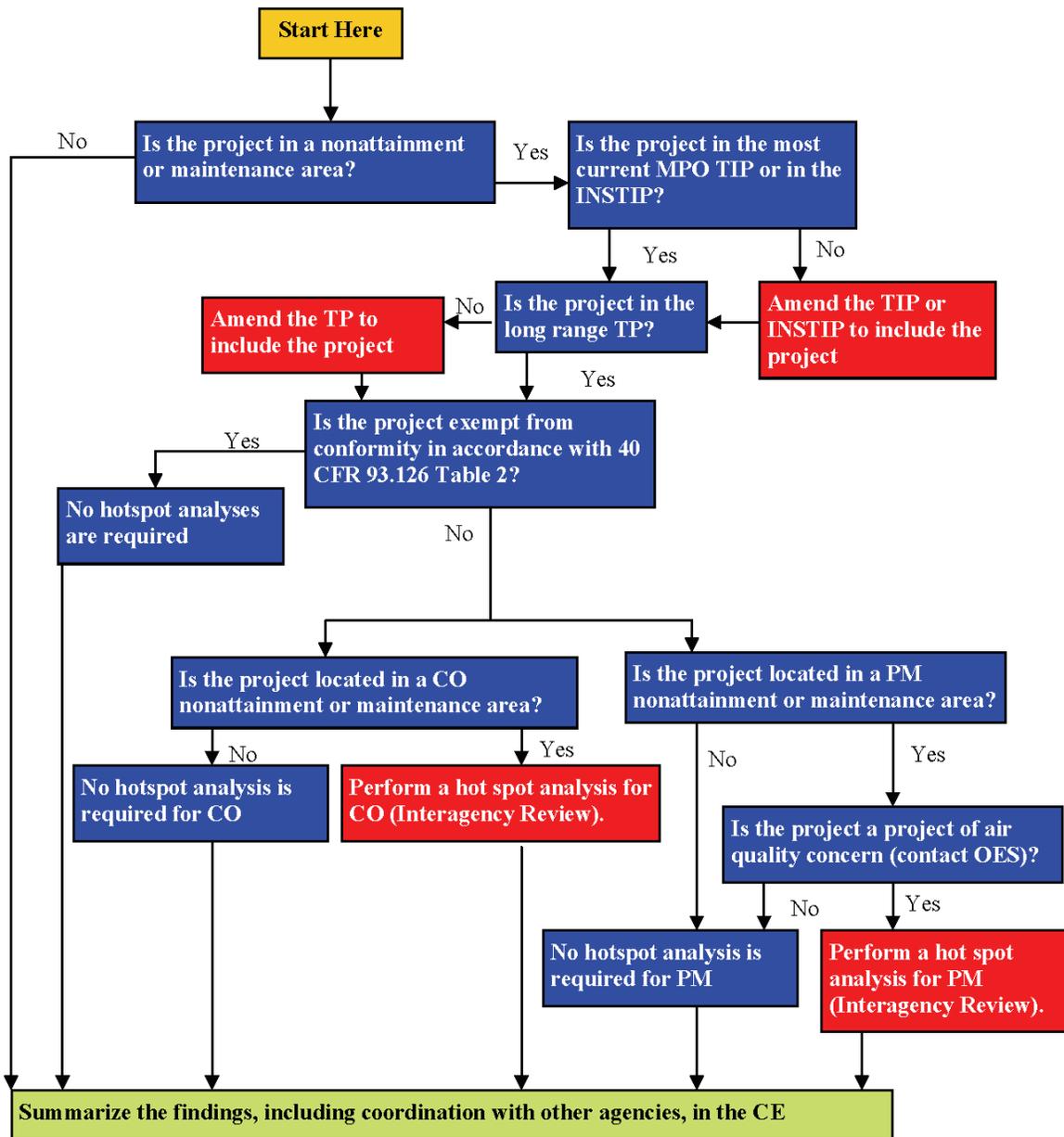
Process

It is the project sponsor's responsibility to determine if a hot spot analysis is required, ensure that the consultation requirements are completed, complete the hot spot analysis and include the results in the NEPA document. See the *Procedural Manual for Preparing Environmental Documents* for more information.

Information

In the remarks section, indicate if a hot spot analysis is required and the reasoning for the decision. If a hot spot analysis is required, include a summary of the analysis in the remarks section and the study in the appendix.

Figure 1: Hot Spot Analysis Flow Chart



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IV.C.5.b. Mobile Source Air Toxics

Background

The CAA identified a large number of air toxics, also known as hazardous air pollutants of which EPA has identified 21 as mobile source air toxics (MSATs). These are set forth in a 2007 EPA final rule, [Control of Emissions of Hazardous Air Pollutants from Mobile Sources](#). The EPA also extracted a subset of this list that the FHWA labels as the six priority MSATs, which are benzene, formaldehyde, acetaldehyde, diesel particulate matter, acrolein, and 1,3-butadiene.

All projects must be subject to MSAT analysis to determine whether the project will increase the public's exposure to these substances. Depending on the specific project circumstances, the FHWA has identified three types of analysis:

1. An analysis is not required for projects with no potential for meaningful MSAT effects.
2. A qualitative analysis is required for projects with low potential MSAT effects.
3. A quantitative analysis to differentiate the alternatives is required for projects with a higher potential to have MSAT effects

Process

The Flowchart for the Analysis of MSATs ([Figure 2](#)) provides the steps necessary to determine what level of analysis is required for the proposed project. Each level of analysis requires differing amounts of documentation and effort, as is indicated in the flowchart. Most projects that are appropriate to document as CEs require only the first level of analysis because they do not have the potential for meaningful effects on MSATs. Such a project qualifies as a level 1 or 2 CE, is exempt from conformity as described above, or does not alter traffic volumes or the vehicle mix. If a project does not meet one of these criteria, the CE preparer must provide either a qualitative or quantitative analysis. More information on these analyses is available in the [Procedural Manual for Preparing Environmental Documents](#).

Information

Include the appropriate MSAT standard language for the analysis type in the remarks section. For projects that are documents as CE level 1 or level 2, or that are exempt from conformity, use the following language:

This project is of a type qualifying as a categorical exclusion (Group 1) under 23 CFR 771.117(d), or exempt under the Clean Air Act conformity rule under 40 CFR 93.116, and as such, a Mobile Source Air Toxics analysis is not required.

For projects that have no meaningful impacts on traffic volumes or vehicle mix, use the following language:

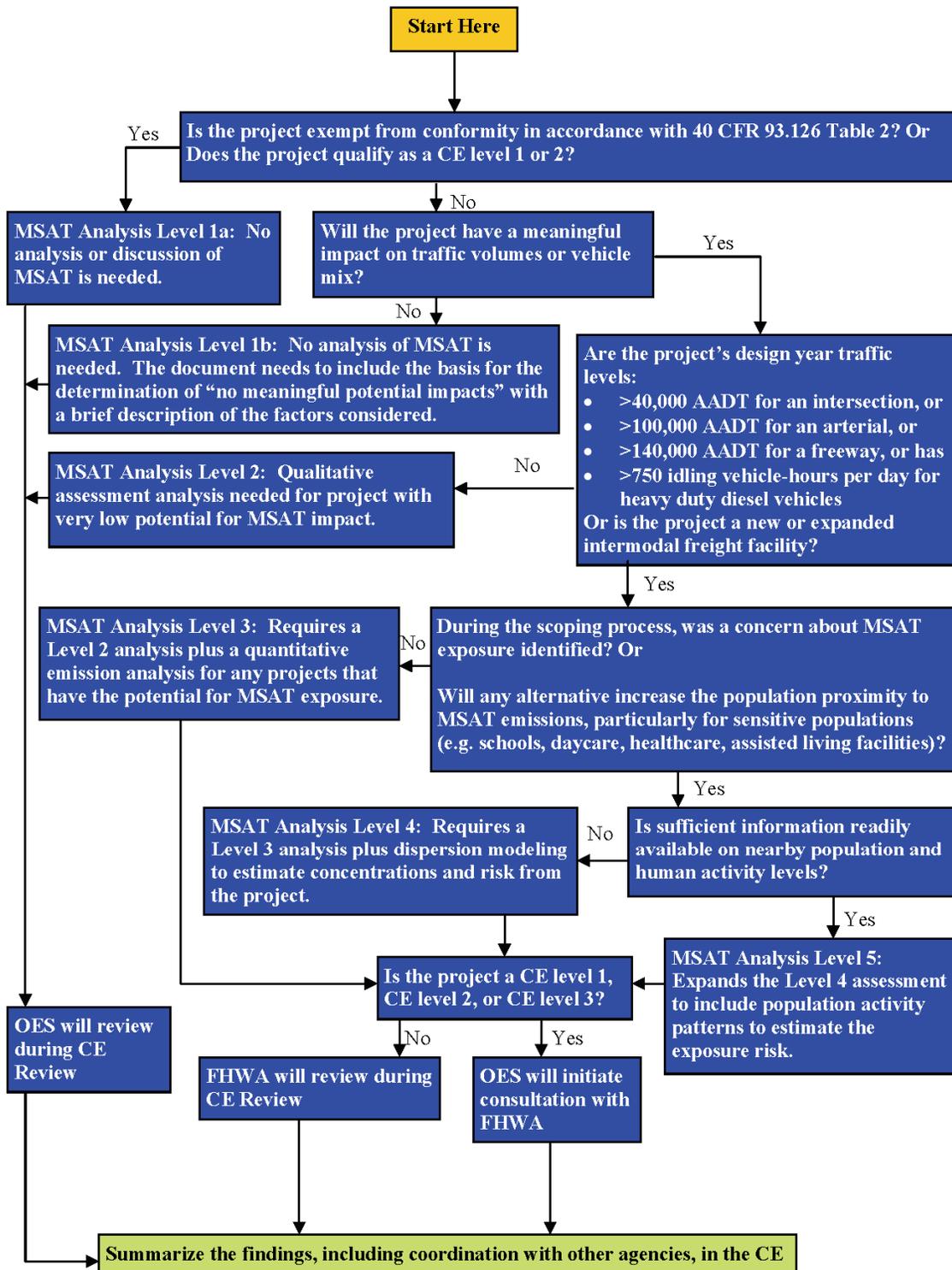
This project will not result in any meaningful changes in traffic volumes, vehicle mix, location of the existing facility, or any other factor that would cause an increase in emissions relative to the no-build alternative. As such, FHWA has determined that this project will generate minimal air quality impacts for Clean Air Act criteria pollutants and has not been linked with any special Mobile Source Air Toxic concerns. Consequently, this effort is exempt from analysis for MSATs.



Moreover, EPA regulations for vehicle engines and fuels will cause overall MSATs to decline significantly over the next 20 years. Even after accounting for a 64% increase in VMT, FHWA predicts MSATs will decline in the range of 57-87% from 2000 to 2020, based on regulations now in effect. This will both reduce the background level of MSATs as well as the possibility of even minor MSAT emissions from this project.

See the [*Procedural Manual for Preparing Environmental Documents*](#) for information on how to complete the remarks section for a CE or EA project that requires a qualitative or quantitative analysis

Figure 2: Flowchart for the Analysis of Mobile Air Source Toxics (MSAT)



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IV.C.6. Section F – Noise Impacts

Background

The Federal Highway Administration's (FHWA) noise regulations ([23 CFR 772](#)) and [INDOT's Traffic Noise Policy](#) require the determination and consideration of traffic noise impacts for what are called Type 1 projects. Type 1 projects are those which consist of new roadways constructed or the physical alteration of an existing roadway that either significantly changes the horizontal or vertical elevation or increases the number of through traffic lanes, as well as other capacity-adding project types. All Type 1 projects require the completion of a noise analysis as part of the NEPA process.

Process

The first step is to determine whether the project is a Type 1 project by consulting with the Office of Environmental Services. If a noise analysis is required, OES will determine the appropriate level of detail for the study. All noise analyses must follow the guidelines set by both the INDOT Traffic Noise Policy and the FHWA regulations. Refer to the [Procedural Manual for Preparing Environmental Documents](#) for guidance on information that must be included in the noise analysis and Flowchart 14 in Appendix E for submission timelines.

LPAs are responsible for completing a noise analysis for their projects during the NEPA phase. The preparer should contact the Office of Environmental services to determine whether a noise analysis is required and to coordinate the study. Noise analyses for INDOT sponsored projects are submitted to OES for approval prior to the CE being reviewed or approved. Noise analyses for LPA sponsored projects may be submitted to OES when the CE is being reviewed.

Information

If a noise analysis is not required, include the following statement in the remarks section of the CE document: *This project is not a Type 1 project. In accordance with 23 CFR 772 and the INDOT Traffic Noise Policy (approved on February 2007), this action does not require a formal noise analysis.*

If a noise analysis is required, include the following information in the remarks section of the CE:

- The number of receivers identified and the appropriate Noise Abatement Category.
- The existing and future noise levels predicted.
- The number of impacted receivers.
- If noise abatement is feasible and reasonable:

Based on the studies completed to date, noise abatement is feasible and reasonable. These preliminary indications of likely abatement measures are based upon preliminary design for a barrier that is (feet/meters) high and _____ (feet/meters) long at a cost of \$_____ that will reduce the noise level by _____ dBA for _____ benefited receivers. (Where there is more than one barrier, provide information for each one). Changes to these abatement measures may be necessary due to conditions encountered during final design. A final decision on the installation of abatement measure(s) will be made upon completion of the project design and the public involvement process.



- If noise abatement is not feasible:
Based on the studies completed to date, noise abatement is not feasible due to (provide explanation). Noise abatement will be reevaluated during the final design if the project's design concept or scope changes.
- If noise abatement is not reasonable:
Based on the studies completed to date, noise abatement is not reasonable due to (provide explanation). Noise abatement will be reevaluated during the final design if the project's design concept or scope changes.

Additional activities after the approval of the NEPA document are described in the [Procedural Manual for Preparing Environmental Documents](#) and the [INDOT Traffic Noise Policy](#).

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IV.C.7. Section G - Community Impacts

IV.C.7.a. Regional, Community & Neighborhood Factors

Background

Transportation projects can change communities in ways that are positive and negative. Although projects that qualify as categorical exclusions typically do not have profound effects on communities, the known, likely, and possible effects must be assessed in the environmental document.

Local mobility, access, pedestrian and motorist safety, and emergency services may be affected by transportation projects both during and after constructions. Other areas of potential impact to the character of a community include alterations to the movement of traffic, land use, or the streetscape. If these impacts are determined to be substantial, the project should be elevated to an EA or EIS.

One approach to integrating transportation projects into communities is Context Sensitive Solutions (CSS). CSS is a collaborative, interdisciplinary approach that involves all stakeholders to develop a transportation facility that fits its physical setting. It is an approach that leads to preserving and enhancing scenic, aesthetic, historic, community, and environmental resources, while improving or maintaining safety, mobility, and infrastructure conditions. CSS incorporates feedback from the locals affected by the proposed project, encourages collaboration between neighborhoods and local, state, and federal officials, enhances roadway and transit communities, considers bicycle and pedestrian access needs, and assists in the development of strategies for smart growth and encourages assessments and design of alternatives consistent with local needs.

Process

The process for gathering information about community impacts should be outlined in the project's public involvement plan. Local planning and public works organizations, emergency service providers, elected officials, and the public can identify the project's impact to the



community and measures to avoid, minimize or mitigate the impacts. The public involvement plan for the project should be designed and executed to engage these stakeholders early and throughout the project development process.

During implementation of the public involvement plan, the preparer should seek feedback from stakeholders to determine whether the project will impact community or neighborhood cohesion, the local tax base, property values, public facilities, community centers, or other resources important to the community that may not be readily identifiable by someone unfamiliar with the community.

CSS requires an early and continuous commitment to public involvement, flexibility in exploring new solutions, and openness to new ideas. Community members play an important role in identifying local and regional problems and solutions that may better meet and balance the needs of all stakeholders. Early public involvement improves community acceptance of the project and can help reduce expensive and time consuming revisions and thus contributes to more efficient project development.

Information

In the remarks section, the preparer should describe expected community impacts, both positive and negative, and explain how these impacts were identified. The preparer should describe measures that will be taken to avoid, minimize or mitigate impacts. The environmental document should discuss what activities have occurred to satisfy the goals of CSS. Any commitments related to regional, neighborhood and community factors or to CSS should be contained in Section J (Environmental Commitments) and in the commitments database.

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IV.C.7.b. Indirect and Cumulative Impacts

Background

In addition to direct impacts to the human environment, the National Environmental Policy Act requires federal agencies to consider indirect and cumulative impacts associated with Federal actions. Indirect effects are defined as follows:

Effects that 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. ([40 CFR 1508.8](#))

An example of an indirect effect would be the expected conversion of farmland to commercial use after a new interchange or highway facility is constructed. If the highway was never constructed, the conversion of farmland to commercial use would not likely occur.



Cumulative impacts are defined as follows:

The impact on the environment, which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. ([40 CFR 1508.7](#))

An example of a cumulative impact would be the combined impact of converting farmland to highway use by a DOT project, the past impacts associated with converting farmland to commercial or residential uses in the project's study area, and the future conversion of farmland to commercial, industrial or residential uses. Projects on new alignment or which provide access to new areas are more likely than others to present concerns related to indirect and cumulative impacts. There is no list of indirect or cumulative impacts that could occur as a result of the project. Critical thinking may be required to identify indirect and cumulative impacts. These impacts can be negative or positive.

Process

The preparer should determine whether the project scope is of a type that is likely to cause substantial indirect or cumulative impacts (for example, a project on new alignment). Most projects that qualify as CEs do not cause substantial indirect or cumulative impacts. If the preparer believes the project may cause substantial indirect or cumulative impacts, then the preparer should contact OES for guidance in evaluating and documenting the indirect and cumulative impacts.

Information

If the project is not likely to cause substantial indirect or cumulative impacts, make a note in the Remarks section and explain how this conclusion was reached (for example, this project adds capacity in an area that is already fully developed). If there are substantial indirect or cumulative effects resulting from the project, describe the impacts in the Remarks section and explain why the impacts are not considered significant.

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IV.C.7.c. Public Facilities and Services

Background

Highway projects have the ability to impact a number of public services. The impacts may be direct impacts, such as taking right-of-way from a school, library or fire station, or indirect impacts to these facilities by affecting their ability to provide services. For example, a new freeway facility may impact the response time for emergency services due to the change to limited access and the closing of some local roads. These types of changes also can impact schools by requiring changes to their transportation plans associated with school bus routes. Maintenance of traffic decisions can also affect the response times of emergency services.

**Process**

Determine what effect the project could have on public utilities; fire, police, emergency services; health, educational or public service facilities; religious institutions; and pedestrian and bicycle facilities by working with the appropriate local officials. Emergency service providers should be contacted to determine changes in emergency routes and travel times or possible response delays. Public transit impacts and school bus routes (including pick-up points) should be coordinated with the proper authorities.

Information

In the remarks section, summarize any impacts to public facilities and services and the coordination that occurred with the appropriate local officials. Note any efforts to minimize or mitigate impacts to public facilities and services.

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IV.C.7.d. Environmental Justice**Background**

An environmental justice (EJ) analysis is required for any project that may result in disproportionately high adverse impacts on a minority or low-income population in or near the project area. Federal agencies are required by legislation and executive order to conduct their programs, policies and activities that substantially affect human health or the environment in a manner that ensures that such programs, policies and activities do not have the effect of excluding persons from participation in, denying persons the benefits of, or subjecting person to discrimination under, such programs, policies and activities because of their race, color or national origin.

Process

The requirements for an EJ analysis depend on the level of document and the type of impacts. The preparer determines whether the project's effects are substantial enough to warrant demographic analysis by examining the extent of relocation and acreage impacts. In CE level documents, no analysis is required for projects that have fewer than two relocations or less than 0.5 acre of right-of-way. A full analysis is required for projects that have two or more relocations or 0.5 acre or more of right-of-way.

If the number of relocations or the amount of additional acres of right-of-way exceeds one of the thresholds above, the preparer must analyze the demographics of the impacted community or communities to detect concentrations of low-income populations and minority populations. Potential EJ impacts are detected by locating minority populations and low-income populations in and near the project area, calculating their percentage in the area relative to a reference population, and determining whether there will be adverse impacts to them.

The reference community is typically a county, city, or town that contains the project and is called the community of comparison (COC). The community that overlaps the project limits is called the affected community (AC). Affected communities which are more than 50 percent



minority or low-income are automatically EJ populations. For all other affected communities, an EJ population exists if the low-income population or minority population is 25 percent higher than the population in the community of comparison.

For example, an added travel lanes project in rural Dubois County, east of Jasper would be in Census Tract 9535, Block Group 3. This block group would be the AC. The COC would be Dubois County. However, a hardship relocation in the city of Martinsville is in Census Tract 5107, Block Group 3 in Morgan County. This block group would be the AC. The COC would be the whole city of Martinsville, not Morgan County.

The preparer defines the appropriate COC and ACs and downloads US Bureau of the Census decennial data for the appropriate analytical units (instructions for downloading this data is available on request from OES). The percent minority and percent low-income is computed for the COC and the ACs. The preparer then determines whether any of the ACs have a percent minority or percent low-income population that is larger than that of the COC by 25 percent or more. The preparer also notes those populations that are 50 percent or more low-income or minority. These ACs are considered to be communities of concern for EJ impacts.

EJ populations may also be located through the public involvement process and through early coordination. Local elected officials or planning organizations should be contacted to help identify minority or low-income populations that may be affected by the project. County human services departments, the Indiana Department of Economic Development, regional planning organizations, and public libraries have demographic and community information to aid in identifying minority or low-income populations within the study area. As part of executing the public involvement plan, the preparer should identify and work with any minority and low-income populations that might be affected by the project.

If EJ populations are located, the preparer analyzes the activities that will take place in each community to determine whether any identified EJ populations will experience disproportionate negative effects. If any disproportionate negative impacts are found, such as relocations or right-of-way acquisitions that are concentrated in a low-income neighborhood, the project sponsor should determine whether the impacts can be avoided by modifying the design or scope.

If a project has unavoidable impacts on an EJ population, OES will consult with the FHWA on the appropriate mitigation. Any disproportionate impact on an EJ population also requires notification of INDOT's Equal Opportunity Division.

Information

The remarks section should explain whether the project meets the acreage and/or relocation threshold. If the project meets either threshold, the preparer describes efforts to identify EJ populations in and near the project area, including analysis of Census data, individuals, and community organizations. If EJ populations were identified, the remarks section must explain whether the project has a disproportionately high or adverse effect on these populations. If so, the remarks must describe actions that were taken, or will be taken, to avoid these effects. If mitigation is required, the remarks must describe all efforts taken to solicit and incorporate feedback from EJ populations. The remarks should summarize the consultation with FHWA and



the appendices should contain the correspondence from FHWA confirming that appropriate mitigation is included in the project.

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IV.C.7.e. Relocation of People, Businesses, or Farms

Background

Some highway projects require the acquisition of right-of-way resulting in the relocation of residential or commercial buildings, farming operations, or other institutions. All federal, state and local government agencies, as well as others receiving federal financial assistance for public programs and projects, that require the acquisition of real property, must comply with the policies and procedures set forth in [49 CFR 24](#) the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, and amended in 1987. This law is commonly referred to as “the Uniform Act.” The rules of the Uniform Act encourage acquiring agencies to negotiate with property owners in a prompt and amicable manner so that litigation can be avoided.

A business information survey is used during planning stages to gather information about businesses that are likely to be impacted by a project. This includes both businesses that will be relocated and businesses that are in or near the project area. A Conceptual Stage Relocation Study (CSRS) is used to assess the likely effects of relocations on businesses and residents. Guidelines for these studies are provided by INDOT’s Office of Real Estate, and apply to anyone that could be relocated by the project.

Process

The preparer should work with the engineers to determine the right-of-way requirements for the project and identify any relocation of people, businesses, farms, or any other institutions. If a project is anticipated to have more than 10 relocations, then OES should be contacted to determine whether a CSRS should be completed. OES will consult with FHWA if there is controversy associated with relocations to determine if the project should be elevated to an EA or EIS.

In addition, a business information survey is required for projects involving more than 10 relocations, or 25% of the structures in the town (if there are fewer than 10 structures in the town). Within larger cities, the survey is required for projects involving more than 10 relocations or half of the community/neighborhood. In these cases, OES should be contacted to determine an appropriate area of review. See the [Procedural Manual for Preparing Environmental Documents](#) for more information regarding business information surveys and CSRSs.

Information

If there will be no relocations as a result of the project, make a note of it in the Remarks section. If there are relocations, describe the number and type of proposed relocations in the Remarks section. Note any efforts to avoid or minimize relocations. If a CSRS or a business information



survey is required, provide a summary of the study in the CE. Include the following statement when relocations are required as part of the proposed project:

The acquisition and relocation program will be conducted in accordance with 49 CFR 24 and the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 as amended. Relocation resources are available to all residential and business relocatees without discrimination. No person displaced by this project will be required to move from a displaced dwelling unless comparable replacement housing is available to that person.

Relocations should be identified in attached graphics, to the extent that they are known at the time of environmental document approval. During plan review, relocations will be compared with the environmental document and discrepancies will need to be addressed with further environmental documentation. If there are relocations that result only in the demolition of structures on state right-of-way, the owners will have the opportunity to buy back the remainder of the property after demolition is complete. Changes may occur during the right-of-way acquisition that may require additional review.

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IV.C.7.f. Joint Development

Background

Joint development can be a factor in any size of project. It involves an effort by a public agency (e.g. INDOT, Local Public Agency (LPA)) and a separate developer (e.g. parks department, refuge, concessionaire) to undertake projects which integrate transportation infrastructure and non-highway uses. Since these facilities are usually developed independently, considerable coordination is required to achieve mutual goals.

Highway projects incorporating joint development can be integrated with the development of bikeways, public buildings, apartments, parks, and other public or private undertakings, and may fit better into the overall community than if they were developed separately. Joint development can also be carried out within approaches such as context-sensitive solutions, and can serve as an impetus for economic revitalization and redevelopment.

Process

Joint development arrangements must be executed through a legally binding agreement between the parties. The public must be kept informed throughout the project. Joint development plans require approval by both INDOT and the Federal Highway Administration (FHWA).



Information

The CE should discuss how the implementation of joint development projects will preserve or enhance the community's social, economic, and visual values. This discussion should include information on commercial and residential opportunities, and opportunities for increasing community accessibility and economic development. It may be presented separately or combined with the land use, and/or social impacts presentations. The benefits to be derived, those who will benefit, and the entities responsible for maintaining the measures should be identified.

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IV.C.8. Section H - Hazardous Materials and Regulated Substances

Background

Management of hazardous materials is regulated by the [Resource Conservation and Recovery Act \(RCRA\)](#) and the [Comprehensive Environmental Response, Compensation, and Liability Act \(CERCLA\)](#), as well as applicable state laws. These laws apply to wastes (such as contaminated soil) generated by construction and must be considered when developing transportation projects. Even if no wastes are expected to be generated on a project, workers must be protected from health risks presented by hazardous materials (solvents, gases for welding, etc.) that they may encounter as part of their work.

Process

The Hazardous Materials Site Visit Form (Attachment 5) must be filled out during the preliminary visit to the project site. The purpose of this form is to highlight areas of concern which did not appear on the state and federal databases. If no areas of concern are found either in the Red Flag Investigation or during the site visit, the hazardous materials investigation requirements have been fulfilled. If known or potential waste sites are identified, further analysis will need to be conducted, generally as a Phase I, Initial Site Assessment (ISA).

A Phase I, Initial Site Assessment (ISA) is a review of state and federal databases to determine whether environmental concerns are already known by resource agencies to be present on the property in question. The ISA is conducted generally in accordance with the standard established by the American Society for Testing and Materials ([ASTM E1527-05](#)). The ISA should be submitted to the hazardous materials unit of OES as soon as it is completed so that any corrections may be made, and recommendations may be evaluated prior to submittal of the full CE. If no further work is recommended, then hazardous materials obligations have been satisfied.

If a physical investigation of the site is warranted then OES will recommend the preparation of a Phase II, Preliminary Site Investigation. These are conducted generally in accordance with the Indiana Department of Environmental Management's [Risk Integrated System of Closure \(RISC\) Technical Guide](#) and may include subsurface borings to collect soil and water samples for lab analysis. While it is preferable to conduct this work prior to completion of the CE, so that as



much information as possible may be incorporated, this is not always possible due to site access restrictions or other considerations. If Phase II work is to be carried out after completion of the CE, this requirement should be noted on the commitment summary form.

If complicated hazardous material issues exist (such as anything requiring a Remedial Investigation (RI)/Feasibility Study (FS)), then OES should be contacted to determine how to proceed.

After all investigations are completed, (Red Flag, Phase I and/or Phase II), copies of the reports will be requested by OES for distribution.

For LPA projects, submittal of the Red Flag or other hazardous material documentation in advance of the environmental document is optional. The local agency or their consultant should submit the Red Flag Investigation and all hazardous materials documentation with the completed environmental document.

Information

If hazardous materials and/or regulated substances are not found to be present in the project area, check the “No” box. If, hazardous materials and/or regulated substances are present and will affect the project, check the “Yes” box. On the Categorical Exclusion/ Environmental Assessment Document Form, check the box(es) (Red Flag, Potential Hazardous Waste Site Assessment Form, Phase I, Phase II) of the studies which have been completed and indicate the date that each was accepted by OES.

If there are known or potential hazardous waste sites within the project area, then describe the site(s) of concern in relation to the alternatives that may be affected in the Remarks section of Section I. If additional documentation (special provisions, pay quantities etc.) will be needed, these should be indicated here as well. It is not necessary to incorporate full hazardous materials reports into the CE or even in the appendix. Executive summaries of Red Flag Investigations and/or Phase I and Phase II reports are generally adequate. Maps showing the locations of any properties of concern should be included as well, indicating the properties in relation to the alternatives under consideration. Information on how to prepare hazardous materials documentation can be found in the INDOT [Hazardous Materials Unit Operating Manual](#).

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IV.C.9. Section I - Permits

Background

A permit allows specific impacts to a regulated environmental resource, such as air, water, or land. Of these, water permits are the most common for transportation projects. These permits often contain conditions or other provisions that must be fulfilled or obeyed by the permittee in order to remain in compliance, and a violation of a permit is a violation of law.



Major regulatory agencies that issue permits are the US Army Corps of Engineers (USACE), the Indiana Department of Environmental Management (IDEM), the Indiana Department of Natural Resources (IDNR), the US Fish and Wildlife Service (USFWS), the US Coast Guard (USCG), and the US Environmental Protection Agency (USEPA). Other agencies with jurisdiction may include county drainage boards and the National Oceanic and Atmospheric Administration (NOAA). The permits that may be required for a project depend on the impacted resource, the severity of the impact to the resource, and the type of project. The following is a very brief description of the permits that may be required for various impacted resources:

- Threatened or endangered species or migratory birds: May require Section 7 from USFWS.
- Karst feature receiving runoff: May require Class V injection well permit from IDEM.
- Land disturbance: May require a Rule 5 erosion control permit from IDEM if at least one acre of land is disturbed.
- Jurisdictional stream, waterway, or wetland: May require Section 404 from USACE and Section 401 from IDEM.
- Non-jurisdictional stream or waterway: May require Section 401 from IDEM.
- Isolated wetland: May require isolated wetland permit from IDEM.
- Navigable waterway: May require Section 9 and/or Section 10 from USCG.
- Any other waters of the State: May require Section 401 from IDEM, navigable waterways, lake preservation, or ten acre lake permits from DNR.
- Floodplain or floodway: Construction in a floodway may require permit from DNR.
- Regulated drain: May require permit from county drainage board.
- Levee: May require levee permit from USACE.
- Coastal zone: May require consistency determination from DNR and NOAA.
- Point discharges to any waterbody: May require Section 402 (NPDES) from IDEM.

A full explanation of permit requirements is available in the [Indiana Waterway Permit Manual](#).

Process

Permits are usually obtained during the design phase but may be obtained at any time during the project development process as long as they will not expire before they are used. For a list of time frames it takes to obtain a specific permit, refer to the Waterways Permitting Manual.

For projects sponsored by INDOT, OES obtains all necessary permits after the CE process is concluded. The designer submits permit applications for projects sponsored by local public agencies.

Prior to the submission of the CE for review, the preparer documents the characteristics and locations of all wetlands and waterways within and near the project area in a waters report. This information is collected within a waters report which will be reviewed by OES and then submitted to the USACE in support of a Jurisdictional Determination (JD). The requirements for a waters report are available from the Ecology Unit of OES.

As part of the NEPA process, the preparer should make a preliminary determination of necessary permits. The purpose of this preliminary permit determination (PPD) is to identify the permits that might be required based on the resources that will be impacted by the project to the extent



they have been identified at this stage. The PPD is not a full Permit Determination, which is made by OES's Waterway Permitting Unit later in project development. The PPD is important at this stage because it may show that the project as documented in the CE will require permits that are difficult or time-consuming to obtain. In some cases it will be more expedient to make design changes to avoid these resources than to seek the permits required for the original design.

Information

The results of the PPD, including the waters report and other resources, should be discussed in the remarks section. Anticipated permit requirements should be indicated in the checkboxes. Any permits which are not listed should be added under "Other".

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IV.C.10. Section J - Environmental Commitments

Background

Environmental commitments are made by the project sponsor to ensure that the design and construction of the project contains specific features and avoids or minimizes particular environmental impacts. The commitments may also identify certain undesirable or illegal activities that must not occur. Environmental commitments may be formulated at any time during project development but are often initially compiled from resource agency responses to early coordination and from the preparer's knowledge of resources that must be avoided. In some cases, commitments may be made to avoid a resource which, if impacted, would change the level of required documentation.

Environmental commitments may be classified as either firm commitments or as recommendations for further consideration. Firm commitments must be implemented as written. Commitments marked as recommendations for further consideration are goals that the designer or contractor should try to implement, subject to other goals of the project.

Commitments may be added at any point in the project development process, generally as a result of public involvement, design, and real estate activities. A commitment may not be removed without consulting the party that made the original commitment. The designer must confirm that each firm commitment was incorporated into the project and must record the disposition of each commitment for further consideration.

The commitments are included in the construction contract to control contractor activities and communicate with the project engineer. The commitments supplement the standard specifications that INDOT includes in construction contracts.



Process

The preparer examines all responses to early coordination, including both resource agencies and local public officials. Commitments may also be generated by the project sponsor and during public involvement on the environmental document. This should include known mitigation requirements, such as a Section 106 MOA and time-limited activities, such as tree-clearing activities. In addition to listing commitments to do certain activities, the preparer should also commit to avoid resources which are known to be present but are not currently impacted by the project. Changes to the project which affect these resources will often trigger an additional information document or require additional permitting.

Careful thought should be given to the assignment of commitments to the firm and for further consideration categories. Incorrect assignment may lead to unnecessary complications in design or to a violation of legal requirements. For resource agency commitments, the distinction between advisory and directive language will usually be obvious. Long or involved language should be paraphrased such that the direction to the designer or contractor is clear. Prior to committing to any mitigation efforts, the preparer should coordinate with the project manager and construction personnel to ensure constructability.

The preparer also uploads the commitments to INDOT commitments database, which replaces the Commitments Summary Form. INDOT staff may upload commitments directly to the database. Attachment 4 contains a copy of the commitments upload spreadsheet and instructions for its use.

Information

The preparer records the commitments in the Environmental Commitments section of the CE form. The CE commitments section and the database should be identical. Commitments should be consecutively numbered. It is recommended that the origin of the commitment (e.g. the resource agency name) be provided in parentheses after the language to aid in tracking and subsequent coordination.

The OES has prepared standard firm commitments for all projects that address changes in right-of-way, discovery of human remains, discovery of hazardous materials, and the need for wetland permits. The exact language of these commitments is available on request from OES. In the appendices, the preparer should include any agency correspondence that requests special consideration of impacts or protection of sensitive areas during construction.

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IV.C.11. Section K – Early Coordination

Background

The purpose of early coordination is to request feedback from resource agencies and local officials on potential impacts before significant time or effort has been invested in the project. Agencies are consulted on the project's impacts to resources under their jurisdiction and local



officials are consulted to obtain information on impacts to communities, community facilities, and local infrastructure. Avoidance of resources and mitigation of impacts can then be undertaken from the beginning of design rather than in the forms of revisions later. These revisions can often delay the project or add cost. Re-coordination may be required for an Additional Information document. Contact OES to determine the agencies that will need re-coordination.

Process

Guidelines for preparing early coordination are provided in Appendix I and the [Procedural Manual for Preparing Environmental Documents](#) (Section I.F). These should be reviewed carefully, since the nature and type of coordination will vary by agency and by project type. Programmatic agreements exist for some circumstances that make formal letters unnecessary, and some agencies have developed forms or questionnaires to streamline their review. The early coordination letter should provide the project description, but should *not* identify the level of CE for the project. A sample early coordination letter may be found in Appendix I as well.

Information

The remarks box should provide the date on which the letter was sent and list all agencies contacted, whether a response was received, and the date of response. This information is most effectively presented in table format. All correspondence that was received should be included as an attachment to the CE, along with a copy of the early coordination letter.

[Return to the Table of Contents](#)

Attachments

Attachment 1
Environmental Screening/CE-1 Form

ENVIRONMENTAL SCREENING/CE-1 FORM	Date:
--	--------------

Initial Version

 Revision to Version Dated:

Purpose of this document:

CE Level 1 documentation for exempted projects

 Determine scope of Federal documentation (CE Level 2-4)

 State-funded categorical exemption documentation

Approval of Exempt, CE-1 Level or State-Funded CE: _____

Environmental Scoping Manager

Date

(If used for scoping, this form should be completed prior to using the CE/EA form.)

PROJECT INFORMATION			
Project Number, County, Route		Des Number	
Project Description			
Purpose and Need for Action:			
Alternatives Considered:			
Project Termini:			
Funding Source(s):	___ Federal ___ State ___ Local	Estimated Cost	\$
Project Sponsor:		Project Length	

Environmental Screening/CE-1 Form Project: _____

Des No: _____

SCOPE OF THE PROPOSED ACTION:	No	Possible	Comments
Public Involvement			
Relocation of residences/businesses/etc.*			
Right-of-way in acres (permanent and temporary)*			
Added through-traffic lanes – length*			
Permanent alteration of local traffic pattern*			
Facility on new location or realignment*			
Disruption to public facilities/services (such as schools, emergency service)			
Involvement with existing bridge(s) (Include structure number(s))			

INVOLVEMENT WITH RESOURCES:	No	Possible	Studies, Coordination, and Comments
Watercourses Impacted (linear feet)			
Other Surface Waters (such as ponds, lakes, reservoirs, in acres)			
Wetlands (acres)*			
Disturbance of Terrestrial Habitat (acres)			
Karst Features			
Threatened and Endangered Species Present/Impacted*			
Impacts to Sole Source Aquifer*			
Flood Plains (note transverse or longitudinal impact)			
Farmland (acres)			
Cultural Resources (Section 106)*			
Section 4(f) and Section 6(f) Resources *			

Categorical Exclusion Level Thresholds

	Level 1	Level 2	Level 3	Level 4
Relocations	None	≤ 2	> 2	> 10
Right of way¹	< 0.5 acres	< 10 acres	≥ 10 acres	≥ 10 acres
Length of added through lane	None	< 1 miles	≥ 1 mile	≥ 1 mile
Traffic pattern alteration	None	None	Yes	Yes
New alignment	None	None	< 1 mile	≥ 1 mile ²
Wetlands	< 0.1 acres	< 1 acre	< 1 acre	≥ 1 acre
Stream Impacts	≤ 300 linear feet, ≤ 150 linear feet REC, ≤ 1 acre	> 300 linear feet, > 150 linear feet REC	> 1 acre	> 1 acre
Section 4(f)	None	None	Programmatic/ <i>de minimis</i> Findings ³	Individual 4(f)
Section 6(f)	None	None	Any impacts	Any impacts
Section 106*	“No Historic Properties Affected” or falls within guidelines of Minor Projects PA	“No Adverse Effect” or “Adverse Effect”	N/A	If ACHP involved
Noise Analysis Required	No	No	Yes ⁴	Yes ⁴
Threatened/Endangered Species	"No Effect", or Falls within Guidelines of USFWS 9/8/93 Programmatic Response	“Not likely to Adversely Affect”	“Not likely to Adversely Affect”	“Likely to Adversely Affect” ⁵
Sole Source Aquifer Groundwater Assessment	Detailed Assessment Not Required	Detailed Assessment Not Required	Detailed Assessment Not Required	Detailed Assessment Required
Approval Level				
• ESM⁶	Yes	Yes	Yes	Yes
• OES			Yes	Yes
• FHWA				Yes

*These thresholds have changed from the March 2008 Manual.

¹Permanent and/or temporary right of way.

²If the length of the new alignment is equal to or greater than one mile, contact the FHWA’s Air Quality/Environmental Specialist.

³The FHWA must review and approve Programmatic and *de minimis* Section 4(f) prior to CE approval.

⁴In accordance with INDOT’s Noise Policy.

⁵If the project is considered Likely to Adversely Affect Threatened and/or Endangered Species, INDOT and the FHWA should be consulted to determine whether a higher class of document is warranted.

⁶Environmental Scoping Manager

Environmental Screening/CE-1 Form Project: _____

Des No: _____

In accordance with the *Categorical Exclusion Programmatic Agreement* between INDOT and FHWA, the following type of environmental documentation is needed:

	No Additional Documentation: State-Funded Project. For projects that are 100% state-funded, and meets IDEM's approved list of Categorical Exempted Projects.
	No Additional Documentation: Categorical Exclusion, Level 1. The necessary supporting documentation, including maps and coordination, are attached to this document and will be kept on file in the district. If the project is approved as a CE-1 under Tables 2 or 3 in the CE Manual, provide the number or letter under which this CE-1 is approved. For projects not listed on Tables 2 or 3, but determined to be Level 1 CEs on other criteria, such as the threshold chart above, attach appropriate documentation.
	Categorical Exclusion, Level 2 through 4 – The proposed action exceeds the thresholds for a CE-1 in the thresholds table above. The project must be documented on the Categorical Exclusion/Environmental Assessment Form. Additional research and documentation are necessary to determine environmental impacts and the type of environmental documentation.
	EA – An Environmental Assessment will be prepared.
	EIS – An Environmental Impact Statement will be prepared.

Attachment 2
CE/EA Form (CE Levels 2,3,4)

Indiana Department of Transportation

County _____ Route _____ Des. No. _____ Project No. _____

**FHWA-Indiana Environmental Document
CATEGORICAL EXCLUSION / ENVIRONMENTAL ASSESSMENT FORM
GENERAL PROJECT INFORMATION**

Road No./County:	_____
Designation Number:	_____
Project Description/Termini:	_____

After completing this form, I conclude that this project qualifies for the following type of Categorical Exclusion (FHWA must review/approve if Level 4 CE):

	Categorical Exclusion, Level 2 – The proposed action meets the criteria for Categorical Exclusion Manual Level 2 - table 1, CE Level Thresholds. Required Signatories: ESM (Environmental Scoping Manager).
	Categorical Exclusion, Level 3 – The proposed action meets the criteria for Categorical Exclusion Manual Level 3 - table 1, CE Level Thresholds. Required Signatories: ESM, OES.
	Categorical Exclusion, Level 4 – The proposed action meets the criteria for Categorical Exclusion Manual Level 4 - table 1, CE Level Thresholds. Required Signatories: ESM, OES, FHWA.
	Environmental Assessment (EA) – EAs require a separate FONSI. Additional research and documentation is necessary to determine the effects on the environment.

Approval _____
 ESM Signature _____ Date _____ OES Signature _____ Date _____

 FHWA Signature _____ Date _____

Release for Public Involvement** _____
 ESM Initials _____ Date _____

 OES Initials _____ Date _____

Certification of Public Involvement _____
 Manager, Public Hearings Signature _____ Date _____

Note: Do not approve until after Section 106 public involvement and all other environmental requirements have been satisfied.

Project plans were reviewed and are consistent with the information discussed within this document **Yes

Reviewer Signature _____ Date _____

Name and organization of CE/EA Preparer: _____

This is page 1 of 16. Project name: _____ Date: _____

Indiana Department of Transportation

County _____ Route _____ Des. No. _____ Project No. _____

Part I - PUBLIC INVOLVEMENT

Every Federal action requires some level of public involvement, providing for early and continuous opportunities throughout the project development process. **The level of public involvement should be commensurate with the proposed action.**

Discuss what public involvement activities (legal notices, letters to affected property owners and residents, meetings, special purpose meetings, newspaper articles, etc.) have occurred for this project.

Remarks:

--

Public Controversy on Environmental Grounds

Will the project involve substantial controversy concerning community and/or natural resource impacts?

Yes

No

Remarks:

--

Opportunity to hold Public Hearing not Required	
---	--

This is page 2 of 16. Project name: _____ Date: _____

Indiana Department of Transportation

County _____ Route _____ Des. No. _____ Project No. _____

Part II - General Project Identification, Description, and Design Information

Sponsor of the Project: _____ INDOT District: _____

Local Name of the Facility: _____

Funding Source: Federal State Local Private

PURPOSE AND NEED:

Describe the problem that the project will address.

PROJECT DESCRIPTION (PREFERRED ALTERNATIVE):

County: _____

Municipality: _____

Limits of Proposed Work:

Total Work Length: _____ mi

Is an Interchange Modification Study / Interchange Justification Study (IMS/IJS) required?
If yes, when did the FHWA grant a conditional approval for this project?

Yes ¹	No
Date: _____	

¹If an IMS or IJS is required; a copy of the approved CE/EA document must be submitted to the FHWA with a request for final approval of the IMS/IJS.

This is page 3 of 16. Project name: _____ Date: _____

Indiana Department of Transportation

County _____ Route _____ Des. No. _____ Project No. _____

In the Remarks box below, describe in detail the scope of work for the project, including the preferred alternative. Include a discussion of logical termini. Discuss any major issues for the project and how the project will improve safety or roadway deficiencies if these are issues.

OTHER ALTERNATIVES CONSIDERED:

Describe alternatives considered, including the Do-Nothing Alternative and an explanation of why each non-preferred alternative was not selected.

The Do Nothing Alternative is not feasible, prudent or practicable because *(Mark all that apply):*

- It would not correct existing capacity deficiencies;
- It would not correct existing safety hazards;
- It would not correct the existing roadway geometric deficiencies;
- It would not correct existing deteriorated conditions and maintenance problems, or
- It would result in serious impacts to the motoring public and general welfare of the economy.
- Other (Describe)

This is page 4 of 16. Project name: _____ Date: _____

Indiana Department of Transportation

County _____ Route _____ Des. No. _____ Project No. _____

MAINTENANCE OF TRAFFIC (MOT) DURING CONSTRUCTION:

	Yes	No
Is a temporary bridge proposed?	<input type="checkbox"/>	<input type="checkbox"/>
Is a temporary roadway proposed?	<input type="checkbox"/>	<input type="checkbox"/>
Will the project involve the use of a detour or require a ramp closure? (describe in remarks)	<input type="checkbox"/>	<input type="checkbox"/>
Provisions will be made for access by local traffic and so posted.	<input type="checkbox"/>	<input type="checkbox"/>
Provisions will be made for through-traffic dependent businesses.	<input type="checkbox"/>	<input type="checkbox"/>
Provisions will be made to accommodate any local special events or festivals.	<input type="checkbox"/>	<input type="checkbox"/>
Will the proposed MOT substantially change the environmental consequences of the action?	<input type="checkbox"/>	<input type="checkbox"/>
Is there substantial controversy associated with the proposed method for MOT?	<input type="checkbox"/>	<input type="checkbox"/>

Remarks:

ESTIMATED PROJECT COST AND SCHEDULE:

Engineering: \$ _____ (20__) Right-of-Way: \$ _____ (20__) Construction: \$ _____ (20__)
 Anticipated Start Date of Construction: _____

RIGHT OF WAY:

Land Use Impacts	Amount (acres)	
	Permanent	Temporary
Residential		
Commercial		
Agricultural		
Forest		
Wetlands		
Other:		
Other:		
Other:		
TOTAL		

Remarks:

Indiana Department of Transportation

County _____ Route _____ Des. No. _____ Project No. _____

Part III – Identification and Evaluation of Impacts of the Proposed Action

SECTION A – ECOLOGICAL RESOURCES

	<u>Presence</u>		<u>Impacts</u>	
	Yes	No	Yes	No
Streams, Rivers, Watercourses & Jurisdictional Ditches	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
State Wild, Scenic or Recreational River	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Remarks:

	<u>Presence</u>		<u>Impacts</u>	
	Yes	No	Yes	No
Other Surface Waters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reservoirs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lakes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Farm Ponds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Detention Basins	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Storm Water Management Facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Remarks:

	<u>Presence</u>		<u>Impacts</u>	
	Yes	No	Yes	No
Wetlands	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Total wetland area: _____ acre(s) Total wetland area impacted: _____ acre(s)
 (If a determination has not been made for non-isolated/isolated wetlands, fill in the total wetland area impacted above.)

Wetland No.	Classification	Total Size (Acres)	Impacted Acres	Comments

This is page 7 of 16. Project name: _____ Date: _____

Indiana Department of Transportation

County _____ Route _____ Des. No. _____ Project No. _____

--	--	--	--	--

Wetlands

Wetland Determination
 Wetland Delineation Report
 USACE Isolated Waters Determination
 Mitigation Plan

Documentation

Yes No

OES Approval Dates

Improvements that will not result in any wetland impacts are not practicable because such avoidance would result in (Mark all that apply and explain):

- Substantial adverse impacts to adjacent homes, business or other improved properties;
- Substantially increased project costs;
- Unique engineering, traffic, maintenance, or safety problems;
- Substantial adverse social, economic, or environmental impacts, or
- The project not meeting the identified needs.

Individual
Wetland
Finding

Yes No

Measures to avoid, minimize and mitigate wetland impacts need to be discussed in the remarks section

Remarks:

Terrestrial Habitat

Presence

Yes No

--	--

Impacts

Yes No

--	--

Use the remarks table to identify each type of habitat and the acres impacted (i.e. forested, grassland, farmland, lawn, etc).

Remarks:

If there are high incidences of animal movements observed in the project area, or if bridges and other areas appear to be the sole corridor for animal movement, consideration of utilizing wildlife crossings should be taken.

Presence

Yes No

Impacts

Yes No

This is page 8 of 16. Project name: _____ Date: _____

Indiana Department of Transportation

County _____ Route _____ Des. No. _____ Project No. _____

Karst

Does the proposed project involve the Karst Region of Indiana?

Use the remarks table to identify any karst features within the project area. (Karst investigation must comply with the Karst MOU, dated October 13, 1993)

Remarks:

Presence

Impacts

Yes

No

Yes

No

Threatened or Endangered Species

- Within the known range of any federal species?
- Any critical habitat identified within project area?
- Federal species found in project area (based upon informal consultation)?
- State species found in project area (based upon consultation with IDNR)?
- Is Section 7 formal consultation required for this action?

Remarks:

SECTION B – OTHER RESOURCES

Presence

Impacts

Yes

No

Yes

No

Drinking Water Resources

- Sole Source Aquifer (SSA)
- Is the Project in the St. Joseph Aquifer System?
- Is the FHWA/EPA SSA MOU Applicable?
- Initial Groundwater Assessment Required?
- Detailed Groundwater Assessment Required?
- Source Water Protection Area(s)
- Public Water System(s)
- Residential Well(s)
- Wellhead Protection Area

Remarks:

Indiana Department of Transportation

County _____ Route _____ Des. No. _____ Project No. _____

	<u>Presence</u>		<u>Impacts</u>	
	Yes	No	Yes	No
Flood Plains				
Longitudinal Encroachment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transverse Encroachment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is the project located in a FEMA designated floodplain?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Homes located in floodplain within 1000' up/downstream from project.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discuss impacts according to classification system described in the "Procedural Manual for Preparing Environmental Studies".

Remarks:

	<u>Presence</u>		<u>Impacts</u>	
	Yes	No	Yes	No
Farmland				
Agricultural Lands	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Prime Farmland (per NRCS)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NRCS Form AD-1006 scored \geq 160?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Provide the NRCS Form AD-1006 score and state whether there is a significant loss of farmland as a result of the project in the remarks section.

Remarks:

SECTION C – CULTURAL RESOURCES

	<u>Category</u>	<u>Type</u>	<u>INDOT Approval Dates</u>
Minor Projects PA Clearance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	<u>Eligible and/or Listed Resource Present</u>	
	Yes	No
Results of Research		
Archaeology	<input type="checkbox"/>	<input type="checkbox"/>
History/Architecture	<input type="checkbox"/>	<input type="checkbox"/>
NRHP Buildings/Site(s)	<input type="checkbox"/>	<input type="checkbox"/>
NRHP District(s)	<input type="checkbox"/>	<input type="checkbox"/>
NRHP Bridge(s)	<input type="checkbox"/>	<input type="checkbox"/>

	<u>Yes</u>	<u>Not Applicable</u>	<u>SHPO/OES/FHWA Approval Dates</u>
Project Effect			
No Historic Properties Affected	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No Adverse Effect	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Adverse Effect	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	<u>Documentation Prepared</u>		<u>SHPO/OES/FHWA Approval Dates</u>
	<u>Yes</u>	<u>Not Applicable</u>	
Documentation			
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

This is page 10 of 16. Project name: _____ Date: _____

Indiana Department of Transportation

County _____ Route _____ Des. No. _____ Project No. _____

Historic Properties Short Report			
Historic Property Report			
Archaeological Records Check/ Review			
Archaeological Phase Ia Survey Report			
Archaeological Phase Ic Survey Report			
Archaeological Phase II Investigation Report			
Archaeological Phase III Data Recovery			
APE, Eligibility and Effect Determination			
800.11 Documentation			
Memorandum of Agreement			

Describe all efforts to document cultural resources, including a detailed summary of the Section 106 process, using the categories outlined in the remarks box. The completion of the Section 106 process requires that a Legal Notice be published in local newspapers. Please indicate the publication date, name of paper(s) and the comment period deadline. Likewise include any further Section 106 work which must be completed at a later date, such as mitigation or deep trenching.

Remarks:

Area of Potential Effect (APE):

Coordination with Consulting Parties:

Archaeology:

Historic Properties:

Documentation, Findings:

Public Involvement:

SECTION D – SECTION 4(f) RESOURCES/ SECTION 6(f) RESOURCES

Section 4(f) Involvement

	<u>Presence</u>		<u>Use</u>		<u>FHWA / OES Approval/dates</u>
	Yes	No	Yes	No	
Parks & Other Recreational Land					
Publicly owned park	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Publicly owned recreation area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Programmatic Section 4(f) Evaluation	<input type="checkbox"/>	<input type="checkbox"/>			
Individual Section 4(f)	<input type="checkbox"/>	<input type="checkbox"/>			
Other (school, state/national forest, bikeway, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
“De minimis” Impact	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

This is page 11 of 16. Project name: _____ Date: _____

Indiana Department of Transportation

County _____ Route _____ Des. No. _____ Project No. _____

	<u>Presence</u>		<u>Use</u>		<u>FHWA / OES Approval/dates</u>
	Yes	No	Yes	No	
Wildlife & Waterfowl Refuges					
Federal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
National Wildlife Refuge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
State	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
State Fish & Wildlife Area – recreation or refuge areas only	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Programmatic Section 4(f)	<input type="checkbox"/>	<input type="checkbox"/>			<input type="text"/>
Individual Section 4(f) Evaluation	<input type="checkbox"/>	<input type="checkbox"/>			<input type="text"/>
“De minimis” Impact	<input type="checkbox"/>	<input type="checkbox"/>			<input type="text"/>

	<u>Presence</u>		<u>Use</u>		<u>FHWA / OES approval/dates</u>
	Yes	No	Yes	No	
Historic Properties					
Sites eligible and/or listed on the NRHP	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Programmatic Section 4(f)	<input type="checkbox"/>	<input type="checkbox"/>			<input type="text"/>
Individual Section 4(f) Evaluation	<input type="checkbox"/>	<input type="checkbox"/>			<input type="text"/>
“De minimis” Impact	<input type="checkbox"/>	<input type="checkbox"/>			<input type="text"/>

Discuss Programmatic Section 4 (f) and De minimis Section 4(f) impacts in the remarks section below. Individual Section 4(f) documentation must be separate Draft and Final documents. For further discussions on Programmatic, De minimis and Individual Section 4(f) documents please refer to the “Procedural Manual for the Preparation of Environmental Studies”. Discuss proposed alternatives that satisfy the requirements of Section 4(f).

Remarks:

Section 6(f) Involvement

Section 6(f) Property

<u>Presence</u>		<u>Use</u>	
Yes	No	Yes	No
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discuss proposed alternatives that satisfy the requirements of Section 6(f). Discuss any Section 6(f) involvement.

Remarks:

Conformity Status of the Project

	Yes	No
Is the project in an air quality non-attainment or maintenance area?	<input type="checkbox"/>	<input type="checkbox"/>
If YES, then:		
Is the project in the most current MPO TIP?	<input type="checkbox"/>	<input type="checkbox"/>
Is the project exempt from conformity?	<input type="checkbox"/>	<input type="checkbox"/>
If the project is NOT exempt from conformity, then:		
Is the project in the Transportation Plan (TP)?	<input type="checkbox"/>	<input type="checkbox"/>
Is a hot spot analysis required (CO/PM)?	<input type="checkbox"/>	<input type="checkbox"/>
Is an MSAT level 1a Analysis required?	<input type="checkbox"/>	<input type="checkbox"/>
Is an MSAT level 1b Analysis required?	<input type="checkbox"/>	<input type="checkbox"/>
Is an MSAT level 2 Analysis required?	<input type="checkbox"/>	<input type="checkbox"/>
Is an MSAT level 3 Analysis required?	<input type="checkbox"/>	<input type="checkbox"/>

This is page 12 of 16. Project name: _____ Date: _____

Indiana Department of Transportation

County _____ Route _____ Des. No. _____ Project No. _____

Is an MSAT level 4 Analysis required? _____

Is an MSAT level 5 Analysis required? _____

Remarks:

SECTION F - NOISE

Noise

Yes

No

Is a noise analysis required in accordance with FHWA regulations and INDOT's noise policy?

No Yes/ Date

OES Approval of Noise Analysis

Remarks:

SECTION G – COMMUNITY IMPACTS

Regional, Community & Neighborhood Factors

Yes

No

Will the proposed action comply with the local/regional development patterns for the area?

Will the proposed action result in substantial impacts to community cohesion?

Will the proposed action result in substantial impacts to local tax base or property values?

Will construction activities impact community events (festivals, fairs, etc.)?

Remarks:

Indirect and Cumulative Impacts

Yes

No

Will the proposed action result in substantial indirect or cumulative impacts?

Remarks:

This is page 13 of 16. Project name: _____ Date: _____

Indiana Department of Transportation

County _____ Route _____ Des. No. _____ Project No. _____

Public Facilities & Services

Will the proposed action result in substantial impacts on health and educational facilities, public utilities, fire, police, emergency services, religious institutions, public transportation or pedestrian and bicycle facilities? Discuss the maintenance of traffic, and how that will affect public facilities and services.

Yes	No
<input type="checkbox"/>	<input type="checkbox"/>

Remarks:

Environmental Justice (EJ) (Presidential EO 12898)

During the development of the project were EJ issues identified?

Are any EJ populations located within the project area?

Will the project result in adversely high or disproportionate impacts to the EJ population?

Yes	No
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

Remarks:

Relocation of People, Businesses or Farms:

Will the proposed action result in the relocation people, businesses or farms?

Is a business needs survey required?

Yes	No
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

Number of relocations: Residences: ____ Businesses: ____ Farms: ____ Other: _____

If a business information survey or Conceptual Stage Report is required, discuss the results in the Remarks section.

Remarks:

SECTION H – HAZARDOUS MATERIALS & REGULATED SUBSTANCES

	<u>Documentation</u>	
	Yes	No
Red Flag Investigation	<input type="checkbox"/>	<input type="checkbox"/>
Hazardous Materials Site Assessment Form	<input type="checkbox"/>	<input type="checkbox"/>
Phase I Initial Site Assessment (ISA)	<input type="checkbox"/>	<input type="checkbox"/>
Phase II Preliminary Site Investigation(PSI)	<input type="checkbox"/>	<input type="checkbox"/>
Design/Specifications for Remediation required?	<input type="checkbox"/>	<input type="checkbox"/>

	No	Yes/ Date
OES Review of Investigations	<input type="checkbox"/>	<input type="checkbox"/>

This is page 14 of 16. Project name: _____ Date: _____

Indiana Department of Transportation

County _____ Route _____ Des. No. _____ Project No. _____

Include a summary of findings for each investigation.

Remarks:

SECTION I – PERMITS CHECKLIST

	<u>Required</u>	<u>Not Required</u>
Army Corps of Engineers (404/Section10 Permit)		
Individual Permit (IP)	<input type="checkbox"/>	<input type="checkbox"/>
Nationwide Permit (NWP)	<input type="checkbox"/>	<input type="checkbox"/>
Regional General Permit (RGP)	<input type="checkbox"/>	<input type="checkbox"/>
Pre-Construction Notification (PCN)	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>
Wetland Mitigation required	<input type="checkbox"/>	<input type="checkbox"/>
IDEM		
Section 401 WQC	<input type="checkbox"/>	<input type="checkbox"/>
Isolated Wetlands determination	<input type="checkbox"/>	<input type="checkbox"/>
Rule 5	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>
Wetland Mitigation required	<input type="checkbox"/>	<input type="checkbox"/>
Stream Mitigation required	<input type="checkbox"/>	<input type="checkbox"/>
IDNR		
Construction in a Floodway	<input type="checkbox"/>	<input type="checkbox"/>
Navigable Waterway Permit	<input type="checkbox"/>	<input type="checkbox"/>
Lake Preservation Permit	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>
Mitigation Required	<input type="checkbox"/>	<input type="checkbox"/>
US Coast Guard Section 9 Bridge Permit	<input type="checkbox"/>	<input type="checkbox"/>
Others (Please discuss in the Remarks section below)	<input type="checkbox"/>	<input type="checkbox"/>

Remarks:

SECTION J- ENVIRONMENTAL COMMITMENTS

Information below must be included on Commitments Summary Form. List all commitments, indicating which are firm and which are optional.

This is page 15 of 16. Project name: _____ Date: _____

Indiana Department of Transportation

County _____ Route _____ Des. No. _____ Project No. _____

Remarks:

SECTION K- EARLY COORDINATION

Please list the date coordination was sent and all agencies that were contacted as a part of the development of this Environmental Study. Also, include the date of their response or indicate that no response was received.

Remarks:

Attachment 3
Environmental Consultation Form

ENVIRONMENTAL CONSULTATION FORM

Indiana Department of Transportation

PART A (TO BE SUBMITTED AT DESIGN STAGE 2)

(1) County: **(2) Route:** **(3) Designation Number:**

(4) Date of Plan Submission :

(5) Funding Source(s): Federal State Local Private

(6) Project Description:

(7) Need for Improvement:

(8) Right of Way Data:

Existing:
Proposed Permanent:
Temporary:
Number of Relocations:

(9) Type of Environmental Document:

Exempt CE-1 CE-2 CE-3 CE-4 EA/FONSI EIS/ROD

Date of Environmental Approval: _____

Environmental Reevaluation Screening:

(10) Are the scope and impacts still consistent with the approved CE/EA and all subsequent re-evaluations (if any)? _____ Yes _____ No

(11) If "Yes", what is the date of the last approval (CE or Reevaluation)? _____
If "No", then an additional reevaluation is required before completing this form.

(12) If a Reevaluation was completed were there any changes to the environmental commitments? _____ Yes _____ No

If yes, please address the changes in the Project Commitments Database.

Impact Data:

- (13) Is the roadway being realigned horizontally? (Y/N): _____
- (14) Number and length of spans: _____
- (15) Width of vegetation clearing at corners of structure: _____
- (16) Channel impacts (linear feet): _____
- (17) Is the channel being relocated? (Y/N): _____
- (18) Wetland impacts (acres): _____
- (19) Is a causeway planned? (Y/N): _____
- (20) Is mitigation expected to be required? (Y/N): _____

(21) If the type of approval was an EIS-ROD:

Most recent date of an FHWA authorization for the project (final design, r/w acquisition): _____

Have more than three years passed between federal approvals? ____ Yes ____ No

If "Yes", what date was the NEPA Reevaluation approved? _____

Has the funding been switched from 100% state and/or local, to now include federal participation or need a federal action (such as permit approval)? ____ Yes ____ No

If so, does the current environmental document and approval cover all of the applicable federal regulatory requirements? ____ Yes ____ No

(22) Public Involvement:

Include any public hearings, hearing opportunities, and public comments

PART B (TO BE SUBMITTED AT DESIGN STAGE 3)

(23) Commitments:

Include a printout from the Project Commitments Database with this form.

(24) Waterway Permit Information:

Type of Permit:		Required for this Project?	Date Obtained	Expiration Date	Incorporated into the Construction Contract?
		Yes or No			Yes or No
Army Corps of Engineers (404/Section10 Permit)					
	Individual (IP)				
	Nationwide (NWP)				
	Regional General Permit (RGP)				
	Pre-Construction Notification (PCN)				
IDEM					
	Section 401				
	Isolated Wetlands determination				
	Wetland Mitigation required				
	Stream Mitigation required				
	Rule 5				
	Pre-Construction Notification (PCN)				
IDNR					
	Construction in a Floodway				
	Lake Preservation permit				
US Coast Guard Section 9 Bridge Permit					
Others (Please list below)					

INDOT has reviewed the original Environmental Document and all subsequent reevaluations (if any) and hereby finds that the Document remains valid.

Prepared by: _____
(25) INDOT Project Manager
 LPA- Design Consultant

Date: _____

Approved by: _____
 District ESM/DPD or OES

Date: _____

Instructions for Completing the Environmental Consultation Form

Part A

1. The county in which the project is located (if project is located in more than one county, list all counties beginning with the starting terminus of the project).
2. The State Route, US Route, Interstate or local road for which the project is programmed.
3. The seven digit designation number for which the project is programmed.
4. The date of submission for the current set of plans.
5. The type(s) of funding sources for the project (indicate all types that are applicable to the project).
6. The facility improvement that is planned at the time of this submittal.
7. The transportation problem which the project is intended to address.
8. The acreage of land to be acquired for the project, including reacquisition of apparent Right of Way (if necessary). Also the number of relocations anticipated.
9. The specific type of environmental document that was prepared for the project (indicate only one type).
10. Subsequent to a comparison of the current design plans with the project footprint covered by the approved environmental documentation, indicate whether or not the project remains as essentially discussed in the approved environmental documents.
11. If the “yes” box is indicated, list all of the environmental approval dates and reevaluation dates associated with the project. If the “no” box is indicated, a project reevaluation is required before the completion of this form.
12. Based on the just completed reevaluation, were there any changes required for the environmental commitments? Indicate either yes or no. If the “yes” box was indicated, address any changes on the attached Commitment Summary Form.
13. State whether the roadway is being moved from its existing horizontal alignment.
14. Indicate total length of the bridge and the length of each span, if applicable.
15. Indicate any clearing which will be necessary at the corners of the structure. Repeat for multiple structures.
16. List the amount of channel length which will be impacted, both upstream and downstream of the structure. Repeat if there are multiple structures.
17. State whether channel relocation will be necessary.
18. Calculate the estimated acreage of impacts to wetlands from the project.
19. If it is known that a temporary causeway will be used during construction, it should be indicated here.
20. State whether it is anticipated that mitigation for channel or wetland impacts will be necessary.
21. NOT APPLICABLE for EA/FONSI or CE level projects.
22. Summarize public involvement activities and results to date.
23. This should include all commitments marked “active” at the current time.

24. The information required for this section is whether a specific type of permit is required for this project, when the permit was obtained, what is the expiration date of the permit is and have the stipulations and the requirements of the permit been incorporated into the construction contract. This section is also to be completed by the project manager for INDOT sponsored projects and the design consultant for LPA sponsored projects.
25. INDOT sponsored project should have the signature of the project manager. LPA sponsored projects should be signed by the LPA design consultant.

Attachment 4
Commitments Database Import
Spreadsheet and Instructions

Using the Commitments Database March 2009

I. INDOT Users

INDOT users may access the commitments database and instructions through the *My Tasks* option in the SPMS portal on the INDOT Intranet. Internal users may enter commitments individually through data entry screens or they may use the upload process described below for non-INDOT users.

II. Non-INDOT Users

Non-INDOT users, such as LPAs and consultants, may provide project commitments for the database using a preformatted spreadsheet. The project manager then uploads the commitments into the database. The upload will fail if any columns are blank or if the spreadsheet contains blank formatted rows, so preparers must follow these instructions carefully to avoid revisions.

The spreadsheet allows many commitments to be placed in the database at one time rather than by adding each commitment individually. The spreadsheet looks like this, with some detail columns removed:

	A	B	C	D	E	F	G	P	Q	R	S	T	U
1	DESIGNATION NUMBER	COMMITMENT NUMBER	COMMITMENT DATE	CONSULTANT	FIRST NAME	LAST NAME	COMMITMENT TEXT	REQUIRED FOR CONSTRUCTION	LEGAL	TIME SENSITIVE	IMPLEMENTED		
2	9902910	1	6/10/2008	INDOT OES	Laura	Hilden	Any additional right of way beyond the amounts at the locations described in this document shall be reviewed by INDOT's Office of Environmental Services. (Firm)	N	Y	N	N		
3	9902910	2	6/10/2008	INDOT OES	Laura	Hilden	Revegetate all bare and disturbed areas with a mixture of grasses (excluding all varieties of tall fescue), legumes, and native shrub and hardwood tree species as soon as possible upon completion. (For further consideration)	N	Y	N	N		
4	9902910	3	6/10/2008	INDOT OES	Laura	Hilden	Minimize and contain within the project limits inchannel disturbance and the clearing of trees and brush. (Firm)	N	Y	N	N		
5	9902910	4	6/10/2008	INDOT OES	Laura	Hilden	Do not work in the waterway from April 1 through June 30 without the prior written approval of the IDNR Division of Fish and Wildlife. (Firm)	N	Y	N	N		
6	9902910	5	6/10/2008	INDOT OES	Laura	Hilden	Use minimum average six-inch graded rip rap stone extended below the normal water level to provide habitat for aquatic organisms in the void (For further consideration)	N	Y	N	N		
							Plant native hardwood trees along the top of the bank and right-of-way to replace the vegetation destroyed during construction. (For further consideration)						

The spreadsheet consists of 20 columns that must be completed, as follows:

Columns 1-4: Commitment Text

DESIGNATION_ NUMBER	COMMITMENT_ NUMBER	COMMITMENT_ DATE	COMMITMENT_ TEXT
9802702	1	10/14/2008	< text > (Firm)
9802702	2	10/14/2008	< text > (For further consideration)
9802702	3	10/14/2008	< text > (Firm)

DESIGNATION_NUMBER is the seven-digit INDOT project designation number. This must be entered as text to preserve leading zeros (e.g. “0123456”, not “123456”)

COMMITMENT_NUMBER should be entered as consecutive numbers starting with 1 as shown above. These numbers may not match the numbers in the database because there may already be existing commitments against the project. The application will number the commitments consecutively starting from the next commitment number not used.

COMMITMENT_DATE can be entered as any date; however, the date entered into the database will be the actual date the commitments are imported.

COMMITMENT_TEXT is the commitment as it appears in the environmental document or other source document. Some discretion should be used when copying large blocks of text (such as entire legal agreements). If a commitment will require more than 1000 characters, it should be broken into logical pieces between text boxes. Each commitment should be labeled as “Firm” or “For further consideration” in parentheses.

Columns 5-8: Consultant Information

CONSULTANT_ SUBMIT_ COMMITMENT	FIRST_ NAME_ CONSULTANT	LAST_ NAME_ CONSULTANT	CONSULTANT_ PHONE_ NUMBER
Acme CE Services, LLC	Jimmy	Puffinburger	317-867-5309
Acme CE Services, LLC	Jimmy	Puffinburger	317-867-5309
Acme CE Services, LLC	Jimmy	Puffinburger	317-867-5309

These columns document the name of the consultant’s firm and the contact person at that firm. If commitments are prepared internally, this is the INDOT office that is uploading the commitments.

Columns 9-12: Documenter Information

OFFICE_DOCUMENTING_COMMITMENT	DOCUMENTER_FIRST_NAME	DOCUMENTER_LAST_NAME	DOCUMENTER_PHONE_NUMBER
INDOT Office of Env. Services	Loni	Hrynk	317-222-5555
INDOT Office of Env. Services	Loni	Hrynk	317-222-5555
INDOT Office of Env. Services	Loni	Hrynk	317-222-5555

These columns document the INDOT office and the name of the INDOT employee who is uploading the commitments. If the commitments are prepared internally, this information is the same as the consultant information.

Columns 13-16: Requesting Agency Information

AGENCY_REQUIRING_COMMITMENT	CONTACT_FIRST_NAME	CONTACT_LAST_NAME	CONTACT_PHONE_NUMBER
IDEM	Autoreponse	Autoreponse	317-555-5018
IDNR	Christie	Stanifer	317-111-3333
USFW (and IDNR)	Michael	Litwin	812-222-1111

These columns document the agency that requires the commitment and the contact person for that agency. If essentially identical commitments are received from two different agencies, combine them into one commitment and provide contact information for both agencies. Contact information for the secondary agency can be provided in the commitment text.

Columns 17-20: Designations and Other Information

REQUIRED_FOR_CONSTRUCTION	LEGAL	TIME_SENSITIVE	IMPLEMENTED
N	Y	N	N
Y	Y	Y	N
Y	N	N	N

REQUIRED_FOR_CONSTRUCTION highlights items which require action or attention during construction and will not be designed into the project.

LEGAL indicates commitments which have legal consequences if they are not met, for example, anything in the NEPA document, permit conditions, and contractual obligations with landowners.

TIME_SENSITIVE applies to items which will affect project scheduling, for example, restrictions on clearing trees in Indiana bat habitat and restrictions on in-channel work during the fish-spawning season.

IMPLEMENTED indicates the item has been incorporated into the project and is to be filled out after construction by the Project Engineer or Supervisor.

Attachment 5
Hazardous Materials Site Visit Form

HAZARDOUS MATERIALS SITE VISIT FORM

Des # _____ Project # _____
 Road # _____ Type of Road Project _____
 Description of area (either general location or exact location of parcel) _____

Person completing this Field Check _____

1. **Has a Red Flag Investigation been completed?** Yes No

Notes:

2. **Right-of-Way Requirements:**

No New ROW Strip ROW Minor Take Whole Parcel Take Information Not Available

Notes:

3. **Land Use History and Development:** (Industrial, Light Industry, Commercial, Agricultural, Residential, Other – also, indicate source of data: visual inspection, aerial photos, U.S.G.S. topo maps, etc.)

Setting (rural or urban):

Current Land Uses:

Previous Land Uses:

Adjacent Land Uses:

Describe any structures on the property:

	Property	Adjoining Property		Property	Adjoining Property
Storage Structures:			Evidence of Contamination:		
Underground Tanks	_____	_____	Junkyard	_____	_____
Surface Tanks	_____	_____	Auto Graveyard	_____	_____
Transformers	_____	_____	Surface Staining	_____	_____
Sumps	_____	_____	Oil Sheen	_____	_____
Ponds/Lagoons	_____	_____	Odors	_____	_____
Drums	_____	_____	Vegetation Damage	_____	_____
Basins	_____	_____	Dumps	_____	_____
Landfills	_____	_____	Fill Dirt Evidence	_____	_____
Other	_____	_____	Vent pipes or fill pipes	_____	_____
			Other	_____	_____

5. **Is a Phase I, Initial Site Assessment required?** Yes No

(Write additional notes on back)

Attachment 6

Ecological Evaluation Form

ECOLOGICAL EVALUATION FORM

Road: _____ Des. No: _____ Project No: _____ County: _____
 Project Description: _____
 Project Location: _____
 Natural Region and Section: _____
 8-Digit Watershed: _____ USGS Quadrangle: _____ Soil Survey Map Sheet _____

RIGHT-OF-WAY BY LAND USE TYPE

Permanent Right-of-way

Land Use Type	R/W (ha)	R/W (ac)
Commercial		
Industrial		
Residential		
Agricultural		
Wooded		
Total Perm R/W		

Temporary Right-of-way

Land Use Type	R/W (ha)	R/W (ac)
Commercial		
Industrial		
Residential		
Agricultural		
Wooded		
Total Temp R/W		

Is the project located in an urban or a rural setting? _____
 Is land use in the project changing? Yes No If yes, explain: _____

QUADRANT DESCRIPTION

Northeast _____
 Northwest _____
 Southeast _____
 Southwest _____

STREAM INFORMATION

	Width	Depth	Maximum Depth
Bank Full Channel			
Ordinary High Water Mark			

Substrate Material: (circle one) silt sand gravel loose rock bedrock
 Flow Velocity: (circle one) stagnant slow moderate swift rapid
 Does the stream contain riffle/pool complexes? Yes No
 Does the stream contain meanders within the proposed right-of-way? Yes No
 Is channel work proposed as part of this project? Yes No If yes, describe: _____

Is aquatic flora present? Yes No If yes, please list: _____

Is aquatic fauna present? Yes No If yes, please list: _____

Comments: _____

TERRAIN

Immediate Area: Depressed Flat Gently Rolling Rolling Hilly
 Extended Area: Depressed Flat Gently Rolling Rolling Hilly

ENDANGERED AND THREATENED SPECIES

Is this project located within the range of any Federally Endangered or Threatened Species? Yes No

If yes, please list below.

Common Name	Scientific Name	Status	Confirmed Occurrences Nearby?	Suitable Habitat Present
				Yes No

Will any of the above listed species be impacted by the planned improvements? Yes No

NATURAL AREAS

Are there any natural areas located within 5 miles of the project area? Yes No

If yes, please list below.

Property Name	Ownership	Proximity to Project

Will any of the above listed properties be impacted by the planned improvements? Yes No

WETLAND INFORMATION

Are wetlands mapped within or adjacent to project limits? Yes No

If yes, please list below.

Wetland Type	Abbreviation	Location within Project	Confirmed in Field?
			Yes No Undetermined

Were any of the following wetland indicators observed in or adjacent to project limits?

	Yes	No	Location within Project
Standing Water	___	___	_____
Saturated Soil	___	___	_____
Depressional Areas	___	___	_____
Water Marks on Trees	___	___	_____
Drift Lines	___	___	_____
Fluted Tree Trunks/Roots	___	___	_____
Sediment Deposits	___	___	_____
Water Stained Leaves	___	___	_____
Other _____	___	___	_____

Is there a potential for impacts to jurisdictional wetlands as a result of the planned improvements? Yes No

Comments: _____

Appendices

Appendix A

Glossary

Glossary

A

Abutment: A substructure supporting the ends of a single span or the extreme ends of a multi-span bridge or small structure. An abutment usually retains or supports the approach embankment.

Additional Information: See *Reevaluation* below.

Adjacent Wetlands: Wetlands separated from other waters of the U.S. by man-made dikes or barriers, natural river berms, beach dunes, etc. (33 CFR 328.3(c)).

Advisory Council for Historic Preservation (ACHP): An independent federal agency responsible for the federal review process to ensure that cultural resources are considered during federal project planning and implementation.

Affected Environment: The physical features, land, area or areas to be influenced, impacted or created by a transportation improvement under consideration; also includes various social and environmental factors and conditions pertinent to an area.

Alternative: One of a number of specific transportation improvement proposals, alignments, options, design choices, etc. in a study. The alternative chosen for implementation is called the preferred alternative.

Alternative Analysis: A systematic review and evaluation of alternatives to determine the one that best meets purpose and need while minimizing impacts to resources. The analysis can include avoidance, minimization and/or compensatory mitigation for impacts to a wetland, historic property or other type of resource.

Approving Authority: The individual or agency that approves a categorical exclusion.

Archaeological Investigations: Studies of prehistoric and historic locales which provide understanding of past human behavior, culture change, and related topics through scientific and scholarly techniques such as literature research, excavation, analysis and interpretation.

Archaeological Resource: The location of a building, structure, district, site, or objects constructed or deposited at least 50 years ago where the location itself possesses research value.

Area of Potential Effect (APE): Under 36 CFR Part 800.16(d) “the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist.”

Average Daily Traffic (ADT): The number of vehicles that pass a point each day averaged over a specified period of time.

B

Biological Diversity (Biodiversity): The variability of genes, organisms, species, and interactions within or between habitats, communities, and ecosystems. Biological diversity may be measured at the level of genes, species, and ecosystems. In general usage, biodiversity refers to the number of species supported by an ecosystem weighted by relative abundance of each species.

Biological Opinion: A document which is issued as a result of consultation under Section 7 of the federal Endangered Species Act. It includes: (1) the opinion of the Fish and Wildlife Service or the National Marine Fisheries Service as to whether or not a federal action likely to jeopardize the continued existence of listed species (“jeopardy” or “no jeopardy”), or result in the destruction adverse modification of designated critical habitat (“adverse modification” or “no adverse modification”); (2) a summary of the information which the opinion is based; and (3) a detailed discussion of the effects of the action species or designated critical habitat. (50 CFR 402.02, 50 CFR 402.14(h)).

Bridge: A structure, including supports, erected over a depression or an obstruction such as water, highway, or a railway having a track or passageway for carrying traffic or other moving loads, and having a length measured along the center of the roadway of more than 20 ft (6.1 m) between undercopings of abutments or extreme ends of openings for multiple boxes.

Burial Ground: A graveyard or other area set aside for burial of the dead; a common burying ground of a church or community.

Business Information Survey: A survey that gathers information about businesses that are likely to be relocated or otherwise impacted by a project.

C

Capacity: The maximum number of vehicles (average daily traffic, or ADT) that can reasonably be expected to pass over a lane of roadway during a given time period under prevailing roadway and traffic conditions.

Categorical Exclusion: The environmental document prepared for federal actions that do not have a significant effect on the environment either individually or cumulatively.

Categorical Exemption: The minimal environmental document prepared for projects that Indiana agencies have agreed are anticipated to have little or no impact on the human and natural environment.

Commitments: Promises made during the environmental evaluation and study process to moderate or lessen impacts from the proposed action. These measures may include planning and development commitments, environmental measures, right-of-way improvements, and agreements with resource or other agencies to effect construction or post construction action. Commitments are documented on the Commitments Summary Form.

Community Advisory Committee (CAC): A group of representatives of public and private community organizations that are convened at the outset of the NEPA process and meets periodically to discuss issues and concerns related to the project. CAC's are required for all EIS-level projects and are considered on EA projects based on public interest or potential for controversy. They are unusual for CE level projects.

Comprehensive Plan: The general, inclusive, long-range statement of the future development of a unit of local government, such as a municipality or county. The plan is typically a map accompanied by description and supplemented by policy statements that direct future capital improvements in an area.

Conceptual Stage Relocation Study (CSRS): A study performed to the likely effects of relocations on businesses and residents.

Conformity: The U.S. Clean Air Act stipulates that any approved transportation project, plan, or program must conform to the State Implementation Plan (SIP), a document which prescribes procedures for the implementation, maintenance and enforcement of primary and secondary pollutants.

Constraints: Significant resources, facilities or other features of a study area located in or adjacent to an existing or proposed transportation corridor that serve to restrain, restrict, or prevent the ready implementation of proposed transportation improvements in a given area; may include natural or physical resources, important structures, manner of payment and various administrative requirements which must be met.

Constructed or Created Wetland: A man-made wetland constructed where one did not formerly exist.

Construction Limits: The farthest limits of construction as measured perpendicular to a base line (e.g., toe of slope, top of ditch backslope). The construction limits are usually the farthest extent of ground disturbance at a project site.

Consultant: An individual, partnership or firm with expertise in engineering, environmental, or public involvement disciplines that is contracted by the originating office to provide technical services. Expertise is determined by comparison to consultant prequalification criteria.

Consultation: The process of seeking, discussing, and considering the views of other participants, and where feasible, seeking agreement with them regarding matters arising in the Section 106 process.

Consulting Party: An individual or entity identified in the Section 106 process that has expressed an interest in the effects of the undertaking on historic resources. Consulting parties are invited to participate in the consultation process.

Context Sensitive Solutions (CSS): A collaborative, interdisciplinary approach to design that considers the total context within which a transportation improvement project will exist. CSS involves all stakeholders to develop a transportation facility that fits its physical setting and preserves scenic, aesthetic, historic, and environmental resources, while maintaining safety and mobility.

Contributing Resource: A building, site, structure, or object that adds to the historic significance of a property or district.

Criteria Pollutants: Six pollutants (Carbon monoxide, ozone, particulate matter, lead, nitrogen dioxide, and sulfur dioxide) defined under the Clean Air Act that adversely affect human health and safety.

Critical Habitat: Geographic areas that are essential to the conservation of an endangered species. Specifically, critical habitat is: (1) The specific areas within the geographical area currently occupied by a species, at the time it is listed in accordance with the Endangered Species Act, on which are found those physical or biological features essential to the conservation of the species, and that may require special management considerations or protection; and (2) Specific areas outside the geographical area occupied by a species at the time it is listed in accordance with the Endangered Species Act, upon a determination by the Secretary of the US Department of the Interior, that such areas are essential for the conservation of the species.

Cultural Resource: Any archaeological, historical, or architectural resource, e.g., a building, object, structure, or site.

Culvert: A structure not classified as a bridge which provides an opening under the roadway.

Cumulative Impact: The total impact on the environment from the incremental impact of a specific action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

D

Data Recovery: Excavation of an archaeological site to obtain information from the site.

Design Approval: An administrative action taken by either INDOT or by the FHWA at the conclusion of the preliminary design phase to officially certify the route location and major design features of a highway.

Design Criteria: Established state and national standards and procedures that guide the establishment of roadway layouts, alignments, geometry, and dimensions for specified types of highways in certain defined conditions. The principal design criteria for highways are traffic volume, design speed, the physical characteristics of vehicles, the classification of vehicles, and the percentage of various vehicle classification types that use the highway.

Design Exception: An approval issued by a state or federal agency to permit certain deviation from a specified, accepted design criteria granted on the basis of a report explaining the need for the exception and the consequences that will result from the action.

Design Manual: An INDOT publication defining criteria, processes and procedures for the evaluation, assessment, engineering design and development of highway and bridge projects.

Designated Use: Classification in Indiana's water quality standards for each watercourse or body of water that defines its optimal purpose. Examples are drinking water use and aquatic life use.

Determination of Eligibility: The process of rendering a professional evaluation of the historical significance of a property. FHWA, in consultation with the State Historic Preservation Officer, applies National Register of Historic Places criteria when deciding matters of historical significance.

Direct Effects: Environmental effects which are caused by a specific action and occur at the same time as the action. Changes in noise levels, traffic volumes or visual conditions are some examples of direct effects generated by transportation improvements.

District Office: One of six INDOT offices throughout Indiana responsible for administering project development, design, construction and maintenance activities within a specified geographic region.

Ditch: A long, narrow excavation made in the ground by removing material or opening an existing passage or trench, such as a natural channel or waterway.

Drinking Water: Ground or surface water which is of a high enough quality either to drink directly from the source or with some amount of filtration and/or chemical treatment.

E

Ecological Survey Report: A report summarizing the ecological field studies done to inventory ecological resources and the impacts of various project alternatives.

Effect Finding: A finding made by FHWA that a proposed project has an effect on a property included on or eligible for the National Register of Historic Places. The three findings of effect are “No Historic Properties Affected,” “No Adverse Effect,” and “Adverse Effect”.

Eligible for Inclusion on the NRHP: Includes both properties formally determined as such in accordance with the regulations of the Secretary of the Interior and all other properties that meet the National Register criteria.

Endangered Species: Any species which is in danger of extinction throughout all or a significant portion of its range as per Section 4 of the Endangered Species Act, 16 U.S.C.A. 1531 et seq., as amended.

Environmental Assessment (EA): A document prepared for an action where the significance of the environmental impact is not clearly established. The primary purpose of an EA is to help FHWA decide whether or not an environmental impact statement is needed.

Environmental Consultation Form: The document completed as design is finished to verify that the project as designed is consistent with the approved environmental document.

Environmental Document: Any document prepared to satisfy the requirements of the National Environmental Policy Act, such as an environmental impact statement, an environmental assessment, a categorical exclusion, and any reevaluation of these documents.

Environmental Impact Statement (EIS): The environmental document prepared for projects or actions which are known to have a significant effect on the environment.

Environmental Justice: An approach to undertakings that considers impacts to minority populations and low-income populations. Environmental justice requires efforts to avoid disproportionately high and adverse impacts on minority and low-income populations with respect to human health and the environment.

Environmental Scoping Manager: A professional in each of INDOT’s six district offices who oversees and coordinates district efforts related to environmental issues, operations and evaluations.

Environmental Screening/CE1 Form: The lowest level of environmental documentation for a categorical exclusion. This document is also used to screen projects for higher levels of documentation

Ephemeral Stream: A stream with flowing water only during, and for a short duration after, precipitation events in a typical year. The streambed is located above the water table year-round and precipitation is the primary source of water for stream flow.

Erosion and Sedimentation Control Plan: A detailed plan developed to minimize accelerated erosion and prevent sedimentation damage.

F

Farmland: Under the Farmland Protection Policy Act, any land not already in or committed to urban development or water storage.

Feasibility Study: A systematic evaluation of the desirability or practicality of further developing a proposed action that is performed during the planning stage or very early in the preliminary development phase.

Federal Action: A highway or transit project proposed for FHWA or FTA funding. It also includes actions such as joint and multiple use permits, other federal permits and approvals, changes in access control, etc., which may or may not involve a commitment of Federal funds.

Federal Highway Administration (FHWA): The agency of the U.S. Department of Transportation responsible for carrying out federal highway and transportation mandates through regional offices and a Division Office in each state.

Federal Transit Administration (FTA): An agency of the U.S. Department of Transportation tasked with administering the federal transit program.

Field Investigation: A survey that describes the type, location and condition of properties or resources in a specific geographic area combined with background research.

Field Review: A site visit conducted by INDOT to gather or verify data, define scopes of work, perform analyses, and make decisions for specific projects.

Final Design: The development of detailed working drawings, specifications, and estimates for transportation projects. Final Design follows the receipt of necessary design and/or environmental approval, and it includes right-of-way acquisition, utility relocation, and contract advertisement and award.

Finding of No Significant Impact (FONSI): A determination by a federal agency that briefly presents the reasons why an action or project documented as an environmental assessment will not have a significant effect on the human environment and why an environment impact statement will not be prepared.

Floodplain: The relatively level land next to a stream or river channel that is periodically submerged by flood waters. It is composed of alluvium deposited by the present stream or river when it floods.

Forested Wetland: A wetland class characterized by woody vegetation that is 20 feet or taller.

G

Ground Water: Water that occurs beneath the surface of the ground, regardless of location or form. Most ground water exists in small pores between rock particles and in narrow fractures in rock formations

H

Habitat: The sum of the physical, chemical, and biological environment occupied by individuals of a particular species, population, or community.

Hazardous Material: A classification under CERCLA given to hazardous wastes and other dangerous materials regulated under a variety of other environmental regulations, such as the Clean Air Act (CAA) and Clean Water Act (CWA).

Hazardous Materials Site Visit Form: Documentation of observations of possible hazardous materials concerns on parcels within or adjacent to the project limits. This information is collected during a site walkthrough.

Hazardous Waste: A waste with properties that make it dangerous, as defined under the Resource Conservation and Recovery Act (RCRA). Wastes may either be classified as hazardous due to direct listing (by substance) or they may be hazardous because they possess one or more of the characteristic traits of hazardous substances.

Headwaters: Non-tidal rivers, streams, and their lakes and impoundments, including adjacent wetlands, that are part of a surface tributary system to an interstate or navigable water of the U.S. upstream of the point on the river or stream at which the average annual flow is less than five cubic feet per second.

Historic Bridge: Bridges included in or eligible for inclusion in the National Register of Historic Places; or considered a contributing element within a listed or eligible historic district.

Historic District: An area that possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan of physical development.

Historic Property: Any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This includes artifacts, records, and remains that are related to and located within such properties.

Historical/Architecture Investigations: Studies that result in identification of resources (buildings, structures, and sites) constructed over fifty years ago or of recent construction and demonstrably significant based on National Register of Historic Places guidelines, via literature research, photo documentation, analysis, and interpretation.

Hot Spot Analysis: An estimation of likely future localized particulate matter or carbon monoxide concentrations and a comparison of those concentrations to relevant air quality standards.

Human Environment: Interpreted comprehensively to include the natural and physical environment and the relationship of people with that environment. This means that economic or social effects are not intended by themselves to require preparation of an environmental impact statement.

I

Impacts: Positive or negative effects upon the natural or human environment resulting from transportation projects.

Indian Tribe: A tribe, band, nation, or other organized group or community, that is recognized by the federal government as eligible for the special programs and services provided by the United States because of their status as Indians.

Indirect effects or impacts: Effects that are caused by an action and occur later in time or farther removed in distance, but are still reasonably foreseeable, including changes in land use patterns, population density or growth rates, and related effects on air and water and other natural systems.

Initial Site Assessment (Phase I): A review of environmental database records related to the project area and immediately surrounding environment. The Phase I Site Assessment is designed to determine whether past uses of a property represent a concern to the project. Depending on the results of the Phase I Site Assessment, a Phase II Site Investigation may also be needed.

Injection Well: A well constructed for the purpose of injecting treated water, often wastewater, directly into the ground.

Interested Community: The persons or groups affected by or interested in a specific transportation project. Contact information for the interested community is gathered and maintained by INDOT or LPAs during the course of transportation project studies.

Intermittent Stream: A stream that has flowing water during certain times of the year, when groundwater supports stream flow. During dry periods, intermittent streams may not have flowing water. Precipitation is a supplemental source of water for stream flow. (Fed. Reg./Vol. 65, No 47, 3/9/00).

Intermodal Surface Transportation Efficiency Act (ISTEA): The 1991 US Department of Transportation authorizing act, which established the policy of developing an economic, efficient, and environmentally sound national transportation system. ISTEA initiated transportation enhancement activities and required transportation policy to advance the objectives of regional and metropolitan planning by considering the “overall social, economic, energy and environmental effects” of transportation projects.

Invasive Species: A species that is non-native (or alien) to the ecosystem under consideration and whose introduction causes or is likely to cause economic or environmental harm or harm to human health. Invasive species can be plants, animals, and other organisms (e.g., microbes). Human actions are the primary means of invasive species introductions.

Isolated Wetlands: Wetlands that have no surface water connection to a surface water of the state, are outside of, and not contiguous to, any one hundred-year floodplain and have no contiguous hydric soil between the wetland and any surface water of the state.

J

Joint Development: The conception, planning and execution of improvements in the uses of land outside the normal right-of-way for a transportation facility.

Jurisdictional Determination (JD): A site survey or document review performed by the U.S. Army Corps of Engineers to officially determine whether or not a given parcel of land is subject to regulation as waters of the United States, and if so, the extent of the area.

Jurisdictional Water: A waterbody over which the US Army Corps of Engineers has jurisdiction because it meets certain criteria, such as a wetland, stream, river, or other water feature.

K

Karst: Landscape features caused by patterns of dissolved bedrock, typically limestone or dolomite, and often marked by underground drainage channels. Karst features include sinkholes, swallowholes, caves, springs, and sinking streams

L

Lead Agency: A state or federal agency taking primary responsibility for preparing an engineering or environmental document.

Legal Notice: A formal announcement published according to legal requirements in a periodical or newspaper to provide official public notice of an action or approval of interest to the public.

Level of Service (LOS): A commonly used indicator of a highway's performance. Levels of service range from A, which indicates unrestricted free flow conditions, to F which indicates high congestion and generally restricted operating speeds.

Local Government: A city, county, parish, township, municipality or other general purpose political subdivision of a State.

Local Public Agency Project: Any highway improvement project or enhancement project that is funded wholly or in part by a local government entity.

Location Map: A graphic drawing used in study reports and meeting presentations to show the orientation and the relationship of the project with its study area in comparison with existing roadways, features, developments, municipalities, and principal land uses nearby. The graphic typically will be large enough to show all major roadways, major cities, and principal topographic controls in the region.

Logical Termini: Connecting points with known features (land uses, economic areas, population concentrations, cross route locations, etc.) at either end of a proposed transportation route that enhance good planning and which serve to make the route usable. Logical termini are considered rational end points for a transportation improvement.

M

Memorandum of Agreement and Memorandum of Understanding: Documents that record terms and conditions negotiated between parties with a common interest, goal, or procedure. A Memorandum of Agreement (MOA) focuses on general areas of agreement in which the activities of one party depend on the activities of another. A Memorandum of Understanding focuses on defining relationships in which the activities of one party do not depend on the activities of another.

Metropolitan Planning Organization (MPO): The organization designated by the governor and local elected officials as responsible, together with the state, for transportation planning in an urbanized area.

Mitigation: The restoration, creation, enhancement or, in exceptional circumstances, preservation of resources expressly for the purpose of compensating for impacts.

Mobile Source Air Toxics: Any of the 21 compounds identified by the Environmental Protection Agency as hazardous air pollutants from mobile sources.

N

National Environmental Policy Act (NEPA): The federal legislation requiring states to document the environmental impact of transportation projects. The NEPA process is enforced by regulations of the Council on Environmental Quality (CEQ).

National Historic Landmark: A historic property evaluated and found to have significance at the national level and designated as such by the Secretary of the Interior.

National Historic Preservation Act: The primary legislation that governs historic and archaeological preservation in the United States and outlines the Section 106 process..

National Register of Historic Places (NRHP): The national list of districts, sites, buildings, structures and objects significant in American history, architecture, archaeology, engineering, or culture.

Native Species: A species which, by scientific evidence, was present in Indiana just prior to European exploration and settlement.

No-Build Alternative or No-Action Alternative: Option of maintaining the status quo by not building transportation improvements. The no-build serves as a baseline for comparison of build alternatives.

Non-attainment Areas: Counties that do not meet national ambient air quality standards for the criteria pollutants; ranked by the severity of their problem as marginal, moderate, serious, severe or extreme. In accordance with the Clean Air Act Amendments of 1990, these areas must take specific emission reduction measures.

Non-native Species: A species which, by scientific evidence, was not present in Indiana just prior to European exploration and settlement.

O

Ordinary High Water (OHWM): As defined by federal regulation, “that line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.”

Originating Office: The lead District, or LPA responsible for administering, developing, and implementing a given project.

Outstanding River: A high-quality scenic or recreational river designated by the Indiana Department of Natural Resources under one or more of 22 categories.

P

Plans, Specifications, and Estimates Submission (PS&E): The final set of plans, specifications, and estimates for the project as it will be let for construction. This transmittal includes all written material and engineering data necessary to place a highway construction project under contract. These submissions are reviewed for accuracy and completeness prior to bid, and, for major federal aid projects, may be provided to the Federal Highway Administration for final approval.

Perennial Stream: A stream that has flowing water year-round during a typical year. The water table is located above the stream bed for most of the year. Groundwater is the primary source of water for stream flow and precipitation is a supplemental source of water for stream flow. (Fed. Reg./Vol. 65, No 47, 3/9/00)

Phase I Cultural Resource Survey: Documentation and analysis of the cultural resource investigations in a specific survey area.

Phase I: Initial Site Assessment (ISA): A review of environmental database records related to the project area and immediately surrounding environment. The Phase I Site Assessment is designed to determine whether past uses of a property represent a concern to the project. Depending on the results of the Phase I Site Assessment, a Phase II Site Investigation may also be needed.

Phase II Cultural Resource Survey: Documentation and analysis of a detailed investigation of a specific property, properties, or site(s).

Phase II: Preliminary Site Investigation (PSI): A Phase II Site Investigation involves subsurface investigations and lab analysis of soil and/or water samples to determine whether contamination is present, and if so, to what extent.

Phase III Cultural Resource Survey: Documentation and analysis of archaeological investigations as they pertain to data recovery.

Practicable: Available and capable of being executed with existing technology and without significant adverse effect on the economic feasibility of the project in light of the overall project purposes and in consideration of the relative environmental benefit.

Pre-Construction Notification (PCN): A document, generally a completed 404 Application, which must be submitted to the U.S. Army Corps of Engineers prior to commencing an activity authorized by a Section 404 Nationwide Permit.

Preferred Alternative: The alternative that will be implemented by the project.

Permit Determination: Identification of permits that are required based on resources impacted by a project. Permit determinations performed during the drafting of the environmental document are considered preliminary and those performed at the time of permitting are final.

Preliminary Site Investigation (Phase II): A Phase II Site Investigation involves subsurface investigations and lab analysis of soil and/or water samples to determine whether contamination is present, and if so, to what extent.

Pre-qualified Consultant: Those individuals or firms who meet the criteria and have been approved by INDOT for pre-qualification for archaeological or and/or history/architecture or other types of environmental investigations under INDOT's Consultant Prequalification Requirements and Procedures. The individual or firm should be listed by INDOT as pre-qualified at the time investigations are undertaken.

Primary Consultant: An individual, partnership or firm with qualified expertise in engineering, environmental or public involvement disciplines who is contracted by the originating office to provide technical services.

Programmatic Agreement: An agreement between agencies on policy and procedure that is designed to accomplish mutual goals efficiently.

Programming: A general term to refer to a series of activities carried out by a project sponsor (typically INDOT), including data assessment, appraisal of identified planning needs and consideration of available or anticipated fiscal resources to result in the drawing up, scheduling and planning.

Project Area: That area involved in a highway improvement that will be directly impacted by the project. This area can either be within existing right-of-way or include new right-of-way.

Project Development Process (PDP): Indiana's procedures for advancing a transportation improvement project from concept to construction.

Project File: A compilation of all data and study materials associated with environmental documents, including all pertinent information gathered during the environmental evaluation, supporting reports, telephone memorandums and pertinent correspondence.

Public Hearing: A meeting that provides the public the fullest opportunity to comment on the record about a proposed transportation project.

Public Information Meeting: A meeting conducted by transportation officials designed to provide information to the public about a proposed project.

Public Involvement: Coordination events and informational materials geared toward public participation in the Transportation Development Process.

Purpose and Need: A written description of the transportation problem or other need that the proposed project is intended to address.

Q

Qualified Cultural Resource Personnel: Those persons who meet the professional qualification standards published in 36 CFR 61 and the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation published in the Federal Register, 1983, Part IV, 48(190:44738-44739).

Qualitative Analysis: The systematic comparison of one or more factors that cannot be measured in monetary terms, have no apparent common denominators, or are not readily quantifiable, using sound judgment.

Qualitative Habitat Evaluation Index (QHEI): An index designed to provide a measure of habitat that generally corresponds to those physical factors affecting fish communities and which are generally important to other aquatic life (e.g. invertebrates).

Quantitative Analysis: The comparison of one or more factors using measurable data. Certain mathematical models, formulas, numerical indices, rankings, and value matrices may be used.

R

Red Flag Investigation: A review resources and features in the project area to determine whether any of a range of potential environmental concerns are present. This information is used as a first-step screening tool to identify and eliminate any alternatives which may be fatally flawed on environmental grounds.

Red Flags: Identified points of concern, including environmental and engineering issues, within the project study area.

Reevaluation: An update to an existing environmental document prepared whenever changes occur over time to single or cumulative project conditions that might cause new or more severe environmental impacts or to evaluate a project with respect to new or changed environmental rules, regulations or laws. When applied to a CE, a reevaluation may also be called an additional information document.

Regulated drain: A drainage structure subject to the authority of a county drainage board under IC 36-9-27-33.

Regulatory Agency: An agency empowered to issue permits or recommend approval or denial of a permit or action.

Relocation (Displacement): Removal of a structure from the right of way of a transportation facility, either by movement or by demolition; formerly called displacement.

Remedial Investigation (RI): An investigation of a site with known contamination to determine an appropriate course of action to remove or reduce health and safety hazards on the site.

Resource Agency: An agency with regulatory authority over an environmental resource, including IDEM, USEPA, USFWS, USACE, NRCS, and IDNR. Resource agencies review environmental technical documents and reports generated for proposed development projects, including early coordination information.

Right-of-Way: Land occupied by or intended to be occupied by certain transportation and public use facilities, such as roadways, railroads, and utility lines. Permanent right of way is owned outright by the agency. Temporary right of way is returned to the owner after being used during construction of the transportation facility.

Riparian: Areas next to or substantially influenced by water, including areas adjacent to rivers, lakes, or estuaries, which may or may not be wetlands.

River: A large natural stream of water emptying into an ocean, lake or other body of water and usually fed along its course by converging tributaries.

S

SAFETEA-LU: The acronym for Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users, which is the federal transportation bill passed in 2005. SAFTEA-LU authorizes federal transportation programs and contains provisions to streamline compliance with environmental laws and regulations.

Scope of Work: A detailed, written listing of tasks prepared in advance of engineering and environmental work to define requirements of studies.

Scoping Field Review: A site visit conducted by the originating office and other appropriate parties to define a project's scope of work and to evaluate a variety of circumstances involved with the proposed project.

Section 106: The provision of the National Historic Preservation Act of 1966 that requires federal agencies to take into account the effect of their undertakings on properties included in or eligible for inclusion in the National Register of Historic Places, and to afford the Advisory Council on Historic Preservation a reasonable opportunity to comment on such undertakings.

Section 4(f): The provision of the US Department of Transportation Act of 1966 (Title 49, USC, Section 303) that requires special considerations be made regarding the "use" of any publicly owned park, recreation area, wildlife/waterfowl refuge or historic property that is listed in or eligible for the National Register of Historic Places.

Section 6(f): The provision of the Federal Land and Water Conservation Fund Act of 1965 that protects public recreational properties developed or enhanced using federal funding supplied to states or municipalities under the act by requiring replacement of lands converted to non-recreational uses.

Sensitive Receiver: In noise analysis, an area of frequent human use for which noise impacts are analyzed. These may include any location for which noise may be an impact.

Sensitive Species: Plant or animal species which are (1) Federal listed or proposed threatened or endangered species; (2) bird species protected under the Migratory Bird Treaty Act; (3) species protected under State endangered species laws and regulations, plant protection laws and regulations; Fish and Game codes, or species of special concern listings and policies, or (4) species recognized by national, state, or local environmental organizations (e.g. The Nature Conservancy).

Significant Impacts: An impact that is meaningful, major, important, or large, when both context and intensity are considered. Significant impacts may occur on small or large scales, over the long or short term, may be incidental or cumulative, and may be direct or indirect. Any project that has significant impacts to the human or natural environment cannot be documented as a categorical exclusion. See 40 CFR 1508.27 (<http://ceq.eh.doe.gov/nepa/regs/ceq/1508.htm#1508.27>) for a detailed definition of context and intensity.

Small Structure: A small structure is any crossing which is shorter than exactly twenty feet. Structures that are twenty feet or longer are considered bridges.

Sole Source Aquifer: As defined by the federal Safe Drinking Water Act, a groundwater source that represents the principle source of a water supply for a community or region that, if contaminated, would create a significant hazard to public health.

Special Aquatic Sites: Geographic areas, large or small, which possess special ecological characteristics of productivity, habitat, wildlife protection, or other important and easily disrupted ecological values, such as sanctuaries and refuges, wetlands, mud flats, vegetated shallows, coral reefs, and riffle and pool complexes.

State Historic Preservation Officer (SHPO): The Governor or his/her appointed representative responsible for directing the State Office of Historic Preservation.

State Categorical Exemption: The environmental document completed for a project that is entirely state funded and that does not require preparation of a state environmental assessment. Common projects that qualify as state categorical exemptions are listed in Table 4 in this manual.

Stream: Any channel, which carries water for at least a minimal period of time and has an Ordinary High Water Mark.

Structure Number: A permanent number assigned to a bridge. This is the identification number for the data on a particular structure.

Study Area: The area that will be studied for environmental effects. The study area contains both the project area (also called the project footprint) and the project vicinity. It must be large enough to address all pertinent project impacts.

Surface Water: Any body of water that has some exposure at the surface, such as rivers, creeks, ditches, lakes, reservoirs, ponds, open wells, detention/retention basins, and some wetlands.

T

Terrestrial Habitat: The local environment in which land animals and plants live.

Threatened Species: any plant or animal species that is native to Indiana or that migrates or is otherwise reasonably likely to occur within the state and which has been listed as threatened pursuant to Section 4 of the Endangered Species Act (16 U.S.C.A. 1531 et seq., as amended, or by Indiana.

Type 1 Project: Any project that requires a noise study because it will add capacity, e.g. as new alignment, through significant changes in the horizontal or vertical elevation of an existing road, or an increase in the number of through traffic lanes.

U

Undertaking: A project, activity, or program funded in whole or part under the direct or indirect jurisdiction of a federal agency, including those carried out by or on behalf of a federal agency; those carried out with federal assistance; those requiring a federal permit, license, or approval; and those subject to state or local regulations administered pursuant to a delegation or approval by a federal agency.

Upland: Any area that does not qualify as wetland because the associated hydrologic regime is not sufficiently wet to elicit development of vegetation, solid and/or hydrologic characteristics associated with wetlands, or is defined as open waters.

Utility Clearance: Before construction projects can proceed the right of way must be cleared of affected utilities or the utilities must be scheduled for relocation/abandonment. This is typically accomplished through the certification of right of way.

V

W

Watercourse: A natural or artificial channel through which water flows.

Waters of the State: Accumulations of water, surface and underground, natural and artificial, public and private, or parts thereof, which are wholly or partially within, flow through, or border upon this state. The term does not include any private pond, or any pond, reservoir, or facility built for reduction or control of pollution or cooling of water prior to discharge unless the discharge there from causes or threatens to cause water pollution.

Waters of the United States: Bodies of water subject to the jurisdiction of the US Army Corps of Engineers under Section 404 of the Clean Water Act. This includes all interstate waters such as lakes, rivers, streams (including intermittent streams) and wetlands. Water of the United States is a broader term than navigable waters of the U.S. A detailed definition can be found in 33 CFR 328.3(a).

Waters of the U.S. Determination Report: The document prepared to request a jurisdictional determination of Waters of the U.S. and/or the State of Indiana in support of a permit request. The report identifies all waterways and water bodies that may be impacted by the project and includes data relevant to assessing their jurisdictional status.

Watershed: A watershed is all of the landscape that drains to a specific point.

Well Head Protection Area: The surface and subsurface area surrounding a water well, well field, spring or infiltration gallery supplying a public water system, through which contaminants are reasonably likely to move toward and reach the water well or well field.

Wetland: Areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas that are delineated in accordance with the 1987 the USACE Wetland Delineation Manual.

Wetland Delineation: An investigation that defines the boundaries of those topographic features within a study area and which meet the federal definition of “wetland” as contained in 33 CFR 328.3(b).

Wetland Determination: An investigation that identifies probable wetlands within a study area.

Wetland Finding: A finding made FHWA that there are no practicable alternatives to the impacting one or more acres of wetland. The finding is part of the CE and FHWA approval of the CE is also approval of the wetland finding.

Wetland Restoration: An activity returning a wetland from a disturbed or altered condition with lesser acreage or functions to a previous condition with greater wetland acreage or functions.

Wild and Scenic Rivers Act: Establishes the policy that certain rivers of the nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geological, fish and wildlife, historic, cultural, or other similar values, shall be preserved in free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations. (16 USC 1271 et seq.)

Wildlife Crossing: A structure either above or below a roadway that allows wildlife to cross the roadway.

Appendix B

Acronyms

ACRONYMS

AADT	Annual Average Daily Traffic
ACHP	Advisory Council of Historic Preservation
ADT	Average Daily Traffic
APE	Area of Potential Effect
BA	Biological Assessment
BO	Biological Opinion
BMP	Best Management Practices
CAA	Clean Air Act
CAAA	Clean Air Act Amended
CAC	Community Advisory Committee
CAPA	Critical Aquifer Protection Area
CE	Categorical Exclusion
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CIA	Community Impact Assessment
CMAQ	Congestion & Air Quality Improvement Program
CMS	Congestion Management System
CO	Carbon Monoxide
CSD	Context Sensitive Design
CSR	Conceptual Stage Relocation Plan
dba	Decibel (A-weighted)
DEIS	Draft Environmental Impact Statement
DHPA	Division of Historic Preservation and Archaeology
DHV	Design Hourly Volume
DMMPC	Delaware-Muncie Metropolitan Plan Commission
DOT	Department of Transportation
DPA	District Planning Administrator
EA	Environmental Assessment
EIS	Environmental Impact Statements
EJ	Environmental Justice
EO	Executive Order
ER	Emergency Relief
ESA	Environmental Site Assessment
ESM	Environmental Scoping Manager
EUTS	Evansville Urban Transportation Study
FCIR	Farmland Conversion Impact Rating
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FHWA-IN	Federal Highway Administration, Indiana Division
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
FPPA	Farmland Protection Policy Act
FS	Feasibility Study

FTA	Federal Transit Administration
FWPCA	Federal Water Pollution Control Act (1972 – See Section 404)
GIS	Geographical Information Systems
GWIA	Groundwater Impact Assessment
HC	Hydrocarbons
HGM	Hydrogeomorphic
HHEI	Headwaters Habitat Evaluation Index
HUD	United States Department of Housing and Urban Development
IAC	Indiana Administrative Code
IBI	Index of Biological Integrity
IC	Indiana Code
ICI	Invertebrate Community Index
IDEM	Indiana Department of Environmental Management
IDNR	Indiana Department of Natural Resources
IJS	Interchange Justification Study
IMPO	Indianapolis Metropolitan Planning Organization
IMS	Interchange Modification Study
INDOT	Indiana Department of Transportation
INWRAP	Indiana Wetlands Rapid Assessment Protocol
IP	USACE Section 404 Individual Permit
IR	Indiana Register
ISA	Initial Site Assessments
ISTEA	Intermodal Surface Transportation Efficiency Act
JD	Jurisdictional Determination
KIPDA	Kentuckiana Regional Planning and Development Agency
LEDPA	Least Environmentally Damaging Practicable Alternative
Leq(h)	Equivalent Hourly Sound Level
LOS	Level of Service
LPA	Local Public Agency
LWCF	Land and Water Conservation Fund Act
MACOG	Michiana Area Council of Governments
MOA	Memorandum of Agreement (Agreement with agency outside DOT)
MOT	Maintenance of Traffic
MOU	Memorandum of Understanding
MPO	Metropolitan Planning Organization
N/A	Not Applicable
NAAQS	National Ambient Air Quality Standards
NAC	Noise Abatement Criteria
NEPA	National Environmental Policy Act
NIRCC	Northeastern Indiana Regional Coordinating Council
NIRPC	Northwestern Indiana Regional Planning Commission
NO ₂	Nitrogen Dioxide
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places

NRIS	National Register Information System
NWI	National Wetland Inventory
NWP	USACE Section 404 Nationwide Permit
O ₃	Ozone
OES	Office of Environmental Services
OHWM	Ordinary High Water
OKI	Ohio-Kentucky-Indiana Regional Council of Governments
Pb	Lead
PCN	USACE Section 404 Permit Pre-Construction Notification
PD	Permit Determination
PDP	Project Development Process
PIP	Public Involvement Plan
PM _{2.5} and PM ₁₀	Particulate Matter
PS&E	Plans, Specifications & Estimates
PSI	Preliminary Site Investigation
QHEI	Quality Habitat Evaluation Index
RCRA	Resource Conservation and Recovery Act
RI	Remedial Investigation
RGP	USACE Section 404 Regional General Permit
ROD	Record of Decision
R/W or ROW	Right-of-Way
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy of Users
SCORP	Statewide Comprehensive Outdoor Recreation Plan
SEIS	Supplemental EIS
SHPO	Indiana State Historic Preservation Officer
SIP	State Implementation Plan
SO ₂	Sulfur Dioxide
SSA	Sole Source Aquifer
TCM	Transportation Control Measures
TIP	Transportation Improvement Program
TNM	Traffic Noise Model
TP	Transportation Plan
UA	Urbanized Area
USACE/ ACOE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USDOI	United States Department of Interior
USDOT	United States Department of Transportation
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geologic Survey
UTM	Universal Transmercator Grid
VMT	Vehicle Miles Traveled
VPD	Vehicles per Day
VPH	Vehicles per Hour
WCIEDD	West Central Indiana Economic Development District

WHPA
WQC

Wellhead Protection Area
Section 401 Water Quality Certificate

Appendix C

References

References

General

Council on Environmental Quality (CEQ) Regulations (40 CFR 1508):

http://www.nepa.gov/nepa/regs/ceq/toc_ceq.htm or
http://www.access.gpo.gov/nara/cfr/waisidx_08/40cfr1508_08.html

Definitions:

Cumulative Impacts (40 CFR 1508.7):

http://edocket.access.gpo.gov/cfr_2008/julqtr/pdf/40cfr1508.7.pdf

Categorical Exclusion definition (40 CFR 1508.4):

http://edocket.access.gpo.gov/cfr_2008/julqtr/pdf/40cfr1508.4.pdf

Effects – Indirect and Direct (40 CFR § 1508.8):

http://edocket.access.gpo.gov/cfr_2008/julqtr/pdf/40cfr1508.8.pdf

FHWA Environmental Impact and Related Procedures (23 CFR 771):

http://www.access.gpo.gov/nara/cfr/waisidx_08/23cfr771_08.html

FHWA Categorical Exclusion (CE) Guidance:

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

FHWA Environmental Assessment (EA) Guidance:

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

FHWA Environmental Guidebook: <http://environment.fhwa.dot.gov/histpres/index.asp>

FHWA Environmental Impact Statement (EIS) Guidance:

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

FHWA Environmental Regulations: http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=3db86354c1f68b6f60cd1db8571e0b6a&tpl=/ecfrbrowse/Title23/23cfr771_main_02.tpl

FHWA-IN Environmental Procedures: <http://www.fhwa.dot.gov/indiv/procedur.htm>

FHWA Guidance For Preparing and Processing Environmental and Section 4(f) Documents (Technical Advisory T6640.8A):

<http://www.fhwa.dot.gov/legsregs/directives/techadv/t664008a.htm>

Indiana Department of Environmental Management (IDEM) Early Coordination Letter:

www.in.gov/idem/enviroreview/hwy_earlyenviroreview.html

INDOT Consultant Prequalification Requirements: <http://www.in.gov/indot/6813.htm>

INDOT Office of Environmental Services: <http://www.in.gov/indot/7287.htm>
Cultural Resources Manual
INDOT Categorical Exclusion Manual and (CE) Forms
Procedural Manual for Preparing Environmental Documents
Waterway Permit Manual

Indiana Environmental Laws: <http://www.in.gov/legislative/ic/code/title13/>

Indiana Environmental Policy Act: <http://www.ai.org/legislative/iac/T03270/A00110.PDF>

Indiana Geological Survey GIS Atlas: http://129.79.145.7/arcims/statewide_mxd/index.html

National Environmental Policy Act (NEPA): <http://www.nepa.gov/nepa/nepanet.htm>

Project Development Process (PDP) Manual:
<http://www.in.gov/indot/files/ProjectDevelopmentProcessManual.pdf>

Public Involvement Procedures: <http://www.in.gov/indot/2309.htm>

Safe, Accountable, Flexible, Efficient Transportation Equity Act-A Legacy for Users (SAFETEA-LU): http://www.fhwa.dot.gov/safetealu/safetea-lu_summary.pdf

Section 4(f) of the USDOT Act of 1966: <http://environment.fhwa.dot.gov/projdev/4fregs.asp>

Surveys and Investigations; Right of Entry (IC 8-23-7-26) and Notification of Occupants (IC 8-23-7-27): <http://www.in.gov/legislative/ic/code/title8/ar23/ch7.html>

Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally-Assisted Programs (49 CFR 24):
http://www.access.gpo.gov/nara/cfr/waisidx_08/49cfr24_08.html

US Census Bureau Fact Finder Website:
http://factfinder.census.gov/home/saff/main.html?_lang=en

Air Quality

Air Quality Non-Attainment Areas: <http://www.epa.gov/oar/oaqps/greenbk/index.html>

Clean Air Act: <http://www.epa.gov/air/caa/>

Conformity Determination Process (40 CFR 93.101): <http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&rgn=div6&view=text&node=40:20.0.1.1.7.1&idno=40>

Indiana Department of Environmental Management's (IDEM) Air Quality Designations:
<http://www.in.gov/idem/programs/air/attainment/>

Mobile Source Air Toxics (MSATs): <http://www.epa.gov/otaq/toxics.htm>

Transportation Conformity Rule (40 CFR Parts 51 and 93):
<http://www.fhwa.dot.gov/environment/conformity/rule.htm>

Transportation Conformity Rulemakings:
<http://www.epa.gov/otaq/stateresources/transconf/conf-regs-c.htm>

Cultural Resources

A Context for Common Historic Bridge Types: [http://www.trb.org/NotesDocs/25-25\(15\)_FR.pdf](http://www.trb.org/NotesDocs/25-25(15)_FR.pdf)

Indiana Cemetery Development Plan (IC 14-21-1-26.5):
<http://www.ai.org/legislative/ic/code/title14/ar21/ch1.html#IC14-21-1-26.5>

Indiana Historic Bridges Inventory: <http://www.in.gov/indot/7035.htm>

Indiana Historic Preservation and Archaeology Regulations (IC 14-21-1-18):
<http://www.ai.org/legislative/ic/code/title14/ar21/ch1.html>

National Register of Historic Places: <http://www.nr.nps.gov/>

Protection of Historic Properties (36 CFR 800):
http://www.access.gpo.gov/nara/cfr/waisidx_08/36cfrv3_08.html#800

Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation:
http://www.nps.gov/history/local-law/arch_stnds_9.htm

Section 106 Qualified Professional Roster: <http://www.in.gov/dnr/historic/4282.htm>

Endangered Species, Wildlife, and Terrestrial Habitat

Endangered Species Act (ESA): <http://www.fws.gov/endangered/pdfs/ESAall.pdf>

Federally Endangered and Threatened Species Lists for Indiana by County:
<http://www.fws.gov/midwest/Endangered/lists/indiana-cty.html>

Fish and Wildlife Coordination Act (16 CFR 661): [http://frwebgate.access.gpo.gov/cgi-bin/usc.cgi?ACTION=RETRIEVE&FILE=\\$\\$xa\\$\\$busc16.wais&start=7884400&SIZE=7858&TYPE=TEXT](http://frwebgate.access.gpo.gov/cgi-bin/usc.cgi?ACTION=RETRIEVE&FILE=$$xa$$busc16.wais&start=7884400&SIZE=7858&TYPE=TEXT)

Indiana Endangered Species (IC 14-22-34):
<http://www.in.gov/legislative/ic/code/title14/ar22/ch34.html>

Invasive Species (Executive Order 13112):
<http://www.invasivespeciesinfo.gov/laws/execorder.shtml>

Migratory Bird and Eagle Permits: <http://www.fws.gov/permits/mbpermits/birdbasics.html>

Migratory Bird Treaty Act (MBTA): <http://frwebgate.access.gpo.gov/cgi-bin/usc.cgi?ACTION=BROWSE&TITLE=16USCC7>

Removal of the Bald Eagle from the List of Endangered and Threatened Wildlife (50 CFR 17):
<http://www.fws.gov/migratorybirds/issues/BaldEagle/baldeaglefinaldelisting.pdf>

US Fish and Wildlife Service Wetland Classification System:
http://www.transitterminal.com/wetlands/RTTRESBK_AppendixD.pdf

Farmland and Recreational Resources

Farmland Protection Policy Act <http://www.nrcs.usda.gov/programs/fppa/>

Land and Water Conservation Fund Act of 1965:
http://www.nps.gov/nrcr/programs/lwcf/lwcf_act.pdf

Nation Park Service's LWCF web site: <http://www.nps.gov/nrcr/programs/lwcf/history.html>

Land and Water Conservation Fund Program Compliance (36 CFR 59):
<http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=085a6c3c382eb2e34ada142b39c8ca2c&rgn=div5&view=text&node=36:1.0.1.1.25&idno=36>

Land and Water Conservation Fund Project List: <http://waso-lwcf.nrcr.nps.gov/public/index.cfm>

Hazardous Materials

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):
<http://www.epa.gov/superfund/policy/cercla.htm>

Resource Conservation and Recovery Act (RCRA): <http://www.epa.gov/lawsregs/laws/rcra.html>

Standard Practice for Environmental Site Assessments (Phase I) (ASTM E1527-05):
http://www.astm.org/cgi-bin/SoftCart.exe/DATABASE.CART/REDLINE_PAGES/E1527.htm?E+mystore

Standard Guide for Environmental Site Assessments (Phase II) (ASTM E1903-97):
http://www.astm.org/cgi-bin/SoftCart.exe/DATABASE.CART/REDLINE_PAGES/E1903.htm?E+mystore

Toxic Substances Control Act (TSCA): http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?sid=085a6c3c382eb2e34ada142b39c8ca2c&c=ecfr&tpl=/ecfrbrowse/Title40/40cfrv31_02.tpl

Underground Injection Control Program (40 CFR 144): http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=085a6c3c382eb2e34ada142b39c8ca2c&tpl=/ecfrbrowse/Title40/40cfr144_main_02.tpl

Noise

FHWA Procedures for Highway Traffic Noise Abatement (23 CFR 772):
http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=085a6c3c382eb2e34ada142b39c8ca2c&tpl=/ecfrbrowse/Title23/23cfr772_main_02.tpl

INDOT *Traffic Noise Policy*: <http://www.in.gov/indot/6716.htm>

Water, Wetlands and Aquatic Habitat

FEMA Community Status Book for Flood Maps: <http://www.fema.gov/fema/csb.shtm>

Headwater Habitat Evaluation Index (HHEI):
http://www.epa.state.oh.us/dsw/wqs/headwaters/PHWHManual_2002_102402.pdf

Hydrogeomorphic (HGM) Evaluation: <http://el.erdc.usace.army.mil/wetlands/pdfs/wrpde4.pdf>

Index of Biotic Integrity: <http://www.epa.gov/bioiweb1/html/ibi-hist.html>

Indiana Scenic Rivers (312 IAC 7-2): <http://www.in.gov/legislative/iac/T03120/A00070.PDF>

National Wetland Inventory (NWI) Website: <http://www.fws.gov/nwi/>

Natural, Scenic, and Recreational River System (IC 14-29-6):
<http://www.ai.org/legislative/ic/code/title14/ar29/ch6.html>

Ohio Rapid Assessment Method: http://www.epa.state.oh.us/dsw/401/oram50sf_s.pdf

Preservation of the Nation's Wetlands (USDOT Order 5660.1A):
<http://nepa.fhwa.dot.gov/ReNEPA/ReNepa.nsf/docs/6749292D98E3C0CD85256FE400731ADF?opendocument&Group=Natural%20Environment&tab=REFERENCE>

Protection of Wetlands (Executive Order 11990):
<http://www.epa.gov/owow/wetlands/regs/eo11990.html>

Qualitative Habitat Evaluation Index (QHEI):
<http://www.epa.state.oh.us/dsw/documents/QHEIManualJune2006.pdf>

Sole Source Aquifer (SSA) Protection Program:

<http://cfpub.epa.gov/safewater/sourcewater/sourcewater.cfm?action=SSA>

US Army Corps of Engineers Wetland Delineation Manual:

<http://www.mvn.usace.army.mil/ops/regulatory/wlman87.pdf>

Water Quality Standards (327 IAC 2-1.5-4):

<http://www.ai.org/legislative/iac/T03270/A00020.PDF>

Wellhead Protection Program: <http://www.in.gov/idem/4289.htm>

Wetland Evaluation Technique (WET):

http://el.erdc.usace.army.mil/emrrp/emris/emrishelp6/wetland_evaluation_technique_tools.htm

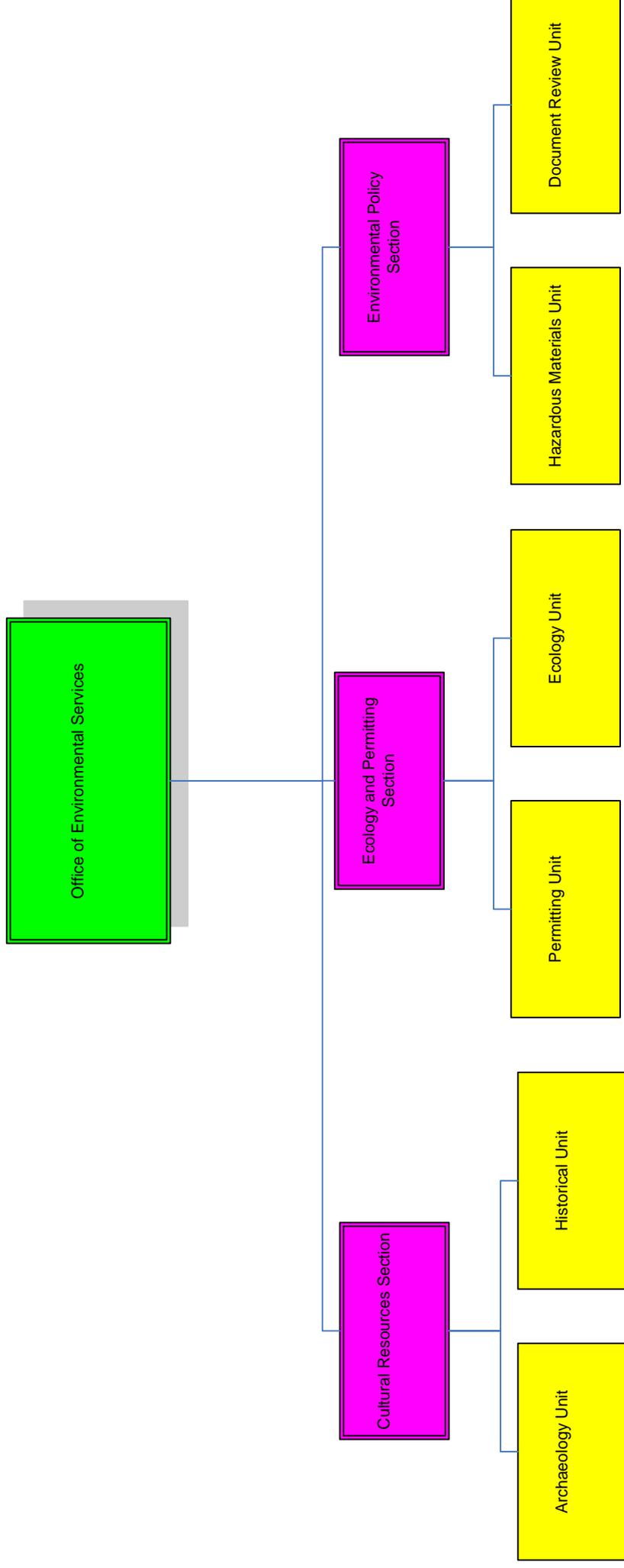
Wild and Scenic Rivers Act (16 USC 1271-1287):

<http://frwebgate.access.gpo.gov/cgi-bin/usc.cgi?ACTION=BROWSE&TITLE=16USCC28>

Appendix D

OES Organizational Chart

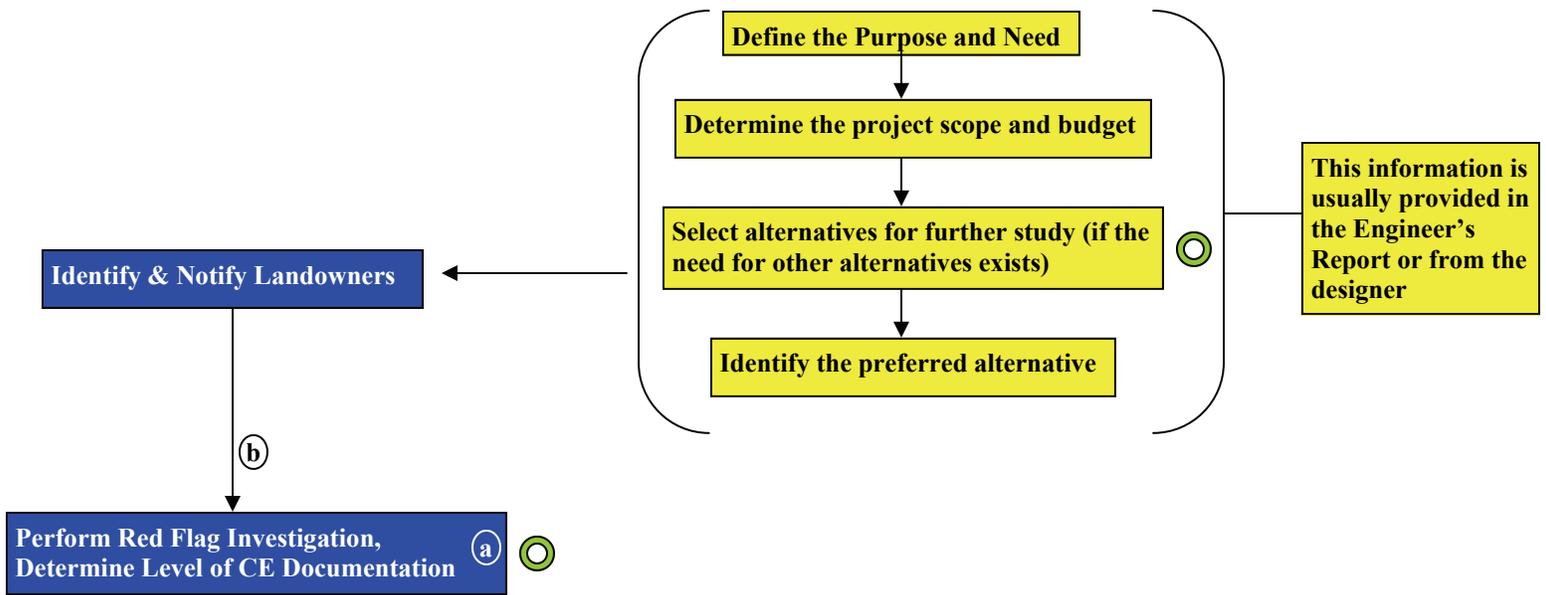
Office of Environmental Services Organizational Chart



Appendix E

CE Process Flowchart

Flowchart 1: (Introduction) The Process for Preparing a Categorical Exclusion (CE)



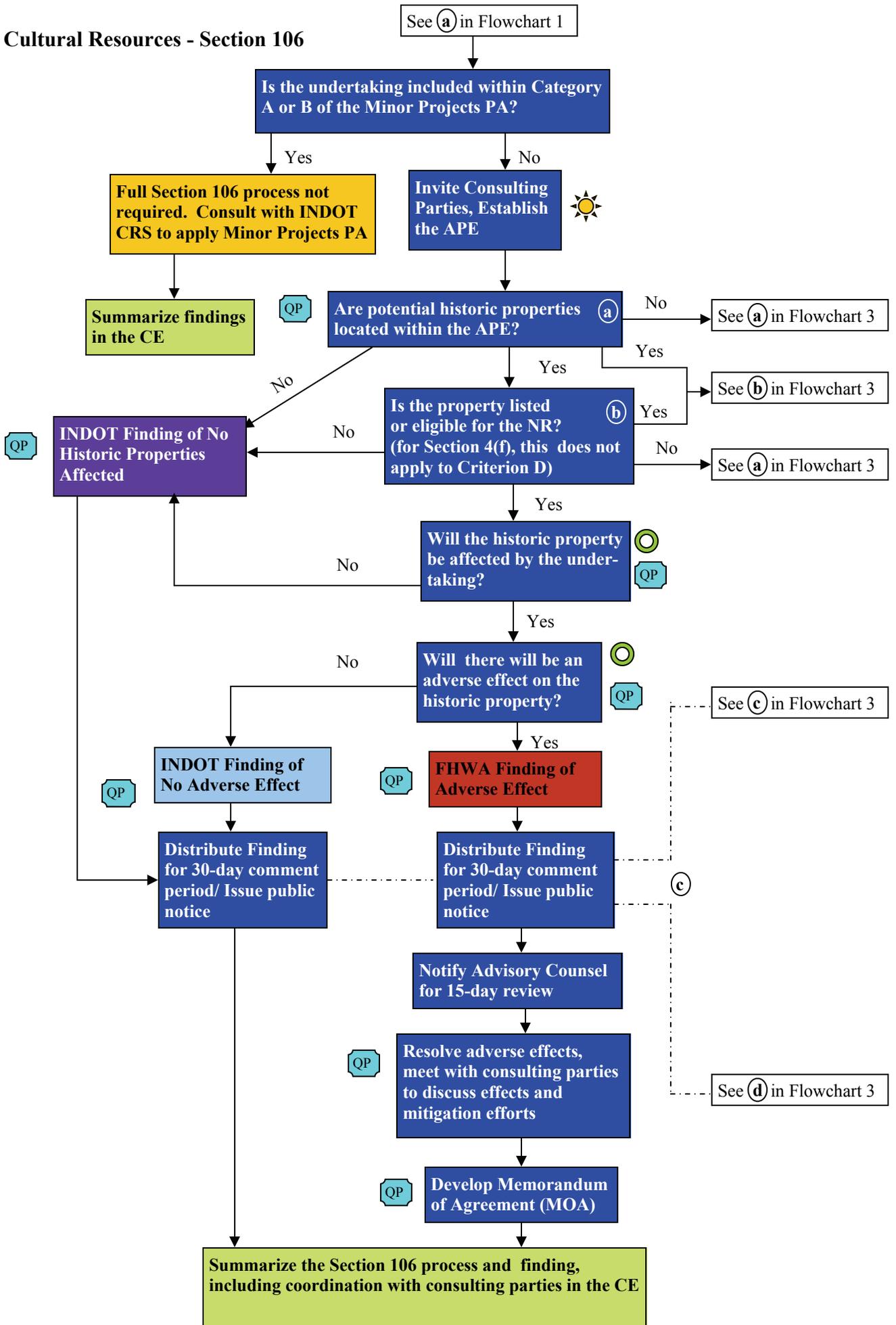
⊙ = CE threshold/ document type determination point

☀ = Conduct Early Coordination

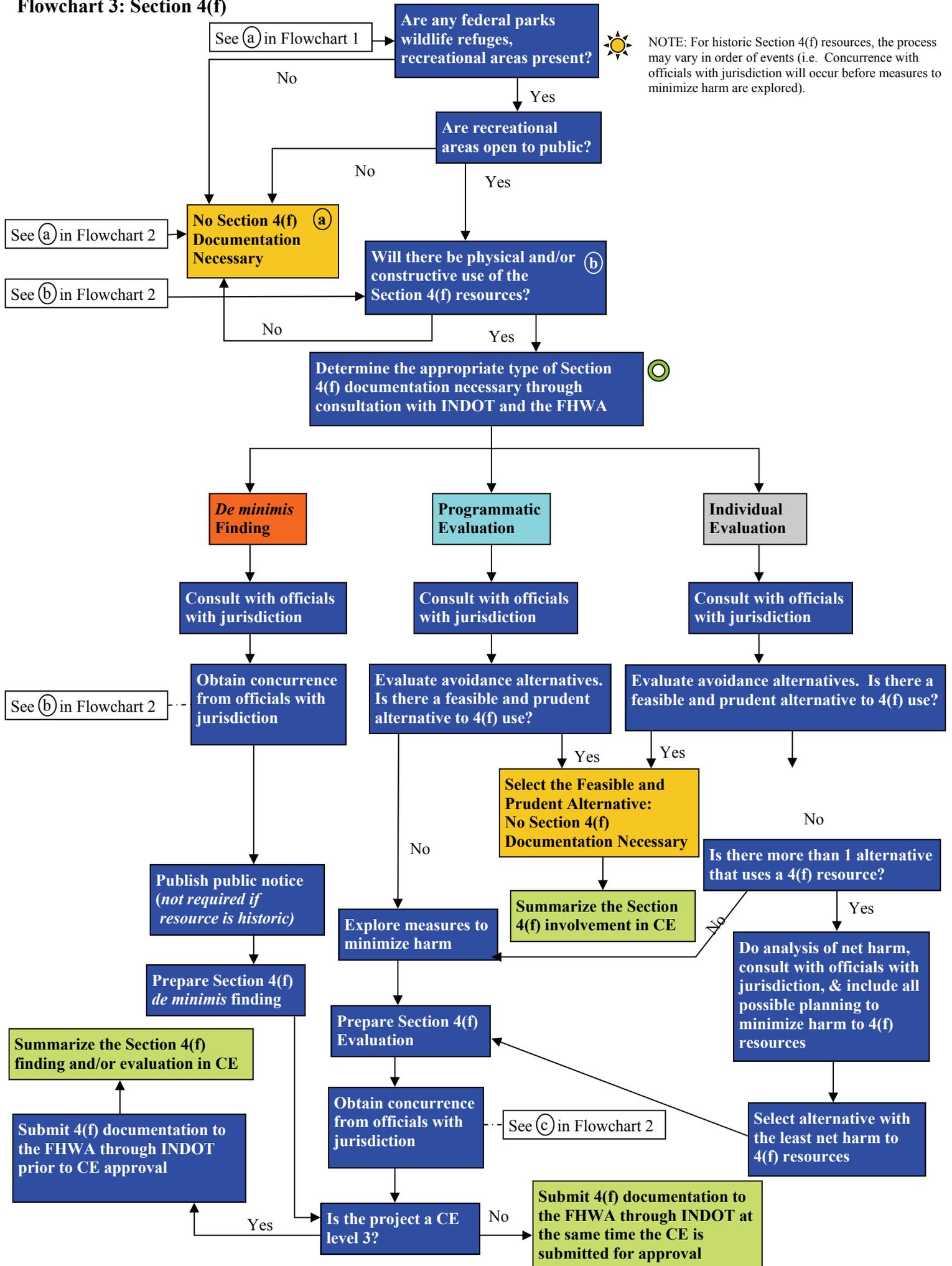
QP = Work must be done by qualified professional

☒ = Permits may be required

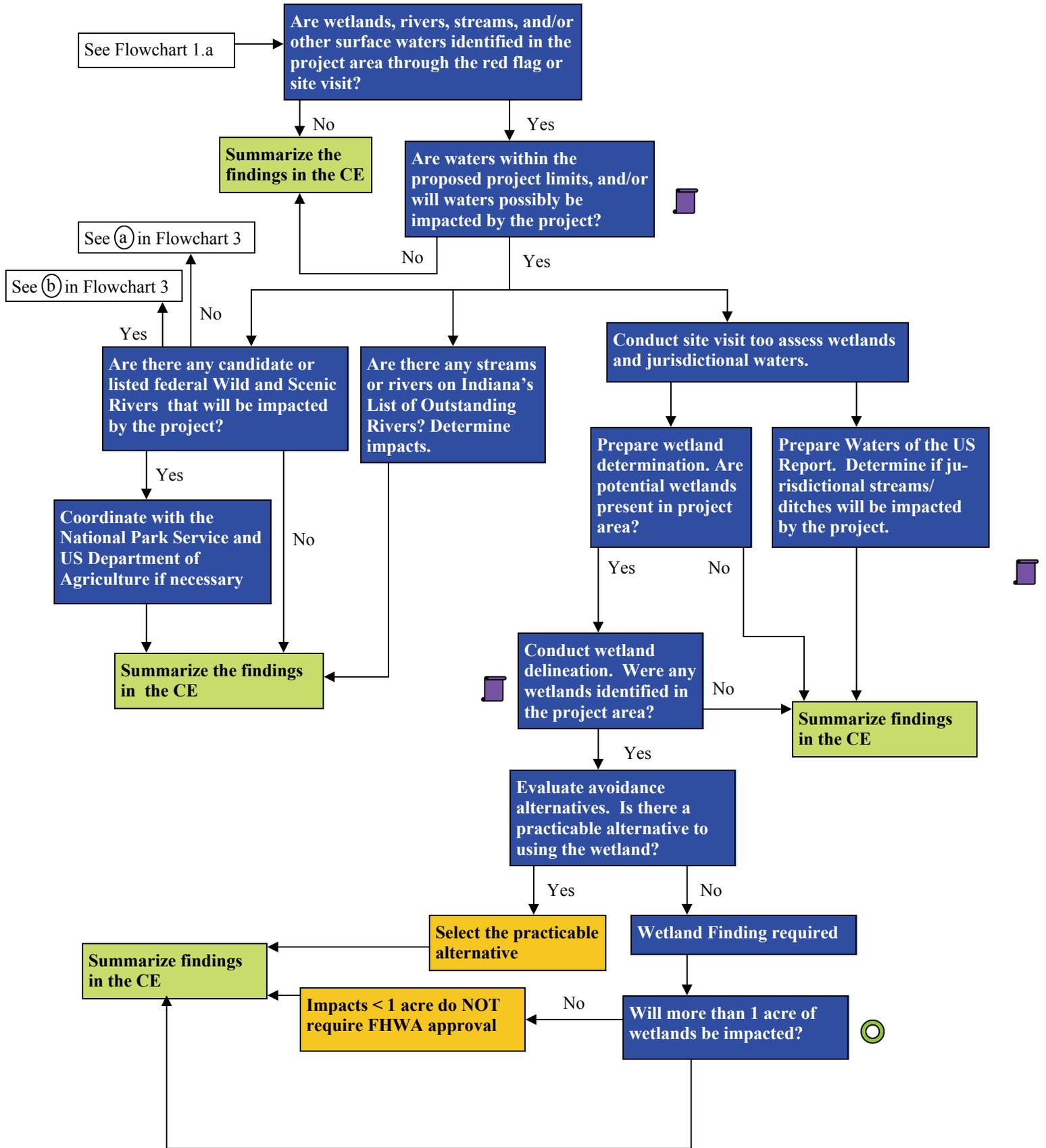
Flowchart 2: Cultural Resources - Section 106



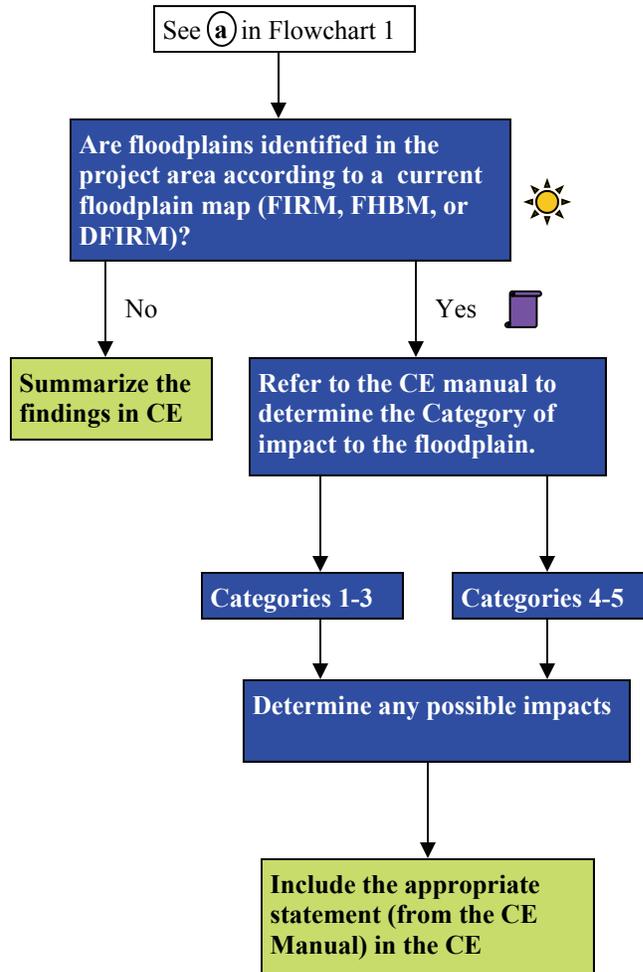
Flowchart 3: Section 4(f)



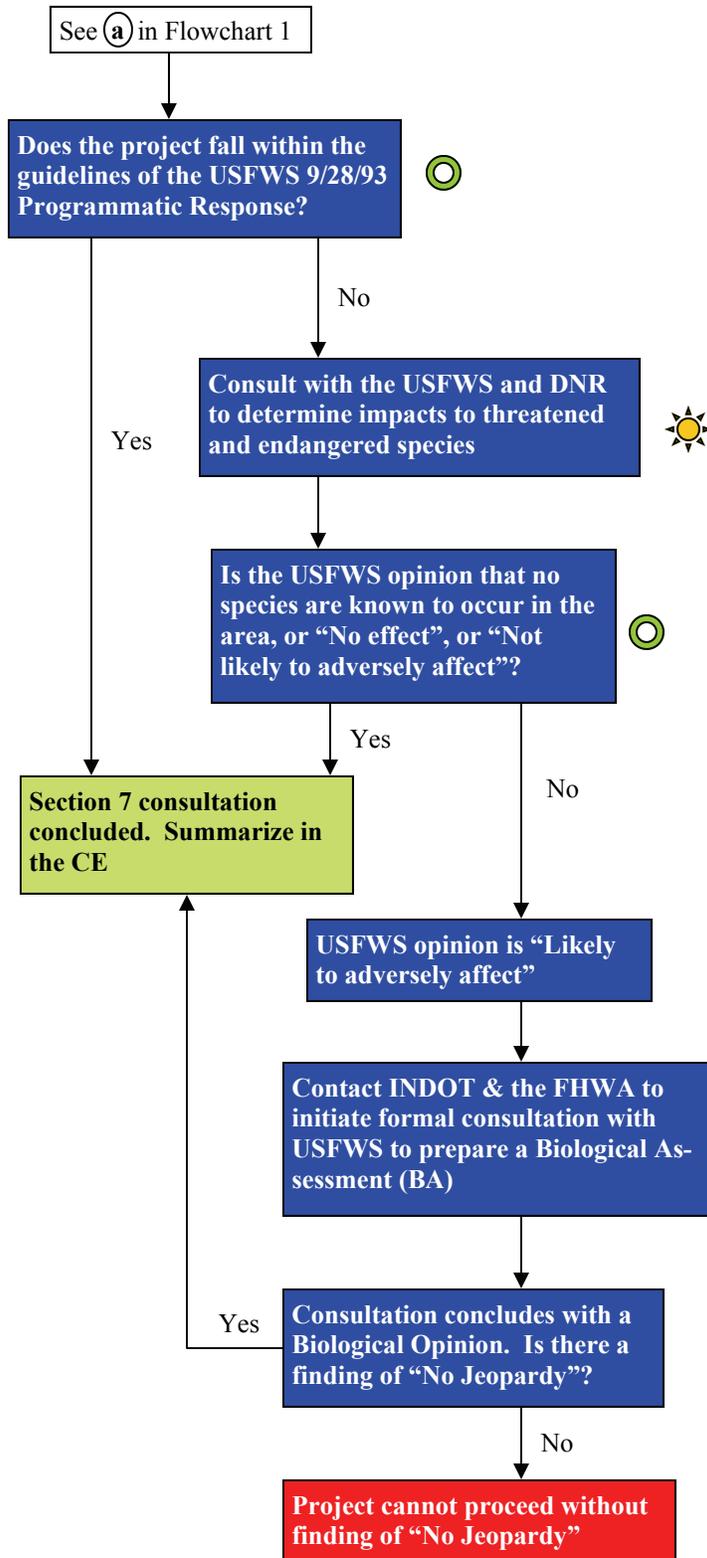
Flowchart 4: Water Resources



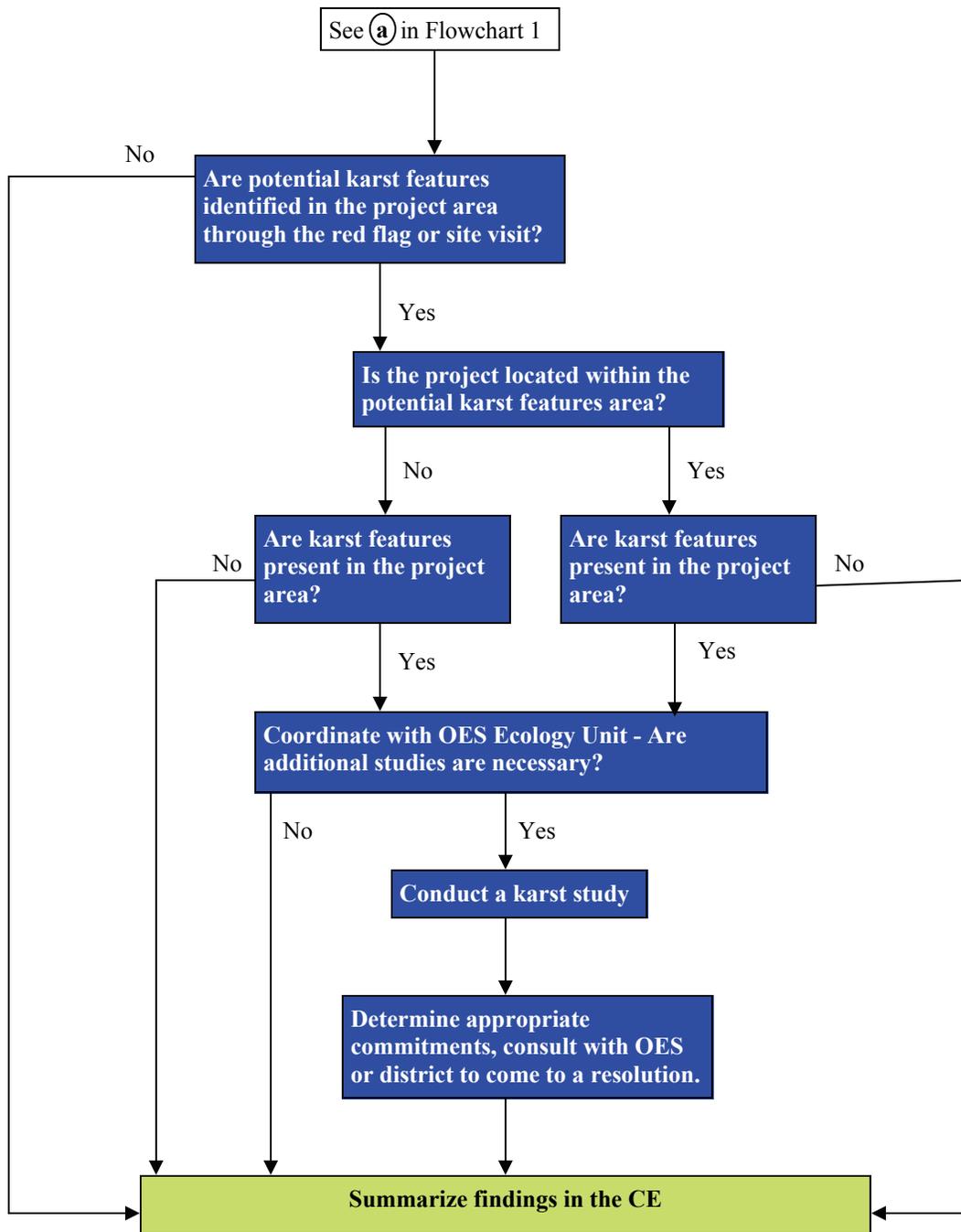
Flowchart 5: Floodplains



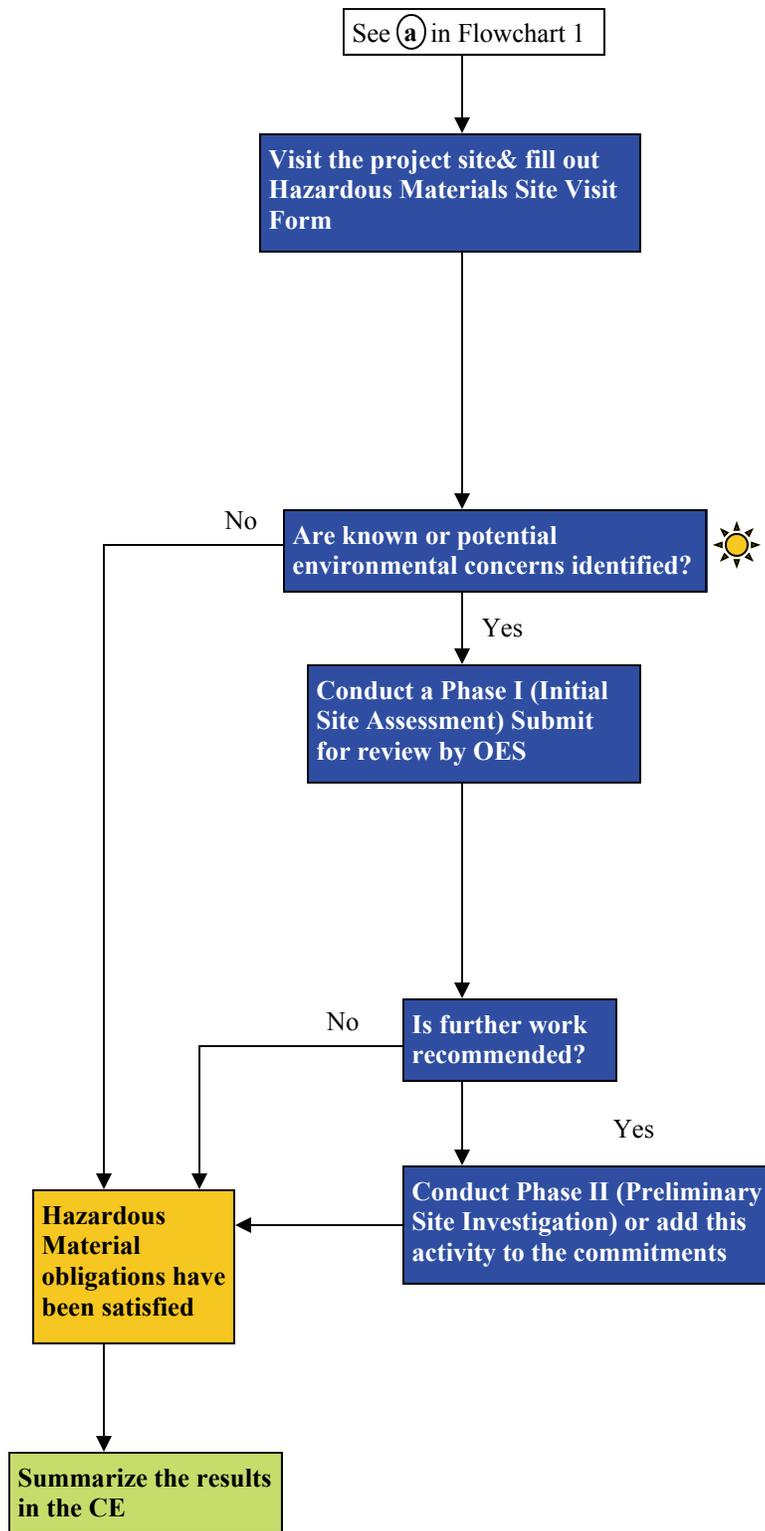
Flowchart 6: Threatened or Endangered Species



Flowchart 7: Karst Features

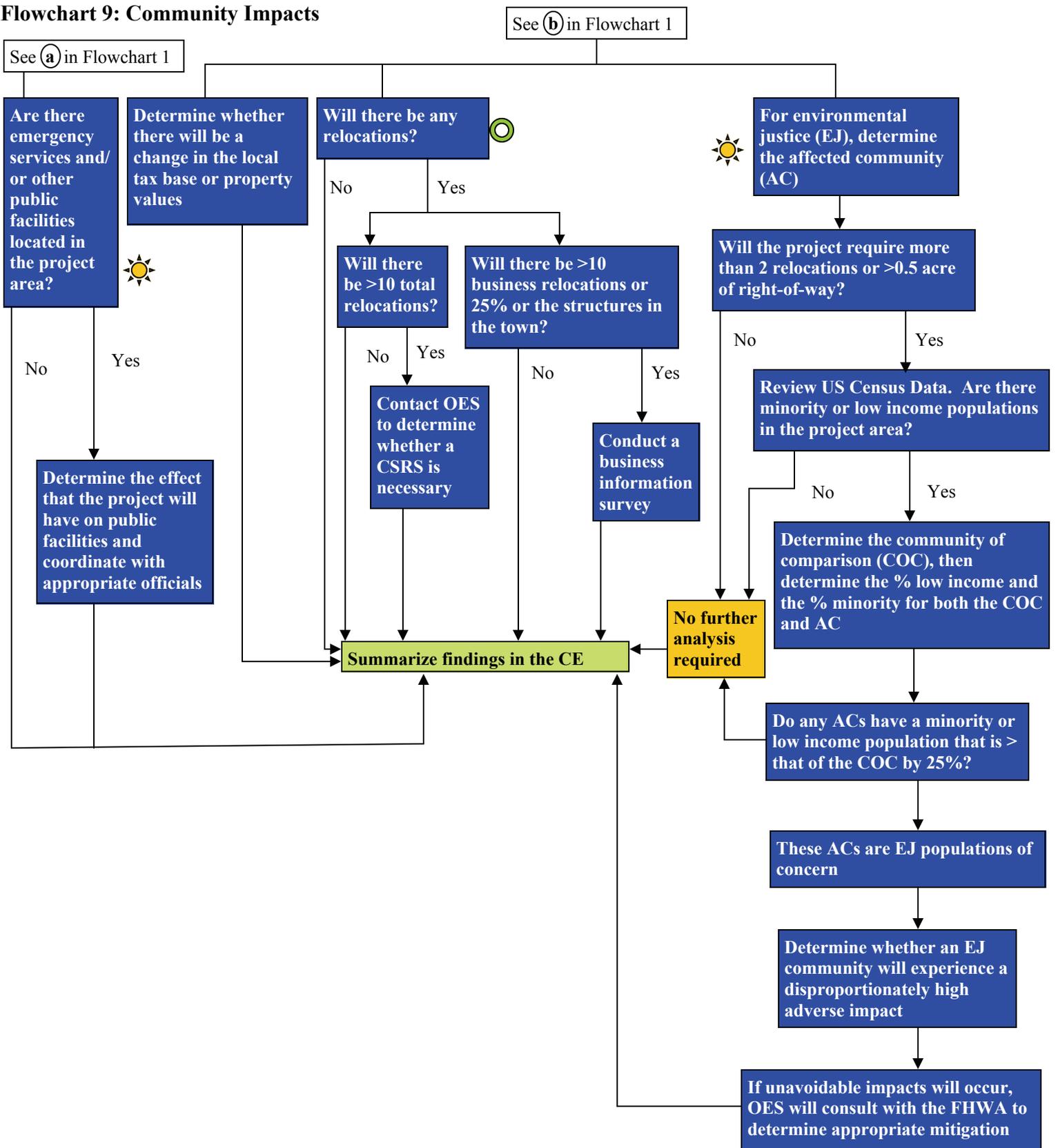


Flowchart 8: Hazardous Materials

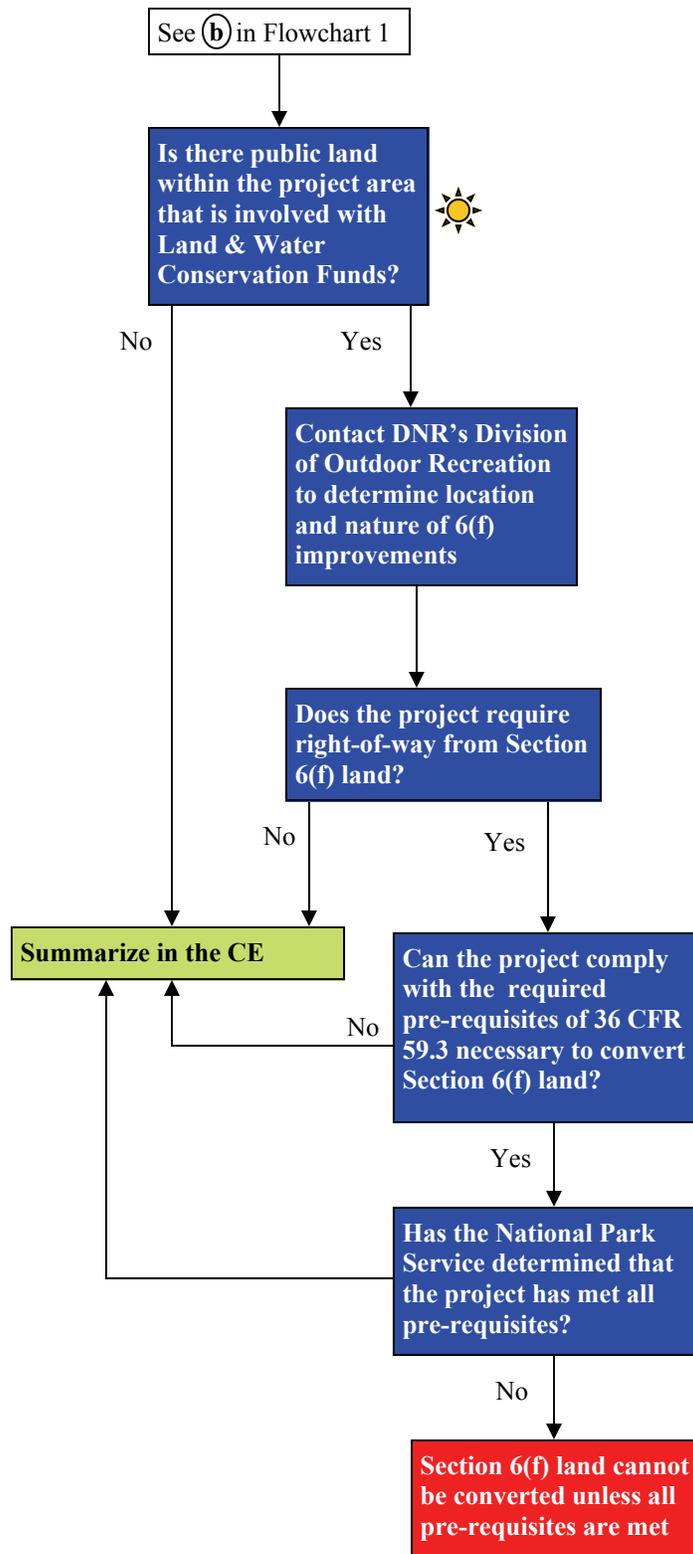


Note: OES Review not necessary for LPA projects

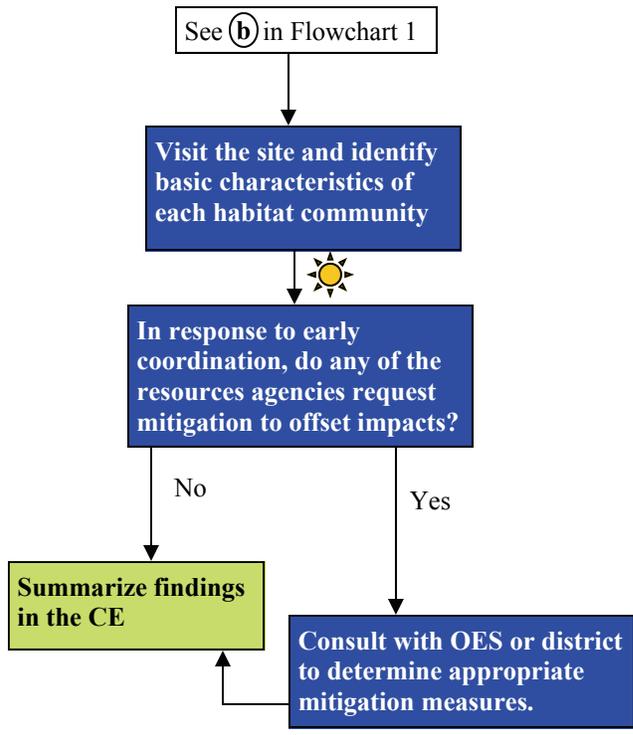
Flowchart 9: Community Impacts



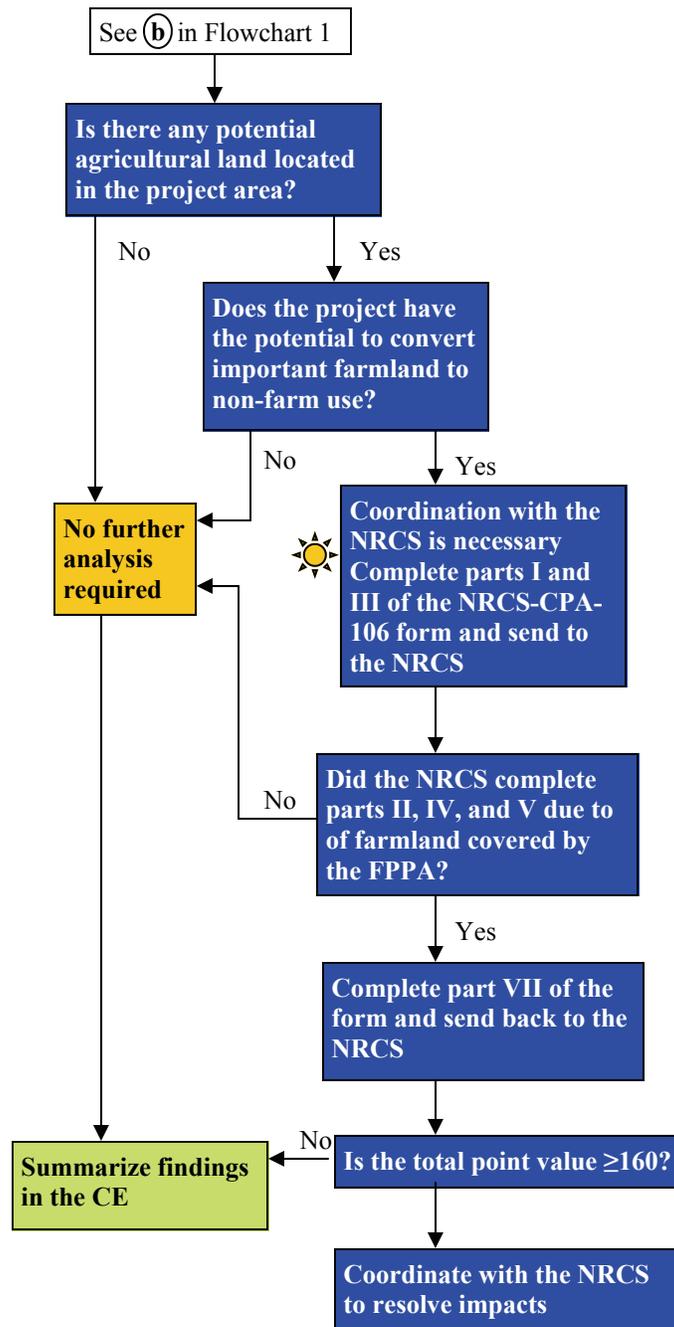
Flowchart 10: Section 6(f)



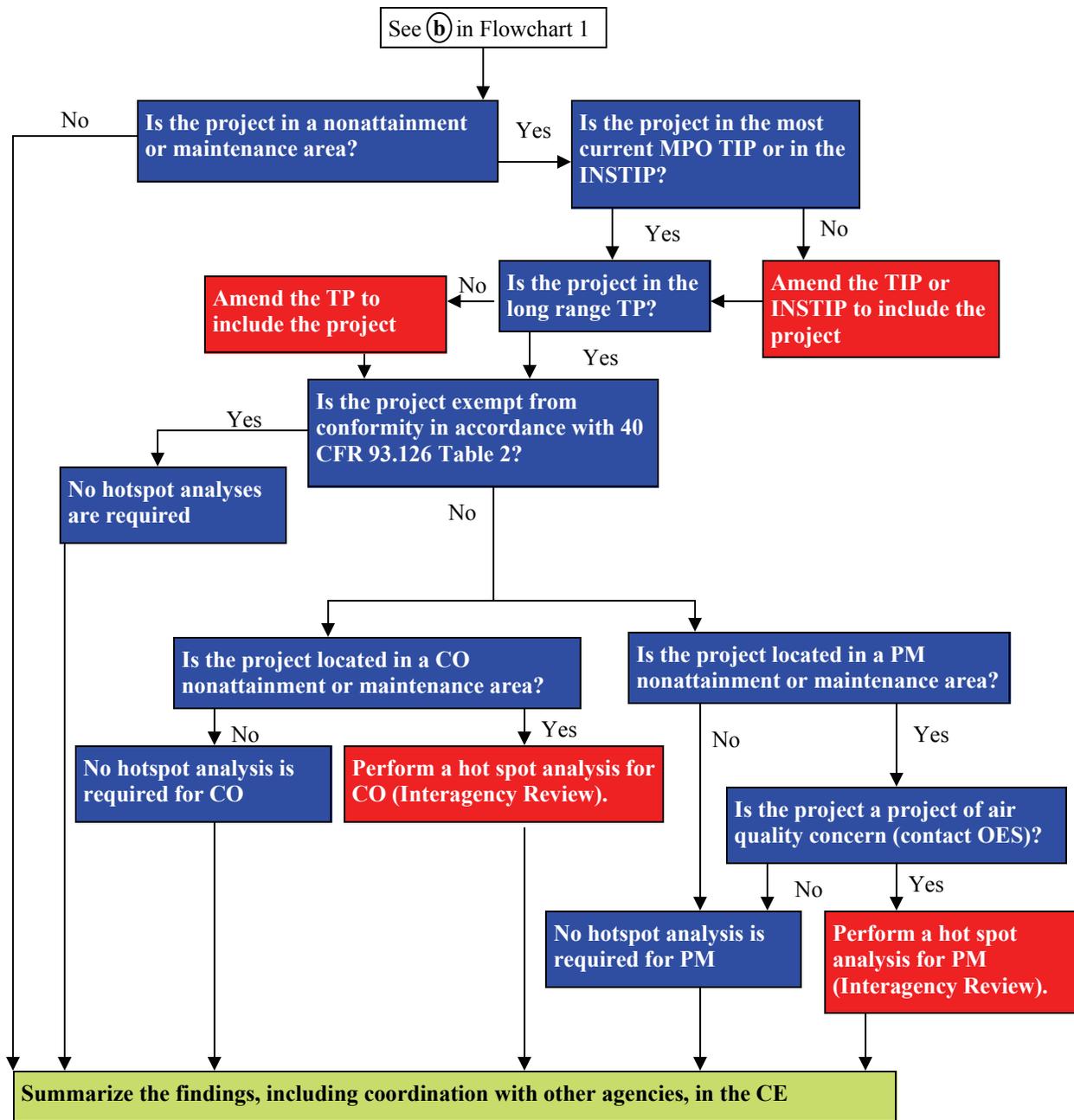
Flowchart 11: Terrestrial Habitat



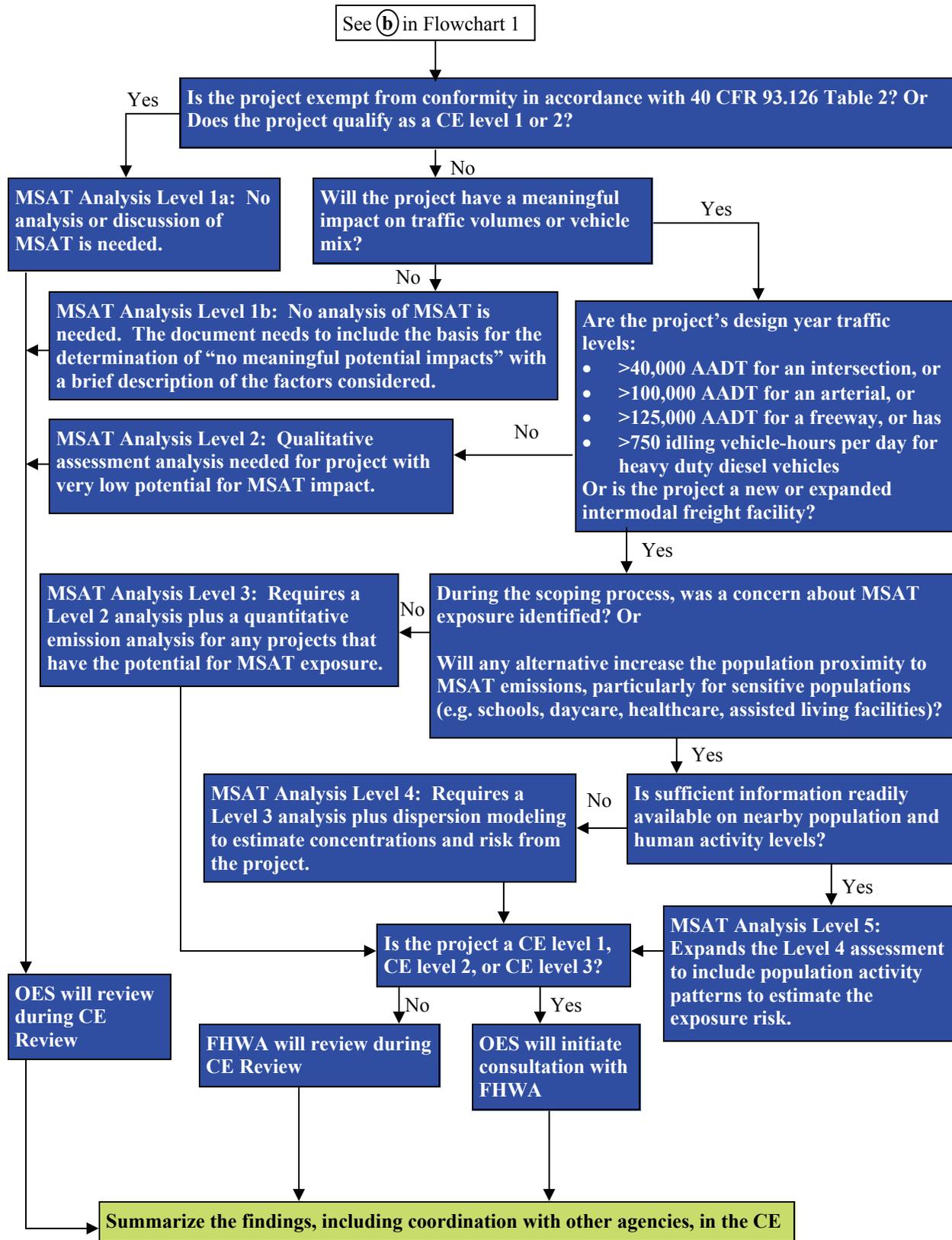
Flowchart 12: Farmland



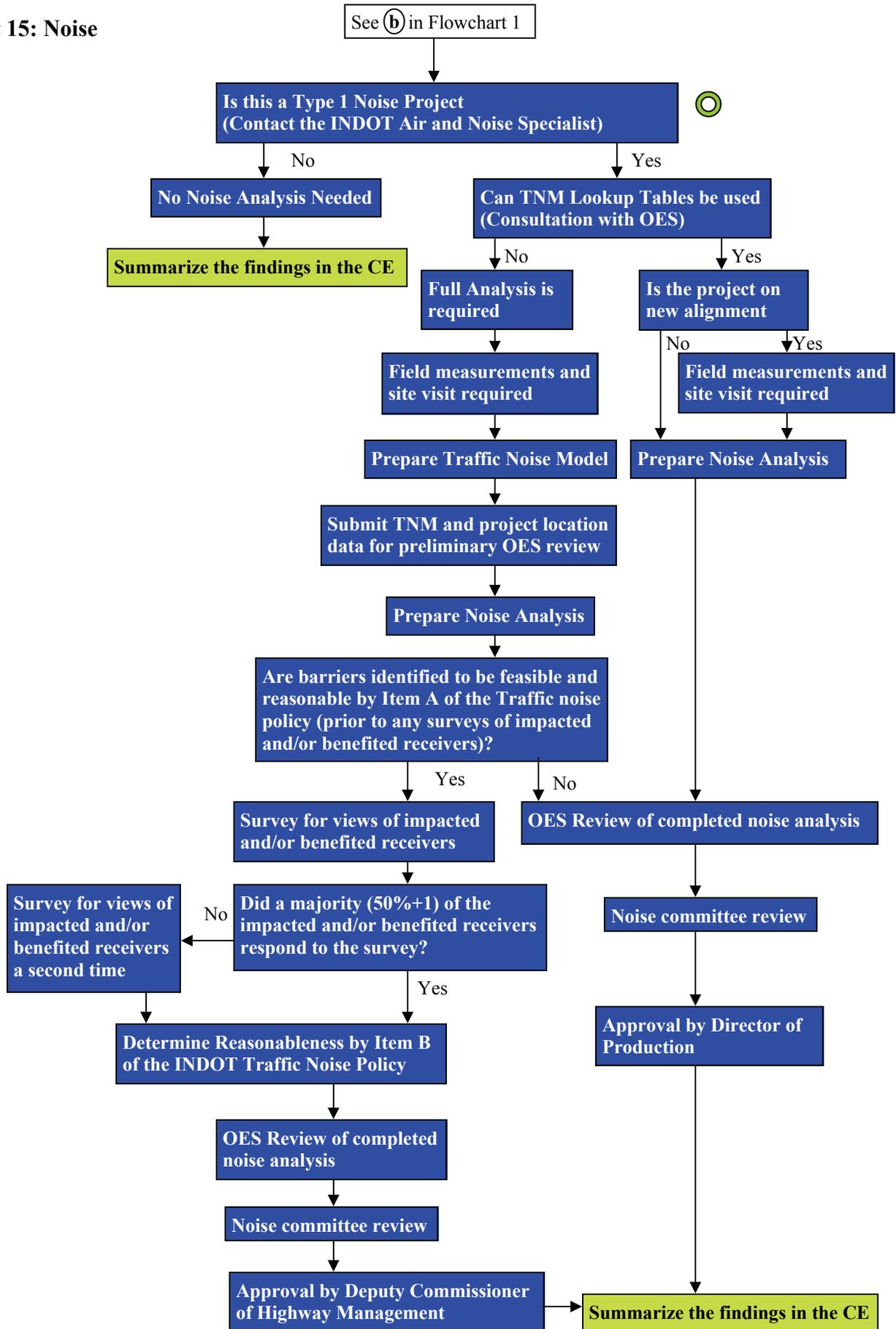
Flowchart 13: Air Quality Conformity



Flowchart 14: Air Quality-MSATs



Flowchart 15: Noise



Appendix F

How to Assemble the CE Document

Categorical Exclusion Document Organization

An organized CE document facilitates timely review of the document. The following is a suggested format for CE documents. Not all of the appendices listed will be included in every project.

- CE/EA Document Form
- Table of Contents for Appendix Items
- Appendix A: INDOT Supporting Documentation
 - Threshold Chart
 - CE-1/Screening Form, if applicable
- Appendix B: Graphics
 - Maps of the project area
 - Road Map
 - Aerial photos
 - Plans
 - Photographs of the project area
- Appendix C: Early Coordination
 - One copy of the early coordination letter sent to resource agencies
 - All early coordination responses
- Appendix D: Section 106 of the NHPA
 - Section 106 documentation
 - Approved APE
 - Finding
 - Executive summaries of all reports and studies
 - One copy of all letters sent to consulting parties
 - Consulting parties response letters
 - Supporting graphics
 - Affidavit of publication of legal notice
- Appendix E: Red Flag and Hazardous Materials
 - Red flag investigation
 - Any hazardous materials investigations
- Appendix F: Water Resources:
 - NWI maps
 - Wetland delineation
 - Waters report
 - Supporting graphics
 - Floodplain maps

- Appendix G: Public Involvement
 - Copy of legal notice
 - Hearing certification
 - Any other public involvement notices

- Appendix H: Air Quality
 - Copy of page from TP and/or TIP with project listed
 - Hot spot analysis
 - Any other air studies completed for the project

- Appendix I: Noise
 - Executive summary of the noise study
 - Approval of the noise study

- Appendix J: Additional Studies
 - Any additional studies that are completed for the project (Karst study, Business Needs Survey, etc) should be included in its own appendix.

Appendix G

CE Programmatic Agreement

Categorical Exclusion Programmatic Agreement Between the Federal Highway Administration And the Indiana Department of Transportation

Introduction

The Indiana Department of Transportation (INDOT) and the Federal Highway Administration (FHWA) are both committed to addressing environmental requirements under the National Environmental Policy Act (NEPA) and doing so in a streamlined and efficient manner. In accordance with FHWA regulations (23 CFR Part 771), Categorical Exclusions (CEs) are actions which meet the definition contained in the Council on Environmental Quality (CEQ) regulations, 40 CFR 1508.4, and, based on past experience with similar actions, do not involve significant environmental impacts. Most projects developed by INDOT do not have significant environmental impacts and therefore qualify as CEs. The INDOT and FHWA hereby establish this Agreement in order to address the development and approval of CEs in a streamlined and efficient manner. The agreement provides for the following:

- Establishment of four levels of Categorical Exclusions based on measurable environmental impact thresholds.
- Delegation of authority to the Indiana Department of Transportation (INDOT) to approve Categorical Exclusions for projects with minimal environmental impacts as identified by this Agreement.
- Establishment of INDOT signature authority for each level of Categorical Exclusion.
- Establishment of a monitoring program to ensure the appropriate implementation of the terms of the Agreement.

The Agreement has been developed to be in conformance with policies and procedures for Class II – Categorical Exclusion (CE) Actions as defined in Section 23 CFR 771.117. INDOT and FHWA concur in advance with the classification of the four levels of CEs as shown on the following page which normally are found to have no significant social, economic and environmental effect.

Four Levels of CE Documentation

INDOT and the FHWA hereby agree to four levels in which a project may qualify as a CE. The appropriate level of a CE is based on the type of action and the anticipated impacts of the project. All Federal-aid projects developed or reviewed by INDOT in accordance with this Agreement must have an approved CE Form. Initial screening will assist in determining the appropriate level of NEPA class, as well as the appropriate level of CE. Table 1 provides CE Level thresholds.

Table 1: Categorical Exclusion Level Thresholds

	Level 1	Level 2	Level 3	Level 4
Relocations	None	≤ 2	> 2	> 10
Right of way¹	< 0.5 acres	< 10 acres	≥ 10 acres	≥ 10 acres
Length of added through lane	None	< 1 miles	≥ 1 mile	≥ 1 mile
Traffic pattern alteration	None	None	Yes	Yes
New alignment	None	None	< 1 mile	≥ 1 mile ²
Wetlands	< 0.1 acres	< 1 acre	< 1 acre	≥ 1 acre
Stream Impacts*	≤ 300 linear feet, ≤ 150 linear feet REC, ≤ 1 acre impact footprint	> 300 linear feet, > 150 linear feet REC	> 1 acre impact footprint	> 1 acre impact footprint
Section 4(f)	None	None	Programmatic/ <i>de minimis</i> Findings ³	Individual 4(f)
Section 6(f)	None	None	Any impacts	Any impacts
Section 106*	"No Historic Properties Affected" or falls within guidelines of Minor Projects PA	"No Adverse Effect" or "Adverse Effect"	N/A	If ACHP involved
Noise Analysis Required	No	No	Yes ⁴	Yes ⁴
Threatened/Endangered Species	"No Effect", or Falls within Guidelines of USFWS 9/8/93 Programmatic Response	"Not likely to Adversely Affect"	"Not likely to Adversely Affect"	"Likely to Adversely Affect" ⁵
Sole Source Aquifer Groundwater Assessment	Detailed Assessment Not Required	Detailed Assessment Not Required	Detailed Assessment Not Required	Detailed Assessment Required
Approval Level • ESM ⁶ • OES • FHWA	Yes	Yes	Yes Yes	Yes Yes Yes

¹These thresholds have changed from the March 2008 Manual.

²Permanent and/or temporary right of way.

³If the length of the new alignment is equal to or greater than one mile, contact the FHWA's Air Quality/Environmental Specialist.

⁴The FHWA must review and approve Programmatic and *de minimis* Section 4(f) prior to CE approval.

⁵In accordance with INDOT's Noise Policy.

⁶If the project is considered Likely to Adversely Affect Threatened and/or Endangered Species, INDOT and the FHWA should be consulted to determine whether a higher class of document is warranted.

⁷Environmental Scoping Manager

CE Level 1 Projects

INDOT and the FHWA have identified specific project scopes that may qualify as CE Level 1 projects, provided the project impacts do not exceed the thresholds identified in Table 1. While state and federal laws and regulations still apply, less coordination and review may be required due to lower risk of impact to protected resources. Among these, there are two groups of project scopes that qualify for this level of documentation. The first, listed in Table 2 below, contains projects that are defined in 23 CFR 771.117(c) as CEs.

While certain project types are specifically defined as CEs, 23 CFR 771.117(d) also allows the FHWA to propose additional project types for management as CEs. INDOT and the FHWA-IN have agreed to seven project scopes under this provision. The project scopes in Table 3 are commonly minor road improvements that will not result in any significant impacts to the human or natural environment, based on INDOT and FHWA past experience.

Table 2: CE Level 1 Projects Pursuant to 23 CFR 771.117(c)

1	Activities which do not involve or lead directly to construction, such as planning and research activities; grants for training; engineering to define the elements of a proposed action or alternatives so that social, economic, and environmental effects can be assessed; and Federal-aid system revisions which establish classes of highways on the Federal-aid highway system.
2	Approval of utility installations along or across a transportation facility.
3	Construction of bicycle and pedestrian lanes, paths, and facilities.
4 ¹	Activities included in the State's highway safety plan under 23 U.S.C. 402.
5	Transfer of Federal lands pursuant to 23 U.S.C. 317 when the subsequent action is not an FHWA action.
6	The installation of noise barriers or alterations to existing publicly owned buildings to provide for noise reduction.
7	Landscaping.
8 ²	Installation of fencing, signs, pavement markings, small passenger shelters, traffic signals, and railroad warning devices where no substantial land acquisition or traffic disruption will occur.
9	Emergency repairs under 23 U.S.C. 125.
10	Acquisition of scenic easements.
11	Determination of payback under 23 U.S.C. 156 for property previously acquired with Federal-aid participation.
12	Improvements to existing rest areas and truck weigh stations.
13	Ridesharing activities.
14	Bus and rail car rehabilitation.
15	Alterations to facilities or vehicles in order to make them accessible for elderly and handicapped persons.
16	Program administration, technical assistance activities, and operating assistance to transit authorities to continue existing service or increase service to meet routine changes in demand.
17	The purchase of vehicles by the applicant where the use of these vehicles can be accommodated by existing facilities or by new facilities which themselves are within a CE.
18	Track and railbed maintenance and improvements when carried out within the existing right-of-way.
19	Purchase and installation of operating or maintenance equipment to be located within the transit facility and with no significant impacts off the site.
20	Promulgation of rules, regulations, and directives.

¹ These activities are non-infrastructure programs, such as educational programs to encourage seatbelt use.

² These activities may include general pavement markings, line painting, and installation of raised pavement markers, maintenance of signs, and maintenance of fencing.

Table 3: INDOT/FHWA CE Level 1 Projects

A	Culvert and pipe replacement/reconstruction. (All permits and coordination are still required.)
B	Modernization of a highway by resurfacing/reconstruction of pavement/sidewalks.
C	Guardrail projects where no new bank stabilization is required (except for end treatment areas) as long as work is within previous construction limits.
D	The replacement of traffic signals within existing rights-of-way.
E	Bridge deck overlays, bridge deck replacements, bridge painting projects and other bridge maintenance activities, within existing rights-of-way.
F	Herbicidal spraying within existing right-of-way.
G	Mowing or brush removal/trimming within existing right-of-way.

There may be other types of projects that qualify as a CE Level 1 based upon meeting the threshold limits, but are not listed above. Decisions as to the proper level of CE documentation will be made on these types of projects on a project-by-project basis.

For Level 1 projects, the CE-1 Form (Attachment 1) completes the environmental documentation. For higher-level CEs, the CE-1 Form can provide an overview of potential issues that must be investigated and documented in the CE 2-4 Form. The CE-1 Form is not required if the project is clearly a Level 2 or higher project due to known resource impacts, although it may still be useful as a screening tool.

Programmatic Categorical Exclusions

INDOT and FHWA have identified certain types of projects which are routinely classified as a CE-1 and which require little or no environmental review and resource agency coordination. For these types of projects, it may be appropriate to provide environmental clearance at a programmatic level rather than through an individual assessment of each project.

For a programmatic categorical exclusion to be appropriate, the project type must meet all of the following criteria:

- Require no new right of way (permanent or temporary)
- Require no resource agency permits
- Require no excavation in undisturbed soils
- Require no coordination with the US Fish and Wildlife Service (USFWS) under the most current programmatic coordination agreement between INDOT, FHWA and the USFWS
- Fit into “Category A” under the most current *Programmatic Agreement (PA) Among the Federal Highway Administration, the Indiana Department of Transportation, the Advisory Council on Historic Preservation and the Indiana State Historic Preservation Officer Regarding the Implementation of the Federal Aid Highway Program In the State of Indiana* (“the Minor Projects PA”), demonstrating that the project type has no potential to impact properties protected by Section 106 of the Historic Preservation Act

These project types will be proposed by OES and reviewed by FHWA for appropriateness. If accepted by FHWA, OES will prepare a programmatic CE-1 which describes the proposed work types and outlines standard conditions and commitments for those work types. Projects which cannot comply with the conditions of a programmatic CE will require an individual Categorical Exclusion.

Programmatic CEs will be signed by the Environmental Policy Administrator and FHWA. They will be reviewed each year as part of the annual Quality Assurance Review to confirm that the approved types of work are still appropriate and that they are being applied correctly.

CE Levels 2 Through 4

The regulations ([23 CFR 771.117 \(d\)](#)) allow for CEs beyond those which INDOT has designated as CE-1s. However, these require additional analysis and review to verify that a CE is appropriate. The CE/EA Form should be used for any project which appears to be a CE but which exceeds the thresholds for a CE-1. The CE/EA Form covers the same resource categories as the CE-1 form, but in greater depth.

For some projects the level of documentation may change as environmental investigations progress. This may result in elevation to a higher-level of CE (or higher class of environmental document), or may result in a lesser level document if the size and/or anticipated impacts of the project decrease. The preparer should assess the project against the thresholds as information becomes available. At any time, the OES or the FHWA may elevate a CE to a higher level or different NEPA class based on considerations outside those in the thresholds chart.

Signature Authority

Table 4 lists the signature authority for each CE level.

Table 4: Signature Authority for CEs

	CE Level 1	CE Level 2	CE Level 3	CE Level 4
Signature Authority	ESM	ESM	ESM, OES	ESM, OES, FHWA

Monitoring

Compliance with this agreement will be determined through an annual quality assurance review to be jointly conducted by FHWA, INDOT OES and INDOT District staff. The results of such reviews will be used to determine what agreement modifications, if any, will be made. The INDOT Districts will be reviewed every two years (three Districts each year). A random sample of CE projects on upcoming lettings will be sampled annually to assure that each District has an approved CE document on file for the associated Federal-aid projects.

Wetland Finding for CEs Impacting Less Than 1 Acre

Introduction - This wetland finding is made on a program-wide basis and has been prepared for CEs that impact less than one acre of wetlands. It satisfies the requirements of Executive Order 11990 (EO) entitled Protection of Wetlands and U.S. Department of Transportation Order 5660.1A (DOT Order) entitled Preservation of the Nation's Wetlands. No individual wetland finding needs to be prepared for projects that have been coordinated with the IDNR and USFWS, where they have expressed no significant concern over the proposed use of the wetlands. An individual wetland finding will be included in all CE-4 projects impacting one acre or more of wetlands.

Finding – FHWA hereby finds, for Federal-aid CE projects impacting less than one acre of wetlands, where IDNR and USFWS have expressed no significant concern over the proposed use of the wetlands, that:

- (1) there is no practicable alternative to the proposed construction in wetlands, and
- (2) the proposed project includes all practicable measures to minimize harm to the involved wetlands.

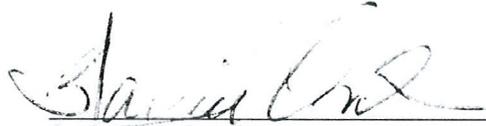
APPROVAL

INDOT agrees that all the conditions stated in this Programmatic CE Agreement will be satisfied for all projects processed under this Agreement. This Agreement supersedes all previous CE processing agreements held between FHWA and INDOT.

It is hereby determined that projects that fall within the bounds of this Agreement are actions which meet the definition contained in 40 CFR 1508.4, and, based on past experience with similar actions, do not involve significant environmental impacts. They are actions which do not:

- induce significant impacts to planned growth or land use for the area;
- require the relocation of significant numbers of people,
- have a significant impact on any natural, cultural, recreational, historic, or other resource,
- involve significant air, noise or water quality impacts,
- have significant impacts on travel patterns,
- otherwise, either individually or cumulatively, have any significant environmental impacts.

Therefore, projects that fall within the bounds of this Agreement are excluded from the requirement to prepare an Environmental Assessment or Environmental Impact Statement.

 6/15/09
date

Janice Osadezuk
Planning/Environmental Specialist
Indiana Federal Highway Administration

 6/15/09
date

Ben Lawrence, PE
Environmental Policy Administrator
Indiana Department of Transportation

Appendix H

Sample Notice of Entry Letter



INDIANA DEPARTMENT OF TRANSPORTATION

Driving Indiana's Economic Growth

100 North Senate Avenue
Room N642
Indianapolis, Indiana 46204-2216
(317) 232-5348 FAX: (317) 233-4929

Mitchell E. Daniels, Jr., Governor
Michael W. Reed, Commissioner

«owner_name»
«owner_address»
«owner_city», «owner_state_id» «owner_zip»

RE: Des. No. xxxxxxxx, <Project Name>

Notice of Entry for Survey or Investigation **<DATE>**

Dear Property Owner:

Our information indicates that you own property near the above proposed transportation project. Representatives of the Indiana Department of Transportation will be conducting environmental surveys of the project area in the near future. It may be necessary for them to enter onto your property to complete this work. This is permitted under Indiana Code § 8-23-7-26. Anyone performing this type of work has been instructed to identify him or herself to you, if you are available, before they enter your property. If you no longer own this property or it is currently occupied by someone else, please let us know the name of the new owner or occupant so that we can contact them about the survey.

Please read the attached notice to inform you of what the “Notice of Entry for Survey or Investigation” means. The survey work may include the identification and mapping of wetlands, archaeological investigations (which may involve the survey, testing, or excavation of identified archaeological sites), and various other environmental studies. The information we obtain from such studies is necessary for the proper planning and design of this highway project. It is our sincere desire to cause you as little inconvenience as possible during this survey.

If any problems do occur, please contact the field crew or contact < contact name> at xxx-xxx-xxxx or xxxx@[indot.in.gov](mailto:xxxx@indot.in.gov). You may also call or write to Shaun Miller (317-233-6795) at INDOT. Their address is: Cultural Resources Section, Office of Environmental Services, Indiana Department of Transportation, Indiana Government Center North, Room N642, 100 North Senate Avenue, Indianapolis, IN, 46204.

Please be aware that IC 8-23-7-27 and 28 provides that you may seek compensation from INDOT for damages occurring to your property (land or water) that result from INDOT's entry for the purposes mentioned above in IC 8-23-7-26. In this case, a basic procedure that may be followed is for you and/or an INDOT employee or representative to present an account of the damages to one of the three above named INDOT staff. They will check the information and forward it to the appropriate person at INDOT who will contact you to discuss the situation and compensation.

In addition, you may contact, xxx xxxx, the xxxx District Real Estate Manager (xxx-xxx-xxxx). His/her address is: xxxxxx. The District Real Estate Manager (DREM) can provide you with a form to request compensation for damages. After filling out the form, you can return it to the DREM for consideration, and the DREM may be contacted if you have questions regarding the matter, rights, and procedures.

If you are not satisfied with the compensation that INDOT determines is owed to you, Indiana Code 8-23-7-8 provides the following:

The amount of damages shall be assessed by the county agricultural extension educator of the county in which the land or water is located and two (2) disinterested residents of the county, one (1) appointed by the aggrieved party and one (1) appointed by the department. A written report of the assessment of damages shall be mailed to the aggrieved party and the department by first class United States mail. If either the department or the aggrieved party is not satisfied with the assessment of damages, either or both may file a petition, not later than fifteen (15) days after receiving the report, in the circuit or superior court of the county in which the land or water is located.

It is our sincere desire to cause as little inconvenience as possible during our work, and we thank you in advance for your cooperation.

Sincerely,

Ben Lawrence, P.E., Administrator
Environmental Policy Section
Office of Environmental Services

Attachment



INDIANA DEPARTMENT OF TRANSPORTATION

Driving Indiana's Economic Growth

100 North Senate Avenue
Room N642
Indianapolis, Indiana 46204-2216 (317) 232-5348 FAX: (317) 233-4929

Mitchell E. Daniels, Jr., Governor
Michael W. Reed, Commissioner

Indiana Department of Transportation Notice of Entry for Survey or Investigation Indiana Department of Transportation

If you have received a “Notice of Entry for Survey or Investigation” from INDOT or an INDOT representative, you may be wondering what it means. In the early stages of a project’s development, INDOT must collect as much information as possible to ensure that sound decisions are made in designing the proposed project. Before entering onto private property to collect that data, INDOT is required to notify landowners that personnel will be in the area and may need to enter onto their property. Indiana Code, Title 8, Article 23, Chapter 7, Section 26 deals with the department’s authority to enter onto any property within Indiana.

Receipt of a Notice of Entry for Survey or Investigation does not necessarily mean that INDOT will be buying property from you. It doesn’t even necessarily mean that the project will involve your property at all. Since the Notice of Entry for Survey or Investigation is sent out in the very early stages and since we want to collect data within AND surrounding the project’s limits more landowners are contacted than will actually fall within the eventual project limits. It may also be that your property falls within the project limits but we will not need to purchase property from you to make improvements to the roadway. Another thing to keep in mind is that when you receive a Notice of Entry for Survey or Investigation, very few specifics have been worked out and actual construction of the project may be several years in the future.

Before INDOT begins a project that requires them to purchase property from landowners, they must first offer the opportunity for a public hearing. If you were on the list of people who received a Notice of Entry for Survey or Investigation, you should also receive a notice informing you of your opportunity to request a public hearing. These notices will also be published in your local newspaper so interested individuals who are not adjacent to the project will also have the opportunity to request a public hearing. If a public hearing is to be held, INDOT will publicize the date, location, and time. INDOT will present detailed project information at the public hearing, comments will be taken from the public in spoken and written form, and question and answer sessions will be offered. Based on the feedback INDOT receives from the public, a project can be modified and improved to better serve the public.

So, if you have received a “Notice of Entry for Survey or Investigation”, remember:

1. You do not need to take any action at this time. It is merely letting you know that people in orange/lime vests are going to be in your neighborhood.
2. The project is still in its very early planning stages.
3. You will be notified of your opportunity to comment on the project at a later date.

Appendix I

Early Coordination Information



INDIANA DEPARTMENT OF TRANSPORTATION

Driving Indiana's Economic Growth

100 North Senate Avenue
Room N642
Indianapolis, Indiana 46204-2216 (317) 232-5348 FAX: (317) 233-4929

Mitchell E. Daniels, Jr., Governor
Karl B. Browning, Commissioner

April 1, 2009

«Title1» «First_Name» «Last_Name»
«Title»
«Company_Name»
«Address_Line_1»
«Address_Line_2»
«City», «State» «ZIP_Code»

Re: Des. Nos.: 9999999, Small Structure Project over Tributary to Sample Creek on SR 00, 1.5 Miles South of US 99, Benton County.

Dear «Title1» «Last_Name»:

The Indiana Department of Transportation intends to proceed with a project involving the aforementioned small structure in Benton County. This letter is part of the early coordination phase of the environmental review process. We are requesting comments from your area of expertise regarding any possible environmental effects associated with this project. **Please use the above designation numbers and description in your reply.** We will incorporate your comments into a study of the project's environmental impacts.

This project is located on SR 00, 1.5 miles south of US 99, in Benton County. This section of SR 00 is a two lane *Rural Major Collector*. The existing SR 00 approach cross section consists of two 11' lanes bordered by 2' gravel, usable shoulders. V-ditches exist in the vicinity of the structure. The existing small structure is an 8.5' span by 3.5' rise reinforced concrete encased I-beam culvert, under shallow fill (<2'). I-beams are severely rusted, there are areas of significant leaching, and there is substantial cracking of the deck. No guardrail or other standard safety features exist at the structure. The approximate existing right-of-way is 30' each side of centerline throughout the project.

The proposed project will replace the small structure over a tributary to Sample Creek and include an estimated 482' of guardrail installation. The project requires the acquisition of 0.64 acres of permanent right-of-way. Proposed right-of-way widths along SR 00 are 50' from centerline. The project will be approximately 700' in length. The preferred method of traffic maintenance is an official state detour; a temporary runaround will not be used.

Land use in the vicinity of the project is primarily agricultural and includes one residence. The INDOT Ecology Section will perform waters and wetlands determinations and a Biological Assessment to identify any ecological resources that may be present. The INDOT Cultural Resources Section will investigate the areas of additional right-of-way for archaeological and historic resources for compliance with Section 106 compliance. The results of this investigation will be forwarded to the State Historic Preservation Officer for review and concurrence.

Should we not receive your response **within thirty (30) calendar days** from the date of this letter, it will be assumed that your agency feels that there will be no adverse effects incurred as a result of the proposed project. However, should you find that an extension to the response time is necessary; a reasonable amount may be granted upon request. If you have any questions regarding this matter, please feel free to contact (Preparer's Name), of the Environmental Policy Section, at (XXX) XXX-XXXX. Thank you in advance for your input.

Sincerely,

Ben T. Lawrence, PE, Administrator
Environmental Policy Section
Office of Environmental Services
Indiana Department of Transportation

BTL/XXX
Attachment

Agencies to Be Contacted As Part of Early Coordination Efforts for All Projects:

ADDRESSES	INFORMATION TO BE SENT	TYPICAL RESPONSE
Field Supervisor U.S. Fish and Wildlife Service Bloomington Field Office 620 South Walker Street Bloomington, Indiana 47403-2121	1. Early coordination letter 2. Photos 3. Graphics	1. "No Effect", 2. "Not Likely to Adversely effect", or 3. "Likely to Adversely effect"
State Conservationist Natural Resource Conservation Service 6013 Lakeside Boulevard Indianapolis, Indiana 46278	1. Early coordination letter 2. Photos 3. Graphics 4. CPA-106 form (Appendix V) partially completed	CPA-106 form with Section V completed
Section Head Environmental Geology Section Indiana Geological Survey 611 North Walnut Grove Bloomington, Indiana 47405	1. Early coordination letter 2. Questionnaire (Appendix R) 3. Graphics	Questionnaire completed
Manager Aviation Section Indiana Department of Transportation Room N901, IGC North 100 North Senate Avenue Indianapolis, Indiana 46204	1. Early coordination letter 2. Questionnaire (Appendix Q) 3. Graphics	Questionnaire completed
Regional Environmental Coordinator Midwest Regional Office National Park Service 601 Riverfront Drive Omaha, Nebraska 68102	1. Early coordination letter 2. Graphics	Questionnaire completed
Federal Highway Administration Federal Office Building Room 254 575 North Pennsylvania Street Indianapolis, Indiana 46204	1. Early coordination letter 2. Graphics	No response
Environmental Coordinator Indiana Department of Natural Resources Division of Fish and Wildlife Room W264, IGC South 402 West Washington Street Indianapolis, Indiana 46204	1. 2 Early coordination letters 2. 2 Sets of photos 3. 2 Sets of graphics	Letter stating possible permits and mitigation
Field Environmental Officer Chicago Regional Office US Department of Housing & Urban Development Metcalf Fed. Bldg. 77 W. Jackson Blvd. Rm 2401 Chicago, IL 60604	1. Early coordination letter 2. Graphics	Response letter

Indiana Department of Environmental Management Automatic website Early Coordination: http://www.in.gov/idem/enviroreview/hwy_earlyenviroreview.html	1. Short project description on website submission	Response letter will appear immediately after web submission
Chief, Groundwater Section Indiana Department of Environmental Management 100 N. Senate Avenue Indianapolis, IN 46204	1. Wellhead Protection Proximity Request Form http://www.in.gov/idem/4289.htm#proxdet	Wellhead Protection Proximity Determination

If the project is in the following northern counties then contact the northern USFWS office at the address listed below.

Allen	Dekalb	Elkhart	Fulton	Jasper
Kosciusko	LaGrange	Lake	LaPorte	Marshall
Newton	Noble	Porter	Pulaski	St Joseph
Starke	Steuben	Whitley		

ADDRESSES	INFORMATION TO BE SENT	TYPICAL RESPONSE
U. S. Fish and Wildlife Service P.O. Box 2616 Chesterton, IN 46304	1. Early coordination letter 2. Photos 3. Graphics	1. "No Effect", 2. "Not Likely to Adversely effect", or 3. "Likely to Adversely effect"

If the project is located in the southern portion of the state, contact US Forest Service at:

Forest Supervisor Wayne-Hoosier National Forest US Forest Service 811 Constitution Avenue Bedford, Indiana 47421	1. Early coordination letter 2. Questionnaire (Appendix S) 3. Graphics	Response letter
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If the project will directly affect the shoreline of Lake Michigan, contact the National Oceanic and Atmospheric Administration Office of Program Planning and Integration:

ADDRESSES	INFORMATION TO BE SENT	TYPICAL RESPONSE
NOAA NEPA Coordinator Program Planning & Integration 1315 East-West Highway Room 15603 Silver Spring, MD 20910	1. Early coordination letter 2. Graphics	Response letter

If a project involves a sole source aquifer, contact USEPA:

ADDRESSES	INFORMATION TO BE SENT	TYPICAL RESPONSE
Sole Source Aquifer Coordinator Ground Water and Drinking Water Branch USEPA, Region 5 77 West Jackson Boulevard, WG-15J Chicago, Illinois 60604	1. Early coordination letter 2. Graphics	Response letter

If the project involves the crossing of a stream, contact the appropriate Corps of Engineers District Office(s), as determined by the project location:

ADDRESSES	INFORMATION TO BE SENT	TYPICAL RESPONSE
Chief, Environmental Analysis Branch Department of the Army Detroit District, Corps of Engineers ATTN: CENCE-PD-EA P. O. Box 1027 Detroit, Michigan 48231-1027	1. Early coordination letter 2. Graphics 3. Photos	Response letter
Chief, Environmental Resources Department of the Army Louisville District, Corps of Engineers ATTN: CEPMP-P-E P. O. Box 59 Louisville, Kentucky 40201-0059	1. Early coordination letter 2. Graphics 3. Photos	Response letter

If the project involves one of the following waterways, contact the appropriate Coast Guard District Office. Projects north of the 41st parallel are covered by the Ninth Coast Guard District. All others are covered by the Eighth District:

- Miami River (Great) from mile 0.5 to 1.5 miles.
- Indian Creek from mile 0.0 to mile 4.8.
- Ohio River in its entirety.
- Wabash River from mile 441.9.
- Junction of the East and West Forks of the White River from mile 51.6.
- Crooked Creek from mile 7.7.
- Little Blue River from mile 17.6.
- Anderson River from mile 6.0.
- McFadden Creek from mile 2.3.
- Pigeon Creek from mile 5.9.
- Little Oil Creek from mile 4.4
- Little River from mile 20.2

- Patoka River from mile 8.0.

ADDRESSES	INFORMATION TO BE SENT	TYPICAL RESPONSE
Chief, Bridge Program Section Ninth Coast Guard District 1055 E. Ninth Street Cleveland, OH 44114-1092	1. Early coordination letter 2. Questionnaire (Appendix T) 3. Graphics	Questionnaire completed
Chief, Bridge Program Section Eighth Coast Guard District 1222 Spruce St St. Louis, Missouri 63103-2832	1. Early coordination letter 2. Questionnaire (Appendix T) 3. Graphics	Questionnaire completed

Any known local organization, (Metropolitan Planning Organizations (MPOs), county highway department, historical societies, etc.) with a specific interest in the project's development should be contacted. For projects sponsored by Local Public Agencies, the appropriate INDOT District Office should also receive an early coordination letter with all attachments (addresses listed below). If a project is located within a corporation limit, the mayor and town/city council should be contacted.

Environmental Scoping Manager	Environmental Scoping Manager
INDOT – Crawfordsville District Office	INDOT – Fort Wayne District Office
PO Box 667	5333 Hatfield Rd
Crawfordsville, IN 47933	Fort Wayne, IN 46808

Environmental Scoping Manager	Environmental Scoping Manager
INDOT – LaPorte District Office	INDOT – Seymour District Office
PO Box 429	185 Agrico Lane
LaPorte, IN 46350	Seymour, IN 47274

Environmental Scoping Manager	Environmental Scoping Manager
INDOT – Greenfield District Office	INDOT – Vincennes District Office
32 S Broadway St	3536 US 41 South
Greenfield, IN 46140-2247	Vincennes, IN 47591

County Drainage Boards:

County	Address	City	Zip Code
Adams	313 W. Jefferson St - Suite 200	Decatur	46733
Allen	City-County Building - 1 E. Main St. - Room 610	Fort Wayne	46802
Bartholomew	440 Third Street - Room 400	Columbus	47201
Benton	706 E. 5th St	Fowler	47944
Blackford	110 West Washington Street	Hartford City	47348

Boone	116 W. Washington St.	Lebanon	46052
Brown	P.O. Box 37 - County Courthouse	Nashville	47448
Carroll	101 W Main St.	Delphi	46923
Cass	200 Court Park - County Courthouse	Logansport	46947
Clark	501 E. Court Ave.	Jeffersonville	47130
Clay	Clay County Courthouse - 609 E. National Ave.	Brazil	47834
Clinton	125 Courthouse Square - County Courthouse	Frankfort	46041
Crawford	PO Box 316 - County Courthouse	English	47118
Daviess	200 East Walnut - County Courthouse	Washington	47501
Dearborn	Admin Bldg - 215 W. High St.	Lawrenceburg	47025
Decatur	150 Courthouse Square	Greensburg	47240
Dekalb	County Courthouse – 1st Floor - 100 S. Main St.	Auburn	46706
Delaware	100 West Main Street - County Courthouse	Muncie	47305
Dubois	1 Courthouse Square - County Courthouse	Jasper	47546
Elkhart	Elkhart County Surveyor's Office - 4230 Elkhart Rd	Goshen	46526
Fayette	401 Central Avenue - County Courthouse	Connersville	47331
Floyd	311 West 1 st - City County Building	New Albany	47150
Fountain	301 4th Street - County Courthouse	Covington	47932
Franklin	Franklin County Government Center - 1010 Franklin Ave	Brookville	47012
Fulton	125 E. 9th Street	Rochester	46975
Gibson	101 N. Main Street - County Courthouse	Princeton	47670
Grant	401 S Adams St. - Room 322	Marion	46953
Greene	North Locust Court - County Courthouse	Bloomfield	47424
Hamilton	One Hamilton County Square - Suite 188	Noblesville	46060
Hancock	Courthouse Annex - 111 S. American Legion Pl. - Suite 171	Greenfield	46140
Harrison	300 N. Capitol Ave.	Corydon	47112
Hendricks	355 S. Washington Street - #214	Danville	46122
Henry	1201 Race St. - Suite 216	New Castle	47362
Howard	Surveyor - Room 332 - 232 N Main Street	Kokomo	46901
Huntington	Huntington County Surveyor - Room 203 - Courthouse	Huntington	46750
Jackson	Main Street - County Courthouse	Brownstown	47220
Jasper	115 West Washington Street - Suite 110	Rensselaer	47978
Jay	Jay County Courthouse	Portland	47371
Jefferson	County Court House - Main & Jefferson St.	Madison	47250
Jennings	P.O. Box 383 - County Courthouse	Vernon	47282
Johnson	Courthouse Annex Building - Lower Level 86 West Court St.	Franklin	46131
Knox	101 N 7th Street - County Courthouse	Vincennes	47591
Kosciusko	100 West Center Street - Courthouse	Warsaw	46580
Lake	Building 'A' - 3rd Floor - 2293 N. Main St.	Crown Point	46307
LaGrange	114 W Michigan St - County Office Building - 2 nd Floor	LaGrange	46761
LaPorte	813 Lincolnway - Suite 101	LaPorte	46350
Lawrence	15th and E Streets - County Courthouse	Bedford	47421
Madison	16 East Ninth Street	Anderson	46016
Marion	Suite 1922 - 200 E. Washington St.	Indianapolis	46204

Marshall	Marshall County Building - Rm 301 - 112 W Jefferson St	Plymouth	46563
Martin	P.O. Box 600, County Courthouse, Shoals, IN 47581	Shoals	47581
Miami	Miami County Courthouse - 25 N Broadway - Rm 103	Peru	46970
Monroe	119 West 7th Street	Bloomington	47404
Montgomery	P.O. Box 768 - County Courthouse	Crawfordsville	47933
Morgan	10 E. Washington - County Courthouse	Martinsville	46151
Newton	4117 South 240 West	Morocco	47963
Noble	Noble County Courthouse - 101 N Orange St.	Albion	46701
Ohio	413 Main St. - County Courthouse	Rising Sun	47040
Orange	205 E. Main Street - County Courthouse	Paoli	47454
Owen	349 North Main Street	Spencer	47460
Parke	116 West High Street - #207	Rockville	47872
Perry	2219 Payne Street - County Courthouse	Tell City	47586
Pike	801 East Main Street	Petersburg	47567
Porter	155 Indiana Avenue, Suite 303, Valparaiso, IN 46383	Valparaiso	46383
Posey	P.O. Box 745 - County Courthouse	Mount Vernon	47620
Pulaski	112 E. Main - County Courthouse	Winamac	46996
Putnam	Room 43 - Putnam County Courthouse	Greencastle	46135
Randolph	100 South Main Street - County Courthouse	Winchester	47394
Ripley	128 W. First North Street - PO Box 151	Versailles	47042
Rush	101 East Second Street - Room 104	Rushville	46173
Scott	1 E. McClain Ave. - County Courthouse	Scottsburg	47170
Shelby	407 S. Harrison Street - County Courthouse	Shelbyville	46176
Spencer	Spencer County Court House - 200 Main Street	Rockport	47635
St. Joseph	227 W. Jefferson Blvd. - County/City Building	South Bend	46601
Starke	53 E. Mound Street - County Courthouse	Knox	46534
Steuben	317 S. Wayne St. - Suite 3K	Angola	46703
Sullivan	PO Box 370 - County Courthouse,	Sullivan	47882
Switzerland	212 West Main Street - County Courthouse	Vevay	47043
Tippecanoe	301 Main Street - County Courthouse	Lafayette	47901
Tipton	101 East Jefferson Street - County Courthouse	Tipton	46072
Union	26 West Union - County Courthouse	Liberty	47353
Vanderburgh	825 Sycamore Street - County Courthouse	Evansville	47708
Vermillion	P.O. Box 190 - County Courthouse	Newport	47966
Vigo	Third & Wabash - County Courthouse	Terre Haute	47807
Wabash	1 W. Hill Street - County Courthouse	Wabash	46992
Warren	125 N Monroe Street - County Courthouse	Williamsport	47993
Warrick	109 W. Main Street - County Courthouse	Boonville	47601
Washington	99 Public Square - County Courthouse	Salem	47167
Wayne	301 East Main Street - County Courthouse	Richmond	47374
Wells	105 W Market Street - Suite 205 - County Courthouse	Bluffton	46714
White	P.O. Box 260 - County Courthouse	Monticello	47960
Whitley	101 W Van Buren - County Courthouse	Columbia City	46725

Appendix J
Roster of Indiana Waters Declared
Navigable or Non-navigable

**Roster of Indiana Waters Declared Navigable or Non-navigable
(Listed By Waterway Name)**

Anderson River (including Middle Fork): Navigable in Spencer County from its junction with the Ohio River for 28.4 river miles to the Perry-Spencer County Line. The Middle Fork is navigable from its junction with the Anderson River for 3.3 river miles.

Armuth Ditch: See Black Creek.

Arnold Creek: Navigable in Ohio County from its junction with the Ohio River for 4.4 river miles.

Baker Creek: Navigable in Spencer County from its junction with Little Pigeon Creek 1.8 river miles.

Bald Knob Creek: Navigable in Perry County from its junction with Oil Creek for 0.5 river miles.

Banbango Creek: See Baugo Creek.

Baugo Creek: Navigable from its junction with the St. Joseph River in South Bend for 15.2 river miles to the main forks (near Wakarusa).

Bayou Creek: Navigable in Vanderburgh County from its junction with the Ohio River for 1.5 river miles.

Beanblossom Creek: Navigable in Monroe County from its junction with the West Fork of the White River for 17.7 river miles to Griffy Creek.

Bear Creek: Navigable in Perry County from its junction with the Ohio River for 1.6 river miles.

Big Blue River: Navigable from its junction with Sugar Creek (to form the Driftwood River) for 55.46 river miles to the Henry-Rush County Line.

Big Blue River: See, also, Blue River.

Big Creek: Navigable in Posey County from its junction with the Wabash River for 25.4 river miles (near Cynthiana). See, also, Little Fork of Big Creek.

Big Deer Creek: See Deer Creek.

Big Indian Creek: See Indian Creek (Morgan County).

Big Oil Creek: Navigable in Perry County from its junction with the Ohio River for 10.6 river miles.

Big Poison Creek: Navigable in Perry County from its junction with the Ohio River for 6.3 river miles.

Big Raccoon Creek: Navigable from its junction with the Wabash River for 42.35 river miles to the Parke-Putnam County Line (now Cecil M. Harden Lake). The dam for Harden Lake is located at river mile 33.7.

Big Saluda Creek: Navigable in Jefferson County from its junction with the Ohio River for 1.0 river miles.

Big Sandy Creek: See Sandy Creek.

Big Vermillion River: Navigable from its junction with the Wabash River for 10.8 river miles to the Illinois State Line. (This river is navigable to Carmargo, Illinois.)

Black Creek: Navigable from its junction with the West Fork of the White River (near Edwardsport) for 11.8 river miles (near Marco).

Blue River: Navigable from its junction with the Ohio River for 57.15 river miles to Fredricksburg.

Blue River: See, also, Big Blue River.

Bryant Creek: Navigable in Switzerland County from its junction with the Ohio River for 2.6 river miles.

Buck Creek: Navigable in Harrison County from its junction with the Ohio River for 5.8 river miles.

Buck Creek: Navigable in Perry County from its junction with the Ohio River for 0.7 river miles.

Buck Run: Navigable in Ohio County from its junction with the Ohio River for 1.1 river miles.

Bull Creek: Navigable in Clark County from its junction with the Ohio River for 1.1 river miles.

Bull Hollow: Navigable in Perry County from its junction with Big Oil Creek for 0.7 river miles.

Burns Ditch: Navigable as a channelization of the Little Calumet River.

Burns Waterway Harbor: Navigable as an extension of Lake Michigan for 1.3 river miles to the Little Calumet River.

Busseron Creek: Navigable from its junction with the Wabash River in Knox County for 20.96 river miles. A channelization and relocation of Busseron Creek is navigable from its junction with the Wabash River in Sullivan County (near Rogers Ditch) for 2.85 river miles to its junction with the original channel.

Busserou Creek: See Busseron Creek.

Cagles Mill Lake: See Eel River, and see Mill Creek.

Calumet River: See Grand Calumet River; also Little Calumet River.

Calumet River Canal: See Indiana Harbor Canal.

Cammie Thomas Ditch: Navigable for 7.45 river miles as a channelization of the Muscatatuck River.

Camp Creek: Navigable in Clark County from its junction with the Ohio River for 1.7 river miles.

Caney Branch: Navigable in Perry County from its junction with Big Poison Creek for 0.2 river miles.

Caney Branch: Navigable in Perry County from its junction with Little Deer Creek for 0.8 river miles.

Caney Creek: Navigable in Spencer County from its junction with the Ohio River for 2.8 river miles.

Carman's Creek: See Turman Creek.

Cecil M. Harden Lake: See Big Raccoon Creek.

Clear Creek: Navigable in Monroe County from its junction with Salt Creek for 2.55 river miles (near Harrodsburg).

Clear Creek: Navigable from its junction with Little Pigeon Creek for 2.4 river miles.

Clover Lick Creek: Navigable in Perry County from its junction with Big Oil Creek for 0.7 river miles.

Conns Creek: Navigable (although with private ownership of the creek bed) from its junction with the Flatrock River for 11.5 river miles to the Rush-Shelby County Line.

Crooked Creek: Navigable in Spencer County from its junction with the Ohio River for 7.7 river miles.

Cypress Creek (including Cypress Creek Diversion Channel): Navigable in Warrick County from its junction with the Ohio River for 6.6 river miles. (The original bed of

Cypress Creek is also navigable west of Cypress Creek Diversion Channel for 1.95 river miles, except where the creek bed has emerged and is no longer inundated.)

Deer Creek: Navigable in Perry County from its junction with the Ohio River for 5.9 river miles.

Driftwood River: Navigable from its junction with the East Fork of the White River (near Columbus) 15 river miles to its junction with the Big Blue River (near Edinburgh).

Dry Run Creek: Navigable in Crawford County from its junction with the Big Blue River for 1.4 river miles.

East Calumuck River: See Little Calumet River.

East Deer Creek: Navigable in Perry County from its junction with Deer Creek for 0.6 river miles.

East Fork of the White River: Navigable from its junction with the White River 189 river miles to its junction with the Flatrock and Driftwood Rivers (near Columbus).

East Fork of the Whitewater River: Navigable from its junction with the Whitewater River for 26.25 river miles to the Union-Wayne County Line.

Eel River: Navigable from its junction with the West Fork of the White River for 51.2 river miles to its junction with Mill Creek (now within Cagles Mill Lake).

Elk Creek: Navigable in Washington County from its junction with the Cammie Thomas Ditch for 3.0 river miles.

Fanny Creek: Navigable in Perry County from its junction with the Ohio River for 0.8 river miles.

Fawn River: Navigable for 13.45 river miles within Indiana. The Fawn River has two navigable segments in Indiana, separated by segments in Michigan. Navigability commences at the Indiana-Michigan state line (near Gilmore Lake and two miles south of Sturgis, Michigan) and continues downstream.

Flat Creek: Navigable from its junction with the Patoka River for 12.0 river miles (near Otwell).

Flatrock River: Navigable from its junction with the East Fork of the White River (Columbus) 93 river miles to its uppermost point in Henry County (near Mooreland).

Fourteen Mile Creek: Navigable in Clark County from its junction with the Ohio River for 2.9 river miles.

Garrett Creek: Navigable in Spencer County from its junction with the Ohio River for 2.2 river miles.

Goose Creek: Navigable in Switzerland County from its junction with the Ohio River for 1.5 river miles.

Grand Calumet River: Navigable from the Illinois State Line (near Hammond) for 15.4 river miles to Marquette Park. (The river is also navigable in Illinois.)

Grants Creek: Navigable in Switzerland County from its junction with the Ohio River for 2.5 river miles.

Great Miami River: Navigable for 1.4 river miles in Dearborn County. (Most of this river lies within Ohio; and the Great Miami River has been determined to be navigable from its junction with the Ohio River for 117 river miles. The waterway enters Indiana at two locations.)

Harden Lake: See Big Raccoon Creek.

Harris Ditch: Navigable in Posey County from its junction with the Ohio River for 0.9 river miles to Little Pitcher Lake.

Hogan Creek (including North Fork and South Fork): (The Main Stem of) Hogan Creek is navigable in Dearborn County from the junction on the Ohio River for its entire length of 0.4 river miles. The North Fork is navigable from the junction with Hogan Creek for 4.9 river miles. The South Fork is navigable from the junction with Hogan Creek for 5.0 river miles.

Honey Creek: Navigable in Spencer County from its junction with the Ohio River for 1.8 river miles.

Houchins Ditch: See Patoka River.

Hurricane Fork: See Little Fork of Big Creek.

Independence Creek: See Indian Creek (Harrison County).

Indian Creek: Navigable in Harrison County from its junction with the Ohio River for 4.8 river miles.

Indian Creek: Navigable in Martin County from its junction with the East Fork of the White River for 15.0 river miles to the Lawrence-Martin County Line.

Indian Creek: Navigable in Morgan County from its junction with the West Fork of the White River for 3.3 river miles (near Martinsville).

Indian Creek: Navigable in Switzerland County from its junction with the Ohio River for 4.1 river miles.

Indian Fork: Navigable in Perry County from its junction with Big Oil Creek for 1.4 river miles.

Indian-Kentuck Creek: Navigable in Jefferson County from its mouth on the Ohio River for 3.8 river miles.

Indiana Harbor: Navigable as an extension of Lake Michigan.

Indiana Harbor Canal (including Calumet River Branch and Lake George Branch): The (Main Stem of the) Indiana Harbor Canal is navigable in Lake County for 3.0 river miles from the Indiana Harbor to where it branches into the Calumet River Canal and the Lake George Canal. The Calumet River Canal is navigable in Lake County from the Indiana Harbor Canal for 1.95 river miles to the Grand Calumet River. The Lake George Canal is navigable in Lake County from the Indiana Harbor Canal for 0.85 river miles (near White Oak Avenue if extended southerly).

Iroquios River: Navigable from the Indiana-Illinois State Line for 39 river miles to the Dexter Ditch (near Parr).

Island Branch: Navigable in Ohio County from its junction with the Ohio River for 1.0 river miles.

Jackson Creek: Navigable in Spencer County from its junction with the Ohio River for 1.8 river miles.

Kankakee River: Navigable from the Indiana-Illinois State Line for 86.3 river miles to the Indiana-Michigan State Line. (This river is also navigable downstream in Illinois.)

Kelly Bayou: Navigable in Sullivan County from its downstream junction with an oxbow of the Wabash River for 5.8 river miles to its upstream junction with the Wabash River.

Kelly Hollow: Navigable in Perry County from its junction with Millstone Creek for 1.0 river miles.

Kemper Ditch: See Little Calumet River.

Kingly Creek: Navigable in Perry County from its junction with the Ohio River for 0.2 river miles.

Knob Creek: Navigable in Perry County from its junction with the Ohio River for 0.2 river miles.

Lake Drain: Navigable in Spencer County from its junction with the Ohio River for 1.6 river miles.

Lake George Canal: See Indiana Harbor Canal.

Lake Michigan: Navigable throughout Indiana.

Lancassange Creek: Navigable in Clark County from its junction with the Ohio River for 0.3 river miles.

Laughery Creek: Navigable from its junction with the Ohio River for 10.8 river miles (near Milton).

Lick Creek: Navigable in Orange County from its junction with the Lost River for 19.5 river miles to Old Spring Mill (near Paoli).

Little Blue River: Navigable in Crawford County from its junction with the Ohio River (near Alton) for 10.6 river miles.

Little Blue River: Navigable from its junction with the Big Blue River (Shelbyville) for 25.6 river miles to its junction with Ball Run.

Little Calumet River: Navigable from the Indiana-Illinois State Line for 21.24 river miles to Burns Waterway Harbor; and navigable for an additional 17.75 river miles to its junction (as Kemper Ditch) with Interstate 94. (The river is also navigable in Illinois.)

Little Creek: See Little Fork of Big Creek.

Little Deer Creek: Navigable from its junction with Deer Creek for 3.9 river miles.

Little Fork of Big Creek: Navigable in Posey County from its junction with Big Creek for 5.1 river miles.

Little Oil Creek: Navigable from its junction with Big Oil Creek for 4.4 river miles.

Little Pigeon Creek: Navigable from its junction with the Ohio River for 15.8 river miles.

Little Pitcher Lake: Navigable in Posey County as an extension of Harris Ditch.

Little Raccoon Creek: Navigable in Parke County from its junction with Big Raccoon Creek for 5.3 river miles (Nevins Covered Bridge).

Little River: Navigable from its junction with the Wabash River 20.2 river miles to Ellison Road (near Fort Wayne).

Little Sandy Creek: Navigable in Spencer County from its junction with the Ohio River for 2.0 river miles.

Little Wabash River: See Little River.

Locust Creek: Navigable in Vanderburgh County from its junction with Pigeon Creek for 1.5 river miles.

Log Lick Creek: Navigable in Switzerland County from its junction with the Ohio River for 2.3 river miles.

Lost River: Navigable from its junction with the East Fork of the White River for 48.87 river miles (near Orangeville).

McFadden Creek: Navigable in Posey County from its junction with the Ohio River for 2.3 river miles.

Marble Powers Ditch: See Kankakee River.

Maumee River: Navigable from the Indiana-Ohio State Line 27.05 river miles to the Hosey Dam, Fort Wayne. (The river is also navigable in Ohio; and the river may be

alternatively described as navigable to total river mile 134.9. The Indiana-Ohio State Line is located at total river mile 107.85.)

Mill Creek: Navigable from its junction with the Eel River (now Cagles Mill Lake) for 32.45 river miles to the Hendricks-Morgan County Line. See, also, Mill Creek Ditch.

Mill Creek: Navigable in Crawford County from its junction with the Little Blue River for 1.4 river miles.

Mill Creek Ditch: Navigable from its junction with Mill Creek upstream for 1.35 river miles to the Hendricks-Morgan County Line.

Millstone Creek: Navigable in Perry County from its junction with the Ohio River for 1.4 river miles.

Mississinewa River: Navigable from its junction with the Wabash River for 109.75 river miles to the Indiana-Ohio State Line.

Monroe Lake: See Salt Creek.

Mosquito Creek: Navigable in Harrison County from its junction with the Ohio River for 2.8 river miles.

Mud Creek: Navigable from its junction with Mill Creek (near Little Point) for 5.6 river miles to Tudor Road (near Hazelwood).

Muscatatuck River: Navigable from its junction with the East Fork of the White River for 24.25 river miles to the main forks. See, also, Vernon Fork of Muscatatuck River and South Fork of Muscatatuck River.

Neglie Creek: Navigable in Perry County from its junction with Little Deer Creek for 0.5 river miles.

North Fork of Muscatatuck River: See Vernon Fork of Muscatatuck River.

Ohio River: Navigable throughout the state (from total river mile 491.34 to total river mile 848.0).

Oil Creek: See Big Oil Creek.

Patoka River: Navigable from its junction with the Wabash River for 146.6 river miles (within Greenfield Township, Orange County).

Pickamink River: See Iroquois River.

Pigeon Creek: Navigable from its junction with the Ohio River for 5.9 river miles.

Plum Creek: Navigable in Switzerland County from its junction with the Ohio River for 2.9 river miles.

Poison Creek: See Big Poison Creek.

Potato Run: Navigable in Harrison County from its junction with the Ohio River for 0.4 river miles.

Raccoon Creek: See Big Raccoon Creek.

Rock River: See Sugar Creek.

Rider Ditch: Navigable in Jackson County as a channelization of the Vernon Fork of the Muscatatuck River.

St. Joseph River: Navigable throughout Indiana (Elkhart and St. Joseph Counties) for 39.57 river miles. The river enters Indiana from Michigan and returns to Michigan. (The river is also navigable downstream in Michigan; and the river may be alternatively described as navigable from total river mile 49.93 to total river mile 89.5.)

Salt Creek: Navigable from its junction with the East Fork of the White River for 63.6 river miles to the upstream boundary of Monroe Lake along the North Fork.

Sample Run: Navigable in Perry County from its junction with the Ohio River for 0.2 river miles.

Sand Creek: Navigable in Switzerland County from its junction with Bryant Creek for 0.9 river miles.

Sand Run: See Sand Creek.

Sandy Creek: Navigable in Spencer County from its junction with the Ohio River for 2.6 river miles.

Silver Creek: Navigable in Clark County from its junction with the Ohio River for 3.0 river miles.

Smart Ditch: Navigable in Jackson County as a channelization of the Muscatatuck River (and the Vernon Fork of the Muscatatuck River).

South Fork of Big Creek: See Little Fork of Big Creek.

South Fork of Muscatatuck River: Navigable from its junction with the Muscatatuck River 28.1 river miles to its junction with Graham Creek.

Sugar Creek: Navigable from its junction with the Big Blue River (to form the Driftwood River) for 24.4 river miles (near Boggstown).

Sugar Creek: Navigable from its junction on the Wabash River (near West Union) for 56.83 river miles to the Montgomery-Boone County Line.

Tanners Creek: Navigable from its junction with the Ohio River in Lawrenceburg for 10.6 river miles.

Tate's Hollow: Navigable in Perry County from its junction with the Ohio River for 0.3 river miles.

Thomas Ditch: See Cammie Thomas Ditch.

Trail Creek: Navigable in LaPorte County from its junction with Lake Michigan for 1.0 river miles.

Turman Creek: Navigable in Sullivan County from its junction with the Wabash River for 7.9 river miles (near Dodds Bridge).

Turtle Creek: Navigable in Switzerland County from its junction with the Ohio River for 1.3 river miles.

Twin Creek: Navigable in Washington County from its junction with the East Fork of the White River for 7.98 river miles to the Cox Ferry Road Bridge near the Jefferson-Brown Township Line.

Vermillion River: See Big Vermillion River.

Vernon Fork of Muscatatuck River: Navigable from its junction with the Muscatatuck River for 39.3 river miles to Vernon (S.R. 7).

Wabash River: Navigable from its junction with the Ohio River for 441.9 river miles to the Wells-Adams County Line.

Webb Branch: Navigable in Perry County from its junction with Big Oil Creek for 0.9 river miles.

West Fork of the White River: Navigable from its junction with the White River 277 river miles to Smithfield, Delaware County.

West Fork of the Whitewater River: Navigable from its junction with the Whitewater River for 64.3 river miles to the three forks (near Connersville).

White River: Navigable from its junction with the Wabash River for 49.5 river miles to where it branches into the East Fork of the White River and the West Fork of the White River.

Whitewater River: Navigable from the Ohio State Line for 29.65 river miles to where it branches into the East Fork of the Whitewater River and the West Fork of the Whitewater River. (The river is also navigable downstream in Ohio; and the river may be alternatively described as navigable from total river mile 7.9 to total river mile 96.9.)

Wilson Creek: Navigable in Dearborn County from its junction with the Ohio River for 1.9 river miles.

Yellow River: Navigable from its junction with the Kankakee River for 41.0 river miles to Plymouth.

Appendix K
Listing of Outstanding Rivers and
Streams

NATURAL RESOURCES COMMISSIONInformation Bulletin #4
(Second Amendment)**SUBJECT: Outstanding Rivers List for Indiana****I. INTRODUCTION**

To help identify the rivers and streams that have particular environmental or aesthetic interest, a special listing has been prepared by the Division of Outdoor Recreation of the Department of Natural Resources. The listing is a corrected and condensed version of a listing compiled by American Rivers and dated October 1990. There are about 2,000 river miles included on the listing, a figure that represents less than 9% of the estimated 24,000 total river miles in Indiana. The Natural Resources Commission has adopted the listing as an official recognition of the resource values of these waters.

A river included in the listing qualifies under one or more of the following 22 categories. An asterisk indicates that all or part of the river segment was also included in the "Roster of Indiana Waterways Declared Navigable", 15 IR 2385 (July 1992). In 2006, the commission updated this citation, and Information Bulletin #3 (Second Amendment) was posted in the Indiana Register at [20061011-IR-31206044ONRA](#). A river designated "EUW" is an exceptional use water. A river designated "HQW" is a high quality water, and a river designated "SS" is a salmonoid stream.

1. Designated national Wild and Scenic Rivers. Rivers that Congress has included in the National Wild and Scenic System pursuant to the National Wild and Scenic River Act, Public Law 90-452.
2. National Wild and Scenic Study Rivers. Rivers that Congress has determined should be studied for possible inclusion in the National Wild and Scenic Rivers System.
3. Federally Protected Rivers other than Wild and Scenic. Rivers subject to federal legal protection other than pursuant to the National Wild and Scenic Rivers Act, such as National Rivers and Waterways and National Recreation Areas.
4. State designated Scenic Rivers. Rivers included in state river conservation systems or otherwise protected pursuant to an act of the state legislature.
5. Nationwide Rivers Inventory Rivers. The 1,524 river segments identified by the National Park Service in its 1982 "Nationwide Rivers Inventory" as qualified for consideration for inclusion in the National Wild and Scenic Rivers System.
6. Hydro Ban Rivers. Rivers on which Congress has prohibited future hydropower development.
7. Rivers Identified in State Inventories or Assessments. Outstanding rivers from state inventories or assessments, i.e., rivers identified as having statewide or greater significance.
8. Atlantic Salmon Restoration Rivers. Rivers undergoing active Atlantic salmon restoration efforts and identified by the U.S. Fish and Wildlife Service for planned restoration.
9. Federal Public Lands Rivers. Rivers identified in U.S. Forest Service and Bureau of Land Management resource planning as potential additions to the National Wild and Scenic Rivers System.
10. State Fishing Rivers. Rivers identified by states as having outstanding fishing values, such as Blue Ribbon Trout Streams.
11. State Heritage Program Sites. Rivers identified by state natural heritage programs or similar state programs as having outstanding ecological importance.
12. Priority Aquatic Sites. Rivers identified in "Priority Aquatic Sites for Biological Diversity Conservation", published by the Nature Conservancy in 1985.
13. Canoe Trails. State-designated canoe/boating routes.
14. Outstanding Whitewater Streams. Rivers listed in the American Whitewater Affiliation's 1990 Inventory of American Whitewater.
15. Locally Protected Rivers. Rivers protected through local and private protection strategies.
16. State Park Rivers. Rivers protected by inclusion in a state park or state preserve.
17. Other Rivers. Miscellaneous rivers identified as having outstanding ecological, recreational, or scenic importance.
18. High Water Quality Rivers. "Outstanding Resources Waters" designated by states and other rivers identified by states as having outstanding water quality.
19. National Natural Landmark Rivers. Rivers designated as, or included within, National Natural Landmarks.
20. State Study Rivers. Rivers that have been formally proposed for state protection or designation.
21. BOR Western Rivers. Rivers listed in the Bureau of Outdoor Recreation's 1982 "Western U.S. Water Plan" proposal as exhibiting identified free-flowing values.
22. State legislated Wabash River Heritage Corridor.

II. LISTING OF OUTSTANDING RIVERS AND STREAMS

River	Significance	County	Segment
Bear Creek River	11, 18, EUW	Fountain	C.R. 250W to confluence with the Wabash
Big Blue*	5, 11	Johnson, Rush, Shelby	Flatrock River to Carthage
Big Creek	17	Jefferson	East side of Jefferson Military Reservation boundary to Graham Creek
Big Pine Creek	7, 11, 13, 18, 20, EUW	Warren	S.R. 18 to confluence with Wabash River
Big Walnut Creek	5, 7, 11, 13, 19, 20	Putnam	Hendricks/Putnam Co. Line to Greencastle
Black River	11	Posey	Confluence with Higginbotham Ditch to confluence with Wabash River
Blue*	4, 5, 7, 11, 13	Crawford, Harrison, Washington	Confluence of Middle Fork Blue to confluence with Ohio River
Blue, South Fork	11, EUW	Washington	S.R. 135 to confluence with Blue River
Buck Creek*	11	Harrison	Headwaters to confluence with Ohio River
Cedar Creek	4, 7, 11, 18, HQW	Allen, Dekalb	Dekalb C.R. 68 to St. Joseph River
Clifty Creek	11, 18, EUW	Montgomery	Headwaters to confluence with Indian Creek
Cypress Slough Creek	11	Posey	Confluence with Castleberry Creek to Southwind Maritime Center
Deep	13, 17	Lake, Porter	1 mile south of U.S. 30 to Little Calumet River
Driftwood	11, 13	Bartholomew	Atterbury Fish and Wildlife Area to Columbus
Eel, North	13	Miami, Wabash	South Whitley to Logansport
Elkhart	13	Elkhart, Noble	S.R. 13 to Island Park in Elkhart
Elkhart, South Branch	7, 11, 13, 20	Noble	C.R. 100N to U.S. 6
Fall Creek	11, 18, EUW	Warren	U.S. 41 to confluence with Big Pine Creek
Fawn*	11, 13	LaGrange, Steuben	Nevada Mills to Indiana/Michigan Line and Indiana/Michigan to Indiana/Michigan line
Fish Creek	11	Dekalb, Steuben	Ohio/Indiana line to Indiana/Ohio Line
Flatrock*	13	Bartholomew, Shelby	S.R. 9 to East Fork White River
Fourteen-Mile Creek*	11	Clark	Confluence of East and West Forks to confluence with Ohio River
Graham Creek	17	Jefferson, Jennings, Ripley	New Marion to confluence with Big Creek
Indian Creek*	11	Harrison	Floyd/Harrison Co. Line to confluence with Ohio River
Indian Creek	11, 18, EUW	Montgomery	C.R. 475W to confluence with Sugar Creek
Indian-Kentuck Creek*	17	Jefferson, Ripley	Confluence with Vestal Branch to confluence with Ohio River
Iroquois*	13	Newton	S.R. 16 to Indiana/Illinois line
Kankakee*	11, 13	LaPorte, Newton, Porter	Upstream boundary of Kingsbury Fish and Wildlife Area through LaSalle State Fish and Wildlife Area to Indiana/Illinois line
Kilmore Creek	17	Clinton	U.S. 421 to confluence with South Fork Wildcat Creek
Laughery Creek*	5, 9, 11	Dearborn, Ohio, Ripley	Source just east of Morris in Ripley Co. to confluence with Ohio River
Little Blue*	5, 11	Crawford	Town of English to confluence with Ohio
Little Calumet East Fork	10, 13, SS	Porter	C.R. 600E to S.R. 249
Little Creek	17	Jefferson	Kent to Big Creek
Little Indian Creek	11	Harrison	Pfimmer Church to confluence with Indian Creek
Little Mosquito	11	Harrison	Headwaters to confluence with Mosquito Creek

Indiana Register

Little Pine Creek	11	Warren	Bridge SW of Green Hill to confluence with Wabash River
Little River*	22	Allen, Huntington	Source to confluence with the Wabash River
Lost River*	9, 11, 19, EUW	Martin, Orange	Potato Road to confluence with East Fork White River
Mosquito Creek*	11	Harrison	Buena Vista to confluence with East Fork White River
Mississinewa*	17	Miami	Mississinewa Reservoir to confluence with Wabash River
Mud Pine Creek	11, 18, EUW	Warren	S.R. 352 to confluence with Big Pine Creek
Muscatatuck*	5	Jackson, Jennings, Scott	Confluence of Graham Creek and Big Washington Creek to confluence with East Fork White River
Muscatatuck, Vernon	11, 13	Jackson, Jennings	Zenas to confluence with Muscatatuck Fork*
Oil Creek*	11	Perry	St. Croix to confluence with Ohio River
Otter Creek	17	Jennings, Ripley	Covered Bridge North of Holton to confluence with Vernon Fork Muscatatuck
Patoka River	17	Dubois, Gibson, Pike	Patoka Reservoir to confluence with Wabash River
Pigeon	11, 13	LaGrange	S.R. 327 to Indiana/Michigan Line
Rattlesnake Creek	18, EUW	Fountain	C.R. 350W to confluence with Bear Creek
Rattlesnake Creek	11	Parke	C.R. 400/450S to confluence with Sugar Creek
Roaring Creek	11	Parke	1 mile upstream of S.R. 41 to confluence with Sugar Creek
Sand Creek	17, 20	Bartholomew, Decatur, Jackson, Jennings	Confluence with Cobbs Fork to confluence East Fork of White River
Stinking Fork	11	Crawford	Headwaters to confluence with Little Blue River
Sugar Creek	5, 7, 11, 13, 16, 20	Montgomery, Parke	Darlington Covered Bridge to confluence with Wabash River
Sugar Creek*	11	Johnson, Shelby	Inclusive within Johnson and Shelby counties
Sugar Mill Creek	17	Fountain, Parke	Wallace to confluence with Sugar Creek
Tippecanoe	5, 13, 16	Carroll, Fulton, Kosciusko, Marshall, Pulaski, Tippecanoe, White	Source (Lake Tippecanoe) to Norway and from Oakdale Dam to the confluence with Wabash River
Turkey Fork	11	Crawford	I-64 to confluence with Little Blue River
Wabash*	22	Adams, Allen, Carroll, Cass, Fountain, Gibson, Huntington, Jay, Knox, Miami, Parke, Posey, Sullivan, Tippecanoe, Vermillion, Vigo, Wabash, Warren, Wells	Indiana/Ohio Line to confluence with the Ohio River including the Little River and the portage between the Little River and the Maumee River
West Branch Mosquito	11	Harrison	Headwaters to confluence with Mosquito Creek
White, East Fork	5, 11, 13	Bartholomew, Daviess, Dubois, Jackson, Lawrence, Martin, Pike	Columbus to confluence with West Fork White River
White, West Fork*	5, 11, 13	Daviess, Delaware, Gibson, Knox, Greene, Hamilton, Madison, Marion, Morgan, Owen, Randolph	Farmland to confluence with Wabash River
Whitewater*	7, 11, 13, 20	Dearborn, Fayette, Franklin	Cambridge City to Indiana/Ohio line Wayne (West Harrison, OH)
Wildcat Creek	4, 7, 13, 17, 18, HQW	Carroll, Tippecanoe	S.R. 29 to confluence with Wabash River
Wildcat Creek, Middle	17	Clinton, Tippecanoe	S.R. 26 (Edna Mills) to confluence with Fork Wildcat, South Fork
Wildcat Creek,	4, 7, 11, 13, 17,	Clinton, Tippecanoe	U.S. 421 to confluence with Wildcat Creek Fork

South	18, HQW		
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III. HISTORY

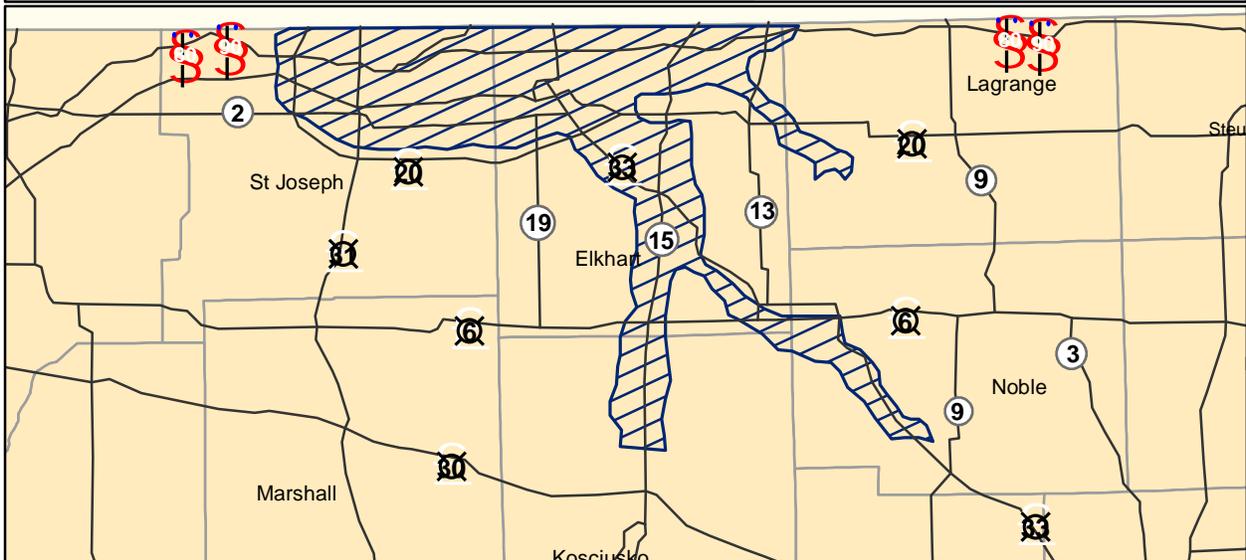
In 1993, the Natural Resources Commission adopted its "Outstanding Rivers List for Indiana". The listing was published in the Indiana Register on March 1 of that year as Information Bulletin #4 (16 IR 1677). The listing has also been specifically incorporated by reference into statutes and rules. Notably, the listing is referenced in the standards for utility line crossings within floodways, at [312 IAC 10-5-0.3](#), [312 IAC 10-5-0.6](#), and [312 IAC 10-5-2](#) through [312 IAC 10-5-4](#). See, also, the general permit for logjam removals at [312 IAC 10-5-6](#) and [312 IAC 10-5-7](#). Except where incorporated into a statute or rule, the listing is intended to provide guidance rather than to have regulatory application.

Posted: 05/30/2007 by Legislative Services Agency
An [html](#) version of this document.

Appendix L

Sole Source Aquifer Map

Sole Source Aquifer Map

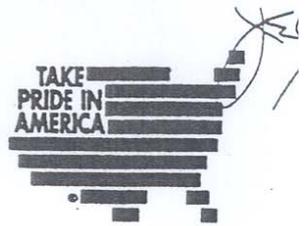


Appendix M
U.S. Fish & Wildlife Letter
(September 8, 1993)



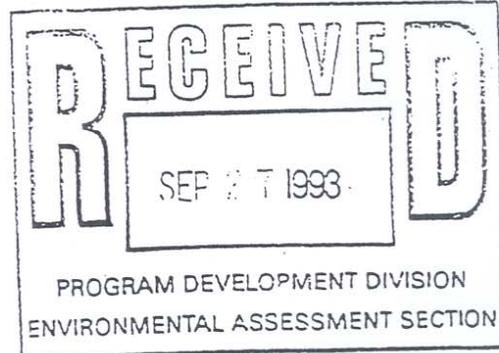
IN REPLY REFER TO:

United States Department of the Interior



FISH AND WILDLIFE SERVICE
BLOOMINGTON FIELD OFFICE (ES)
620 South Walker Street
Bloomington, Indiana 47403-2121
(812) 334-4261 FAX 334-4273

September 8, 1993



Mr. James E. Juricic
Environmental Assessment Section
Department of Transportation
100 North Senate Avenue, Room N808
Indiana Government Center North
Indianapolis, Indiana 46204-2249

Dear Mr. Juricic:

The U.S. Fish and Wildlife Service (FWS) has determined that certain projects subject to Federal Highway Administration funding result in minimal impacts to fish and wildlife resources. Our review of such projects typically results in a response letter with a standard set of conditions to mitigate environmental impacts. To expedite the early coordination process, the FWS is providing a programmatic review for all such projects, as defined in this letter. The programmatic response applies only to projects with minimal impacts to fish and wildlife resources and no adverse effects on federally endangered or threatened species, as defined in this document.

For all projects to which this programmatic response applies, the following standard set of conditions will be in effect, and the FWS will not send an individual response to early coordination letters. For all projects in the "Programmatic Coordination" category of the accompanying Memorandum of Understanding (MOU), we request to be sent an early coordination letter; for projects in the "No Coordination Required" category, no letter will be sent.

These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (16 U.S.C. 661 et. seq.) and are consistent with the intent of the National Environmental Policy Act of 1969, the Endangered Species Act of 1973, and the U. S. Fish and Wildlife Service's Mitigation Policy.

Standard Conditions

1. Post DO NOT DISTURB signs at the construction zone boundaries and do not clear trees or understory vegetation outside the boundaries.
2. Restrict below low-water work to placement of piers, pilings and/or footings, shaping of the spill slopes around the bridge abutments, and placement of riprap.
3. Restrict channel work and vegetation clearing to within the width of the normal approach road right-of-way. In rural areas this should be feasible under current Indiana Natural Resources Commission policy, whereby it is not necessary

for a new bridge in a rural area to reduce the amount of headup compared to the existing bridge (when replaced on essentially the same alignment).

- 4. Minimize the extent of artificial bank stabilization.
- 5. If riprap is utilized for bank stabilization, extend it below low-water elevation to provide aquatic habitat.
- 6. Implement temporary erosion and siltation control devices such as placement of straw bales in drainage ways and ditches, covering exposed areas with burlap, jute matting or straw, and grading slopes to retain runoff in basins.
- 7. Revegetate all disturbed soil areas immediately upon project completion.
- 8. Avoid all work within the inundated part of the stream channel during the fish spawning season (April 1 through June 30), except for work within sealed structures such as caissons or cofferdams that were installed prior to the spawning season.

Projects for which Programmatic Coordination Applies

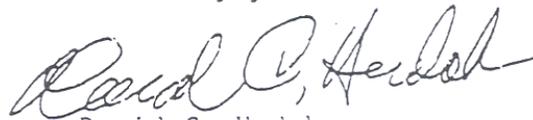
This programmatic coordination letter applies to all projects which are within the criteria described in the "Programmatic Coordination" section of the attached MOU. In general, it applies to all projects for which coordination is required, but which are not in any of the prohibited categories described in the MOU.

If information becomes available concerning federally endangered/threatened species, or other significant fish and wildlife resources, which might preclude the programmatic response for a specific project, it will be the responsibility of the FWS to inform INDOT within 60 days of receiving the early coordination letter that additional consultation will be necessary. If new endangered species information which would affect the project becomes available between early coordination and construction, the FWS will inform INDOT as soon as possible.

A permit under Section 404 of the Clean Water Act may be needed for the proposed project. We would probably not object to issuance of such a permit if the applicable aforementioned recommendations are incorporated into final project plans as currently proposed.

If you have any questions about our recommendations, please call (812) 334-4261.

Sincerely yours,



David C. Hudak,
Supervisor

Appendix N
Memorandum of Understanding,
Streamlining, and Reducing the Flow
of Early Coordination
Letters/Responses with the U.S. Fish
& Wildlife Service

MEMORANDUM OF UNDERSTANDING

Re: Streamlining and reducing the flow of early coordination letters/responses with the U.S. Fish and Wildlife Service

The goal for these revisions is the streamlining and reduction of early coordination responses needed from the USFWS for both INDOT and local public agency transportation projects. The potential to impact natural areas will be the guiding criteria on when and how coordination is to be done for USFWS. Any revisions to the current early coordination method must meet U.S. Fish and Wildlife's as well as the Indiana Department of Transportation's regulatory and legal needs, such as permitting, the Endangered Species Act, and various federal regulations and review authority.

There will be three types of coordination with the U.S. Fish and Wildlife Service - no coordination needed based upon the potential impacts of the project, programmatic coordination, and standard early coordination. As additional information becomes available concerning endangered species and other significant resources, the following data is subject to revision.

No Coordination Required

1. Bridge rehabilitation, widening and reconstruction projects within existing right-of-way. *
2. Improving railroad grade crossings. *
3. Small structure replacements. *
4. Access control (consolidation or elimination of access points). *
5. Road resurfacing, restoration, rehabilitation, reconstruction added shoulders, or added auxiliary lanes (e.g. parking, weaving, turning, climbing) within existing permanent right-of-way. *
6. Intersection improvements. *
7. Erosion control projects. *
8. Modernization of a highway by resurfacing, restoration, rehabilitation, reconstruction, adding shoulders, or adding auxiliary lanes that requires additional right-of-way if all of the right-of-way is currently in urban land usage. *
9. Highway safety or traffic operations improvement projects including installation of ramp metering control devices as long as within existing right-of-way. *

10. Acquisition of land for hardship or protective purposes. *

*All criteria discussed below in the programmatic coordination section must also be satisfied for no coordination to be necessary.

Programmatic Coordination

Certain types of impacts would allow a project to fall under a programmatic coordination where programmatic early coordination would occur, but the coordination would normally elicit no individual response. The programmatic response would be included in the Procedural Manual for Preparing Environmental Studies. This programmatic response from the U.S. Fish and Wildlife Service would supply generalized conditions, etc. required for the project as well as Section 7 clearance (see attached programmatic response). Should special, unforeseen circumstances occur requiring a response from the U.S. Fish and Wildlife Service, they will respond within 60 days. The following permit projects would be one criteria or "red button". The following list of criteria would disallow a project being programmaticly coordinated and thus would require standard early coordination:

- Projects requiring a Section 404 Permit (individual or nationwide) with jurisdictional wetlands contiguous to the roadway.
- The disturbance of natural areas in certain geographical regions (see attached list) - possible rare, threatened, and endangered species habitat.
- Any project that is located in the Karst region (see attached map)
- Any channel work below low water beyond that actually necessary for the installation of the structure.
- Any channel work above low water greater than 70' from the edge of the structure.
- Any new road alignment affecting more than one acre of natural habitat.
- Any project requiring a Section 4(f) (except for historic or archaeological 4(f)'s).

These criteria would apply only to those types of projects that fall under a regular categorical exclusion or require an Environmental Assessment/Finding of No Significant Impacts. Projects requiring a DEIS/FEIS would require standard early coordination.

INFORMATION NEEDED IN THE EARLY COORDINATION BY USFWS

Early coordination often includes too much of the wrong information and too little of the right information. To rectify this the following guidelines should be met:

- do not include engineer's reports or unnecessary engineering details.
- do include a biological report that minimally includes:
 - description of the habitats of the project area.
 - Dominant species for each habitat type.
 - any possible rare or endangered species habitat.
 - photographs of the project site.
 - aerial photography of the site at such a scale that existing and proposed right-of-way and natural features can be shown.
 - any unique, sensitive or unusual biological features or conditions that exist at the site.
 - describe any water features present.
- do include a basic description of the proposed project:
 - type of project.
 - length of project
 - existing and proposed right-of-way width.
 - maintenance of traffic
 - any impacts to surface waters or drainage of the project - work in or near streams, lakes, ditches, etc.
- do include past, current and proposed land uses in the proximity of the project.
- do include adequate graphics - U.S.G.S. quadrangle maps, aerial photographs, well labeled photographs of the site and NWI and County Soil maps if available.

David C. Hudak 9/17/93

Mr. David C. Hudak, Field Supervisor
U.S. Fish and Wildlife Service

James E. Juricic 9/28/93

Mr. James E. Juricic, Manager
Environmental Assessment Section
Indiana Department of Transportation

List of Geographic Locations Excluded from Programmatic Coordination Between
the Indiana Department of Transportation and the U.S. Fish and Wildlife
Service

County Locations

Lake, Porter, LaPorte (all locations within Lake Michigan watershed)
Clark (all locations within Silver Creek watershed)
Ohio, Ripley, Switzerland (bottomland meadows)

Streams and Rivers

Bear Creek and tributaries (Fountain County)
Big Walnut Creek (Putnam, Hendricks Counties)
Big Creek (Jefferson County)
Big Pine Creek (Warren County)
Big Blue River (Johnson, Rush, Shelby Counties)
Black River (Posey County)
Blue River, including South Fork (Crawford, Harrison, Washington Counties)
Buck Creek (Harrison County)
Cedar Creek (Allen, Dekalb Counties)
Clifty Creek (Montgomery County)
Cypress Slough Creek (Posey County)
Deep River (Lake, Porter Counties)
Driftwood River (Bartholomew County)
Eel River (Miami, Wabash Counties)
Elkhart River (Elkhart, Noble Counties)
Fall Creek (Warren County)
Fawn Creek (Lagrange, Steuben Counties)
Fish Creek (Dekalb, Steuben Counties)
Flatrock River (Shelby County)
Graham Creek (Jefferson, Jennins, Ripley County)
Grand Calumet River (Lake County)
Indian Creek (Harrison County)
Indian Creek (Montgomery County)
Indian-Kentuck Creek (Jefferson, Ripley Counties)
Iroquois River (Newton County)
Kankakee River
Kilmore Creek (Clinton County)
Laughery Creek (Dearborn, Ohio, Ripley Counties)
Little Blue River (Crawford County)
Little River (Allen, Huntington Counties)
Little Mosquito Creek (Harrison County)
Little Pine Creek (Warren County)
Little Indian Creek (Harrison County)
Little Calumet River East Fork (Porter County)
Little Creek (Jefferson County)
Lost River (Martin, Orange Counties)
Mississinewa River
Mosquito Creek, including West Branch (Harrison County)

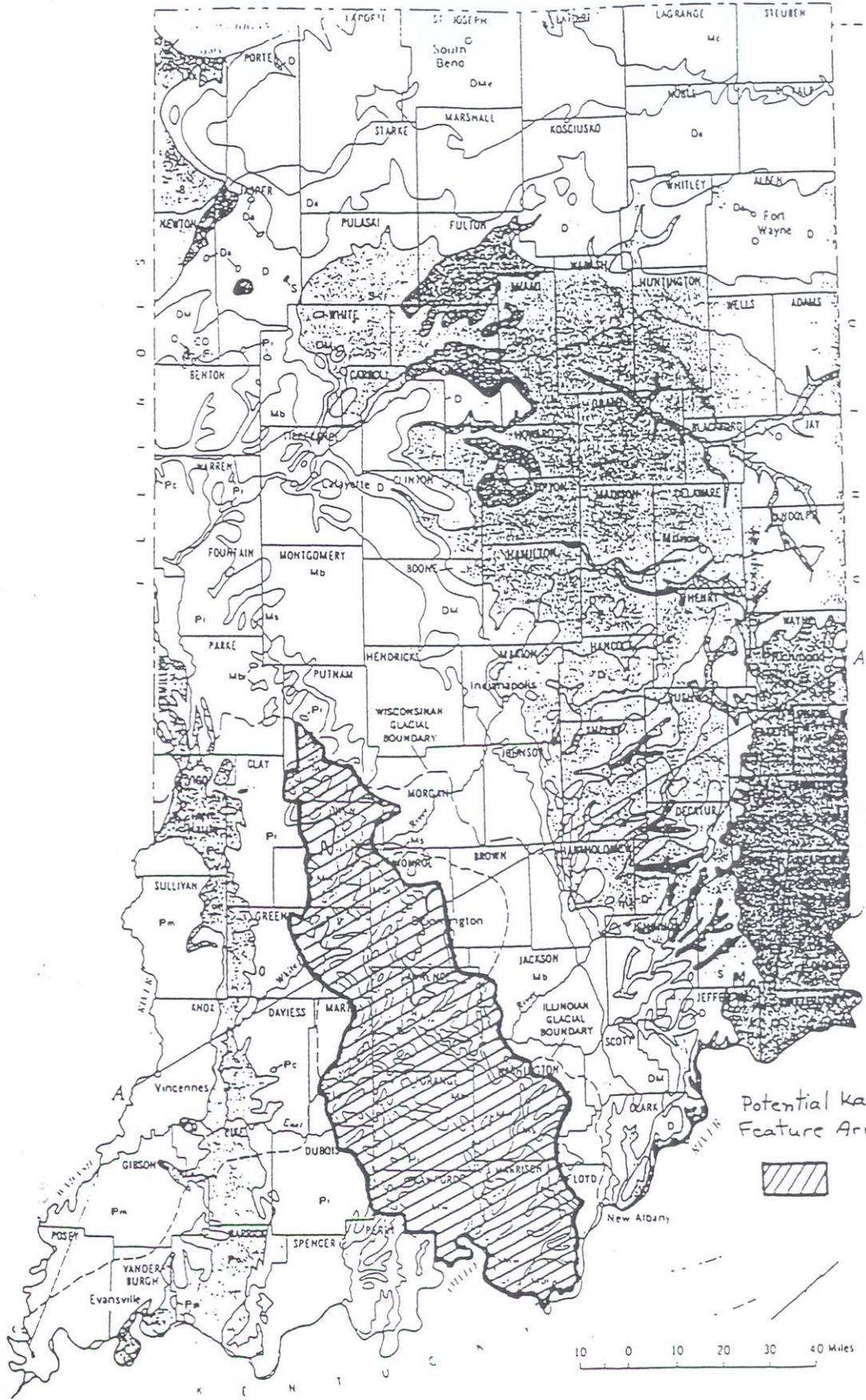
Mud Pine Creek (Warren County)
Muscatatuck River, including Vernon Fork
Ohio River
Oil Creek (Perry County)
Otter Creek (Jennings, Ripley County)
Patoka River (Gibson, Pike Counties)
Pigeon River (Lagrange County)
Rattlesnake Creek (Fountain County)
Rattlesnake Creek (Parke County)
Roaring Creek (Parke County)
Sand Creek (Barrtholomew, Decatur, Jackson, Jennings Counties)
South Branch Elkhart River (Noble County)
St. Joseph River (Elkhart, St. Joseph County)
Stinking Fork (Crawford County)
Sugar Mill Creek (Fountain, Parke Counties)
Sugar Creek (Montgomery, Parke Counties)
Sugar Creek (Johnson, Shelby Counties)
Tippecanoe River
Turkey Fork (Crawford County)
Wabash River
White River Mainstem (Gibson, Pike, Knox Counties)
White River West Fork
White River East Fork
Whitewater River (Fayette, Franklin Counties)
Wildcat Creek, all branches (Carroll, Clinton, Tippecanoe Counties)

Karst areas

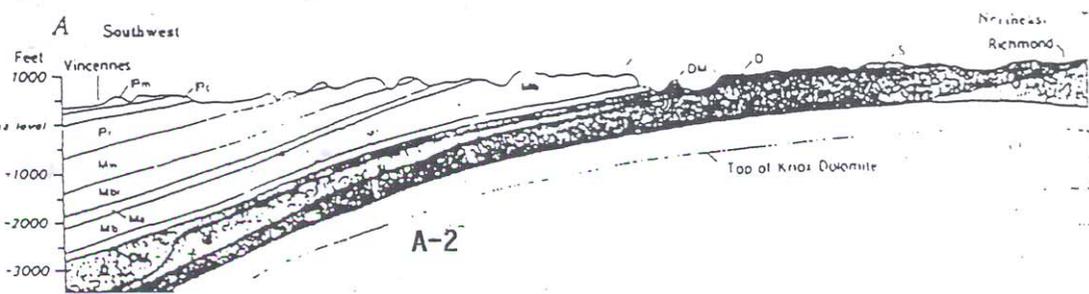
See accompanying map

EXPLANATION

- Pm**
McLeansboro Group
Shale sandstone limestone thin coals
- Pi**
Raccoon Creek Group
Sandstone shale clay limestone thin coals
- Pc**
West Baden and Stephensport Groups and upper Chesterian rocks
Shale sandstone limestone
- Mb**
Blue River Group
Limestone dolomite
- Mb**
Sanders Group
Limestone
- Mb**
Borden Group and Rockford Limestone
Shale siltstone limestone
- Mc**
Coldwater Shale
Gray shale
- Dwe**
Ellsworth and Sunbury Shales
Gray green and black shales
- Dw**
New Albany Shale
Black shale
- Da**
Antrim Shale
Black shale
- D**
Middle Devonian rocks
Limestone dolomite
- D**
Salina Formation
Limestone dolomite
- D**
Lower and middle Silurian rocks
Limestone dolomite siltstone shale
- D**
Upper Ordovician rocks
Shale limestone
- D**
Uppermost Cambrian and lower and middle Ordovician rocks
Dolomite limestone sandstone
- C**
Upper Cambrian rocks
Sandstone shale dolomite
Shown on cross section only
- oC**
Granite, basaltic, and metasedimentary rocks
Shown on cross section only



Potential Karst Feature Area



PENNSYLVANIAN
MISSISSIPPIAN
DEVONIAN
SILURIAN
ORDOVICIAN
CAMBRIAN

Potential Karst Area of Indiana

1. Approximate Boundaries:

North: southern boundary of Wisconsin glaciation
East: Spickert Knob Formation (Borden group)
South: Ohio River
West: Western edge of Mw (West Baden and Stephensport Groups and upper Chesterian rocks) outcrop area

2. Counties Included: (13)

Putnam	Greene	Dubois	Crawford
Morgan	Martin	Washington	
Owen	Lawrence	Floyd	
Monroe	Orange	Harrison	

Note: Four (4) counties (Clay, Jackson, Spencer and Perry) which have either Ms or Mw mapped within their borders are not included in the potential karst area for mainly two (2) reasons. The first is that no caves are listed in them in the 1961, Caves of Indiana by Richard Powell. The second is that Clay, Jackson and Spencer counties also had but very small intrusions of these rocks at the bedrock surface.

Although the Mw rocks do not contain the massive limestones in which karst features typically develop, it was selected as the western map boundary because it matched up very well with the cave location map included in the Caves of Indiana report.

Appendix O

Karst Memorandum of Understanding

Memorandum of Understanding

(Retyped of original text 3/14/2007)

This Memorandum of Understanding is made and entered into this thirteenth day of October, 1993, between the Indiana Department of Transportation (INDOT), the Indiana Department of Natural Resources (IDNR), the Indiana Department of Environmental Management (IDEM) and the U.S. Fish and Wildlife Service (USFWS) for the purpose of delineating guidelines for construction of transportation projects in karst regions of the State.

Whereas, INDOT, IDNR, IDEM and the USFWS wish to cooperate in the identification, study and treatment of drainage in karst regions related to the construction of transportation projects and

Whereas, INDOT, IDNR, IDEM and the USFWS accept responsibility to ensure the transportation needs of Indiana are met in an environmentally sensitive manner that protects the habitat of all species and

Whereas, design and construction practices must protect ground water quality, public health and safety, and the environment.

Whereas, the Indiana Department of Natural Resources will conform to the terms and conditions within this MOU for their transportation projects. Likewise, it will be IDNR's responsibility to provide standard biological review for projects in the karst region.

Therefore, in consideration of the terms and conditions set forth herein the INDOT, IDNR, IDEM and USFWS agree as follows:

1. INDOT in cooperation with the IDNR, IDEM and USFWS shall determine the location of sinkholes, caves, underground streams, and other related karst features and their relationship prior to proposed alterations or construction in karst regions of the state, a consultant with expertise in karst geology/hydrology may assist in the identification and characterization of the karst features. The choice of the consultant retained by INDOT will be subject to the review of IDNR, USFWS and IDEM.

2. Tasks to accomplish this work will include:

Research public and private information sources for information relative to karst features.

Conduct field check karst and cave features that appear from the first task and identify any additional karst features.

Prepare a draft report, with photographs and maps, drainage areas, and land use of that drainage area for each sinkhole or karst feature, dye-tracing and/or other geotechnical information to determine subsurface flow of water in the project area

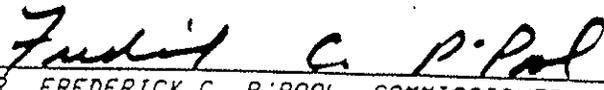
and surface water drainage patterns of the area. Calculations of estimates of annual pollutant loads from the highway and drainage with the right-of-way will be made, including prior to, during and post construction estimates. The design of the treatment of the karst features will take into consideration treatments necessary to meet the standards of the monitoring and maintenance plan.

That report will be used as a tool to assist in determining the proposed highway alignment. The intent of INDOT is to avoid karst areas and use alternate drainage where possible.

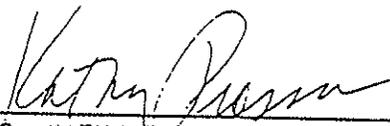
3. IDNR, IDEM and USFWS will be requested to review and comment on the findings at the early coordination phase of project development.
4. INDOT, using the input from IDNR, IDEM and USFWS will begin to formulate appropriate measures to offset unavoidable impacts to the karst features. It is understood by all parties that some of the methods proposed at this time will be generic and could be applied throughout the length of the corridor. Other methods may be specific to a particular cave or karst feature. Some of the approaches may require additional investigations to determine their necessity and/or their feasibility. A revised draft report will be prepared by INDOT's consultant and provided to the IDNR, IDEM and the USFWS as part of the design review process.
5. Drainage entering from beyond the right-of-way will be treated according to the same process as drainage generated by the project.
6. As the project progresses further into the design phase, the IDNR, IDEM and USFWS will be invited and will attend field checks and meetings dealing with efforts to negate or minimize adverse impacts.
7. Hazardous materials traps (HMT's) will be constructed at storm water outfalls and other locations that will protect karst features from spill contamination.
8. INDOT agrees to develop a monitoring and maintenance plan for the affected karst features. IDNR, IDEM and USFWS will be provided an opportunity to review this plan. The establishment of water quality and a point at which a standard is established for remediation will be a part of each monitoring plan. The results of the monitoring will be submitted to IDNR, USFWS and IDEM on a regular basis.
9. A low salt and no spray strategy will be developed for each future project. A signing strategy for these items will also be developed for each project.
10. Prior to acceptance of the final design plans an agreement will be developed which will set out the appropriate and practicable measures to offset unavoidable impacts to karst features. This agreement will be signed by the Department Director of IDNR, the Commissioner of the IDEM, the Commissioner of INDOT and the Supervisor of the USFWS Bloomington, Indiana Field Office. The agreement will become a part of

the contract documents for the project, will be discussed at the pre-construction conference and will be on file at the office of the project administrator.

11. INDOT will assure that the terms of the agreement will be completed with all safeguards given to the karst area. Special provisions, which are binding provisions that are a part of the contract, will be included outlining the precautions to be taken. Construction and design strategies for handling karst features will be discussed with the contractor(s) and project administrator during the pre-construction conference. Project administrator shall ensure that the contractor is following the new erosion control standards that meet Rule 5 of 327 IAC 13 and any special precautions outlined in the design plans that the sinkhole treatment is being handled correctly. The erosion control plan must be available at the project administrator's office. An emergency response plan will be made a part of the contract documents. In addition, the contract documents will contain a strategy for signing to alert the public to the fact that all types of spills are potentially hazardous to the karst environment. For INDOT, this plan would be procedure 20 of the Field Operations Manual dated 6/24/1992. [Currently in the Construction Activities Environmental Manual].
12. The location and nature of the sinkholes and drainage schematic will be provided to the IDEM. They will provide the information to the appropriate local authorities and the Hazmat teams. An emergency response plan will be followed. This constitutes procedure 20. Included in this information is an understanding that all types of spills are potentially hazardous to karst regions.
13. IDNR, IDEM and USFWS personnel will monitor construction and maintenance to the agreed upon terms, as deemed necessary.
14. If during construction it is found that the mitigation agreement must be altered, all of the agencies will be contacted and agreement reached prior to work continuing in that specific area of the project. In order to not unduly delay projects, a two working days response time is needed from the resource agencies.
15. Treatments will be maintained during construction by means of a visual inspection on a weekly basis or after every rain. Corrective action will be taken as needed.
16. If after the above procedure is followed and a state/federal endangered/threatened species is found during construction, work in that area of the project will stop. The IDNR and USFWS will be immediately notified. The IDNR and USFWS will promptly investigate the situation, advise the project administrator and assume responsibility for protecting the endangered species and taking the appropriate action.
17. This document will be reviewed annually or more frequently at the request of any of the foregoing agencies.


MR. FREDERICK C. P. POOL, COMMISSIONER
INDIANA DEPARTMENT OF TRANSPORTATION

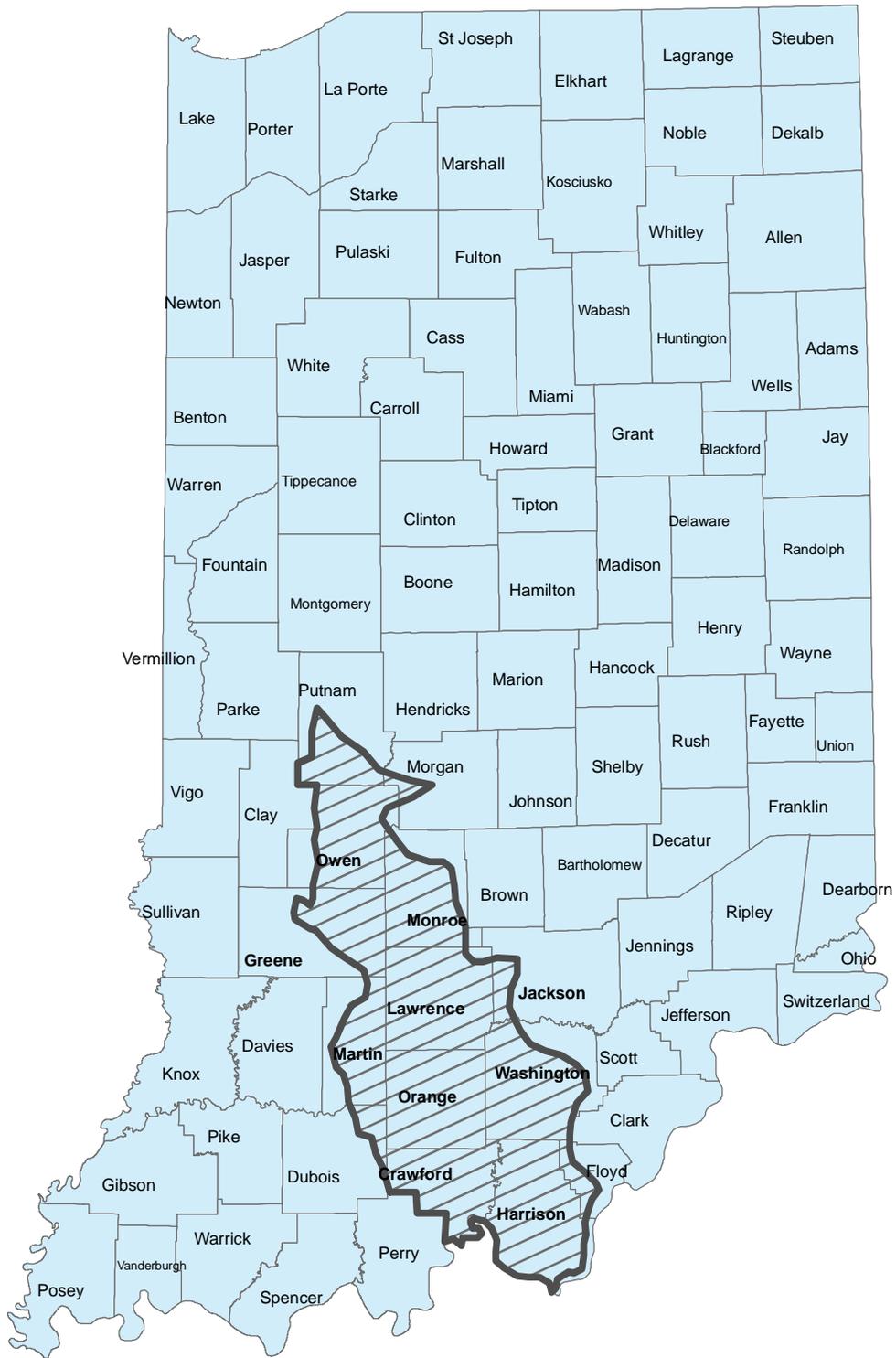

MR. PATRICK R. RALSTON, DIRECTOR
INDIANA DEPARTMENT OF NATURAL RESOURCES


MS. KATHY PROSSER, COMMISSIONER
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT


MR. DAVID C HUDAK, FIELD SUPERVISOR, BLOOMINGTON FIELD OFFICE
U. S. FISH AND WILDLIFE SERVICE

Appendix P

Potential Karst Features Area Map



 Potential Karst Features Region

Appendix Q
FHWA Guidance on *de minimis*
Section 4(f) Impacts



U.S. Department
of Transportation
**Federal Highway
Administration**

Memorandum

Sent Via E-mail

Subject: **ACTION**: Guidance for Determining *De Minimis*
Impacts to Section 4(f) Resources

Date: December 13, 2005

Original Signed by:

From: Cynthia J. Burbank
Associate Administrator, Planning, Environment
and Realty, FHWA
Brigid Hynes-Cherin, Associate Administrator
for Planning and Environment, FTA

Reply to
Attn. of:
HEPE

To: FHWA Division Administrators
FTA Regional Administrators

Section 6009(a) of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), Pub. L. 109-59, amended existing Section 4(f) legislation at Section 138 of Title 23 and Section 303 of Title 49, United States Code, to simplify the processing and approval of projects that have only *de minimis* impacts on lands protected by Section 4(f). This is the first substantive revision of Section 4(f) legislation since passage of the U.S. Department of Transportation Act of 1966. This revision provides that once the U.S. Department of Transportation (DOT) determines that a transportation use of Section 4(f) property, after consideration of any impact avoidance, minimization, and mitigation or enhancement measures, results in a *de minimis* impact on that property, an analysis of avoidance alternatives is not required and the Section 4(f) evaluation process is complete.

Section 6009(c) of SAFETEA-LU requires the U.S. DOT to conduct a study and issue a report on the implementation of the new Section 4(f) provisions. The study will include evaluation of: 1) the implementation processes developed and the resulting efficiencies; 2) the post-construction effectiveness of any impact mitigation and avoidance commitments adopted as part of the projects; and 3) the number of projects determined to have *de minimis* impacts, including information on the location, size, and cost of the projects. The initial study and report will address the first three years of implementation. The Federal Highway Administration (FHWA) Division and Federal Transit Administration (FTA) Regional Offices should maintain a record of the projects for which *de minimis* findings were made and track the progress of those projects in order to facilitate the future evaluation of the post construction effectiveness of any commitments of mitigation made as part of the *de minimis* finding. Additional guidance and information regarding the study and report will be provided in the future.



Questions and Answers on the Application of the Section 4(f) *De Minimis* Impact Criteria

Introduction

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) amendment to the Section 4(f) requirements allows the U.S. Department of Transportation (DOT) to determine that certain uses of Section 4(f) land will have no adverse effect on the protected resource. When this is the case, and the responsible official(s) with jurisdiction¹ over the resource agrees in writing, compliance with Section 4(f) is greatly simplified, as explained in this guidance.

The *de minimis*² impact criteria and associated determination requirements specified in Section 6009(a) of SAFETEA-LU³ are different for historic sites than for parks, recreation areas, and wildlife and waterfowl refuges. *De minimis* impacts related to historic sites are defined as the determination of either “no adverse effect” or “no historic properties affected” in compliance with Section 106 of the National Historic Preservation Act (NHPA)⁴. *De minimis* impacts on publicly owned parks, recreation areas, and wildlife and waterfowl refuges are defined as those that do not “adversely affect the activities, features and attributes” of the Section 4(f) resource.

The following questions and answers provide information and guidance on the process of determining *de minimis* impacts of highway and transit projects that propose the use of Section 4(f) property. A diagram of the determination process for parks, recreation areas, and wildlife and waterfowl refuges is included for illustration following the questions and answers.

1. General Information Regarding Application of the *De Minimis* Impact Criteria.

Question A. Are *de minimis* impact findings limited to any particular type of project or National Environmental Policy Act (NEPA) document?

Answer: No. The *de minimis* impact criteria may be applied to any project, as appropriate, regardless of the type of environmental document required by the NEPA process as described in the FHWA and FTA Environmental Impact and Related Procedures⁵.

Question B. What effect does the *de minimis* impact provision have on the application of the existing FHWA nationwide programmatic evaluations?

Answer: Existing FHWA programmatic Section 4(f) evaluations⁶ remain in effect and may be applied, as appropriate, to the use of Section 4(f) property by a highway project. However, since FTA does not have its own or share FHWA’s programmatic evaluations, the programmatic option applies only to FHWA projects and to multimodal projects in which FHWA and FTA are co-lead agencies.

¹ “Official(s) with jurisdiction” means the SHPO, THPO and ACHP, if participating in the consultation, for historic resources, and is defined in Question 3C for other Section 4(f) resources.

² Black's Law Dictionary (8th ed. 1999) defines *de minimis* as 1. Trifling, minimal. 2. (Of a fact or thing) so insignificant that a court may overlook it in deciding an issue or case. 3. *De Minimis Non Curat Lex, The law does not concern itself with trifles.*

³ Section 6009 amends 49 U.S.C. § 303 and 23 U.S.C § 138; see specifically 49 U.S.C. § 303(d) and 23 U.S.C §138(b)

⁴ 16 U.S.C. 470f, with implementing regulation at 36 CFR part 800

⁵ 23 CFR 771.115

⁶ <http://environment.fhwa.dot.gov/projdev/4fnspeval.htm>

Question C. Is it appropriate to apply the *de minimis* impact criteria to projects that are already in the project development process?

Answer: Yes. The Section 4(f) statutory amendment was effective immediately upon enactment of SAFETEA-LU and the *de minimis* impact criteria may be applied to projects currently in the project development process, where the requirements of a *de minimis* impact finding have been or will be satisfied. The decision to apply the *de minimis* impact criteria to those projects is a matter of agency choice and professional judgment. The factors that should be considered in decisions to apply the *de minimis* impact criteria to projects in the “pipeline” include, but are not limited to: 1) the stage of the NEPA or project development process the project is in; 2) the benefits to the project delivery schedule realized by applying the *de minimis* impact criteria; 3) the impact to the project delivery schedule due to other agency (e.g., SHPO and/or THPO and park authorities) or public concern; 4) the overall benefit to the project realized by the reevaluation of a more viable alternative through a *de minimis* impact finding; 5) the degree and type of controversy and/or public scrutiny related to the project; and 6) the resulting benefits realized to a Section 4(f) resource by the *de minimis* impact finding.

While the *de minimis* impact criteria may be applied to any project meeting the specified requirements, Section 6009(a) of SAFETEA-LU does not require the U.S. DOT to re-open decisions already made concerning Section 4(f) impacts of individual projects. Project sponsors are encouraged to examine projects currently in the environmental process to see if any would benefit from application of the *de minimis* impact criteria, but the decision must be made on a case-by-case basis.

Question D. Can a *de minimis* impact finding be made for a project as a whole, where multiple Section 4(f) resources are involved?

Answer: No. Where multiple Section 4(f) resources are present in the study area and potentially used by a transportation project, *de minimis* impact findings must be made for the individual Section 4(f) resources. The impacts to Section 4(f) resources and any impact avoidance, minimization, and mitigation or enhancement measures must be considered on an individual resource basis and *de minimis* impact findings made individually for each Section 4(f) resource. However, when there are multiple resources for which *de minimis* impact findings are appropriate, the procedural requirements of Section 4(f) can and should be completed in a single process, document and circulation, so long as it is clear that distinct determinations are being made. Also in these cases, the written concurrence of the official(s) with jurisdiction may be provided for the project as a whole, so as long as the *de minimis* impacts findings have been made on an individual resource basis.

Question E. What role does mitigation play in the *de minimis* impact finding?

Answer: The *de minimis* impact finding is based on the degree or level of impact including any avoidance, minimization, and mitigation or enhancement measures that are included in the project to address the Section 4(f) use. The expected positive effects of any measures included in a project to mitigate the adverse effects of a Section 4(f) resource must be taken into account when determining whether the impact to the Section 4(f) resource is *de minimis*. The purpose of taking such measures into account is to encourage the incorporation of Section 4(f) protective measures as part of the project⁷. *De minimis* impact findings must be expressly conditioned upon the implementation of any measures that were relied upon to reduce the impact to a *de minimis* level. The implementation of such measures will become the responsibility of the project sponsor, with FHWA or FTA oversight⁸.

⁷ Conference Report of the Committee of Conference on H.R. 3, Report 109-203, page 1057.

⁸ 23 CFR 771.109(b)

Question F. How should the *de minimis* impacts to Section 4(f) resources be considered in the alternative selection process when all feasible and prudent alternatives result in Section 4(f) use?

Answer: For those situations in which multiple Section 4(f) resources will be used by a project and it has been determined that no feasible and prudent avoidance alternatives exist, the *de minimis* impacts of Section 4(f) resources must be factored into the analysis to determine which alternative results in the least overall harm as described in the FHWA Section 4(f) Policy Paper⁹.

In most cases, the *de minimis* impacts will have little or no influence on the determination of overall harm because the activities, features and attributes of the Section 4(f) resources will not be adversely affected. Also, because potential adverse impacts to the Section 4(f) resources will be completely mitigated or enhanced by inclusion of such measures as part of the project in making *de minimis* impact findings, the Section 4(f) benefit should be included in the least harm analysis. Where it is not clear which alternative results in the least overall harm, consultation with the FHWA or FTA Headquarters or the FHWA or FTA Office of the Chief Counsel is recommended.

Question G. Can a *de minimis* impact finding be made for a “constructive use” of Section 4(f) property?

Answer: No. A *de minimis* impact finding can only be made where the transportation use would not adversely affect the activities, features, and attributes that qualify a property for protection under Section 4(f). Constructive use, by definition, involves impacts to a Section 4(f) resource such that the protected activities, features, and attributes would be substantially impaired¹⁰. Therefore, a *de minimis* impact finding would not be appropriate where there is a constructive use. Furthermore, if a potential constructive use can be reduced below a substantial impairment, with the inclusion of mitigation measures, then Section 4(f) would not apply.

Question H. Can a *de minimis* impact finding be made for a “temporary occupancy” of Section 4(f) property?

Answer: Yes. As long as the *de minimis* impact criteria are met, the impacts associated with a temporary occupancy of a Section 4(f) resource could be determined to be *de minimis*. It should be noted, however, that Section 4(f) does not apply to the temporary occupancy of Section 4(f) property when the conditions set forth in the FHWA and FTA Environmental Impact and Related Procedures¹¹ are satisfied. Therefore, application of the *de minimis* impact provision for these situations should only be considered when the project does not meet the temporary occupancy exception criteria.

Question I. Who makes the *de minimis* impact findings?

Answer: The FHWA Division Administrator or FTA Regional Administrator makes the *de minimis* impact findings. In the determination, FHWA or FTA shall consider any impact avoidance, minimization, and mitigation or enhancement measures that are included in the project to address the impacts and adverse effects on the Section 4(f) resource. The FHWA Division Administrator or FTA Regional Administrator must consider the facts supporting the determination of a *de minimis* impact, the record that was compiled in the coordination that must precede the determination of *de minimis* impact, the concurrence of the official(s) with jurisdiction, and use his or her own best judgment in making the *de minimis* impact finding. It is ultimately the

⁹ March 1, 2005, pages 6, 7; <http://www.environment.fhwa.dot.gov/projdev/4fpolicy.htm>

¹⁰ 23 CFR 771.135(p)(2)

¹¹ 23 CFR 771.135(p)(7)

responsibility of the FHWA or FTA to ensure that *de minimis* impact findings and required concurrences are reasonable.

Coordination with the FHWA or FTA Headquarters or the FHWA or FTA Office of the Chief Counsel is not required for routine *de minimis* impact findings but is recommended for controversial projects and complex situations.

2. *De Minimis* Impact Findings for Section 4(f) Uses of Historic Properties.

Question A. What are the requirements for a finding of *de minimis* impact on a historic site?

Answer: A finding of *de minimis* impact on a historic site may be made when:

- 1) The process required by Section 106 of the National Historic Preservation Act¹² results in the determination of "no adverse effect" or "no historic properties affected" with the concurrence of the SHPO and/or THPO, and ACHP if participating in the Section 106 consultation;
- 2) The SHPO and/or THPO, and ACHP if participating in the Section 106 consultation, is informed of FHWA's or FTA's intent to make a *de minimis* impact finding based on their written concurrence in the Section 106 determination; and
- 3) FHWA or FTA has considered the views of any consulting parties participating in the Section 106 consultation.

Question B. How should the concurrence of the SHPO and/or THPO, and ACHP if participating in the Section 106 determination, be documented when the concurrence will be the basis for a *de minimis* finding?

Answer: Section 4(f)¹³ requires that the SHPO and /or THPO, and ACHP if participating, must concur in writing in the Section 106 determination of "no adverse effect" or "no historic properties affected." The request for concurrence in the Section 106 determination should include a statement informing the SHPO or THPO, and ACHP if participating, that the FHWA or FTA intends to make a *de minimis* finding based upon their concurrence in the Section 106 determination.

Under the Section 106 regulation, concurrence by a SHPO and/or THPO may be assumed if they do not respond within a specified timeframe, but Section 4(f) explicitly requires their written concurrence. It is recommended that transportation officials share this guidance with the SHPOs and THPOs in their States so that these officials fully understand the implication of their concurrence in the Section 106 determinations and the reason for requesting written concurrence.

Question C. Certain Section 106 programmatic agreements (PAs) allow the lead agency to assume the concurrence of the SHPO and/or THPO in the determination of "no adverse affect" or "no historic properties affected" if response to a request for concurrence is not received within a period of time specified in the PA. Does such concurrence through non-response, in accordance with a written and signed Section 106 PA, constitute the "written concurrence" needed to make a *de minimis* finding?

Answer: In accordance with the provisions of a written and signed programmatic agreement, if the SHPO and/or THPO does not respond to a request for concurrence in the Section 106

¹² 16 U.S.C. 470f, with implementing regulation at 36 CFR part 800

¹³ 49 U.S.C 303(d)(2)

determination within the specified time, the non-response together with the written agreement, will be considered written concurrence in the Section 106 determination that will be the basis of the *de minimis* finding by FHWA or FTA.

FHWA or FTA must inform the SHPOs and THPOs who are parties to such PAs, in writing, that a non-response that would be treated as a concurrence in a “no adverse effect” or “no historic properties affected” determination will also be treated as the written concurrence for purposes of the FHWA or FTA *de minimis* impact finding. It is recommended that this understanding of the parties be documented by either appending the written notice to the existing PA, or by amending the PA itself.

Question D. For historic properties, will a separate public review process be necessary for the determination of a *de minimis* impact?

Answer: No. Section 6009(a) of SAFETEA-LU requires the U.S. DOT to consult with the parties participating in the Section 106 process but does not require additional public notice or opportunity for review and comment. Documentation of consulting party involvement is recommended. For projects requiring the preparation and distribution of a NEPA document, the information supporting a *de minimis* impact finding will be included in the NEPA documentation and the public will be afforded an opportunity to review and comment during the formal NEPA process.

3. De Minimis Impact Findings for Parks, Recreation Areas, and Wildlife and Waterfowl Refuges

Question A. What constitutes a *de minimis* impact with respect to a park, recreation area, or wildlife and waterfowl refuge?

Answer: An impact to a park, recreation area, or wildlife and waterfowl refuge may be determined to be *de minimis* if the transportation use of the Section 4(f) resource, including consideration of impact avoidance, minimization, and mitigation or enhancement measures, does not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f). Language included in the SAFETEA-LU Conference Report¹⁴ provides additional insight on the meaning of *de minimis* impact.

“The purpose of the language is to clarify that the portions of the resource important to protect, such as playground equipment at a public park, should be distinguished from areas such as parking facilities. While a minor but adverse effect on the use of playground equipment should not be considered a *de minimis* impact under section 4(f), encroachment on the parking lot may be deemed *de minimis*, as long as the public’s ability to access and use the site is not reduced.”

This simple example helps to distinguish the activities, features, and attributes of a Section 4(f) resource that are important to protect from those which can be used without resulting adverse effects. Playground equipment in a public park may be central to the recreational value of the park that Section 4(f) is designed to protect. When impacts are proposed to playground equipment or other essential feature, a *de minimis* impact finding will, at a minimum, require a commitment to replace the equipment with similar or better equipment at a time and in a location that results in no adverse effect to the recreational activity. A parking lot encroachment or other similar type of land use, on the other hand, could result in a *de minimis* impact with minimal mitigation, as long as there are no adverse effects on public access and the official(s) with jurisdiction agree.

¹⁴ Conference Report of the Committee of Conference on H.R. 3, Report 109-203, page 1057.

Question B. What are the requirements for a finding of *de minimis* impact with respect to a park, recreation area, or wildlife and waterfowl refuge?

Answer: The impacts of a transportation project on a park, recreation area, or wildlife and waterfowl refuge that qualifies for Section 4(f) protection may be determined to be *de minimis* if:

- 1) The transportation use of the Section 4(f) resource, together with any impact avoidance, minimization, and mitigation or enhancement measures incorporated into the project, does not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f);
- 2) The official(s) with jurisdiction over the property are informed of FHWA's or FTA's intent to make the *de minimis* impact finding based on their written concurrence that the project will not adversely affect the activities, features, and attributes that qualify the property for protection under Section 4(f); and
- 3) The public has been afforded an opportunity to review and comment on the effects of the project on the protected activities, features, and attributes of the Section 4(f) resource.

Question C. What officials are considered to be “officials with jurisdiction” over a park, recreation area, or wildlife or waterfowl refuge for the purposes of the *de minimis* impact finding?

Answer: The officials with jurisdiction are the officials of an agency or agencies that own or administer a Section 4(f) property and who are empowered to represent that agency on related matters. In some cases, the agency that owns or administers the land has either delegated or relinquished its authority to another agency. In those cases, FHWA or FTA should review the applicable agreements to determine which agency or agencies have the authority to concur in the assessment of impacts to the property.

Question D. How should Section 6(f) of the Land and Water Conservation Fund Act (LWCFA) or other U.S. Department of Interior (DOI) grants-in-aid programs be treated in *de minimis* impact findings?

Answer: *De minimis* impact findings will satisfy Section 4(f) requirements only. For projects that propose the use of land from a property or site purchased or improved with funds under the LWCFA, the Federal Aid in Fish Restoration Act (Dingell-Johnson Act), the Federal Aid in Wildlife Act (Pittman-Robertson Act), or other similar law, or the lands are otherwise encumbered with a Federal interest, coordination with the appropriate Federal agency is required to ascertain the agency's position on the land conversion or transfer. Other federal requirements that may apply to the Section 4(f) land should be determined through consultation with the officials with jurisdiction or appropriate DOI or other federal official. These federal agencies may have regulatory or other requirements for converting land to a different use. These requirements are independent of the *de minimis* impact finding and must be satisfied.

Question E. Is consultation with DOI routinely required for *de minimis* impact findings?

Answer: No. As a routine matter, FHWA and FTA do not need to consult with the DOI on *de minimis* impact findings. Where the Section 4(f) resource involved is owned or administered by the DOI, FHWA or FTA will need the written concurrence of the appropriate DOI official as the official with jurisdiction. If the Section 4(f) resource is encumbered with a Federal interest as a result of a DOI grant, then the answer to Question D applies.

Question F. Does the concurrence of the official(s) with jurisdiction over the Section 4(f) resource need to be in writing?

Answer: Yes. The concurrence of the official(s) with jurisdiction that the protected activities, features, and attributes of the resource are not adversely affected must be in writing. The written

concurrence can be in the form of a signed letter on agency letterhead, signatures in concurrence blocks on transportation agency documents, agreements provided via e-mail or other method deemed acceptable by the FHWA Division Administrator or FTA Regional Administrator. Obtaining these agreements in writing is consistent with effective practices related to preparing project administrative records.

Question G. What constitutes compliance with the public notice, review and comment requirements related to *de minimis* impact findings?

Answer: Information supporting a *de minimis* impact finding should be included in the appropriate NEPA document prepared for the project. This information includes, at a minimum, a description of the involved Section 4(f) resource(s), the impact(s) to the resources and any impact avoidance, minimization, and mitigation or enhancement measures that are included in the project as part of the *de minimis* impact finding. The public involvement requirements related to the specific NEPA document and process will, in most cases, be sufficient to satisfy the public notice and comment requirements for the *de minimis* impact finding.

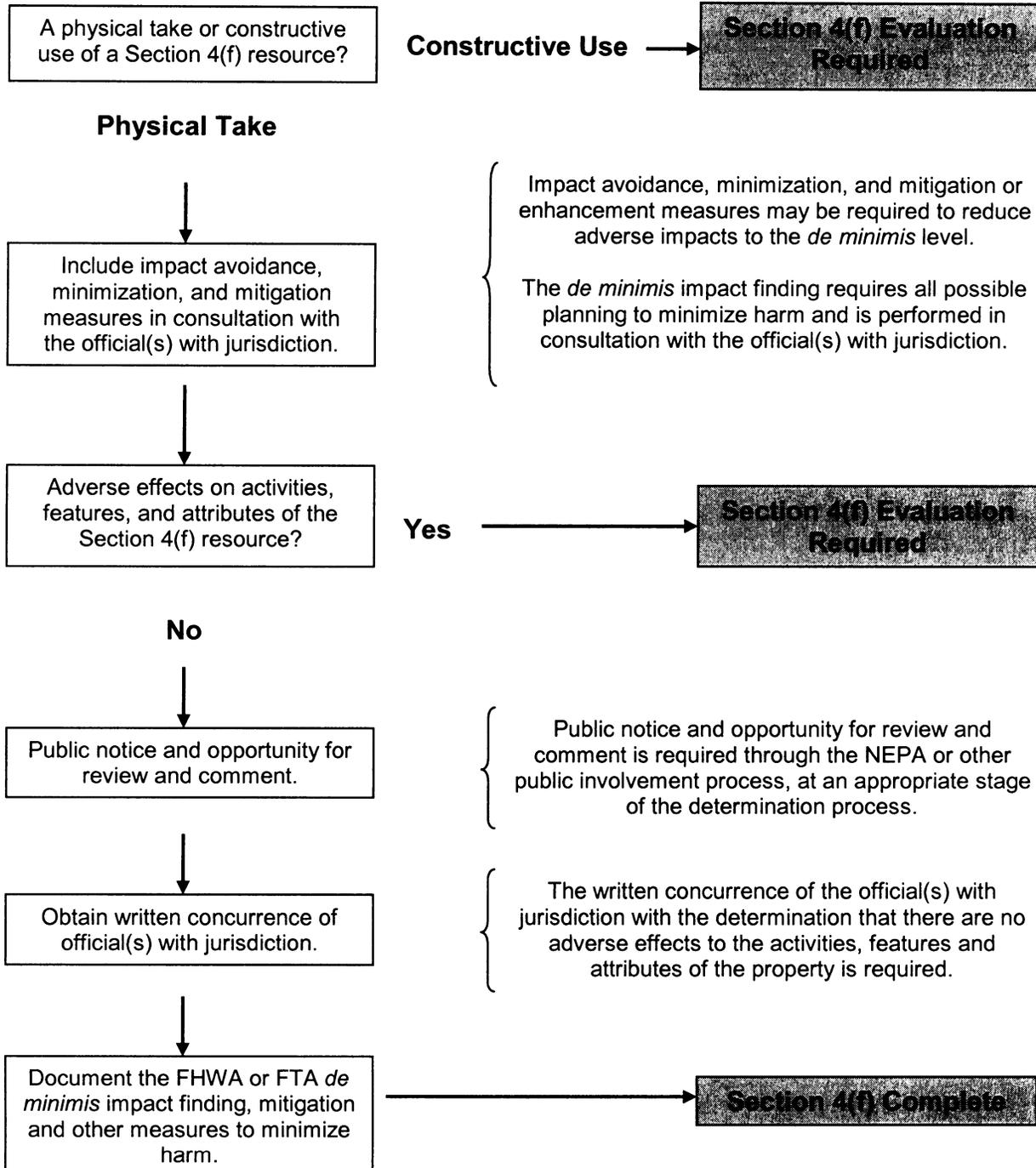
In general, for highway projects, the public notice and comment process related to *de minimis* impact findings will be accomplished through the State DOT's approved public involvement process¹⁵.

For those actions that do not routinely require public review and comment (e.g., certain categorical exclusions and reevaluations) but for which a *de minimis* impact finding will be made, a separate public notice and opportunity for review and comment will be necessary. In these cases, appropriate public involvement should be based on the specifics of the situation and commensurate with the type and location of the Section 4(f) resource(s), impacts and public interest.

All comments received and responses thereto, shall be documented in the same manner that other comments on the proposed action would be handled. Where public involvement was initiated solely for the purpose of a *de minimis* impact finding, responses or replies to the public comments may not be required, depending on the substantive nature of the comments. All comments and responses shall be documented in the administrative record.

¹⁵ 23 CFR 771.111(h)(1))

Suggested Section 4(f) *De Minimis* Impact Determination Process for Parks, Recreation Areas, and Wildlife and Waterfowl Refuges



Appendix R

National Natural Landmarks

NATIONAL NATURAL LANDMARKS

- | | |
|--|---|
| Big Walnut Creek | Meltzer Woods |
| Cabin Creek Raised Bog | Officer's Woods |
| Calvert and Porter Woods Nature Preserve | Ohio Coral Reef (Falls of the Ohio) |
| Cowles Bog | Pine Hills Natural Area |
| Davis-Purdue Agriculture Center Forest | Pinhook Bog |
| Donaldson Cave System and Woods | Pioneer Mother's Memorial Forest |
| Dunes Nature Preserve | Portland Arch Nature Preserve |
| Fern Cliff | Rise at Orangeville |
| Hanging Rock and Wabash Reef | Rocky Hollow-Falls Canyon Nature Preserve |
| Harrison Spring | Shrader-Weaver Woods |
| Hemmer Woods | Tamarack Bog Nature Preserve |
| Hoosier Prairie | Tolliver Swallowhole |
| Hoot Woods | Wesley Chapel Gulf |
| Kramer Woods | Wesselman Park Woods |
| Marengo Cave | Wyandotte Cave |



Appendix S

National Historic Landmarks

NATIONAL HISTORIC LANDMARKS SURVEY

NATIONAL PARK SERVICE
1849 C Street, N.W. Room NC-400
Washington, DC 20240

LISTING OF NATIONAL HISTORIC LANDMARKS BY STATE

INDIANA (37)

ALLEN COUNTY COURTHOUSE.....	07/31/03
FORT WAYNE, ALLEN COUNTY, INDIANA	
ANGEL MOUNDS.....	01/29/64
VANDERBURGH COUNTY, INDIANA	
AUBURN CORD DUESENBERG AUTOMOBILE FACILITY	04/05/05
AUBURN, DEKALB COUNTY, INDIANA	
BAILLY, JOSEPH, HOMESTEAD	12/29/62
PORTER COUNTY, INDIANA	
BROAD RIPPLE PARK CAROUSEL.....	02/27/87
INDIANAPOLIS, MARION COUNTY, INDIANA	
BUTLER FIELDHOUSE.....	02/27/87
INDIANAPOLIS, MARION COUNTY, INDIANA	
CANNELTON COTTON MILL	07/17/91
CANNELTON, PERRY COUNTY, INDIANA	
COFFIN, LEVI, HOUSE	06/23/65
FOUNTAIN CITY, WAYNE COUNTY, INDIANA	
DEBS, EUGENE V., HOME.....	11/13/66
TERRE HAUTE, VIGO COUNTY, INDIANA	
DONALD B. (Towboat) RELOCATED FROM OHIO	12/20/89
VEVAY, SWITZERLAND COUNTY, INDIANA	
ELEUTHERIAN COLLEGE CLASSROOM AND CHAPEL BUILDING	02/18/97
LANCASTER, JEFFERSON COUNTY, INDIANA	
FIRST BAPTIST CHURCH.....	05/16/00
COLUMBUS, BARTHOLOMEW COUNTY, INDIANA	
FIRST CHRISTIAN CHURCH.....	01/03/01
COLUMBUS, BARTHOLOMEW COUNTY, INDIANA	
GAFF, THOMAS, HOUSE (Hillforest).....	10/05/92
AURORA, DEARBORN COUNTY, INDIANA	
GROUSELAND	12/19/60
VINCENNES, KNOX COUNTY, INDIANA	
HARRISON, BENJAMIN, HOME.....	01/29/64
INDIANAPOLIS, MARION COUNTY, INDIANA	
INDIANA WORLD WAR MEMORIAL PLAZA HISTORIC DISTRICT.....	10/11/94
INDIANAPOLIS, MARION COUNTY, INDIANA	
INDIANAPOLIS MOTOR SPEEDWAY.....	02/27/87
SPEEDWAY, MARION COUNTY, INDIANA	
IRWIN UNION BANK AND TRUST	05/16/00
COLUMBUS, BARTHOLOMEW COUNTY, INDIANA	
LANIER MANSION	04/19/94
MADISON, JEFFERSON COUNTY, INDIANA	
LINCOLN BOYHOOD HOME	12/19/60
SPENCER COUNTY, INDIANA	
MADAME C.J. WALKER MANUFACTURING COMPANY	07/17/91
INDIANAPOLIS, MARION COUNTY, INDIANA	
MADISON HISTORIC DISTRICT	03/20/06
MADISON, JEFFERSON COUNTY, INDIANA	
McDOWELL, MABEL, ELEMENTARY SCHOOL	01/03/01
COLUMBUS, BARTHOLOMEW COUNTY, INDIANA	
MILLER HOUSE	05/16/00
COLUMBUS, BARTHOLOMEW COUNTY, INDIANA	
NEW HARMONY HISTORIC DISTRICT	06/23/65
NEW HARMONY, POSEY COUNTY, INDIANA	
NORTH CHRISTIAN CHURCH	05/16/00
COLUMBUS, BARTHOLOMEW COUNTY, INDIANA	
OLDFIELDS	07/31/03
INDIANAPOLIS, MARION COUNTY, INDIANA	

RILEY, JAMES WHITCOMB, HOUSE	12/29/62
INDIANAPOLIS, MARION COUNTY, INDIANA	
SHREWSBURY, CHARLES, HOUSE	04/19/94
MADISON, JEFFERSON COUNTY, INDIANA	
SPENCER PARK DENTZEL CAROUSEL	02/27/87
LOGANSPOUT, CASS COUNTY, INDIANA	
STUDEBAKER, CLEMENT, HOUSE	12/22/77
SOUTH BEND, ST. JOSEPH COUNTY, INDIANA	
TIPPECANOE BATTLEFIELD.....	10/09/60
TIPPECANOE COUNTY, INDIANA	
WALLACE, GENERAL LEW, STUDY	05/11/76
CRAWFORDSVILLE, MONTGOMERY COUNTY, INDIANA	
WALLACE CIRCUS WINTER HEADQUARTERS	02/27/87
PERU, MIAMI COUNTY, INDIANA	
WEBSTER, MARIE, HOUSE.....	11/04/93
MARION, GRANT COUNTY, INDIANA	
WEST BADEN SPRINGS HOTEL	02/27/87
WEST BADEN SPRINGS, ORANGE COUNTY, INDIANA	

APPENDIX A

The numerous designations within the National Park System sometime confuse visitors. The names are created in the Congressional legislation authorizing the sites or by the president, who proclaims "national monuments" under the Antiquities Act of 1906. Many names are descriptive -- lakeshores, seashores, battlefields --but others cannot be neatly categorized because of the diversity of resources within them. In 1970, Congress elaborated on the 1916 National Park Service Organic Act, saying all units of the system have equal legal standing in a national system.

National Park [NP]

These are generally large natural places having a wide variety of attributes, at times including significant historic assets. Hunting, mining and consumptive activities are not authorized.

National Monument [NM]

The Antiquities Act of 1906 authorized the President to declare by public proclamation landmarks, structures, and other objects of historic or scientific interest situated on lands owned or controlled by the government to be national monuments.

National Historic Site [NHS]

Usually, a national historic site contains a single historical feature that was directly associated with its subject. Derived from the Historic Sites Act of 1935, a number of historic sites were established by secretaries of the Interior, but most have been authorized by acts of Congress.

National Historic Park [NHP]

This designation generally applies to historic parks that extend beyond single properties or buildings.

National Memorial [NMem]

A national memorial is commemorative of a historic person or episode; it need not occupy a site historically connected with its subject.

National Battlefield [NB]

This general title includes national battlefield, national battlefield park, national battlefield site, and national military park. In 1958, an NPS committee recommended national battlefield as the single title for all such park lands.

Other Designations [OD]

Some units of the National Park System bear unique titles or combinations of titles, like the White House.

APPENDIX B

NATIONAL PARK SYSTEM UNITS AUTOMATICALLY LISTED IN THE NATIONAL REGISTER

INTERNATIONAL HISTORIC SITE	[IHS]
NATIONAL BATTLEFIELD	[NB]
NATIONAL BATTLEFIELD PARK	[NBP]
NATIONAL BATTLEFIELD SITE	[NBS]
NATIONAL HISTORIC SITES	[NHS]
NATIONAL HISTORICAL PARK	[NHP]
NATIONAL MEMORIAL	[NMEM]
NATIONAL MILITARY PARK	[NMP]
NATIONAL MONUMENT	[NM]

INDIANA

GEORGE ROGERS CLARK NHP
LINCOLN BOYHOOD NMEM