

Threatened & Endangered Species In LPA Context



MoDOT Environmental Presentation

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Welcome.

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Three “C’s” to Remember for Completing Threatened and Endangered Species requirements

Communication

Compliance

Clearance

a.k.a. the Who, When, Why, What, and How of T&E clearance for LPA Federal Aid
Transportation projects

The intent of this brief presentation is to inform Federal Aid recipients (sponsors) and their consultants of the requirements, reasons, and processes for obtaining threatened and endangered species clearance on your project. Every step along the way must be documented.

Communication is Essential

- Complete exchange of information with sponsor (consultant for the sponsor)
- Communication lines within MoDOT between Environmental, District LPA, CO LPA, Construction (PS&E documents)

Good communication:

- Involves complete exchange of information with understanding
- Allows evaluation of impacts for project scope and any changes
- Forms the solid basis for clear documentation
- Ensures compliance with regulatory authorities
- Ensures that projects have necessary clearances for R/W and PS&E
- Helps stay on schedule and avoid delays

Within MoDOT—

- RER NEPA document: clearances or pending or N/A (always a reference)
- Between T&E specialist and NEPA coordinators (more info, clearances)
- T&E/NEPA staff/Liaisons (special circumstances, problems, delays)
- T&E to construction through JSPs (contract JSPs, tree clearing ahead of contract)

Role of MoDOT NEPA Environmental Staff

Act on behalf of FHWA

Compliance with state and federal laws
through all phases of project development
to maintain eligibility for federal funding.

All phases means starting in the planning phase and continues through the NEPA process, project development, design, construction, and maintenance.

Federal Transportation funding for any part of the project triggers the full NEPA process from beginning to end. The full NEPA process means documented Threatened and Endangered species requirements.

Environmental Compliance

Compliance is the legal obligation to follow through on commitments.

Track the completion of commitments through Design and Construction with DOCUMENTATION.

Examples: NEPA document, impact assessment, consultation, Job special provisions, construction plan notes, construction diary

(<https://www.fhwa.dot.gov/federal-aidessentials/catmod.cfm?id=59>)

Federal Aid Essentials for Local Public Agencies video for some of this material (several examples)

National Environmental Policy Act (NEPA)

NEPA requires consideration of the physical environment for any project using federal funding OR requiring federal permits.

- Reminder: NEPA is a Decision making process
- If you don't document it, it didn't happen
- FHWA is watching –catching it on CAP reviews

- FHWA requires the same level of T&E documentation for ALL projects, regardless of classification level, even down to PCE (programmatic categorical exclusions).
- T&E is treated the same for ALL levels of NEPA projects with the same consideration, evaluation, and determination process. There is no step down process for a PCE VS a CE2, EA, or EIS.
- Bigger projects will naturally have larger size impact area. However, the significance of the T&E impact is not dictated by the size of the project.
- A county dirt road Low Water Crossing with less than 0.5 ac tree clearing could conceivably have MORE impact to T&E listed species than an intersection relocation project with 5+ ac of tree clearing.
- All are evaluated individually. Impact size and location of project elements will be discussed a little later with programmatic consultation.

LPA Policy and RER

- Law requires MoDOT to administer funds allocated to state and sub-allocated to LPA.
- Purpose of RER:
 - exchange and record necessary information
 - document approvals from FHWA and resources agencies
 - RER is the NEPA document for classifications below CE2
- MoDOT reviews all submittals and provides technical expertise regarding potential impacts to natural environment.

*RER=Request for Environmental Review

RER-Request for Environmental Review is the MoDOT/FHWA NEPA master document for project submittal and documentation for project review-milestones, clearance dates, incomplete items, commitments available for all to see. Sub-allocation programs: BRO, STP, TAP, CMAQ, others

Based on complete project details, MoDOT reviews the existing environmental conditions, all applicable regs and policies, the consequences of specific actions, and methods and means to avoid or minimize negative impacts.

NEPA coordinators are making sure all applicable reviews and documentations are completed by the sponsor.

EXCEPTION: T&E requirements must ALSO be reviewed by MoDOT Environmental Specialist for official documentation and any needed USFWS consultation-this section is a combination of sponsor and MoDOT effort.

Important to Note

The RER is a master document

it IS a fluid document

it IS the Sponsor's document

it IS an official record

it DOES need to be updated

it IS required to be accurate by FHWA

The RER is initiated very early, sometimes within 5% plans or development of the project. However, don't leave it 5% complete as you progress through your project. Unless you have a very simple project, like resurfacing-new signals-etc, you probably don't have all the project information fields ironed out when you initiate the RER.

Please don't forget to update all fields in the RER as your project progresses-you know your project, you have all the details. That includes the attachments and information for T&E assessments. T&E assessments could take more than a single day to complete and should be started early. E.g., photos should be taken early in the project development, but not before you have a solid idea of all footprint area, easements, ground disturbance limits. If you cannot give a clear picture of T&E impacts, then you might need to develop the project some before submitting all assessments for T&E. If your area of impact or scope changes, that must be documented with the liaison, NEPA coordinator, T&E specialist, and RER updates.

*please consider 30+% plans (but not 90%) appropriate time to start and complete the T&E assessments.

Subset of Resource Agency T&E Clearances

MDC-MO Dept of Conservation

Protect and manage fish, forest, and wildlife resources of the state (STATE resources)

USACE-US Army Corps of Engineers

Protect Nation's aquatic resources/navigation while allowing reasonable development through fair and balanced decisions (404 permit)

USFWS-US Fish and Wildlife Service

Administers Endangered Species Act (ESA) for the Protection, recovery, and conservation of nation's imperiled species and species at risk (FEDERAL resources)

Required to consider all applicable state and federal laws for natural resource impacts, includes any state listed species and federally protected species.

- MDC state endangered species require consideration and protection. Species and communities of Conservation Concern required consideration. All possible impacts must be documented (reference Level 1-3 on MDC Natural Heritage Reports).
- USACE-shall not issue the 404 permit (*federal permit*) until verifying satisfaction of USFWS T&E requirements. Many versions of permit language, some specifically call for submission of FHWA/MODOT T&E determinations and consultation. Others reference 'all other state and federal requirements/clearances/laws' before the permit is considered valid. The basic message is, all USFWS T&E requirements must be completed in order to get a valid permit.
- USFWS Endangered Species Act Section 7 requirements are for FEDERAL AGENCIES. Any Federal nexus triggers USFWS requirements on a project. When there are fed transportation dollars, FHWA is the LEAD FEDERAL AGENCY for T&E clearances. This is why USACE is to defer to clearance obtained by FHWA/MODOT. If there are no transportation dollars, but a Federal USACE Permit is needed, then USACE is the lead federal agency.
- FHWA has made MoDOT its designated non-federal representative for Sect 7 requirements (more discussion later slides).

What is 'T&E Clearance'?

MoDOT verifies all T&E requirements have been met-this does not END the T&E process, just verifies that the project can move forward

- Complete T&E assessment
- Correct and document determination of effect for EACH federally listed species
- Environmental commitments
- Consultation for any species with a May Affect determination
- USFWS concurrence, verification, and clearance date

The T&E section will be marked 'pending' until all requirements have been met.

This means either

1. the completed assessments are used to document No Effect (verified by MoDOT) on any federally listed species or designated critical habitat, in which case the assessments and determinations are recorded as 'No Effect' and a clearance date is given.

OR

2. The completed assessments document that the project May Affect, but is Not Likely to Adversely Affect federally listed species and conservation measures shall be applied to the contract to limit negative impacts (i.e., commitments such as seasonal tree clearing or staying out of stream during restriction dates).
- In such a case, USFWS consultation is necessary—FHWA is the lead federal agency responsible for assuring USFWS consultation has been completed—by delegation of authority, MoDOT is the only non-federal representative that can complete that step.
 - MoDOT submits/verifies consultation and environmental commitments for the project and communicates the clearance date for concurrence/approval from USFWS on the RER (T&E section marked 'cleared')
 - Any commitments must be documented on the RER and through the construction contract (job special provision, plans notes, pre-bid and/or pre-construction discussions, construction diary) to document compliance with federal requirements.
 - T&E clearance means the sponsor has completed all the necessary steps to evaluate

T&E impacts, has addressed any commitments which will be needed, and promised to include all commitments through construction to comply with federal requirements

Milestones Tied to T&E Clearance

NEPA classification approval dependent on:

- Section 106 National Historic Preservation Act*
- Section 4(f) / Section 6(f)*
- Section 7 Endangered Species Act (T&E)
- Noise for anticipated CE2 level document

Request for R/W Acquisition Authority AFTER NEPA Classification Approval

USACE 404 permit authorization dependent on:

- Section 106 National Historic Preservation Act
- Section 7 Endangered Species Act (T&E)

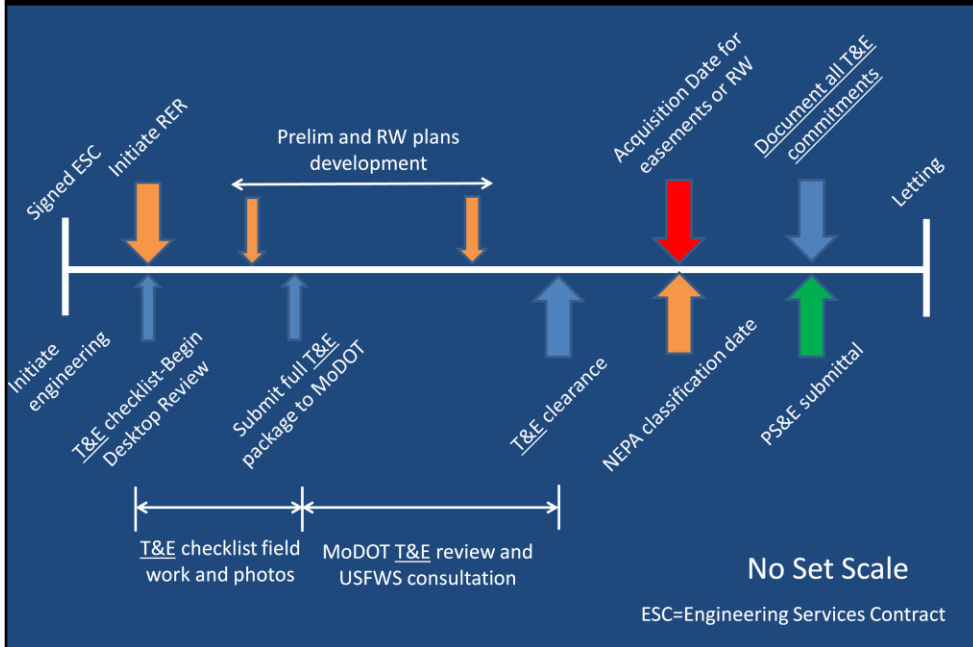
*separate training available for this topic

- T&E clearance is needed for finalizing NEPA classification approval, R/W acquisition (easements, too), and any 404 Permit authorization. Start submitting details for T&E at the beginning of a project, shortly after awarding the Engineering Services Contract-ideally during early design (preliminary phase)
- The initiation of NEPA starts with the submittal of an RER, and several categories are cleared within the first 1-3 months of initiation (farmland, floodplain, storm water, FEMA/SEMA, socio-economic, haz waste, noise, and 4(f)/6(f))- usually the easier categories.
- The project is then waiting for plans development, T&E, wetlands/404, 106, and NEPA classification approval. Although timelines are improving, we are still not seeing initiation of T&E submittal until just before A-date schedule, sometimes 6 months to over 1 yr after NEPA initiation (starting the RER). Considering these milestones, you can see how not getting the T&E clearance approved can delay other parts of the project.

****PLEASE PUT FED TRANSPORTATION PROJECT ID ON EVERY AGENCY DOCUMENT****
e.g., Sponsor/consultant Project Prefix and Project number BRO-B057(017) should be on: ●106 letter to SHPO ●official 4(f)/6(f) documentation ●ALL T&E documents (IPaC & MDC description, Letter with T&E assessments, Plans) ●USACE 404 permit applications

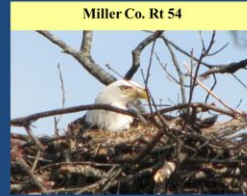
--Regulatory agencies do communicate with each other and with MoDOT about these projects. The Project Number is critical to avoid duplicating efforts and delays projects.

Generic T&E milestones within project timeline



Purpose of the ESA

Endangered Species Act
administered by the US Fish and Wildlife Service



- Prevent species from becoming extinct
- Prohibits “Take” = harm, harass, kill
- Protect habitats essential to species survival
- Promotes the recovery imperiled fish, wildlife, and plants

A nice reference is included on the FHWA Federal Aid Essentials for Local Public Agencies website. There are numerous links to all aspects of LPA processes.
<https://www.fhwa.dot.gov/federal-aidessentials/index.cfm>

There are specific materials for NEPA, Environmental Assessments, and the Endangered Species Act as well: <https://www.fhwa.dot.gov/federal-aidessentials/catmod.cfm?id=39>

Threatened or Endangered?

- A species is listed as “threatened” if it “is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.”
- A species is listed as “endangered” if it is “in danger of extinction throughout all or a significant portion of its range.”



Designated Critical Habitat (CH)

USFWS required to designate CH for listed species when it is 'prudent and determinable'

Very specific physical and biological features that a species needs for life processes and successful reproduction. Documented requirements published.

Critical habitat is not the same as suitable habitat.

This is not just the habitat area where a species can be found. This is a federal level designation made by the US Fish and Wildlife Service based on specific physical and biological criteria necessary for the species to survive and reproduce.

- Space for individual and overall population growth, and for normal behavior
- Cover or shelter
- Food, water, air, light, minerals, or other nutritional or physiological requirements
- Sites for breeding and rearing offspring, germination, or seed dispersal
- Habitats that are protected from disturbances or are representative of the historical geographical and ecological distributions of the species.

Critical habitat represents a very small portion of suitable habitat— **you can definitely have suitable habitat in the project area even if there is no Critical habitat.**

Federal Agency Responsibilities Under Section 7 of the ESA

- Conservation Obligation under Section 7(a)(1)
- Consultation Obligation under Section 7(a)(2)
 - Federal agencies are required to consult with the USFWS before taking any action that has the potential to affect listed species or designated critical habitat.

Conservation Obligation Section 7(a)(1)

- Federal agencies have a duty to promote the conservation of threatened and endangered species.
- There is broad discretion in how to carry out conservation obligations.
- Efforts are “proactive”.

Consultation Obligation Section 7(a)(2)

- Federal agencies comply using Section 7 regulations.
- Efforts are “reactive”.

Basic Section 7 Effect Determinations

- No Effect on T&E species or CH
- May Affect, but Not Likely to Adversely Affect T&E species or CH (informal)
- May Affect, and Likely to Adversely Affect T&E species (formal-take-mitigation)

These effect determinations are part of the FHWA permanent decision-making record.

Projects will not be approved if they are Likely to Jeopardize the continued existence of a species or will Destroy or Adversely Modify CH. *

*Extremely unlikely for any DOT/L:PA project in Missouri.

Note: for most species, LPA projects are unlikely to even reach Likely to Adversely Affect category.

This is just to illustrate that virtually every project can obtain clearance for T&E impacts. Goal is to assess impacts early in the project development in case modifications and commitments are needed to complete consultation.

The exception could be IN and NLE bats with changing status and continued decline, the future of DOT impacts and level of effect is fluctuating.

WHY??? Does MoDOT Need All the T&E Info From Sponsors

- ESA Sect 7 required of Federal Agencies (FHWA)
- FHWA has made MoDOT its designated non-federal representative for Sect 7 requirements*
- MoDOT cannot further delegate that authority to sponsors or consultants
- MoDOT responsible for documenting Effect Determinations and any necessary consultation

*there's a letter, see notes and EPG 136.6.4.5.2

*LPA EPG 136.6.4.5.2 FHWA non-federal designation letter

MoDOT has the ultimate responsibility to document completed T&E reviews, but MoDOT does not have sufficient manpower to address all LPA projects as we do for internal MoDOT STIP project. Therefore, we must rely on sponsors/consultants to provide all the necessary information to make effect determinations and conduct consultation. This is why we have been and continue to make improvements in the T&E review and submittal process.

Suggestions for using resources wisely

Sponsors have the responsibility for RER and all clearances, including T&E assessments and submittals to MoDOT.

Options:

- Sponsor prepares and submits T&E
- Sponsor hires consulting firm which has qualified staff to carry out T&E
- Consultant to the sponsor hires a sub-consultant qualified to complete T&E

Otherwise, the Sponsor is dependent on limited MoDOT staff to conduct or correct field work and assessments and determinations IN ADDITION TO completing any necessary Sect 7 consultation. This option is becoming less and less available—this should be the least attractive option. Future increases in number and size of LPA projects will further limit the ability of MoDOT staff (which will not be increasing) to assist with the basics.

That is the premise behind this T&E training for consultants and sponsors. To train the non-experts how to gather required information and make impact assessments for their own projects.

High Level Basic Steps

Sponsor Responsibilities

Award and/or ESC* executed > Checklist Review > Desktop Review
Plan and conduct field work > Checklist as Guide > Collect Information
Assess and justify impacts
Submit complete T&E assessment to MoDOT (starts T&E clock)
Commitments

MoDOT T&E Responsibilities

Review & evaluate assessment
Review additional resources for cave/karst/other protected resources
Document Effect determination
No Effect and clearance or consultation with commitments
Communicate commitments-verify approval-clearance

*Engineering Services Contract

Sponsor Responsibilities

Once Awarded and/or ESC executed, become familiar with all items on T&E checklist and begin desktop review.

- Timing is important- **submit early**, prior to 404 application, during plans development
- Concurrent with other reviews, for example don't wait until receiving 106 clearance
- IPaC list, MDC report, habitat lists, tree clearing? Bridge/culvert?, aerial imagery, project footprint

Use desktop review and project details to plan and conduct field work.

- Use checklist as guide for completing all steps
- Location and amount of tree clearing (quality photos)
- Habitat assessments (quality photos) Suitable bat habitat trees? Suitable aquatic habitat? Suitable plant habitat? Caves/sinkholes? Federal and state listed species
- Bridge or culvert checks for birds/bats evidence (quality photos)

Write up impact assessments **with justification** for each fed and state listed species from desktop review.

Submit complete T&E assessment (starts the T&E review clock).

- More complete and accurate the assessment= faster processing
- Agreements for any commitments, such as date restrictions, work pad restriction, additional surveys

MoDOT T&E Responsibilities

Review & evaluate assessment

- for completeness and details to justify the impacts noted/expected in T&E submittal document Effect determination
- Gather additional information if necessary-MO Speleological Survey cave database agreement and MDC database for other protected resources not available to public
- Correct or agree with sponsor submitted impacts to listed species (federal and state)
- Document official Sect 7 Effect Determinations for USFWS requirements (becomes part of RER records)

No Effect or USFWS consultation

- No Effect determination completes the T&E review
- A May Affect determination needs USFWS consultation, MoDOT will submit
- Concurrence = clearance, may require conservation commitments for validity

Communicate commitments

- Commitments are reiterated back to sponsor
- Commitments should be noted as plan notes, design modification, seasonal restrictions, JSPs, and documented in Construction documents for compliance

Refer to T&E SUBMITTAL CHECKLIST

Threatened and Endangered Species Federal Aid Transportation Submittal Checklist for MoDOT/FHWA

Date: _____ County and Route: _____ Federal Aid Transportation ID: _____

Section 1

Complete all items. Refer to Section 2 for reference photos and examples. This form does **NOT** take the place of the T&E assessment and **MUST** accompany the assessment submittal, with **ALL** supporting documentation attached.

If plans are available, indicate Plan Stage at T&E assessment submittal: plans attached

Preliminary Plans Right of Way Plans Final Plans for PS&E

1. Obtain official species list: IPaC Online tool at <http://ecos.fws.gov/ipac/>
2. Obtain MDC MO Natural Heritage Review : online <https://naturalheritagereview.mdc.mo.gov/>
 - Level 1? No known Issues, submit to MoDOT Environmental with assessment
 - Level 2 or 3? **Must** contact MDC directly following directions on report. Must address any issues on MDC Review Report in T&E assessment. Submit all to MoDOT with assessment for noted state resources

checklist

Desktop Information, Website submittals

Top to Bottom, discussion live.

- The new Checklist will replace existing LPA EPG fig. 136.6.18
- Self explanatory categories. Links provided so that even someone completely new to the process relying on LPA EPG and this checklist should be able to complete the steps

This is not new information—just trying a new format.

- In 2016, we updated the LPA EPG T&E section, included a longer video, and a new fig LPA Environmental T&E RER Guidance. Have been pushing this information out for years and we are constantly looking for ways to connect

T&E Submittal Checklist

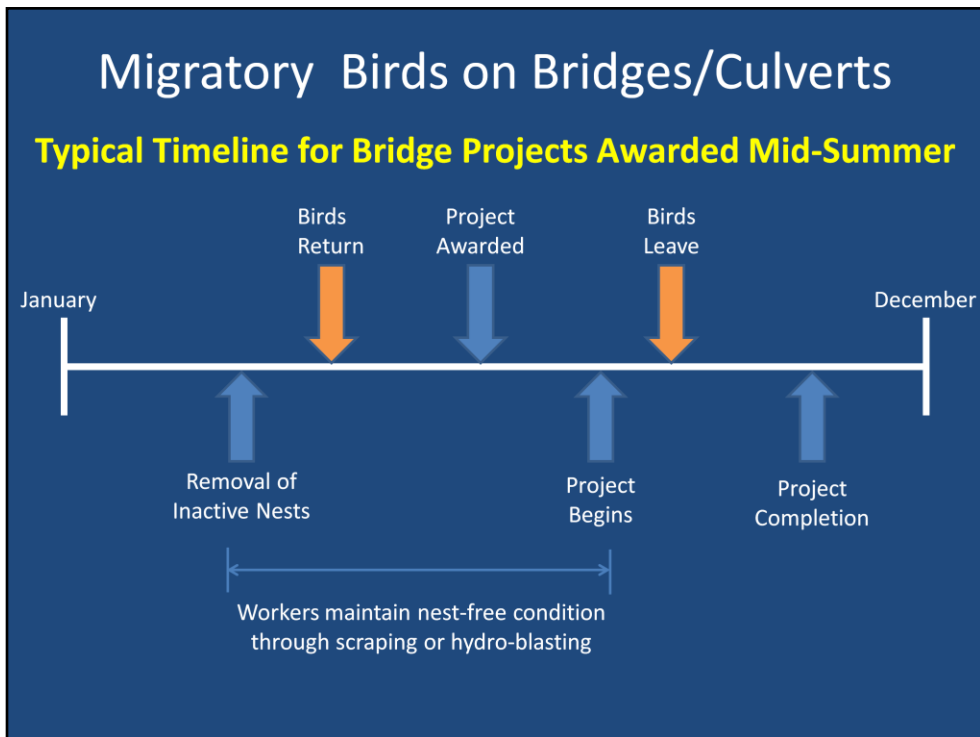
Plans—the clarification is necessary because we only get one shot at reviewing these.

Our EPG refers to steps to be completed before preliminary design phase (PDP)...I bet we rarely get a job that starts the NEPA process prior to some kind of plans development. There are probably cases where no plans are being developed, really. Therefore, indication of the situation requested on the Checklist.

1. Desktop information- USFWS official species list (How to Video, Ch 1.)-must be the official species list, for FHWA fed trans aid job, identified in project description
2. Desktop information- MDC state species of concern, Endangered, or special

communities. (MDC tutorial video) NOTE: the sponsor is supposed to be following up on Level 2 (state monitored species issues) or Level 3 (federal protected species issue), and the documentation received even tells them to do so.

3. Steps 1.-3. Use more desktop resources, aerial images of the project area, Google maps and street view, Google earth, topographic maps, any other online resources that describe the current project area.



Typical scenario for dealing with birds on bridges. For LPA, local forces can remove existing nests during the INACTIVE season and monitor twice a week during active season (generally April 1 to July 31) to scrape off any nests being rebuilt. Schedules can be adjusted to get that work under contract. Another option, when you know you have an issue early in the project development phase, is to attempt to schedule bridge deck work (demo or deck removal or painting, etc) outside active season.

This information represents Desktop review material and applies to birds on bridges or in box culverts. Future LPA EPG improvements may include this graphic possibly with other relatively common date restrictions for environmental consideration.

T&E CHECKLIST cont.

Tree Clearing

3. Tree clearing (**anything over 3 inches in diameter**)

"Unknown" or leaving blank are not acceptable [note: Update any changes as the design progresses]

NO, indicate 'none' in appropriate box on RER AND in assessment, go to item #5

YES, Amount, location, time of year for tree removal must be indicated in assessment; amount in appropriate box on RER, complete item #4

If you are uncertain at the time of submittal, please indicate your best guess for example "possible, under 0.5 ac", "probable, 1-2 ac" on the RER and in assessment

Submit location of all tree clearing either on plan strip map, aerial, other drawing

checklist

Should match RER information

Land Disturbance: **RER**

Will project involve 1 acre but less than 5 acres of land disturbance: Yes	Will project involve 5 acres or more of land disturbance: Unknown	Acres of Tree Clearing: 0.2 acres
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Step 4 moves to actually conducting the habitat assessment of trees in the project area.

3. Tree clearing details (yes, down to 3-in diameter, specifically noted in USFWS documentation for northern long-eared bats)

Please note: although we do want sponsors to start the process early, and there may be some missing or unknown information at the time (like Easements TBD), if the sponsor is pretty sure of the project footprint they should be filling in something about the tree clearing. If they (including consultants) have seen the site on aerial and/or in person they should have a pretty good idea of all the elements needed to complete the job.

- For example, if the road/bridge will be raised, there will need to be fill and a wider footprint=maybe more tree clearing.
- If the job includes installing storm water features or moving other utilities, they should have a pretty good idea of the area needed on the ground to accomplish that=estimate of all tree clearing.
- If it's perhaps a sidewalk job and there will be no additional improvements that would widen the footprint, maybe there is no tree clearing.

The plans footprint, aerial schematic, photos, and description should all match. If I get 'none' for tree clearing on the RER then 12 photos of trees in the general project area, and no plans or good description for explanation, the **conflicting details** from one section to another = **delay** for me to either request additional information and/or visit the site myself.

If the **photos are not detailed enough** for me to see the justification or assist in making

the determination of suitable trees for bats or not, there is a **delay** for more information-better photos-and/or visit the site myself. Including an aerial, strip map, or schematic of location of trees to be clearing and those assessed is helpful.

*GOOD information with the complete T&E package submittal speeds up the review and determination process. **Mis-leading or missing information delays the process.***

T&E CHECKLIST cont.
Tree Clearing

4. Tree Habitat Assessment

*All trees three inches in diameter and above should be assessed for these characteristics. Suitable bat roost trees consist of live or dead hardwood trees which have **shingle-like or loose bark** providing **space for bats to roost underneath the bark** or trees with **cavities, splits, crevices, hollow sections, and other damage.***


photograph trees to be removed, obtain close-up photos of suitable parts of tree, specifically any area with damage, cavities, excessively rough or flaky bark, gaps under bark, bark peeling away or falling in sheets from branches and tree trunks (refer to sample photos)

checklist

Tree Habitat Assessment: Compare photos and descriptions of trees to be removed with definition of suitable summer bat roost habitat.

suitable not suitable unsure

Sponsor will commit to clear suitable bat roost trees only during the non-breeding season, between November 1 and March 31.



MoDOT's checklist, photos examples, and training will hopefully address the gap between what we need and what we get. The Checklist does have photo examples of the quality we are needing.

*There is a video explanation of bat tree and bird/bridge assessments and typical preferred habitat for federally listed species in the LPA EPG.

The topic of tree photos still seems to be too vague. I need to know: if you're clearing trees and if those trees qualify as suitable summer bat roost habitat for Indiana and northern long-eared bats. I don't need a photo of every tree in the project area. I don't even need a photos of every possible tree that might be cut down.

IF you are unsure how to conduct an assessment on a tree, I need a photo of it. IF a tree which will be removed is over 3-inches in diameter and has any of the suitable characteristics of a bat roost tree, I need a photo of it. IF you are pretty sure you have suitable bat roost trees, but not sure if they'll need to be removed, I need photos and plan sheets with tree clearing locations that will be updated throughout design.

The more familiar you become with assessing trees as possible bat habitat, the less time and coordination it will take to obtain and submit quality photos and details for T&E assessments. Please also include text descriptions of possible suitable roost trees in the project limits, too. E.g., 'there are 4 standing dead trees in the project limits, 3 with cavities and loose bark'

Bridge and Box Culvert Projects

Important assessment for Migratory Bird Treaty Act

(evidence of birds nesting on the structure)

AND

Reports on evidence of bat use of the bridge

(for federal listed species AND state wildlife concerns)

AND

Habitat assessment for aquatic species

5. Existing bridge, low water crossing, or box culvert?

NO, Go to Item #7

standard bridge project photos: stream under the bridge, view across the stream (left and right abutments, piers, and left and right banks), banks and vegetation upstream and downstream, view of both road approaches

YES, evaluate for nesting birds and bat staining/guano

Date evaluated: _____

There are times when a consultant/sponsor will photograph the underside of a bridge, stating there are no bird nests, when they have actually captured a photo of a nest. Not often, but it happens, and that's one purpose of this process. To justify the determinations being made by the sponsor/consultant. Dated bridge checks are important. Bridge evaluations are good for 1-2 years from the date of assessment.

Some are very good at describing where on the bridge they searched, what they searched for, and what they found (usually negative results for bat sign and bird nests)—that detailed description is also acceptable. But it must be one or the other, preferably both. **Providing neither adequate photos or detailed assessment description causes a delay** and an extra trip to the site for someone.

Habitat assessments for aquatic species are rarely addressed, and it's better if I have good photos of the stream, banks, substrate, combined with aerials and plans/project limits to assess suitability of habitat without conducting a follow up site visit.

Bridge and Box Culvert Projects

6. Migratory Bird and bat assessment

If the project involves bridgework, photograph the undersides of bridges illustrating the presence/absence of any bird nests or unusual staining on the substructure or underside of the deck. Take note of 90-degree angles on the outside of the bridge, between girders, at pier caps, expansion joints, and abutment walls, if applicable.

photograph underside of bridge in all areas including pier caps, abutment walls, under expansion joints or underside of box culvert, specifically any areas with:

A. Nests of birds Y/N

B. Brown staining or smears (oily spots) Y/N

C. Droppings (guano) Y/N

Note: if YES for B or C, check all crevices on the bridge for bat sign and send memo of findings with checklist.

Bridge memorandum completed? Y/N



Links and reference materials

136.6.4.5 Threatened and Endangered Species

Threatened and endangered (T&E) species considerations for FHWA funded projects include potential impacts to rare plants, animals, critical habitat and natural communities (e.g., caves, prairies, karst). To comply with federal laws, project sponsors are required to thoroughly address any impacts their projects might have on federally listed T&E species.

The state of Missouri also tracks the status of over 1,000 plant and animal species that are considered rare in the state. Of these, 64 are listed as state endangered (current as of the 2016 Missouri Species of Conservation Concern publication). The state Endangered Species Law and the Missouri Wildlife Code protect state listed species. All FHWA funded projects in Missouri must also address potential impacts to state listed species.

Threatened and Endangered Species Program Guidance Videos

[Chap. 1, Overview and Background Information](#)

[Chap. 2, Common Field Assessments: Bats and Birds](#)

[MDC Tutorial: Natural Heritage Review](#)

Coming soon: T&E checklist and listed species habitats references

LPA EPG 136.6.4.5 Threatened and Endangered Species. Since 2016, MoDOT Environmental has updated all the LPA EPG T&E language, produced and improved videos, provided and guidance document for T&E submittals.

There are two Chapter videos, “how to” for the T&E submittal

Chapter 1: Overview and Background Information covers the intro to the T&E process and desktop information that can be gathered for the project to plan on-site visits for habitat assessments. The Desktop review includes the first three steps on the checklist.

Chapter 2: Common Field Assessments: Bats and Birds covers the two most common issues for field visits. The video goes over both identifying and photographing suitable summer bat roost trees AND signs to look for under bridges for bat use. Birds nesting on bridges are the next most common field assessments needed for project review, and the video description and shows images of the locations to check and what birds nests on bridges look like. This video also mentions the seasonal restrictions for tree clearing (bats) and bridge demo (for birds). MoDOT will be including a list of habitat descriptions for each federal T&E species as reference for LPA assessments in the LPA EPG. The Field portion for data collection and photographs covers steps 3.-6. on the checklist.

Step 7. Habitat Assessments

- It is the responsibility of the LPA to make a written evaluation of their project impacts.
- Make an impact assessment and justify that conclusion based on the habitat needs compared to habitat present in the project impact area.

End of checklist, standard language about exactly what to submit and what MoDOT will do next

The language has always advised making a written impact assessment for each federal species listed on the IPaC List AND on MDC state endangered or species or communities of conservation concern from the Official Species List and the Heritage Review.

Recent MoDOT Environmental Section realization (as of March 2018)-there are NO LPA on-call consultants with Environmental certifications (through MoDOT) beyond the basic training for LPA videos. So, this summer the Central Office Environmental and LPA groups decided to begin training ASAP for existing sponsors and consultants.

The ultimate goal of training is to communicate this requirement to the sponsor/consultant and describe what conducting a habitat assessment means or looks like.

The assessments need to make sense based on the sponsor's or consultant's experience. I'd rather see-this species requires "x" habitat and we seem to have "x" habitat, therefore we may have an affect on this species. I will always review the materials and the assessment, correct or agree with the determinations, and document effects officially for FHWA-becomes part of the RER.

One area where habitat assessments for listed species fail is when there are aquatic species listed: mussels, fish, cave dwelling species. Usually it goes like this: no "x"

species were encountered during field surveys therefore no effect.

- Unless the consultant is providing evidence that they know how to conduct a proper mussel survey (or other species), did in fact perform a mussel survey, and provided all the data from that survey—this statement is misleading.
- If they rely on these statements and do not assess whether the project area has suitable habitat for the species, then it causes a delay for re-doing field work or waiting for me to assess the project.

For years MoDOT Environmental has given examples of general ways to handle aquatic species-if aquatic species are listed in IPaC BUT your project will not involve aquatic habitat (no stream in project area), then you can conclude there will be no impact to suitable habitat for aquatic species.

Other Examples: “This project does not involve any tree clearing so there will be ***no effects*** on summer roosting habitat for listed bat species” or “MDC notes that aquatic species are known from this bridge location, and work should be restricted in the stream between 3/15-6/15. Work in the stream ***may have an impact*** on listed fish or mussel species, therefore the sponsor commits to no stream work between those dates”. (a similar example was included on the T&E RER Guidance sheet published June 2016)

Basics of Section 7 Consultation

- Only MoDOT can submit on behalf of FHWA
- Based on project information, field work, and assessment from the sponsor
- Any conservation commitments (e.g. tree clearing restrictions, stream restrictions) included
- Concurrence documented as part of the RER
- Communicate completion to sponsor
- Follow through on commitments becomes compliance

As discussed before, MoDOT cannot further delegate the responsibility of Section 7 compliance to sponsors or consultants.

However, it's so important to get the assessment documented and complete, because that is the information needed to justify No Effect or all the details for May Affect, but Not Likely to Adversely Affect + USFWS consultation for T&E clearance.

Almost all are aware of the tree clearing dates (Nov 1-Mar 31) for bats.

Caution, many sponsors/consultants have the habit of committing to tree clearing dates, assuming no effect to the bats that way, and never complete a habitat assessment- this delays the process and causes more work for me and for them.

- This habit is also detrimental when the project schedule will not allow compliance with that commitment without some extra work (for me and for them).
- Best to understand WHY there is a commitment, address whether it's needed, and say upfront if the commitment can be kept or if the sponsor needs to work with MoDOT for alternatives.
- This is one reason we want complete T&E submittals early in design. It's a good idea to expect complete T&E submittal at least 6 months ahead of anticipated A-Date, and if no A-date, 6 months ahead of PS&E.

- Range wide Programmatic consultation for bat habitat for IN and northern long-eared bats. Certain criteria allow the use of this shortened consultation-no tree clearing more than 100' from the existing road and commit to the tree clearing restriction dates. We are even venturing into additional streamlining in limited situations (for now) for immediate concurrence following these criteria.
- Other species do not have a programmatic agreement and will generally take 30 working days from MoDOT submittal to concurrence (allows sufficient review time).
- Rarely, additional species surveys (e.g., mussels) are needed before completing the T&E assessments. Not all species can be surveyed at all times of the year. If you need a mussel survey, you can expect to add 4-6 months to your project T&E clearance.

MoDOT will attach Section 7 concurrence documentation to the RER for the permanent record.

- I have been reiterating the commitments (like a JSP) in the concurrence notification.
- I have been including a reference to submit complete T&E documents to USACE for 404 permit review.

FHWA is looking for the completed circle, the documentation of compliance for T&E commitments.

- This can be accomplished with plans notes and inclusion of JSP in design and PS&E documents.
- I have been including a reminder to the sponsor to record the completion of the commitments in the construction diary, especially if work (like tree clearing in the proper season) is completed ahead of the construction contract.
- FHWA may be requesting a separate commitments checklist for NEPA compliance.

List of Working Solutions to Improve T&E assessments

Continue to update LPA EPG references to T&E

- Round 1 under review by FHWA
- Round 2 to be submitted soon

T&E Training for non-experts

- Ongoing- CO-May 2018, KC/NW July 2018, NE/STL/SE Sept 2018, SW/CD/overflow Oct 2018, STL Sponsors Nov 2018, TEAM Mar 2019

Continue to offer one-on-one Assistance

- Field visits with consultants and sponsors
- Remote assistance –email and phone

- Several sections are under review by FHWA right now for the first round of updates
- Second round of updates will include even more T&E assistance/references
- Ongoing-LPA CO staff and Environmental Staff collaborated to offer MoDOT's T&E training to sponsors and consultants.
- When possible, or when deemed necessary, I will meet consultants and locals on site, usually for Bat Tree assessments. The field trip is usually the thing that makes it stick....but not always. Sometime soon we are going to have to insist on sponsor/consultant staff that are qualified to do this work.

Summary for T&E in an LPA Context

- FHWA is the lead Federal Agency
- Sponsor is responsible for all RER information
- Open communication will improve quality
- Improving quality will in turn improve the efficiency
- Current innovation focus- training for non-experts

- Federal Aid Transportation projects are funded by and ultimately the responsibility of FHWA.
- The agreement for the project is between FHWA and the sponsor-don't lose sight of that.
- Sponsor is responsible for all RER information, even if they contract it out.
- When it's not getting done, or done inefficiently, it hurts the process in delays, miscommunication, misunderstandings.
- Improving the quality of the T&E submittals is the main goal.
- We have to get smarter about who we are working with and how they operate.
- Accomplishing this will in turn improve the efficiency of T&E clearance, and it follows, NEPA clearance timelines.
- Unless and until there is a shift in the expertise of the consultants used for LPA project, this is the best thing we can do for sponsors.