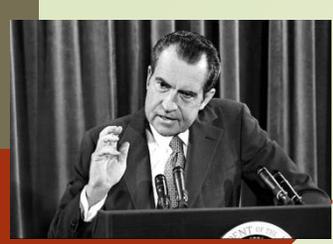


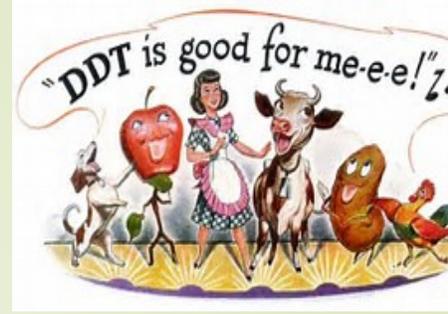
Threatened and Endangered Species and Programmatic Biological Assessment

*Prepared by:
Greg Schonert –ETS Division*





Endangered Species Act (ESA)



- **1972** – President Nixon declared that conservation efforts towards preventing extinction of species were inadequate
- Congress responded with the Endangered Species Act
 - Signed into law in 1973
 - Under the ESA, a species may be listed as threatened or endangered.
 - Endangered- Species is threat of extinction throughout all or a significant portion of its range
 - Threatened- Species likely to become endangered within the foreseeable future
 - Candidate – Any species that are undergoing a USFWS status review
 - Proposed – Species that are found to warrant listing as either threatened or endangered



Section 7 of the ESA



- ▶ Section 7 of the ESA directs that each Federal agency must, in consultation with the USFWS ensure that any action it funds, authorizes, or carries out will not jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat.
 - ▶ For NDDOT: FHWA or USACE involved projects
 - ▶ **FHWA/USACE**
 - ▶ IF Federal agency or designated non-Federal representative determines no effect to listed species no consultation required
 - ▶ **Informal Consultation** – When a project may affect a species but potential effects are insignificant or discountable (i.e highly unlikely or unmeasurable).
 - ▶ >90% of NDDOT projects
 - ▶ Concurrence letter issued by USFWS
 - ▶ **Formal Consultation** – When a project is likely to affect a species (i.e. harass, harm, or directly injure a species or directly impact critical habitat)
 - ▶ USFWS will prepare a Biological Opinion to determine whether a project will jeopardize the continued existence of a listed species.

Threatened and Endangered Species of North Dakota



- Interior Least Tern
- Whooping Crane
- Black-Footed Ferret
- Gray Wolf
- Poweshiek Skipperling
- Piping Plover (DCH)
- Western Prairie Fringed Orchid
- Dakota Skipper (DCH)
- Rufa Red Knot
- Northern Long-Eared Bat
- Rusty Patched Bumblebee
- Sasquatch

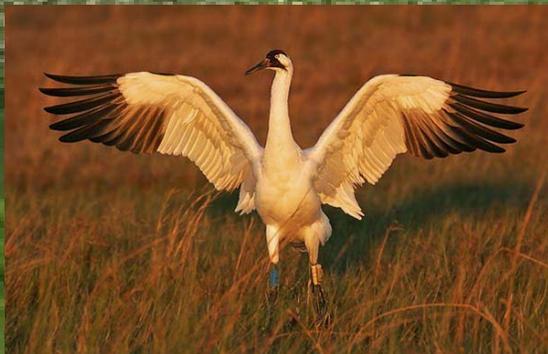








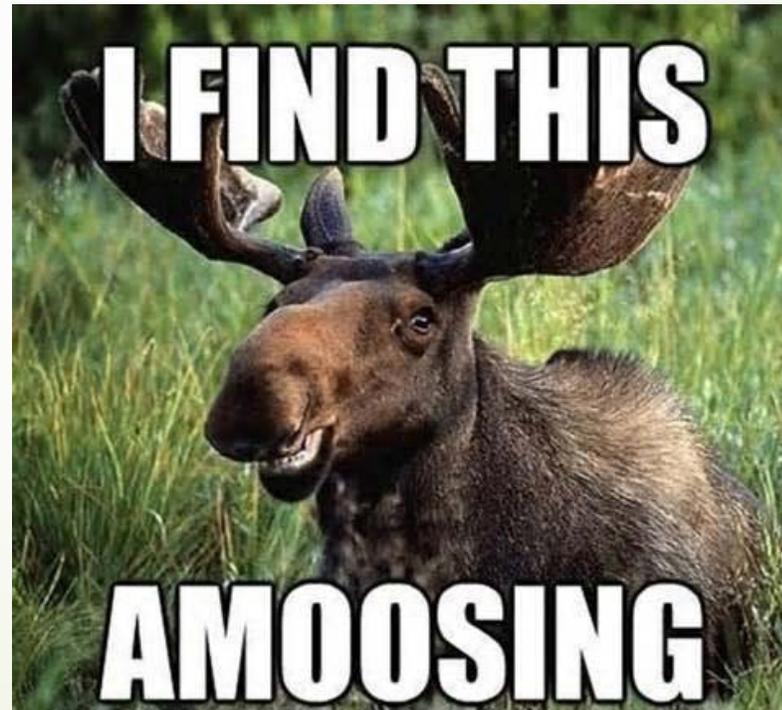




What's on the Horizon??

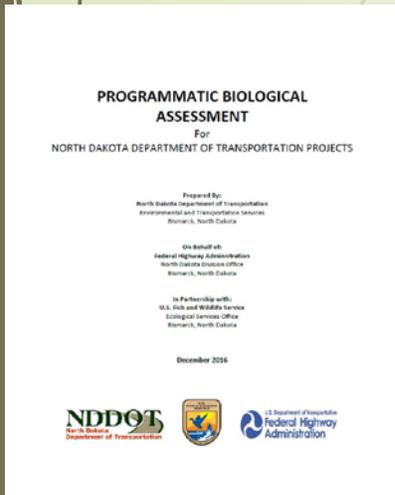


- Three Bee Species (Rusty Patched Bumblebee, Yellow Banded Bumblebee and Western Bumblebee)
- Two Butterfly Species (Regal Fritillary and Monarch Butterfly)
- Moose
- Sturgeon Chub and Sicklefin Chub
- Little Brown Bat
- Golden Winged Warbler



Programmatic Biological Assessment – What is it?

- Comprehensive document that analyzes the effects of the NDDOT transportation program on T&E species within North Dakota.
- Describes the implementation process for use of the document to fulfill Section 7 ESA requirements
- Describes NDDOT project types in detail
 - Including new road construction and all types of roadway improvement projects
- Describes life history of all currently listed species (habitat, breeding, threats, current status)
- Identifies stressors and response for each species / critical habitat as a result of roadway projects
 - I.E. Noise, visual, water quality impacts, habitat alteration, lighting, etc and how species respond to those effects
- Provides conservation measures to be implemented to reduce potential effects
 - I.E. Species surveys, avoidance/timing restrictions, general BMP's. etc.
- Provides effect determination for each species and critical habitat.





Programmatic Biological Assessment – What does it do?

- Streamlines the Section 7 ESA process.
 - Preparation of individual biological assessments involve repetitive analysis and consultation procedures on routine projects with predictable impacts
- PBA facilitates a standardized approach to making effect determinations for all Federally involved transportation projects in North Dakota.
- Predictable patterns and timeframes for ESA compliance work
 - Speed up project delivery
 - Reduce individual project review time
 - Eliminate individual project review from FHWA/USFWS
- Allows NDDOT to be in better compliance with the ESA without significantly delaying the project development process

Programmatic Biological Assessment – How?

- Worked with many NDDOT staff as well as FHWA and USFWS to develop a Deconstruction Matrix
- Excel table for each species that compiles list of all major phases and sub-phases
 - Project Development (surveys, data gathering, bidding, project prep)
 - Utility Relocations
 - New Road Construction or Reconstruction
 - Site Prep
 - Earthwork/Grading
 - Installation of Drainage Features
 - Roadway Surfacing and Finishing
 - Guardrail
 - Workzone Traffic Control
 - New Bridge Construction / Bridge Demolition
 - Road/ROW Maintenance
 - Slide Abatement/Bank Stabilization/Flood-Scour-Sinkhole Repair/Landslide Correction
 - Bridge Painting/Preservation/Rehab
 - Drainage Improvement
- Breaks phases and sub-phases into activities and sub activities
- Matrix also describes stressor and response for species and conservation measures
- Used the matrix as a reference to help build the PBA



Programmatic Biological Assessment – How?

- Created a Memorandum of Understanding between FHWA and NDDOT
- FHWA and NDDOT Responsibilities
- NDDOT Tasks and Products
 - Preparation of programmatic biological assessment
- FHWA and NDDOT Agreements
 - FHWA delegates informal section 7 consultation responsibilities to the NDDOT. Informal consultations conducted either through PBA or project specific BA
 - Ability of NDDOT to make No Effect determinations on FHWA's behalf
 - Approve projects under the programmatic biological assessment on FHWA's behalf
 - Consult directly with USFWS for informal consultations
- Mutual Agreements
- Term, Renewal, and Termination Clause



Programmatic Biological Assessment – How Does it Work?

- **Determine project type and all work activities**
 - T&E table will be used to screen projects that may need a biological assessment
 - Determine species/critical habitat that may be present in counties project occurs in
 - Projects where adverse effects are anticipated, separate biological assessment will be prepared (i.e. new bridge construction within Missouri River).
- **If one or more species require review**
 - A no effect determination package will be needed – or –
 - A biological assessment will be necessary
 - If scope of work activities fit within the scope of the programmatic biological assessment:
 - Project submittal form will be used
- **What types of projects require a Biological Assessment?**
 - New Road Construction, Major Rehabilitation/widening, work near critical habitat, new bridge construction in Missouri River/ Lake Sakakawea or Oahe, location is key!

Programmatic Biological Assessment Project Submittal Package - Page 1

Project Number/PCN:	Submitted By:
	Date:
Roadway and Project Limits:	Legal Description (Township/Range):
Year of Construction and Approximate Duration:	County (or Counties):

*If more room is needed for any of the above information, add to project description on Page 2.

Threatened and Endangered Species/Critical Habitat Occurrence in County (or Counties)

- | | | |
|--|---|--|
| <input type="checkbox"/> Interior Least Tern | <input type="checkbox"/> Poweshiek Skipperling | <input checked="" type="checkbox"/> Northern Long-Eared Bat* |
| <input checked="" type="checkbox"/> Whooping Crane | <input type="checkbox"/> Piping Plover | <input type="checkbox"/> Piping Plover Designated Critical Habitat |
| <input type="checkbox"/> Black-Footed Ferret | <input type="checkbox"/> Western Prairie Fringed Orchid | <input type="checkbox"/> Dakota Skipper Designated Critical Habitat |
| <input type="checkbox"/> Pallid Sturgeon | <input type="checkbox"/> Dakota Skipper | <input type="checkbox"/> Poweshiek Skipperling Designated Critical Habitat |
| <input checked="" type="checkbox"/> Gray Wolf | <input type="checkbox"/> Rufa Red Knot | |
- Dakota skipper or Poweshiek skipperling critical habitat is located within 0.6 mile of the project (see links below)
- Piping plover critical habitat is located within 0.5 mile of the project (see links below)

*Note— Projects that have tree removals, building removals, or structure work (bridge/box culverts) in areas of naturally wooded areas, must use the framework and guidelines set forth in the Programmatic 4(d) if the conservation measures identified in the NDDOT/FHWA PBA or FHWA/USFWS PBA cannot be implemented. The 4 (d) rule streamlined consultation form can be found at the following link:

<https://www.fws.gov/midwest/endangered/mammals/nlebs7.html>

A county list of threatened and endangered species (and critical habitat) can be found within the PBA or at the following link:

<https://www.fws.gov/northdakotafieldoffice/SEtable.pdf>

Paper maps of piping plover critical habitat units can be found at the following link:

<https://www.fws.gov/mountain-prairie/es/pipingPlover.php>

Paper maps of Dakota skipper/Poweshiek skipperling critical habitat units can be found at the following link:

<https://www.fws.gov/midwest/Endangered/insects/dask/finalcb.html>

Shapefiles of critical habitat units can be found and downloaded at the following link:

<http://ecos.fws.gov/eco/report/table/critical-habitat.html>

The following web application to search for critical habitats in relation to project locations:

http://gis.dot.nd.gov/external/ee_html/?viewer=wildlifemap

Programmatic Biological Assessment Project Approval Form

Summary of Effect Determinations

Project Number / PCN:	No Effect	NLTA	NLTA/LAA*	Conservation Measures
Interior Least Tern	<input type="checkbox"/>	<input type="checkbox"/>	N/A	
Whooping Crane	<input type="checkbox"/>	<input type="checkbox"/>	N/A	
Black-Footed Ferret	<input type="checkbox"/>	<input type="checkbox"/>	N/A	
Pallid Sturgeon	<input type="checkbox"/>	<input type="checkbox"/>	N/A	
Gray Wolf	<input type="checkbox"/>	<input type="checkbox"/>	N/A	
Poweshiek Skipperling	<input type="checkbox"/>	<input type="checkbox"/>	N/A	
Piping Plover	<input type="checkbox"/>	<input type="checkbox"/>	N/A	
Western Prairie Fringed Orchid	<input type="checkbox"/>	<input type="checkbox"/>	N/A	
Dakota Skipper	<input type="checkbox"/>	<input type="checkbox"/>	N/A	
Rufa Red Knot	<input type="checkbox"/>	<input type="checkbox"/>	N/A	
Northern Long-Eared Bat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Piping Plover Critical Habitat	<input type="checkbox"/>	<input type="checkbox"/>	N/A	
Dakota Skipper Critical Habitat	<input type="checkbox"/>	<input type="checkbox"/>	N/A	
Poweshiek Skipperling Critical Habitat	<input type="checkbox"/>	<input type="checkbox"/>	N/A	

NLTA—May Affect, Not Likely to Adversely Affect

LAA—May Affect, Likely to Adversely Affect

*Covered Under 4(d) Rule Streamlined Consultation— Note— The 4(d) form must be sent to USFWS.

The project submittal package (on-file at the NDDOT) has been reviewed for content and it has been determined that the scope of work activities associated with this project fit within the activities and sub-activities described in the deconstruction matrix of the programmatic biological assessment (PBA). The potential effects to listed resources that may occur from this project fit within the effects analysis within the PBA, fieldwork has been conducted (if required), and appropriate conservation measures have been selected. The conservation measures identified in this project submittal package must be included in the plan sheets as either environmental notes or special provisions. Should changes to the scope of work for this project occur, the additional work items will need to be reviewed for potential effects to listed species and critical habitat that may occur near or within the project area and the project submittal package will need to be reevaluated. Provided no changes occur to this project, Section 7 Endangered Species Act requirements have been met under the PBA and programmatic concurrence from the USFWS.

NDDOT Biologist

Programmatic Biological Assessment – Project Submittal Form

- Fillable PDF Form used to document project and comply with ESA under the PBA
 - Project Number / PCN
 - Roadway / Project Limits
 - Legal Description
 - Year of construction / Approximate Duration
 - County or Counties
 - Species / Critical Habitat that may be present
 - ROW information (inside existing ROW / additional ROW required)
 - Wetland Mitigation Required
 - Temporary Bypass Required
 - Amount of Ground Disturbance
 - Description of Project
 - Applicable Conservation Measures
 - Affect Determination for Species / Critical Habitat
 - Project Approval Form
 - Form to be included in environmental document
 - Summarizes species and effect determinations as well as conservation measures
 - ETS Biologist Signature

Incorporation into Environmental Documents

- ▶ Programmatic Biological Assessment will replace the Threatened and Endangered Species Affect Determination Table for all levels of environmental documents
- ▶ **Categorically Excluded by Definition (CED) – Rare**
 - ▶ Documentation added to project file
- ▶ **Programmatic Categorical Exclusion (PCE) or Documented Categorical Exclusion (DCE)**
 - ▶ Environmental Impact Checklist
 - ▶ PBA project submittal package approval page attached, entire package appended by reference
- ▶ **Environmental Assessment (EA) or Environmental Impact Statement (EIS)**
 - ▶ Description within document that provides a summary of the species and effect determinations
 - ▶ PBA and entire project submittal package appended by reference
 - ▶ PBA project approval page attached

Conservation Measures

- Conservation measures
 - Most important outcome of a Biological Assessment
 - How it may impact construction of a project
 - Timeline/Restrictions
- Conservation Measures get added to a project via:
 - **Environmental Notes in Plan Sheets**
 - Call out special area of concern (avoidance areas)
 - Call out species that may occur near the project
 - Phase construction
 - **Special Provision**
 - Typically when a survey is required to make them aware they are responsible to hire a qualified biologist
 - **Utility Coordination**
 - Line markers to overhead utility adjustments – when warranted

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

BIOLOGIST

3-015(029)044 – PCN 21042

DESCRIPTION

This work consists of hiring a qualified biologist to conduct field surveys within the critical habitat area (Lake Coe) for the following species:

- Piping Plover; and
- Rufa Red Knot.

QUALIFICATIONS

A biologist is required to have a four year Bachelor of Science degree in wildlife management, biology/zoology, or closely related natural resources degree from an accredited university and to be trained in the identification of the piping plover, rufa red knot, and their habitat.

CONSTRUCTION REQUIREMENTS

The summer nesting season occurs between April 15 and August 31. A construction buffer extends 0.6 miles (1,000 meters) around the designated critical habitat along Lake Coe.

A. Initial Survey.

Conduct an initial field survey within the buffer area 2 days before beginning construction activities to identify suitable habitat (e.g. sparsely vegetated islands, sand bars, or shoreline habitat).

B. No Habitat Present.

If no suitable habitat is identified during the initial survey, construction may begin.

C. Habitat Present.

If suitable habitat has been identified and construction activities will take place within 0.6 miles of the habitat, conduct 2 surveys daily:

- Conduct the first survey for 2 hours during daylight before starting construction activities for that day.
- Conduct a second survey for 1 hour beginning after work has stopped for that day. Stop construction activities early enough to allow for the survey to be completed no later than 30 minutes after sunset.

If no nests, an individual, or pairs of birds are detected by July 15, no further surveys would be required as nest establishment is not anticipated to occur past this date.

If nests, an individual, or pairs of birds are detected during surveys, notify the Engineer. The Engineer will establish a 0.6 mile avoidance area and will contact USFWS, FHWA, and the NDDOT ETS Biologist. Do not resume construction activities within the avoidance area until one of the following has been fulfilled: daily surveys show that the birds have vacated the area, mitigation measures determined by the contacted agencies have been implemented, or September 1 has been reached.

But Wait a Minute!
Endangered
Species Don't Go
Near Roads! Or Do
They?





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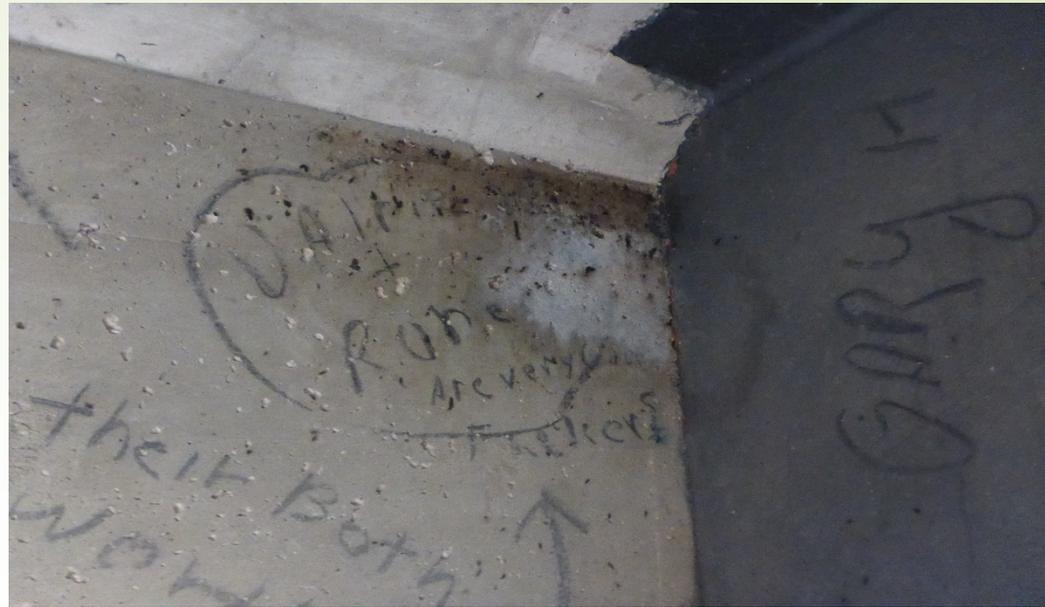
Google Earth













Northern Long-Eared Bat



► NDDOT Programmatic BA

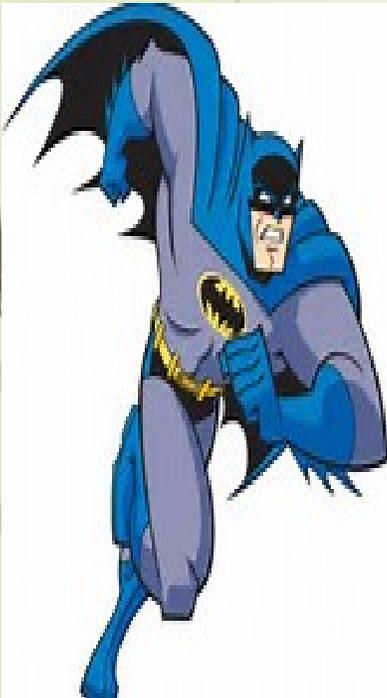
- No Effect Determinations
- Use when PBA is required for other species

► FHWA/USFWS Range Wide Programmatic Consultation for the NLEB

- Must use USFWS submittal form and implement appropriate conservation measures
- Two week period

► Final 4(d) Rule Streamlined Consultation Process

- Must use streamlined consultation form
- Conservation measures recommended, but not required
- May not last, USFWS currently being sued over the rule
- Takes 30 days





Take Home Message

- ▶ **Types of projects that may require a Biological Assessment**
 - ▶ New Road Construction
 - ▶ Major Rehabilitation / Widening
 - ▶ Work near/within Critical Habitat
 - ▶ New Bridge Projects – Missouri / Lake Sakakawea or Oahe
 - ▶ Every project is different – work types may be the same, but location is key!
 - ▶ As project/alternatives progresses, BA may be warranted
- ▶ **Don't be afraid to call or email for assistance!**
 - ▶ Helps to send project description and map(s)
- ▶ **Survey Guidelines will be Forthcoming**
 - ▶ Survey protocols for Special Provisions to help aid during construction
- ▶ **Pollinator species will be difficult to address in the next 5 or so years**

Questions?



More Information:

<http://www.dot.nd.gov/manuals/design/designmanual/reference-forms.htm>

Documents:

- Section 7 ESA Guidance Document
- NDDOT/FHWA/USFWS PBA
 - Associated Forms
- NLEB Documentation Forms

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