Biological Evaluations



Background

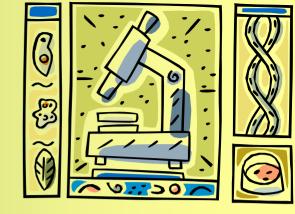


Federal environmental laws

Development of Tribal laws

What is a BE?

- A Study
 - Impacts
 - Biological Resources
 - Threatened and Endangered (T&E) Species
 - Navajo Endangered Species (NESL)
 - Other protected species (e.g., MBTA)
 - Other resources significantly impacted (e.g., culturally significant plants & game animals)
 - Avoidance/Mitigation



Why prepare a BE?



Common sense

- The law
 - Navajo Nation Environmental Policy Act
 - (NNC Title 2, Chapter 9)
 - 17 NNC §507
 - 2 NNC §164
 - National Environmental Policy Act
 - Endangered Species Act





Common Sense

- "The first rule of intelligent tinkering is keeping all the parts"
 - Aldo Leopold, Conservationist
- "Continue to contaminate your bed and you will one night suffocate in your own waste."
 - Chief Sealth, Duwamish Tribe



Navajo Environmental Policy Act

- Navajo Nation Code, Title 2, Chapter 9
- "It is the policy of the Navajo Nation to promote harmony and balance between the natural environment and people of the Navajo Nation..."
- "All agencies, departments, enterprises...of the Navajo Nation shall consider carefully in decision-making...any adverse environmental impacts...the extent to which...impacts may be reduced...and other alternatives..."



National Environmental Policy Act (NEPA) 42 U.S.C. §§ 4321-4347

- NEPA is the basic national charter for protection of environment that is designed to avoid or minimize adverse environmental effects
- Requires environmental review for all major Federal actions
- Reviews are documented in
 - Environmental Assessments (EAs)
 - or more detailed Environmental Impact Statements (EISs)
- EAs are prepared to document whether an EIS is necessary
- EAs and EISs are prepared to inform agency decision makers
- NEPA impact analyses involve predicting the effects of agency actions on biological, physical, and socio-cultural resources the human environment
- A commitment to mitigate adverse impacts is often included in the agency's decision



NEPA Environmental Concerns



→ Wetlands

→ Riparian Areas

→ Wild & Scenic Rivers

→ Special Aquatic Sites

- → Stream Channel Modification
- → Threatened & Endangered Species
- → Landscape Resource (Scenic Beauty)
- → Natural Areas

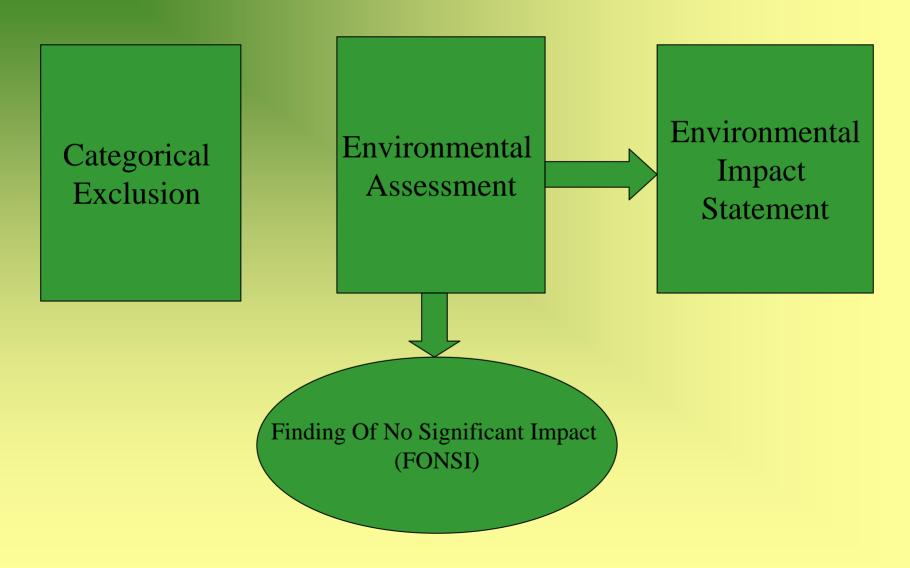




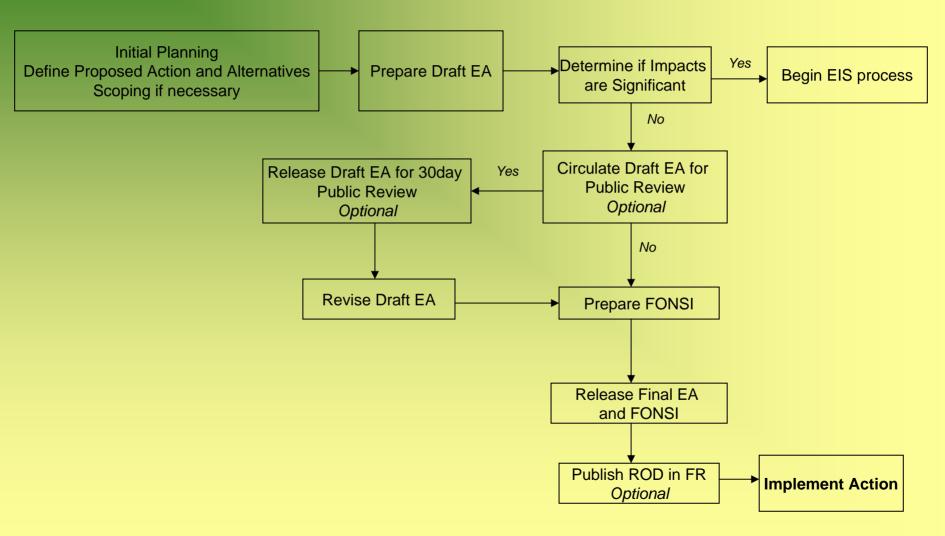




Types of NEPA Analysis



Environmental Assessment (EA) Process





The Endangered Species Act

Table of Contents

Section 2: Findings & Purposes

Section 3: Definitions

Section 4: Listing, Critical Habitat Designation, Recovery,

Monitoring

Section 5: Land Acquisition

Section 6: Cooperation with States

Section 7: The Role of Federal Agencies

Section 8: International Cooperation

Section 9: Unlawful Activities

Section 10: Exceptions, including Permits

Section 11: Penalties and Enforcement

Etc.



Section 7 Interagency Cooperation

- 7(a)(2) Actions an agency authorizes, funds, or carries out cannot jeopardize the existence of listed species.
- 7(a)(1) Federal agencies must carry out their programs to <u>conserve</u> listed species.

Consultations

Purpose

- 1. Avoid jeopardy or adverse modification
- 2. Cover incidental take
- 3. Minimize effects
- 4. Conserve species

Effect Determinations

- No Effect = No consultation
- Is Not Likely to Adversely Affect = Informal Consultation
- Is Likely to Adversely Affect = Formal Consultation



<u>Trigger</u> = "May affect"

Section 9 Prohibited Acts

Take

"Harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or to attempt to engage in these activities."

Harm } 50 CFR 17.3Harass



It is illegal to kill threatened or endangered species without just cause.

Take of species applies to any person or Federal agency.

When do you prepare a BE?



Natural state disturbance







Tribal action

Who prepares a BE?





"Action agency"

Consultant

BE Content



Focus on the issue(s)

- Analytic
 - Not encyclopedic
 - "Less is more"



Contents

- Survey results
- Species experts opinions

- Literature review
- Effects analysis
- Analysis of alternate actions



How to prepare a BE



- □ PROJECT NAME (& NUMBER) and evaluation date.
- □ <u>DESCRIPTION</u>: Type of project, parts, dimensions, associated development
- □ LOCATION: Must **agree** with the legal survey
- □ MAP: USGS 7.5' topo-map; must **agree** with the legal survey
- □ RESEARCH: Is habitat present? ESA/NESL T&E Species present? Other biological resources of concern present? Biological survey is usually needed Surveyors must be permitted
- □ <u>ANALYSIS</u>: "Follow" the impacts. Describe impacts (**direct**, **indirect** and **cumulative**) including *take* and *effect*
- □ AVOIDANCE: Are changes to the project needed
- □ COORDINATION & CONSULTATION: NNDFW/NNHP and USFWS
- □ <u>MITIGATION</u>: **minimize** or **off-set**
- □ <u>EVALUATION PREPARER</u>: Name, telephone # **summary** of qualifications and signature

BE Outline

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- Cover letter
- Project Description
- > For each species
 - Affected environment
 - Biology
 - Status
 - Rangewide
 - Action area
 - Cumulative effects
 - Previous consultations
 - Critical habitat



- ✓ Effects of action
 - Direct
 - Indirect
 - Interrelated and interdependent actions
 - Incidental take
- > Conservation measures
- **Conclusions**
- > Literature
- > current Data Request form (2 years old or less)
- > Contacts/Preparers (w/signatures)
- ➤ Maps/photographs



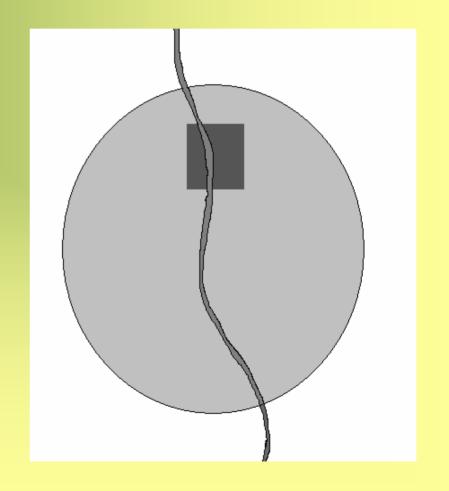
Impacts

• Impacts vs. Effects

 Action Area vs. Project Area

• Cumulative Effects

• "Follow the impact"



Where to start

Good source of information



- Navajo Natural Heritage Program
- Clear idea of what you want to do
 - Not "how you want to do it"



• BE outline

Contacts

www.nndfw.org/personnel.htm