



# Section 7 Continued



## ESA Implementation: Section 7 Continued



*Red-cockaded Woodpecker*



*Cyanea superba*



*Gopher Tortoise*  
Photo Courtesy of USFWS



# Section 7 Continued

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## Objectives

- Know when consultation is necessary
- Understand the steps necessary for completing successful consultation:
  - Know when and how to develop a BA
  - Learn key words and definitions
  - Differentiate the Navy as an action agency and the USFWS/NMFS as the regulatory agencies (RA)
- Know and understand the intent of the statute and regulations in detail
- Identify different types of consultation and when it may be appropriate to use one
- Know and understand the Biological Opinion (BO)





# Section 7 Continued

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## Section 7(a)(2)

- Consultation triggers
- Technical assistance, early coordination, and informal consultation
- Informal consultation process and end point
- Formal consultation process and end point
- Information about BA/Biological Evaluations (BEs) and their preparation timeline
- Information required to initiate consultation
- Conservation measures vs. conservation recommendations
- Explanation of jeopardy and adverse modification of CH
- How to analyze impacts
- Role of the action agency and regulator
- Streamlining consultation



# Section 7 Continued

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## Section 7(a)(2) - Consultation Triggers

- Federal action or Nexus
- 'May Affect' determination
  - Species or designated CH



# Section 7 Continued

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## Steps in Determining if Consultation is Required

- Define the action area
- Determine what species or CH may be present in the action area
  - Species/CH list – 50 CFR §402.12(c)-(e)
- Determine if there will be exposures





# Section 7 Continued

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## Who Coordinates?

- Navy SMEs and Services personnel who meet to discuss proposed projects, programs, etc.
- Can include endangered species biologists and staff from other pertinent disciplines



# Section 7 Continued

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## Early Coordination

- Can begin when:
  - The action proponent has identified a project and before alternatives have been developed
  - Anytime prior to submission of a request for formal consultation
- Facilitates agreement on a species list
- Promotes information exchange which increases common understanding of actions, effects, policies, regulations, and law
- Enables handling of more complex actions with current RA staffing levels





# Section 7 Continued

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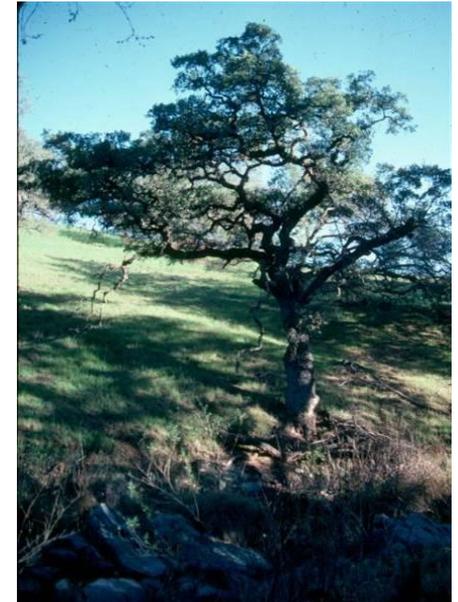


## Coordination Cont'd...

Early coordination helps identify:

- Action area and potential action stressors
- Potential effects on species and habitats
- Adjustments to proposed actions to eliminate or minimize adverse effects
- Conservation needs of the species

Goal: To reduce consultation time through a well-defined proposed action and complete assessment





# Section 7 Continued

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## Informal Consultation

- A process that includes all discussions, correspondence, etc. between the Services and the Federal agency or designated non-Federal representative
- It allows Federal agencies to:
  - Determine need for formal consultation
  - Explore options to reduce or avoid adverse effects on species
  - Explore opportunities to meet their conservation mandate under section 7(a)(1)
  - Request Services' concurrence with "may affect, not likely to adversely affect" determinations



# Section 7 Continued

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## Formal Consultation

- Formal consultation is required for any action that warrants a “may affect” determination, but can be limited to a “likely to adversely affect” determination for a listed species.
- Involves submitting a BA or similar document that analyzes project effects to listed species and CH, and receiving a BO and incidental take statement





# Section 7 Continued

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## Avoid Crises

### Ask yourself these questions:

- Is your communication with the Services' field office working well?
- Is your local consultation biologist(s) familiar with your project(s)?
- Are you familiar with the species' biology and conservation needs?
- Do you know what information is needed to support a concurrence letter or a Biological Opinion (BO)?



# Section 7 Continued

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## Formal Consultation Cont'd...

- BA:
  - Required for major construction activities
  - Doesn't contain regulatory mandated contents, but must include the six criteria required to initiate formal consultation [50 CFR§402.14(c)]
- BE – Huh?





# Section 7 Continued

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## What the Heck is a BE?

- BE stands for Biological Evaluation; it may mean everything that isn't a BA
- Generic term, not in ESA or section 7 Regulations
- Used when a BA is not required.



# Section 7 Continued

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## Purposes of a Biological Assessment/Evaluation

- To evaluate effects of project on listed/proposed species and/or CH
- To determine need for consultation or conference
- To achieve compliance with the ESA





# Section 7 Continued

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## Information Required to Initiate Consultation:

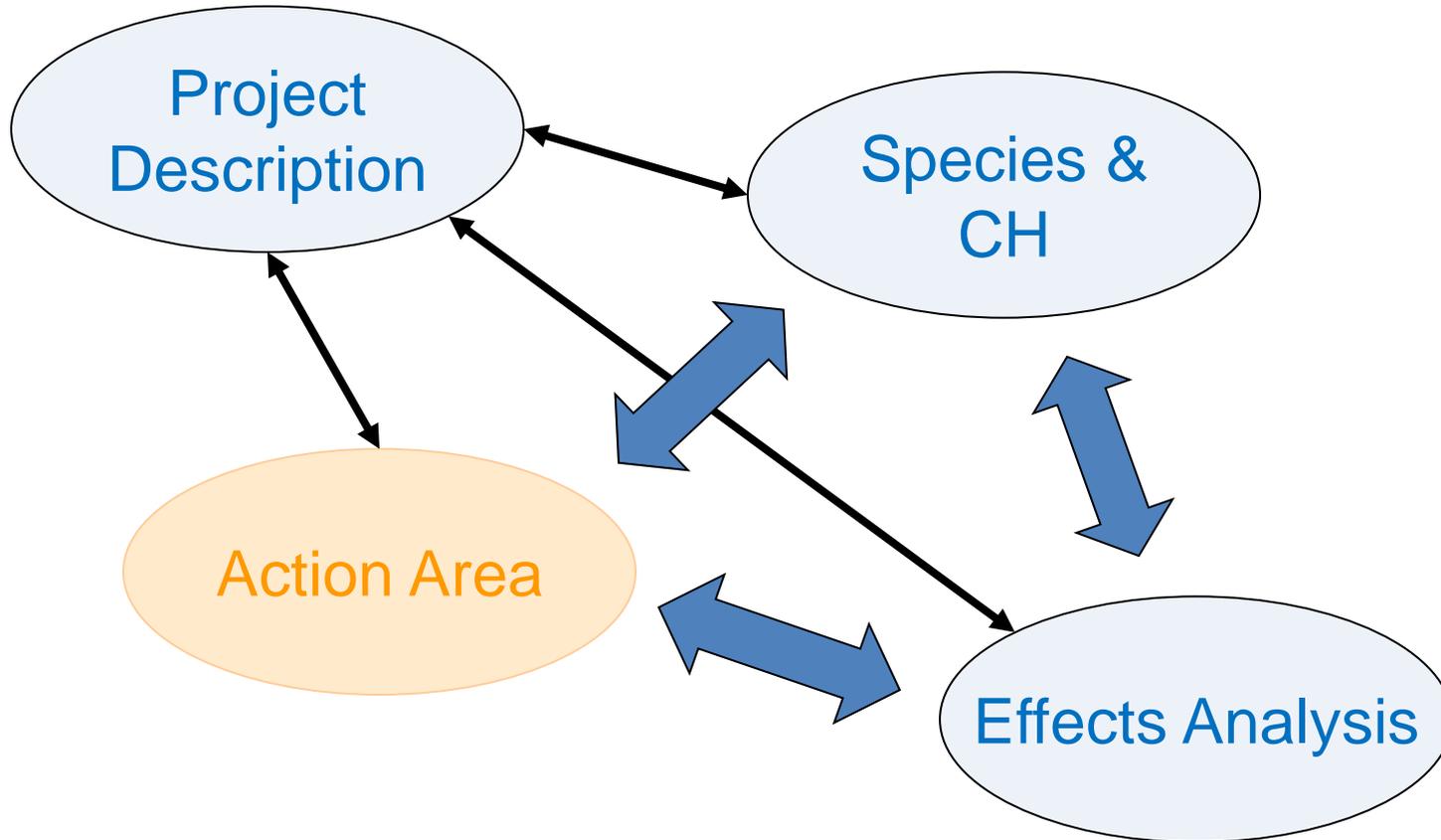
1. Description of the action
2. Description of the area affected
3. Description of listed species or CH that the action may affect
4. Description of the manner of effects and cumulative effects
5. Relevant reports, including environmental documents
6. Any other relevant information



# Section 7 Continued



## Interactive Process





# Section 7 Continued

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## Preparing a BA/BE

- **Description of proposed action**
- **Description of area affected**
- Description of listed species or CH that the action may affect
- Description of manner of effects and cumulative effects
- Relevant reports, including environmental documents
- Any other relevant information

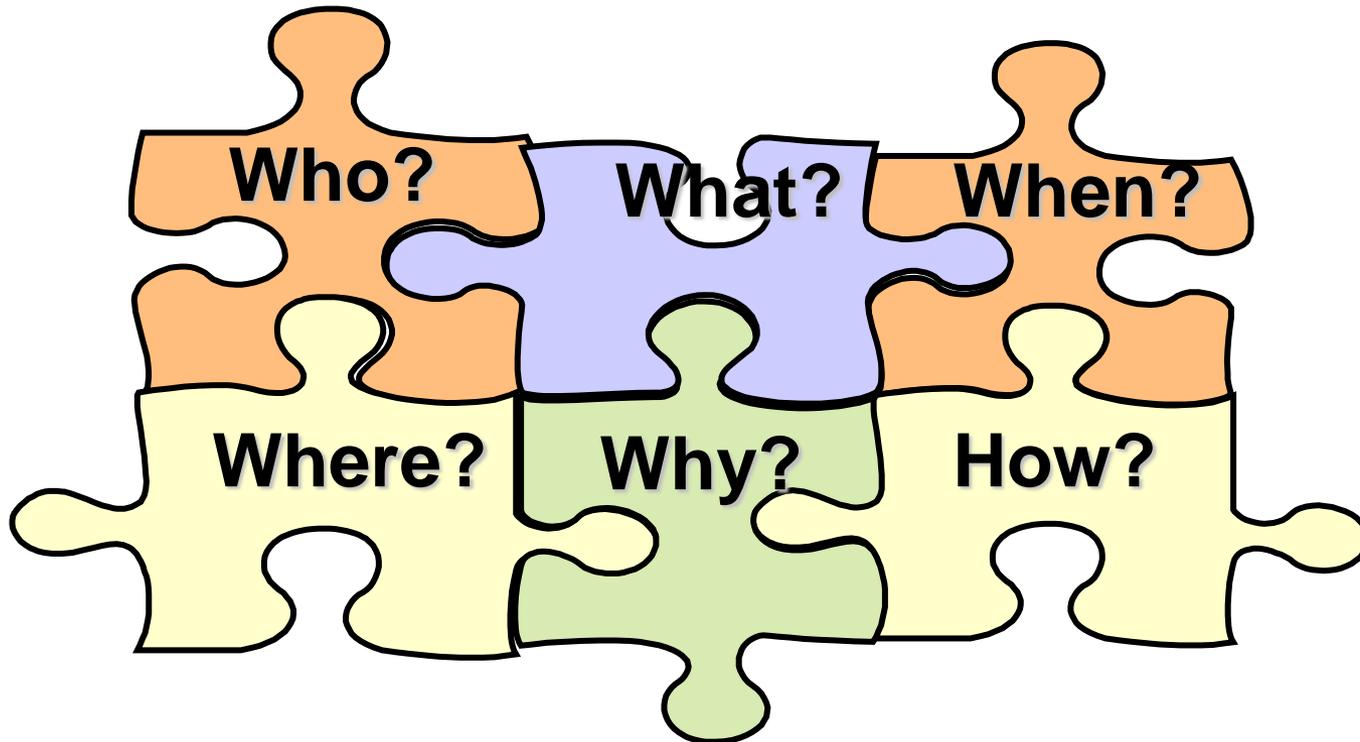


# Section 7 Continued

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## Project Description





# Section 7 Continued

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## Who?

- Ensure you identify all the players and their roles:
  - For example, commands and construction contractors





# Section 7 Continued

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## What?

- Ensure you include all parts of the project
- Differentiate the goal or objective of the project from the actions necessary to achieve that goal or objective





# Section 7 Continued



## Where?

- An important part of the consultation process is the action area
  - Determined in large part by the geographic scope and location of the project
- It's necessary to describe all parts of the project geographically, in addition to the “footprint” or project site





# Section 7 Continued

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## When?

- When would the activity start and end?
- If there are phases, when would each begin and end?
- Will there be a “forever” operations and maintenance phase?
  - If so, it should be incorporated
- Describe the effects of the project’s existence after construction





# Section 7 Continued

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## How?

- Most often the weakest part of the proposed action
- Don't presume that anything is "understood"





# Section 7 Continued

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## Deconstruct the Action

- Many actions are complex and consist of numerous, smaller actions
- Deconstructing actions into constituent elements makes it easier to:
  - Identify aspects of actions that may cause effects (particularly stressors)
  - Assess effects of complex actions





# Section 7 Continued

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## Deconstruction Cont'd...

- Deconstruction identifies those elements that:
  - Are stressors that may have negative consequences
  - Are stressors known to cause negative consequences
  - Are known to benefit
  - Are known to have no effect





# Section 7 Continued

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## Deconstruction Also...

- Identifies interrelated and interdependent actions that have to be considered when defining the action area and conducting effects analysis!!
  - Interrelated actions:
    - Those actions that are part of a larger action and depend on the larger action for their justification
  - Interdependent actions:
    - Those actions that have no independent utility apart from the action under consideration

“But For” Test



# Section 7 Continued

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## Action Area

- All areas to be affected directly or indirectly by the action(s), including effects of interrelated and interdependent actions
- Intimately linked to, and helps define, the effects of the proposed action
- Defined by the boundaries of the effects of all aspects of the proposed action





# Section 7 Continued

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## Action Area Cont'd...

- If the action agency doesn't describe it, or describes it inadequately, then the Services are responsible for this
- Early coordination is needed to keep all players on the same page





# Section 7 Continued

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## Start With the Footprint

- When describing the action area, write about the geographic context of the project:
  - What's being proposed within its readily apparent boundaries
  - The project "site"



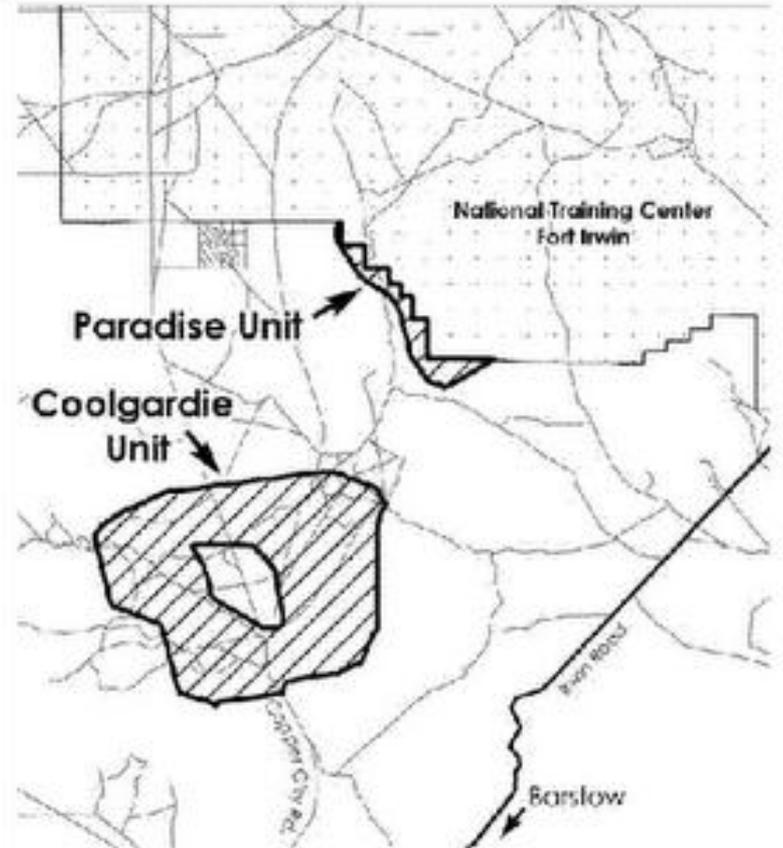


# Section 7 Continued



## Follow All Effects

- Follow direct and indirect effects out from the footprint
- Draw it out – map, map, map
- Follow the effects until impractical





# Section 7 Continued

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## Action Area “Formula”

Action Area = Area of project site +  
Area of direct effects +  
Area of indirect effects +  
Area of effects from interrelated and interdependent actions

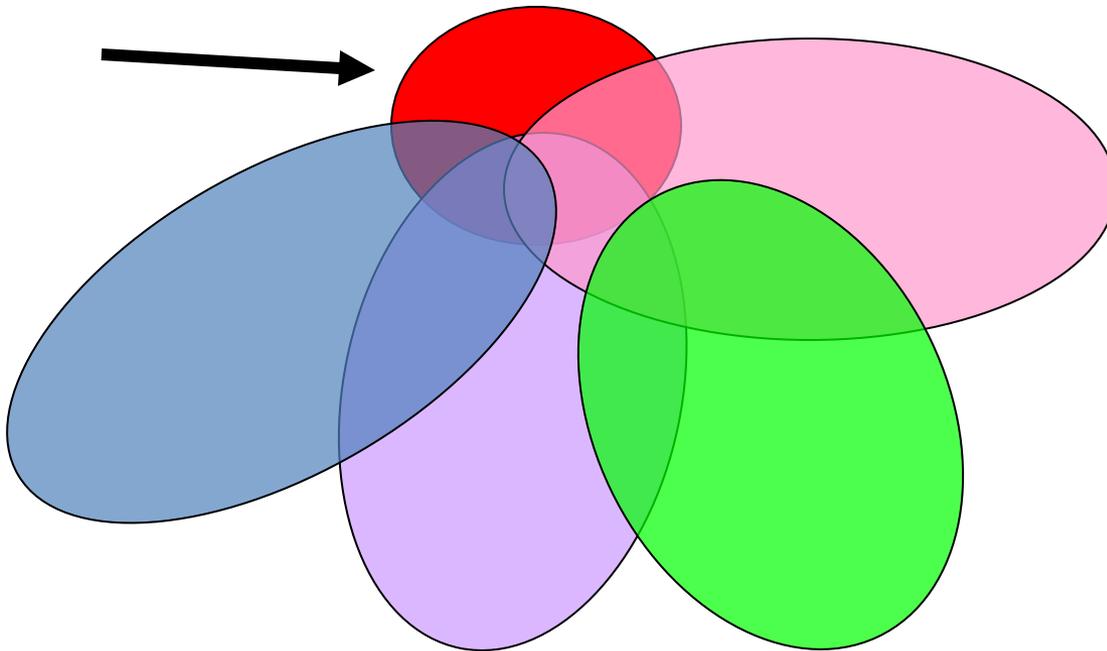


# Section 7 Continued

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## Map out the Effects



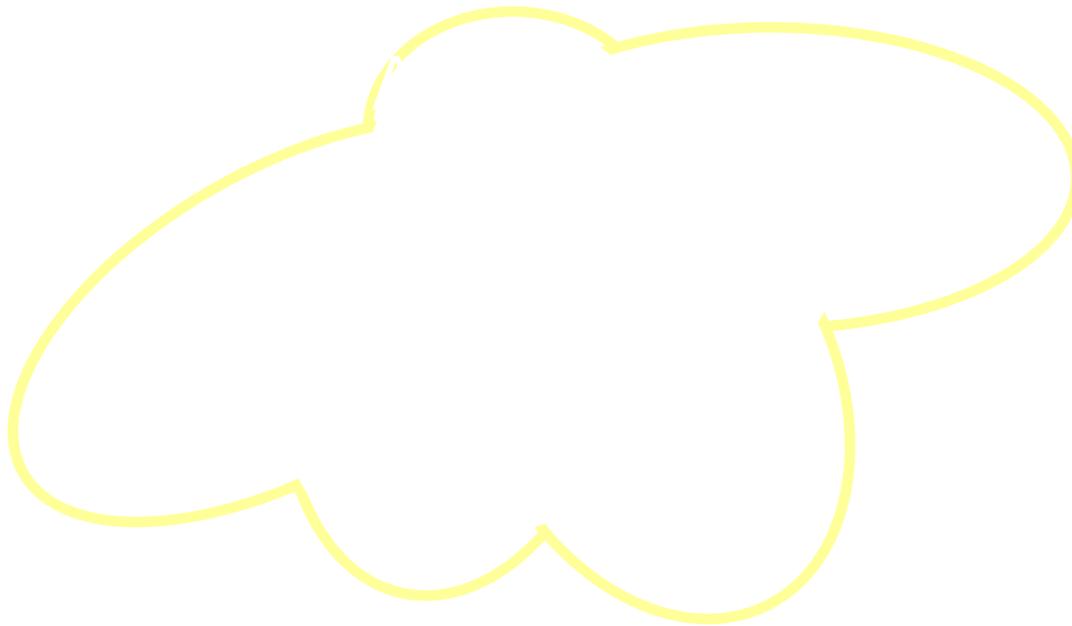


# Section 7 Continued

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**Voilà! Your Action Area**





# Section 7 Continued

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## Preparing a Biological Assessment/Evaluation

- Description of proposed action
- Description of area affected
- **Description of listed species or CH that the action may affect**
- Description of manner of effects and cumulative effects
- Relevant reports, including environmental documents
- Any other relevant information



# Section 7 Continued

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## Integrate With Suitable Habitat

- A species' habitat may be wholly within the footprint of the project, or it may extend beyond the footprint
- The action area may extend into the habitat for the species that isn't within the footprint
- No overlap of species habitat with the action area

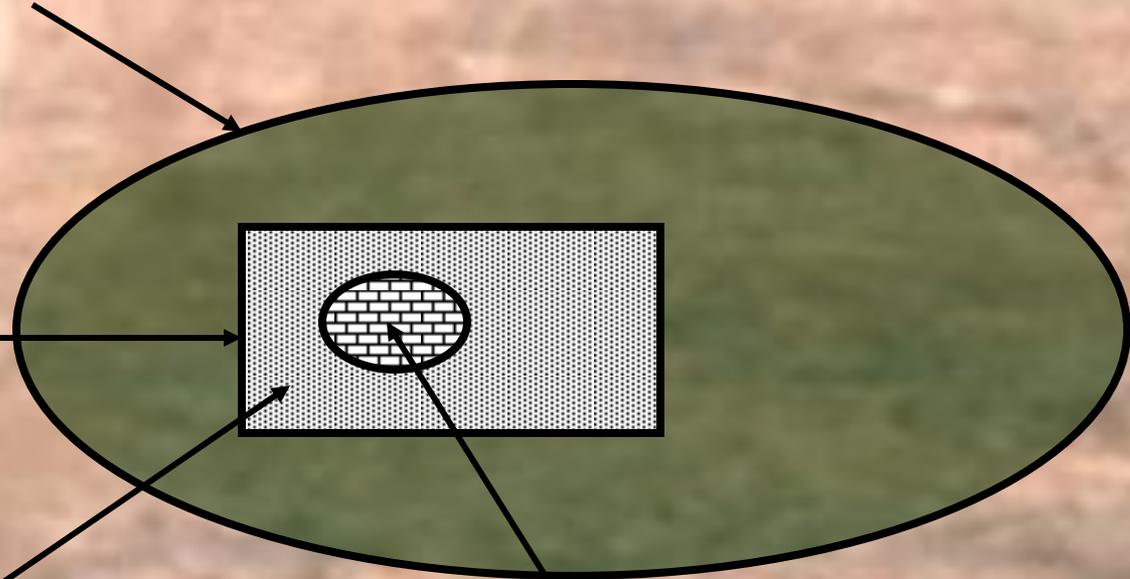


**RANGE OF SPECIES**

**ACTION  
AREA**

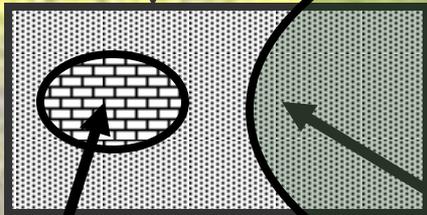
**INDIRECT EFFECTS  
OF THE ACTION**

**DIRECT EFFECTS  
OF THE ACTION**



**ACTION  
AREA**

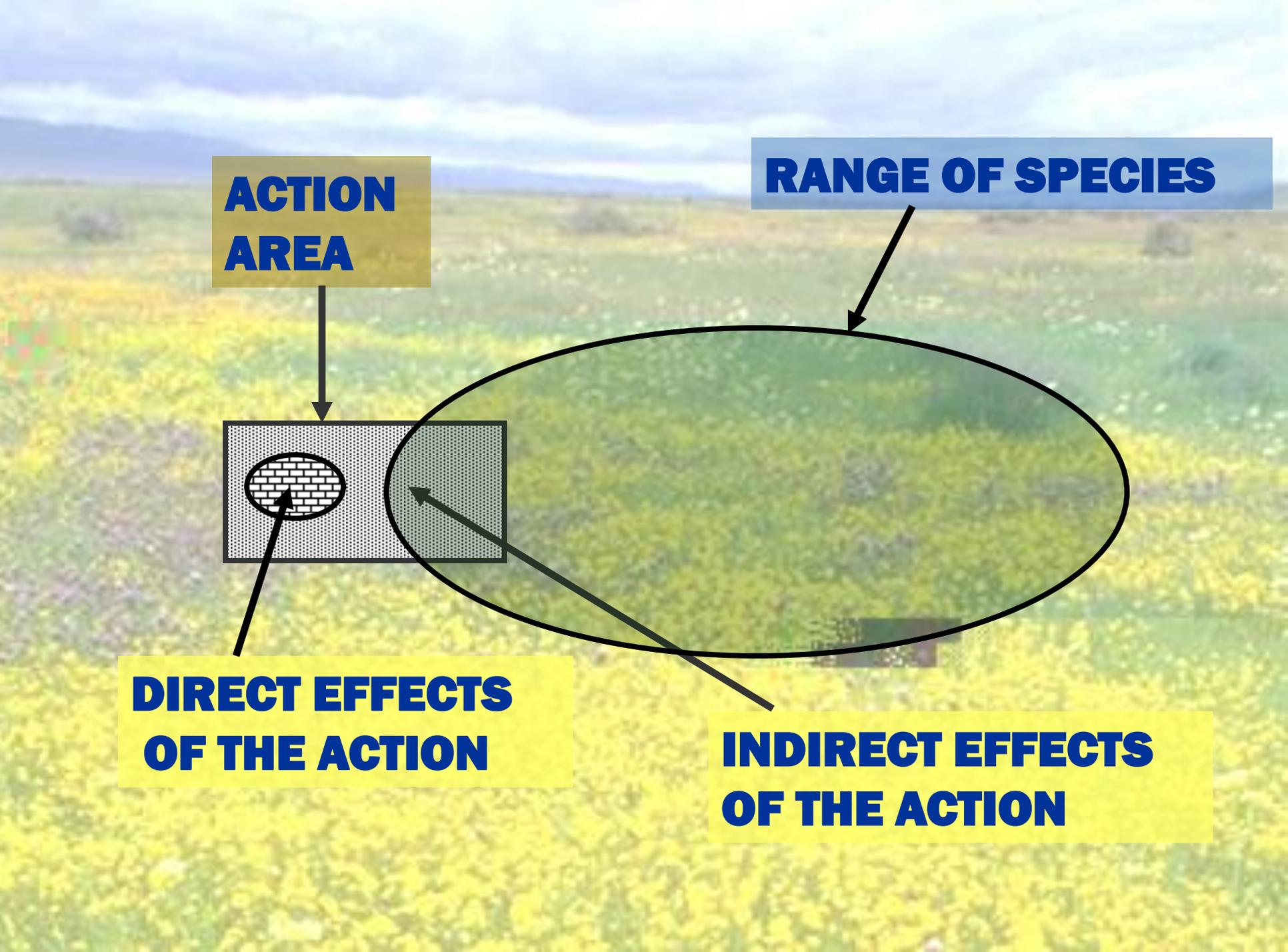
**RANGE OF SPECIES**

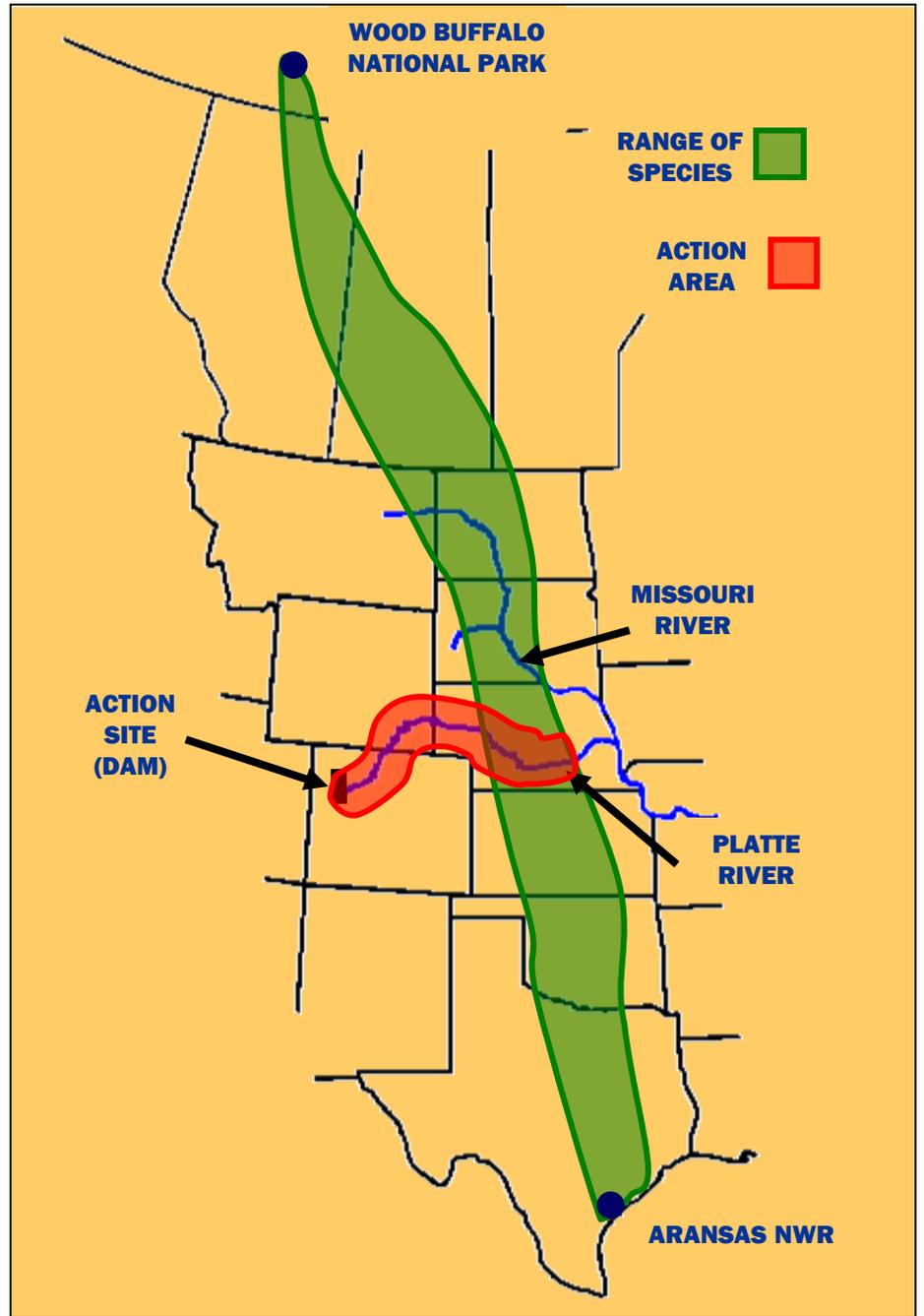


**DIRECT EFFECTS  
OF THE ACTION**



**INDIRECT EFFECTS  
OF THE ACTION**





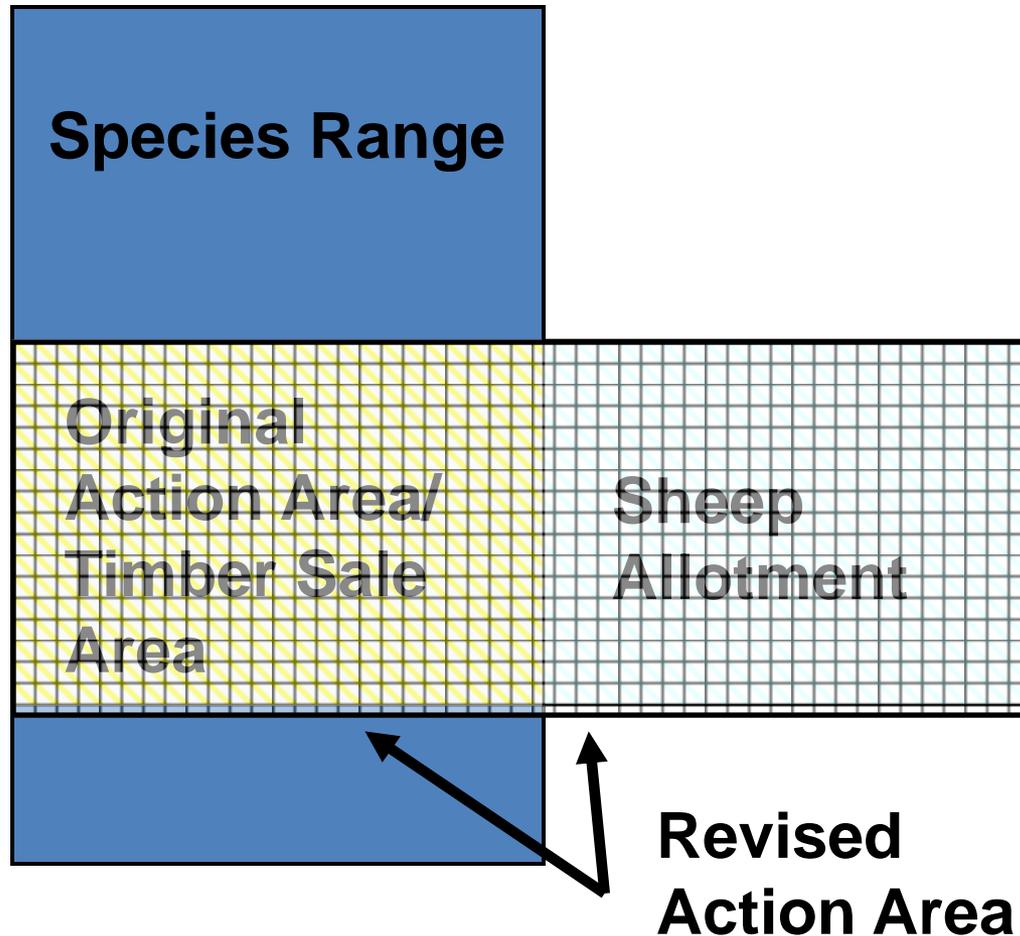


# Section 7 Continued



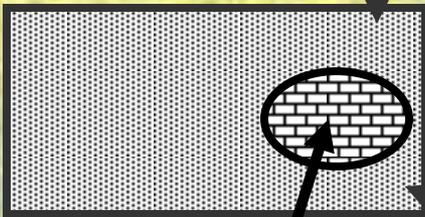
## Court Cases

- Native Ecosystems Council v. Dombeck



**ACTION  
AREA**

**RANGE OF SPECIES**



**DIRECT EFFECTS  
OF THE ACTION**

**INDIRECT EFFECTS  
OF THE ACTION**



# Section 7 Continued

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## Description of Species and Critical Habitat

- Includes only relevant information about a species' biology or CH Primary Constituent Elements (PCEs)
- Includes any relevant recovery plan objectives





# Section 7 Continued

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## Environmental Baseline

- Past and present impacts of all Federal, state, or private actions and other human activities in the action area, the anticipated impacts of all proposed Federal projects in the action area that have already undergone Section 7 consultation or early consultation, and the impact of state or private actions which are concurrent with the consultation in process





# Section 7 Continued

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## Preparing a Biological Assessment/Evaluation

- Description of proposed action
- Description of area affected
- Description of listed species or CH that the action area may affect
- **Description of manner of effects and cumulative effects**
- Relevant reports, including environmental documents
- Any other relevant information



# Section 7 Continued

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## Effects of the Action(s)

- Direct and indirect effects of the action(s) on species or CH together with the effects of interrelated and interdependent actions that will be added to the environmental baseline





# Section 7 Continued



## Analysis of Effects

- Direct, Indirect, Cumulative:
  - Beneficial
  - Insignificant or discountable
  - Adverse





# Section 7 Continued

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## Definitions

### ESA:

- Direct effect - not defined
- Indirect effect - effects caused by actions that take place later in time, but are still reasonably certain to occur

### National Environmental Policy Act (NEPA):

- Direct effect - a result of the action that occurs at the same time and place
- Indirect effect – occurs later in time or in a different place, and is reasonably foreseeable



# Section 7 Continued

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## Definitions Cont'd...

### ESA:

- Cumulative effect: effects of **future state or private activities**, not involving Federal activities, which are reasonably certain to occur in an action area

### NEPA:

- Cumulative effect: the incremental impact of the action when added to other **past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions**



# Section 7 Continued

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## Triggers for Consultation

- Beneficial: contemporaneous positive effects without any adverse effects
- Insignificant: effect should never reach the scale where take occurs
- Discountable: effects extremely unlikely to occur
- Adverse: effect that isn't any of the above





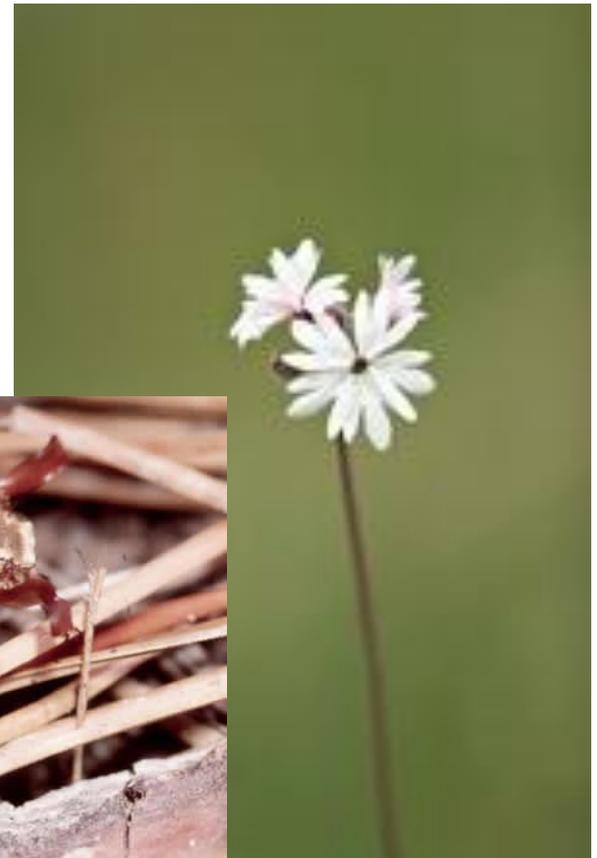
# Section 7 Continued

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## Effects Analysis

- Exposure analysis
- Response analysis





# Section 7 Continued

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## Why Exposure?

- Exposure analyses form the foundation of the effects analysis
- Without exposure analyses, it is difficult to describe and meaningfully evaluate the effects of the action





# Section 7 Continued

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## Exposure Analysis

- **Exposure** means the co-occurrence of the organism and its habitats and the stressors resulting from the action
  - The more precisely the exposure is described, the better our effects analyses will be



# Section 7 Continued

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## Exposure Analysis Cont'd...

- For individuals, exposure analyses should identify:
  - The number of individuals and their populations that risk exposure;
  - The life-stage and sex that would be exposed;
  - The specific stressors associated with exposure, and
  - Exposure pathway(s) (direct, indirect, or both)





# Section 7 Continued



## Co-Occurrence and Proximity of Effects

What life stages or forms of a species will be exposed?

Endangered Bird

						[Redacted]						<b>MILCON</b>
		Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow				<b>Adults</b>
				Cyan	Cyan							<b>Eggs</b>
					Purple	Purple						<b>Nestlings</b>
						Blue	Blue	Blue				<b>Juvenile</b>
J	F	M	A	M	J	J	A	S	O	N	D	



# Section 7 Continued

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## Exposure Example: Pesticide Application





# Section 7 Continued

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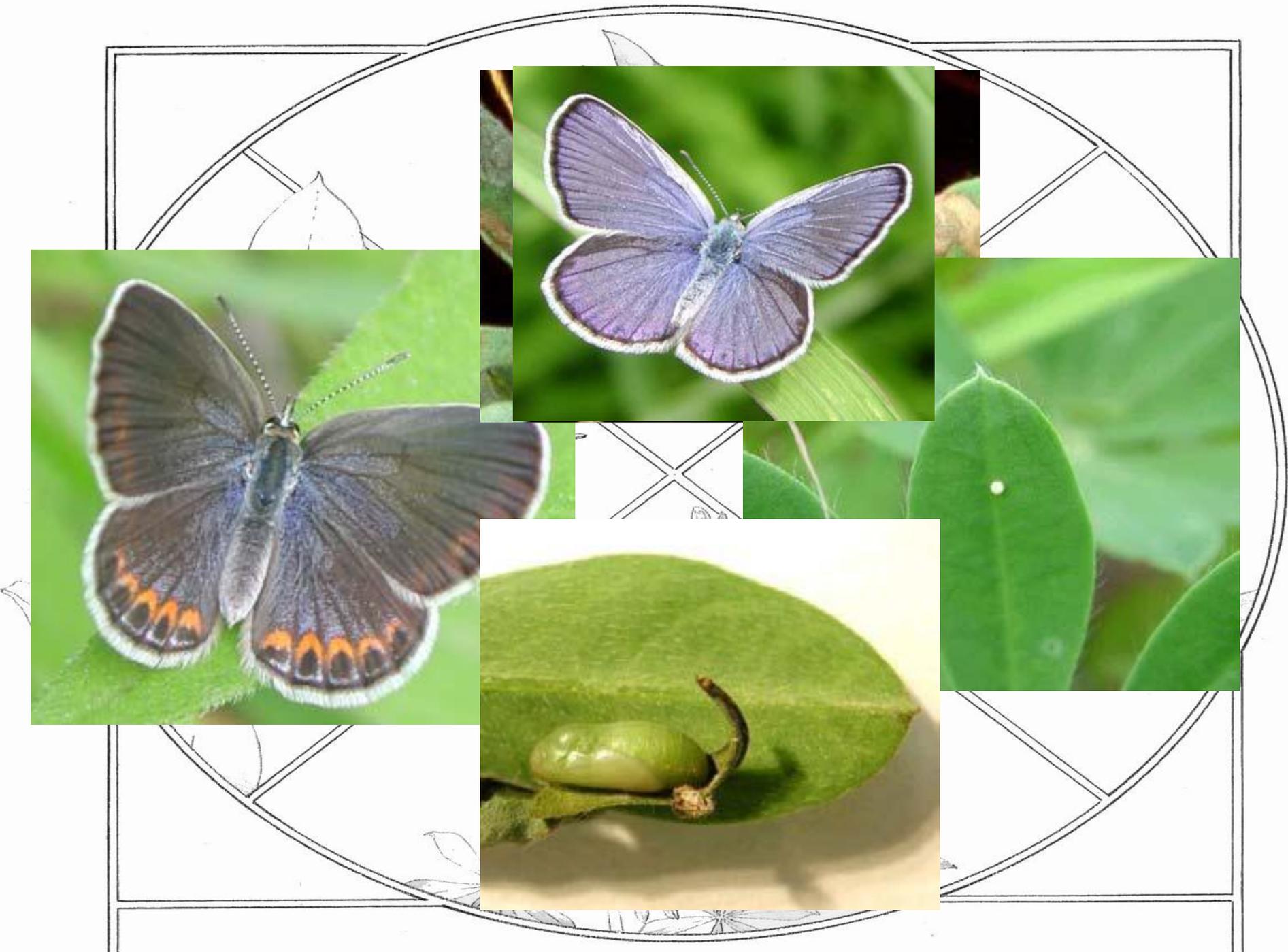


## Exposure Example

### Stressor:

- What = pesticide application for temporary elimination of insects
- Where = Clover field of the Jackson County Management Unit
- When = late September – October
- Frequency = once a year
- Intensity = light misting over vegetation, low wind conditions







# Section 7 Continued

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## Establishing Exposure

- Identify:
  - What physical, chemical, or biotic features of the area that risk exposure
  - What listed species may be directly or indirectly exposed
  - What life stages or forms of a species risk exposure





# Section 7 Continued



## Exposure Profile

[Redacted]												
												adults
												egg
												larva
J	F	M	A	M	J	J	A	S	O	N	D	



# Section 7 Continued



## Exposure Profile

												pesticide
												adults
												egg
												larva
J	F	M	A	M	J	J	A	S	O	N	D	





# Section 7 Continued

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## Exposure Is Not Always Obvious

- It is important to focus on the ecology of the species and the specific physical, chemical, and biotic changes that will occur (exposure pathways may not be obvious)



Photo by USFWS; Joel Trick



# Section 7 Continued

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## Nature of Exposure

- Probability of an effect actually occurring
- Timing of disturbances (*i.e.*, day or night)
- Frequency, intensity, and duration of disturbances





# Section 7 Continued

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## Disturbance Frequency

1. Recovery rate is shorter than the disturbance interval
2. Recovery rate is the same as the disturbance interval
3. Recovery rate is longer than the disturbance interval



# Section 7 Continued



## Disturbance Intensity

- Can assess with potential types of responses
- Determine if it will affect the recovery rate





# Section 7 Continued

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## Disturbance Duration

- Pulse effect – short-term effects, are relaxed almost immediately
- Press effect – sustained, long-term, or chronic effects are not relaxed
- Threshold effect – permanent



# Section 7 Continued

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## Exposure Analysis

- **Exposure** analyses are critical because:
  - We can't change how a species or CH responds to stressors
  - We can sometimes change how they are exposed
  - Conservation measures can reduce or avoid exposure



# Section 7 Continued

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## Response Analysis

- For there to be an effect on a listed species or CH there must be BOTH exposure and a likelihood for that exposure to elicit a response





# Section 7 Continued

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## Response Analysis Cont'd...

- How will a species or CH react to an exposure? Determination...
  - Involves combining information outlined in the exposure analysis with the biology of the species
  - Will be based on different aspects of the species' biology
  - Could be influenced by existing environmental conditions
- Consider consequences of initial responses!!



# Section 7 Continued



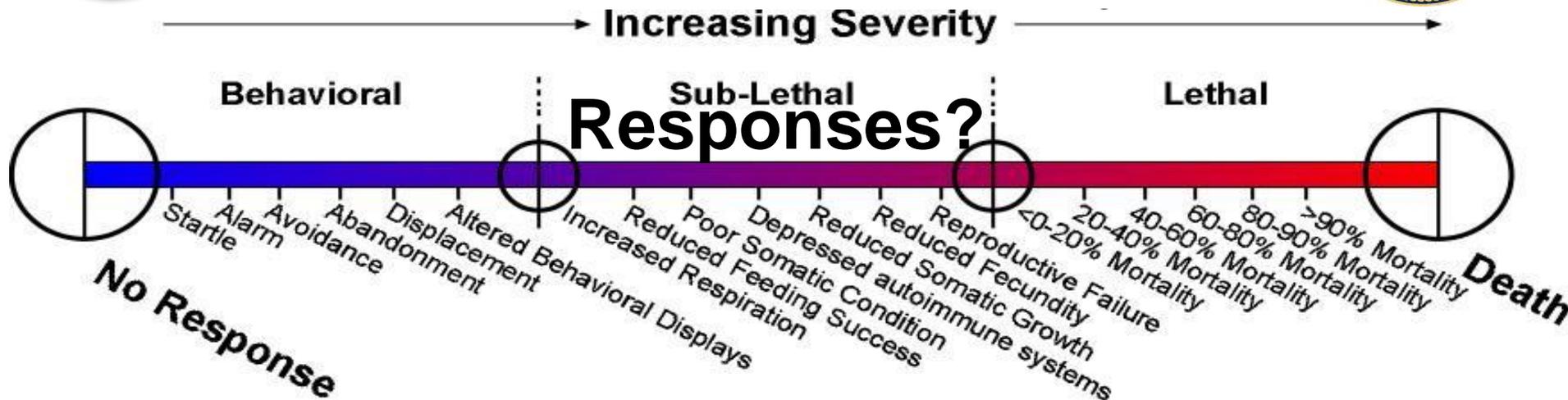
## Response Analysis Cont'd...

- Remember the definitions for harm and harassment:
  - Harm defined by both USFWS and NMFS
  - Harassment defined by USFWS but not NMFS
- Consider the “context” in which the species is exposed





# Section 7 Continued



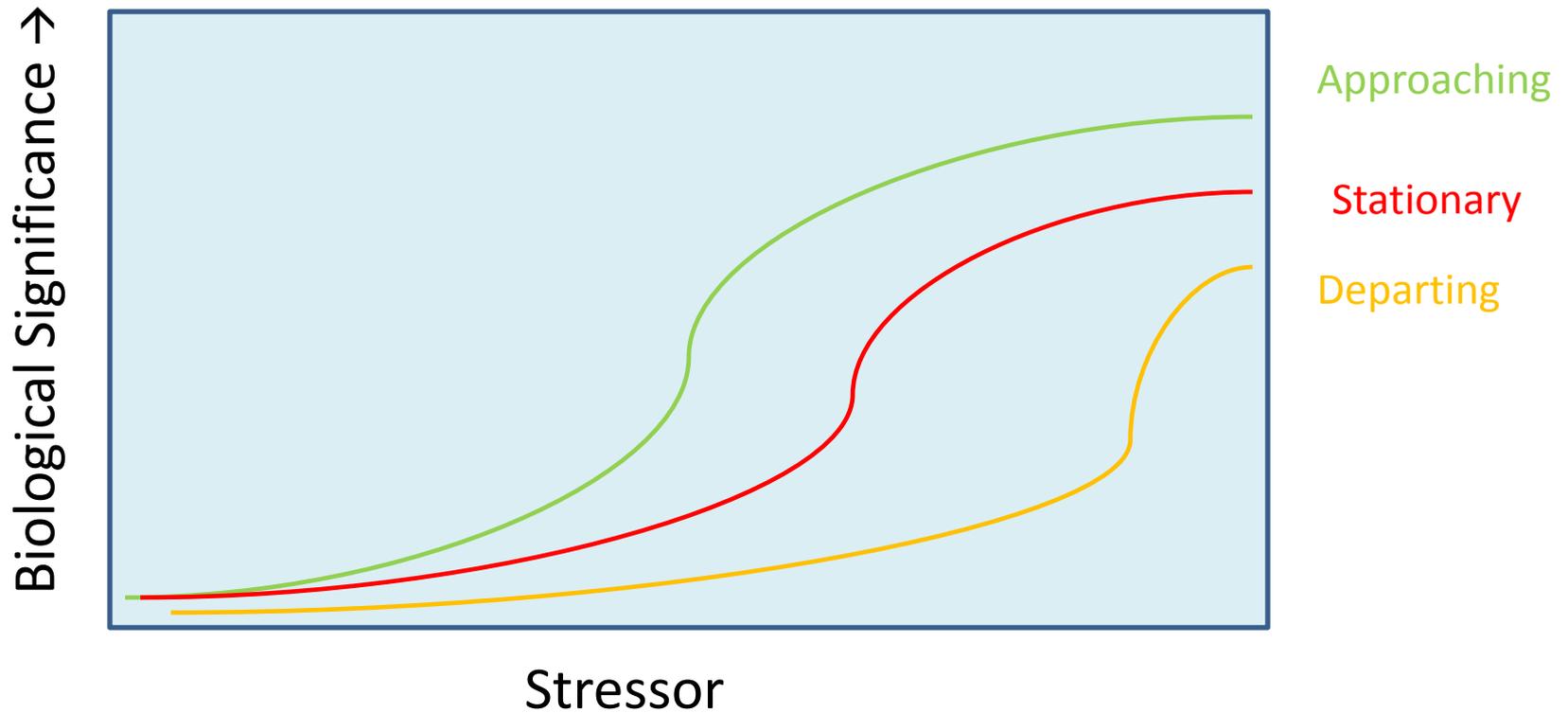
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# Section 7 Continued



## Influence of Source Behavior

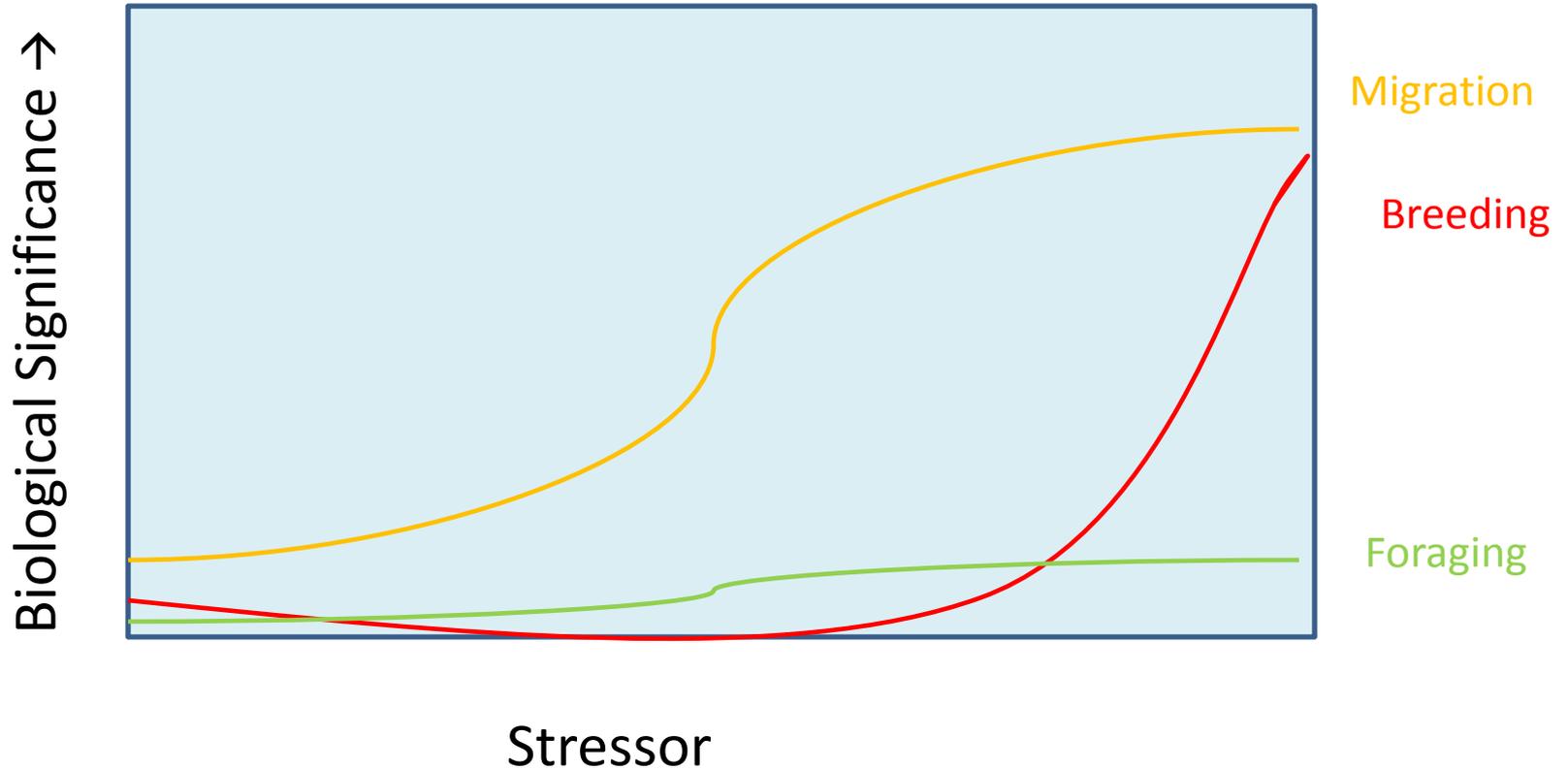




# Section 7 Continued



## Time of Year

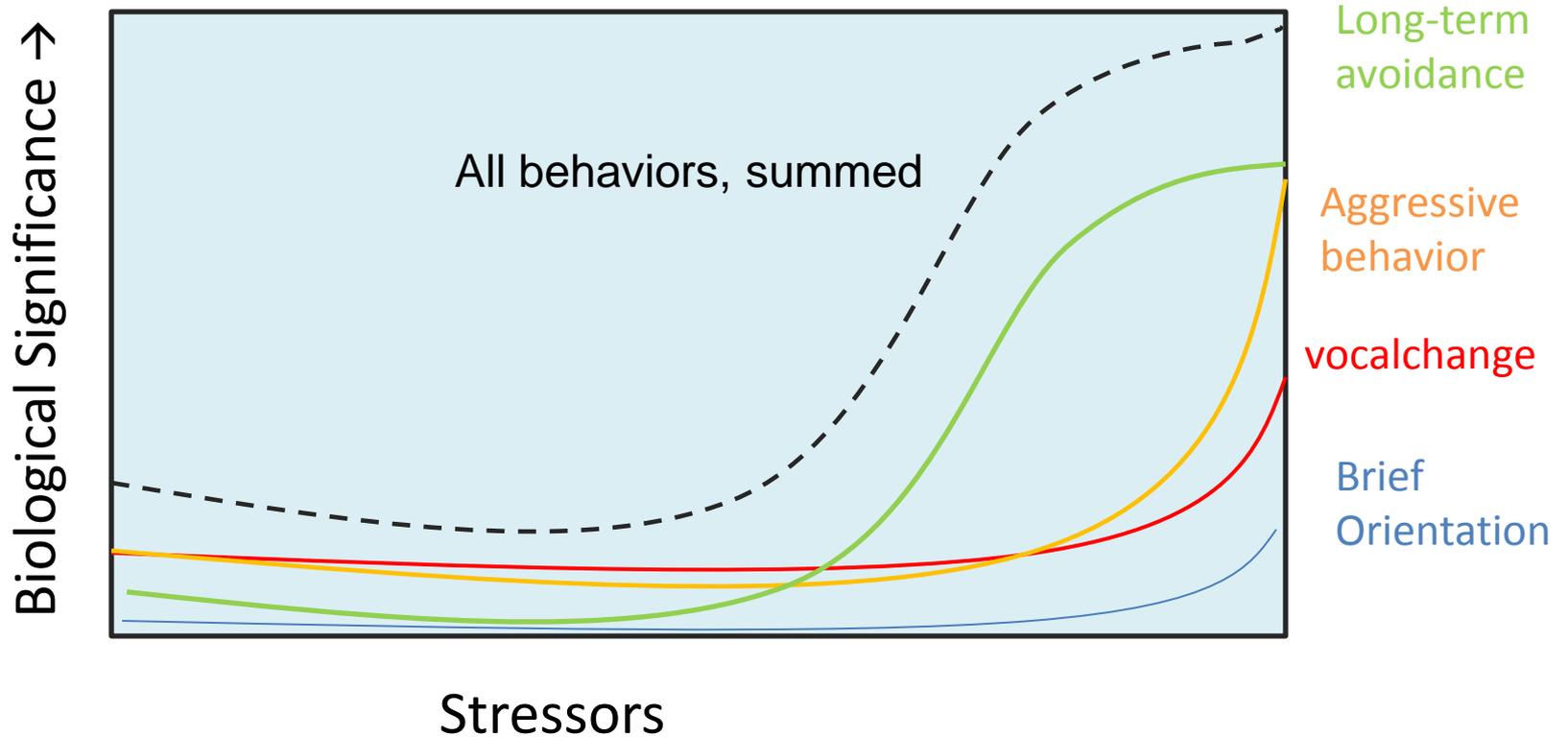




# Section 7 Continued



## Different Behaviors





# Section 7 Continued

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## Response Analyses

- With habitat-based analyses, look for a species' response to events such as:
  - Reductions in habitat quantity and/or quality;
  - Reductions in resource availability;
  - Landscape fragmentation and barriers to movement;
  - Disruption of ecological processes that maintain particular resources;
  - Changes in habitat conditions that benefit competitors; and
  - Introduction of organisms that compete for resources



# Section 7 Continued

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## Effects Determinations

This step must clearly, logically, and completely integrate all of the salient points provided in the preceding sections, and describe the effects

- Avoid relative terms such as “short-term”, “temporary”, “minimal”, “small”, “negligible”, “limited”, etc., unless they are put into proper context
- Avoid statements which lead the reader to ask, “so what?”, “why?”, or “how do you know?”
- Present results numerically to the maximum extent possible



# Section 7 Continued

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## Effects Determination

- This step must clearly, logically, and completely integrate all of the salient points provided in the:
  - Description of the action;
  - The status of the species;
  - The environmental baseline;
  - Exposure to action stressors;
  - Responses to exposures; and
  - Cumulative effects
- Establish all causal links to support your determination



# Section 7 Continued

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## Preparing a Biological Assessment/Evaluation

- Description of proposed action
- Description of area affected
- Description of listed species or CH that the action may affect
- Description of manner of effects and cumulative effects
- **Relevant reports, including environmental documents**
- **Any other relevant information**

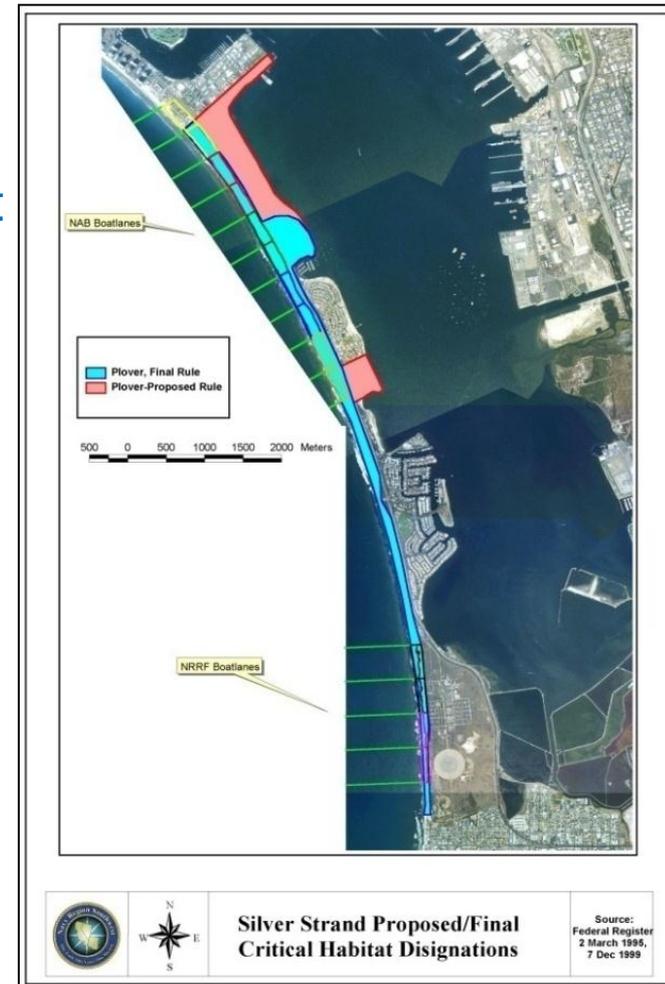


# Section 7 Continued



## Other Relevant Information

- Technical Reports, Environmental Impact Statements (EISs), Environmental Assessments (EAs), or other prepared BAs
- Any other relevant information available about the action, the affected listed species, or the CH





# Section 7 Continued

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## Conclusions

- For each species, state which of the three possible outcomes the analyses determined:
  1. No effect: this conclusion is usually based on a lack of occurrence in the action area, or a lack of co-occurrence of the species and the stressors associated with the proposed action
    - A “no effect” determination does not require consultation with NMFS or USFWS



# Section 7 Continued

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## Conclusions Cont'd...

2. May affect, but is not likely to adversely affect: this determination is usually based on responses to disturbances that do not have any measurable or detectable negative outcomes (i.e., the effects are insignificant or discountable, i.e. not biologically significant)
  - This is also the appropriate finding if the effects of the action are beneficial to the species
  - A “may affect, but not likely to adversely affect” determination requires a request for written concurrence from NMFS or USFWS by way of informal consultation



# Section 7 Continued

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## Conclusions Cont'd...

3. May affect, and is likely to adversely affect: this determination is usually based on responses to disturbances that are not beneficial, insignificant, or discountable, meaning that negative consequences may result from exposures to the disturbances associated with the action
  - Negative consequences may be manifested as harassment or harm as defined by USFWS and NMFS
  - A “may affect, and is likely to adversely affect” determination requires formal consultation with NMFS or USFWS



# Section 7 Continued

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## Jeopardy and Adverse Modification

- These determinations are made within the Services' BO and are not made within the BA, except for:
  - Proposed species / proposed CH
  - Experimental populations
    - Essential
    - Non-essential





# Section 7 Continued

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## Critical Habitat – Status

- Identify proximity to action area
- Discuss in terms of biological and physical features essential to conservation
  - Identify primary constituent elements (PCE)s or habitat qualities used to designate CH
  - Identify the conservation role of individual habitat units
- Sources of information
  - Proposed and final rules
  - Services' websites



# Section 7 Continued



## Designated Critical Habitat

- PCEs:
  - Physical and biological features essential to the conservation of a species that may require management or protection [50 CFR 424.12 (b)]:
    - Space for individual and population growth;
    - Food, water, air, light, minerals – physiological requirements;
    - Cover and shelter;
    - Sites for breeding, reproduction, rearing of offspring, germination, seed dispersal, etc.; and
    - Habitat protected from disturbance or representative of historic geographical and ecological distribution of the species





# Section 7 Continued

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## Critical Habitat - Exposure Analysis

- For designated CH, exposure analyses should identify:
  - The portions of CH that risk exposure;
  - Primary constituent elements to be exposed;
  - The specific stressors causing the exposure; and
  - Exposure pathway(s) (direct, indirect, or both)



# Section 7 Continued

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## Critical Habitat - Effect Analysis

- Evaluate the action's impacts on PCEs
  - Analyze how a stressor would/could impact PCEs/habitat qualities
  - Determine response to potential stressor
- Assess impacts in terms of critical habitat unit
- Effects need to be placed into context of impacting functionality and conservation value of CH in total
  - Purpose of critical habitat unit
  - CH units provide breeding, feeding, sheltering, etc.



# Section 7 Continued

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## Critical Habitat - Effect Determination

- For critical habitat effect determinations in BA/BEs – Use same determination language that would be used for species
  - No Effect
  - May Effect, Not Likely to Adversely Affect
  - Likely to Adversely Affect
- Cumulative effects are also considered in the determination of effect



# Section 7 Continued

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## Critical Habitat - Effect Determination

- Effect determination for CH
  - Should not address mitigation
  - Could address conservation measures or BMPs that are built into action
- Do these impacts reduce conservation value of the entire CH?
- There is no “magic” threshold - key part is in construction of argument



## Section 7 Continued

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## Destruction or Adverse Modification of Critical Habitat

- Courts decided that the definition for destruction or adverse modification is contrary to the ESA due to the linkage between “survival *and* recovery”
- USFWS Interim Guidance - Services will rely on the statutory concepts of CH and conservation



# Section 7 Continued

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## USFWS Interim Guidance

- Do not cite or use the regulatory definition for “destruction or adverse modification” during the consultation process. BOs should state that the Services do not rely on this definition.
- Status of the Species/CH: describe the PCEs and do not address survival of species
- Environmental Baseline: discuss the current condition of the CH units in the action area, the factors responsible for that condition, and the conservation role of those units
- Effects of the Action: discuss how the PCEs or habitat qualities are likely to be affected and are essential to the conservation of the species, and how those effects will influence the function and conservation role of the CH



## Section 7 Continued

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### USFWS Interim Guidance Cont'd...

- Cumulative effects: analyze in terms of how effects of future non-Federal actions will affect the function and conservation role of the CH
- Conclusion: should describe whether CH would remain functional to serve the intended conservation role for the species based on the discussed analytical framework



# Section 7 Continued

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## Destruction or Adverse Modification of Critical Habitat Determination

- For the Services to reach an adverse modification determination
  - Must determine that action will appreciably reduce ability of area to serve its conservation value.
  - Appreciably is more than measurable, but less than significant
- If the action does not impact the ability of critical habitat as a whole to serve its conservation value, then it should not result in an adverse modification determination



# Section 7 Continued

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## Informal Consultation

- A process that includes all discussions, correspondence, etc., between the Services and the Federal agency or designated non-Federal representative
- Allows Federal agencies to:
  - Determine need for formal consultation;
  - Explore options to reduce or avoid adverse effects;
  - Explore opportunities to meet their conservation mandate under section 7(a)(1); and
  - Request Services' concurrence with "may affect and not likely to adversely affect" determinations



# Section 7 Continued

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## Formal Consultation

- Formal consultation is required for any action that warrants a “may affect, likely to adversely affect” determination for a listed species, or designated CH
- Involves submitting a BA or similar document that analyzes project effects to listed species and CH, and receiving a BO and incidental take statement





# Section 7 Continued

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## Formal Consultation Cont'd...

- Formal consultation (the 90-day period, or “the clock”) begins on the day the request is RECEIVED, unless notified by the Service within 30 days\* that the consultation package of information is not complete
- The CLOCK starts when the Service has all the information they need for the consultation





# Section 7 Continued



## Formal Consultation Timeline

- The consultation period is 90 days and then the Services have 45 days to deliver the BO
  - Any or all of the 45 days can be used to further the 90-day consultation period
- Total time from start to finish is 135 days\*





## Section 7 Continued

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### What About Extending the Consultation Period?

- Time line:
  - Section 402.14(e) of the regulations provides for the extension of the consultation process for a specific amount of time upon mutual agreement

*Recommend asking for a written request for the record, and determining a specific timeframe*



# Section 7 Continued

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## Draft Biological Opinions

- The regulation states: If requested, the Service shall make available to the Federal agency the draft BO for the purpose of analyzing **the reasonable and prudent alternatives**
- Handbook policy seems to include non-jeopardy BOs – but this could extend the 135-day timeline



# Section 7 Continued

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## Contents of a Biological Opinion

- Consultation History
- Description of the proposed action
- Status of the species/CH
- Environmental baseline
- Effects of the action
- Cumulative effects
- Conclusion



# Section 7 Continued

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## Jeopardy Determination

- Determined by the aggregate of effects (direct, indirect, environmental baseline, and cumulative)
- Work with Service to identify:
  - **Reasonable and prudent alternatives**
    - Alternatives the Services believe will avoid the likelihood of *jeopardy or adverse modification*
    - Alternatives that can be implemented in a manner consistent with the intended purpose of the action
    - Alternatives that can be implemented consistent with the scope of the action agency's legal authority and jurisdiction
    - Alternatives that are economically and technologically feasible



## Section 7 Continued

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### When Is It Not Possible To Avoid Jeopardy?

- An alternative not under consideration (e.g., locating a project in uplands instead of requiring a Corps permit to fill a wetland)
- Actions of a third party not involved in the proposed action (e.g., only the county, which is not a party to the consultation, has the authority to regulate speed limits)
- Actions on lands over which the action agency has no jurisdiction or no residual authority to enforce compliance
- Data not available on which to base an alternative



# Section 7 Continued

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## What Are Your Options?

- You have to notify the Service in writing of your decision to:
  - Move forward with your action as proposed;
  - Accept and implement a reasonable and prudent alternative;
  - Apply for an exemption; or
  - Not move forward with project action



# Section 7 Continued

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## A Non-Jeopardy Biological Opinion

- Incidental take statement
  - Anticipated amount or extent of take
  - Effect of the take
- Reasonable and prudent measures
  - Terms and conditions
- Re-initiation notice – 4 triggers (who knows?)
- Conservation recommendations



# Section 7 Continued



## Conservation Measures vs. Conservation Recommendations





# Section 7 Continued

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## Two Primary Responsibilities Under Section 7

### Section 7(a)(1):

- A. Requires Federal agencies to develop conservation programs for T&E species
- B. Any action implemented by Federal agencies to provide direct or indirect benefits to listed species and their habitats

### Section 7(a)(2):

- A. Requires Federal agencies to consult with the USFWS/NMFS (Services) to ensure actions are not likely to jeopardize the continued existence of T&E species
- B. Specific actions to limit the amount or extent of incidental take that may result from an activity within the action area, and for which formal consultation was conducted



# Section 7 Continued

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## The 7(a)(2) Consultation Process is used to Remind Navy of its 7(a)(1) Responsibilities

### 7(a)(1):

- ESA regulations are mostly silent on section 7(a)(1) requirements and do not formalize any means to develop and implement section 7(a)(1) duties

### 7(a)(2):

- 50 CFR § 402.14(j) gives the Services the option of including conservation recommendations in BOs and specifically states that these recommendations are “advisory and not intended to carry any binding legal force”



# Section 7 Continued

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## Definition of Conservation Recommendation

- 50 CFR § 402.02 **defines conservation recommendations** as “...suggestions of the Service regarding discretionary **measures to minimize or avoid adverse effects of a proposed action on listed species or CH** or regarding the development of information”
- 50 CFR § 402.14(g)(6) directs the Services to “Formulate discretionary **conservation recommendations**, if any, which will assist the Federal agency **in reducing or eliminating the impacts that its proposed action may have on listed species or critical habitat**”



# Section 7 Continued

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## Conservation Recommendations Cont'd...

- “Conservation recommendations for agency implementation of 7(a)(1) responsibilities under the Act may be included [in a BO] ....”  
Consultation Handbook pg 4-11





## Section 7 Continued

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### What Are Conservation Measures?

- No statutory or regulatory definition, or acknowledgement
- A definition is provided in the Consultation Handbook:
  - Actions integrated into the proposed action **to benefit or promote recovery of species affected by an action; and are taken to minimize or compensate for project effects**
- There can be two types of conservation measures by this definition:
  - Those that help to avoid or minimize incidental take in the action area - [7(a)(2)]
  - **Those that contribute to the conservation of the species affected by the action - [7(a)(1)]**



# Section 7 Continued

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## The Hook

- As part of the proposed action, implementation of conservation measures is required by the terms of the consultation
- It is okay if the action is implemented within the action area to minimize the impact on the affected individuals

## The Pitfalls

- Emergent requirements
- Costly
- May not be the only way, best way, or most cost-effective way to achieve conservation benefits
- May set a precedent
- May not be compatible with the Navy mission
- May not provide the expected benefits



# Section 7 Continued

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## Remember...

- “It is not appropriate to require mitigation for impacts of incidental take” (Consultation Handbook pg 4-50)
- “Similarly, discretionary conservation recommendations under section 7(a)(1) are not a substitute for reasonable and prudent measures as a means of minimizing the impacts of incidental take” (Consultation Handbook pg 4-51)



# Section 7 Continued

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## Summary

- Conservation recommendations are called conservation measures when they are incorporated into the proposed action
- Only conservation recommendations are addressed by the regulations and in the context of addressing 7(a)(1) responsibilities
- The regulations clearly state that conservation recommendations are voluntary and do not carry any binding legal force
- Incorporation of conservation measures into the proposed action may be problematic if they are clearly 7(a)(1) actions
- It is not appropriate to incorporate compensatory mitigation in any ratio as a conservation measure into the proposed action



## Section 7 Continued

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### Does this Mean Never Incorporate Conservation Measures into the Proposed Action?

- No, use your discretion and keep pitfalls in mind
- Clearly, it is prudent to incorporate measures that could reduce incidental take within the action area into the proposed action
- However, Navy has a mechanism other than a BO by which we can address conservation actions [i.e., 7(a)(1) duties]
  - INRMPs



# Section 7 Continued

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## Paradigm Shift

- Conservation programs for T&E Species should be established in and implemented through INRMPs
- Actions that do not minimize incidental take in the action area should not be incorporated into the proposed action as conservation measures
  - Only conservation measures that can be implemented for the purpose of minimizing incidental take within the action area should be included in the proposed action
- The annual INRMP review process should include consideration of conservation recommendations or measures identified during 7(a)(2) consultations



## Section 7 Continued

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### Do NOT Incorporate 7(a)(1) Actions into the Proposed Action...

- As a means to give that action a funding priority
- As a means to expedite the consultation process (if more time is needed beyond 90 days, USFWS/NMFS should send a written request for an extension to the action proponent)
- In response to unsubstantiated potential jeopardy opinions (*i.e.*, threats)



# Section 7 Continued

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## What about Jeopardy?

- Simply put, Jeopardy is predicated on the impacts of the effects of the proposed action on the current status of the species (plus the environmental baseline and cumulative effects)
- If a conservation measure does not have any consequence for the action under consultation (*i.e.*, is designed to improve the status of the species but does not minimize the effect of the action in the action area), that measure would have no influence on the jeopardy analysis





## Section 7 Continued

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### Do...

- State (for example) that as part of the proposed action, the conservation recommendations identified as a result of this consultation will be considered during the annual INRMP review and incorporated into the INRMP as appropriate, along with other actions that can be identified to provide additional conservation benefits to the species affected by this action





# Section 7 Continued

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## Streamlining Consultation

- Refers to ways to make consultation efficient and expedient
- Includes:
  - Early coordination
  - Informal consultation
  - A **well written BA/BE**





# Section 7 Continued

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## Streamlining Tools

- Batching projects
- Project design criteria
- Guidance criteria
- Consultation agreements
- Incorporation by reference
- Program-level consultations
- Other tools





# Section 7 Continued

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## Early Coordination

- Can begin when:
  - The action proponent has identified a project and before alternatives have been developed
  - Anytime prior to submission of a request for formal consultation
- Facilitates agreement on a species list
- Promotes information exchange which increases common understanding of actions, effects, policies, regulations, and laws
- Enables handling of more complex actions with current RA staffing levels





# Section 7 Continued

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## Who Coordinates?

- Navy SMEs and Service personnel who meet to discuss proposed projects, programs, etc.
- Can include endangered species biologists and staff from other pertinent disciplines



# Section 7 Continued

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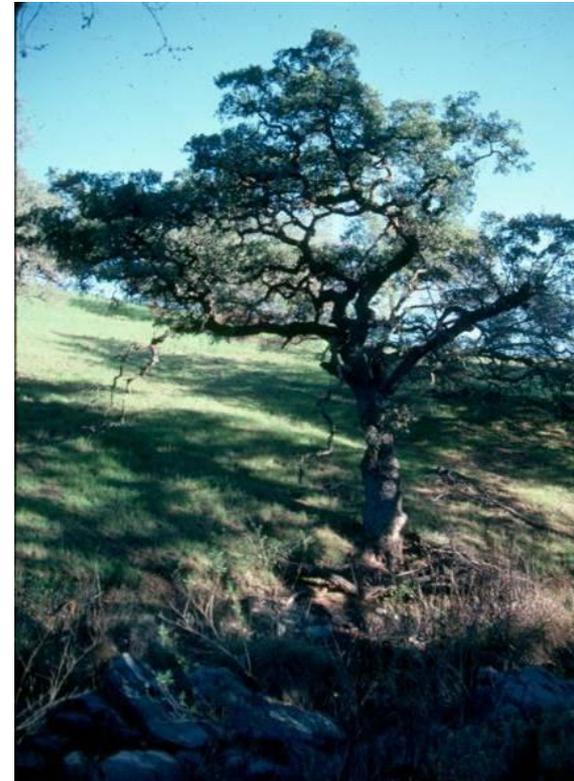


## Coordination Cont'd...

Early coordination helps identify:

- Action area and potential action stressors
- Potential effects on species and habitats
- Adjustments to proposed actions to eliminate or minimize adverse effects
- Conservation needs of the species

Goal: To reduce consultation time through a well defined proposed action and complete assessment





# Section 7 Continued

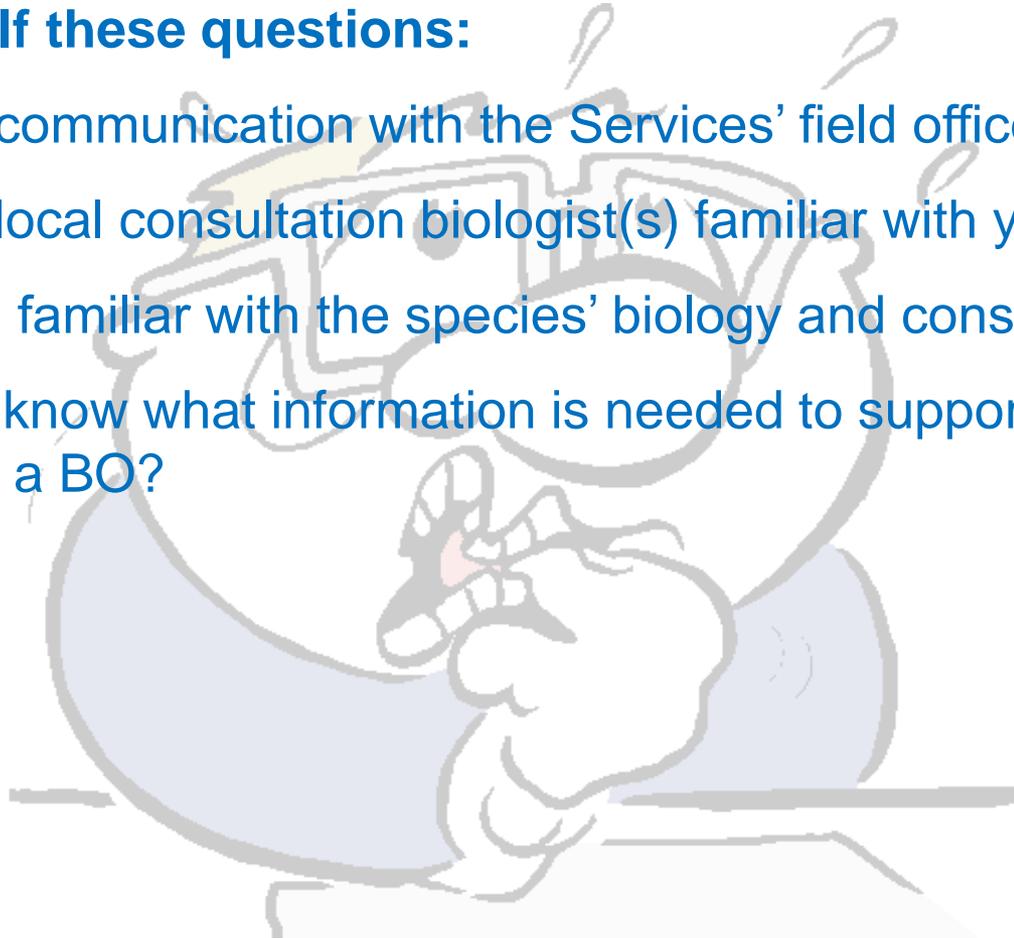
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## Avoid Crises

### Ask yourself these questions:

- Is your communication with the Services' field office working well?
- Is your local consultation biologist(s) familiar with your project(s)?
- Are you familiar with the species' biology and conservation needs?
- Do you know what information is needed to support a concurrence letter or a BO?





# Section 7 Continued



## Potential Tool for Streamlining Consultation

- Information, Planning, and Conservation (IPaC) Decision Support System
  - USFWS System
  - Access and manipulate information to make decisions early in process
  - Information available to inform project design
  - <http://ecos.fws.gov/ipac/>

The screenshot shows the IPaC website interface. At the top, there is a navigation bar with the U.S. Fish & Wildlife Service logo and the text "Information, Planning, and Conservation System". Below this is a search bar and a set of navigation tabs: "IPaC Home Page", "Initial Project Scoping", "Project Builder", and "FAQs".

**IPaC features**

- **Initial Project Scoping »:** Find out if any threatened or endangered species, designated critical habitat, or other natural resources of concern may be affected by your proposed project and then receive a list of conservation measures (or best management practices) designed specifically for your activity types.
- **Project Builder »:** Refine your project design and construct the environmental review documents you'll need.
- **Conservation Measure Search »:** Create a custom query against the conservation measure database.
- **FAQs »:** Read more about how IPaC works and the type of information you can retrieve from IPaC.

**What is IPaC?**

**Purpose:** To provide information about sensitive resources within the vicinity of a proposed project. IPaC provides the following types of information:

- U.S. Fish and Wildlife Service Trust Resources include FWS owned lands and facilities, migratory birds, federally threatened and endangered species, inter-jurisdictional fishes, and some marine mammals. The FWS also has some specific Trustee responsibilities for Tribal Fish and Wildlife interests. The IPaC system provides information regarding federally designated and proposed candidate, threatened, and endangered species, final critical habitats, and Service refuges that may occur in the identified areas, or may be affected by the proposed activities.
- U.S. Fish & Wildlife Service recommended Conservation Measures that detail how a user may avoid, minimize, and mitigate adverse effects that may result from potential activities.

[\[read more at our FAQ page\]](#)

**What's coming?**

The U.S. Fish & Wildlife Service and its partners are expanding IPaC's functionality in 2010 and 2011.

**Summer 2010**

- Expansion of the trust resource list capabilities to other parts of the U.S. beyond the southern U.S./Mexico border.

**Summer 2011**

- Implementation of IPaC's "Project Builder" functionality to assist project

**IPaC is a Partnership between:**



# Section 7 Continued



# Project Scoping

**U.S. Fish & Wildlife Service**  
Information, Planning, and Conservation System

Environmental Conservation Online System

Search

PaC Home Page **Initial Project Scoping** Project Builder FAQs

**Step 1**  
Location

**Define your project location**

Map (using toolbar buttons)  State/county list

Coordinates: Latitude: 30.364258 Longitude: -90.797852 Scale: 1:86937200

Continue

**U.S. Fish & Wildlife Service**  
Information, Planning and Consultation System - BETA

Home **Project builder** BMP search FAQs

**Step 1**  
Location

**Define your project location**

1. Choose a location via:

- Map
- State / county list

2. Zoom to your area of interest (optional):

- Address
- Latitude / Longitude

Address:

Examples:  
1234 MyStreet St. MyCity, TX  
MyCity, TX

**Map Tips**

- Place a point - Click on the map.
- Close the shape - Single click on the first point you placed.
- Delete a point (after you've closed the shape) - Click on it.
- Adjust the shape - Grab and drag a square (i.e. point).
- Start over - Click the 'Clear map' button.

3. Use the trust resource layers in the map legend to find a project location with the least overlap with trust resources (optional).

4. Click on the map to draw your project boundary:

**Map Legend**

- Navigation Layers
  - Counties
  - Waterways
  - 7.5 Quads
- Trust Resource Layers
  - Lowland Spots
  - Refuge

USGS  
Source: ESRI  
Data: USGS  
Display: USGS



# Section 7 Continued



- Local USFWS Contact Information
- Obtain trust resource lists
  - Threatened & Endangered Species (now available)
  - Designated Critical Habitat Areas (now available)
  - National Wildlife Refuges (now available)
  - Migratory Birds (future)
  - Wetlands Conservation (future)
  - Invasive Species Issues (future)
- Obtain trust resource information
  - Links to ECOS
- Recommended USFWS CMs
  - Only for certain activities

### Natural Resources of Concern

An online Endangered Species Act species list is available on this page for all of your project areas, represented by the offices listed below.

The **Endangered Species Act species list** is for planning purposes only - it is not an official species list. To request an official species list, visit the Request an Official Species List link to the right and follow the instructions.

**LOUISIANA ECOLOGICAL SERVICES FIELD OFFICE**  
604 SUDBURY ROAD, SUITE 200  
LAFAYETTE, LA 70503  
(504) 281-3100  
[ecofl@fws.gov](mailto:ecofl@fws.gov)

**MISSISSIPPI ECOLOGICAL SERVICES FIELD OFFICE**  
2000 N. GULF BLVD., SUITE 100  
MOBILE, AL 36688  
(251) 763-1441  
[ecofl@fws.gov](mailto:ecofl@fws.gov)

**PARAMA CITY ECOLOGICAL SERVICES FIELD OFFICE**  
1001 W. MAIN ST., PM 1414  
PARAMA, MD 21126  
[ecofl@fws.gov](mailto:ecofl@fws.gov)

An online Endangered Species Act species list is available for all project areas of your project area, represented by the offices listed below.

To request an official species list for the project area, follow the instructions to the right and visit the Request an Official Species List link to the right and follow the instructions.

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### Endangered Species Act Species List

There are a total of 28 species in your species list.

Species that may be affected by your project: [View all critical habitat on one map](#)

**Amphibians**

Mississippi Gopher Frog (*Rana capito*) Endangered [USFWS](#) Louisiana Ecological Services Field Office

Population: Wherever found east of Mobile and Tangipahoa Rivers in AL, MS, and LA

Red-Coralline Scaevola (*Leptocarpus*) Endangered [USFWS](#) Panama City Ecological Services Field Office

(*Leptocarpus*)

**Birds**

Mississippi Sandhill Crane (*Grus canadensis*) Endangered [USFWS](#) Louisiana Ecological Services Field Office

Population: Wherever found east of Mobile and Tangipahoa Rivers in AL, MS, and LA

Population: except Great Lakes watershed

Red-Coralline Woodpecker (*Picoides borealis*) Endangered [USFWS](#) Louisiana Ecological Services Field Office

Population: AL, FL, GA, SC

Wood Stork (*Mysticeta americana*) Endangered [USFWS](#) Panama City Ecological Services Field Office

Population: AL, FL, GA, SC

**Carnivores**

Alabama Hoopoe (*Piculus inflatus*) Threatened [USFWS](#) Louisiana Ecological Services Field Office

Population: AL, FL, GA, SC

**Ferns and Allies**

Louisiana Spikeweed (*Ischaemum floridanum*) Endangered [USFWS](#) Louisiana Ecological Services Field Office

Population: AL, FL, GA, SC

**Fishes**

Gulf Sturgeon (*Acipenser oxyrinchus*) Threatened [USFWS](#) Louisiana Ecological Services Field Office

Population: AL, FL, GA, SC



**U.S. Fish & Wildlife Service Species Profile**

Mississippi Gopher Frog (*Rana capito sevosia*)

Kingdom: Animalia Class: Amphibia Order: Anura Family: Ranidae

Listing Status: **Endangered**

Quick links: [Federal Register](#) [Actual Plans](#) [Recovery](#) [Critical Habitat](#) [Conservation Plans](#) [Factbooks](#) [Life History](#) [Other Resources](#)

States/Territories in which the Mississippi Gopher Frog, whenever found east of Mobile and Tangipahoa Rivers in AL, MS, and LA is known to or is believed to occur:

US Counties in which the Mississippi Gopher Frog, whenever found east of Mobile and Tangipahoa Rivers in AL, MS, and LA is known to or is believed to occur:

This map represents our best available information about where a species is currently known to or is believed to occur. However, it should not be used as an official species list for Section 7 consultation purposes. To obtain an official species list for this purpose, please visit the Information, Planning, and Conservation (IPAC) System (https://www.ipac.fws.gov).



### Conservation Measures

- MISSISSIPPI ECOLOGICAL SERVICES FIELD OFFICE
- Aircraft Use over Coastal Lands and Waters
- All aircraft should be watching for marine mammals/sea turtles.
  - All reconnaissance aircraft are requested to maintain a minimum altitude of 2,000 feet above the surface of lands and waters administered by the NPS, FWS, or USFS Wilderness areas: FAA Advisory Circular (AC 91-36C), "Visual Flight Rules (VFR) Flight Near Noise Sensitive Areas," defines the surface as: the highest terrain within 2,000 feet laterally of the route of flight, or the uppermost rim of a canyon or valley.
  - Avoid hovering or landing of aircraft near posted birds sites or within or over Stay Out Zones (maps should be available for each region).
  - Dead wildlife should be reported to the Wildlife Reporting Hotline (866-557-1401).
  - No flights below 500 feet over Wildlife Refuges/management areas.
  - Overflights to identify locations of oiled wildlife should not fly below 500 feet over Wildlife Refuges, management areas, or known colonial nesting bird rookeries.



# Section 7 Continued

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## IPaC Caveats

- Information resource
  - Use the information you receive from IPaC for planning purposes
  - Contact appropriate local offices to ensure complete understanding of information received
    - E.g. Species information at county level
- Will not alleviate the need to contact and interact with your local USFWS office
  - Will never replace trained biological experts
  - Cannot perform complex biological analyses
  - Information from system may differ from your analysis
- NMFS information may not be up to date in ECOS



# Section 7 Continued



## IPaC Information Website

- Informational walk through
  - [Http://www.fws.gov/ipac/index.html](http://www.fws.gov/ipac/index.html)
  - Portions still under construction
- Demo videos
  - Video of mapping - <http://www.fws.gov/ipac/vid/IPaCVideo.html>
  - 30 min Overview Video – <http://www.fws.gov/ipac/introvid.html>

A screenshot of the IPaC Information Website interface. The top navigation bar includes the U.S. Fish &amp; Wildlife Service logo and the title "The Information, Planning, and Conservation System". Below the navigation bar is a search bar and a list of menu items: Home, IPaC Overview, IPaC Detailed Look, Conservation Measures, Watch IPaC in Action, Common Questions, and Go to IPaC Website. The main content area features a heading "The Information, Planning, and Conservation System (IPaC System) gives you access to crucial information when you need it. ... BEFORE you have designed your project." Below this is a section titled "IPaC Mapping Feature" which describes the mapping tool. The interface includes a map of the United States with various locations marked, and a sidebar with a list of steps: Step 1 Location, Step 2 Activities, Step 3 Trust Resources ID, and Step 4 Conservation Measures. The bottom of the page indicates "IPaC presents a map of the U.S." and the ESRI logo is visible in the bottom right corner of the map area.