

# Conservation of Threatened and Endangered Species



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# Species of Concern

- Concerns regarding their status and threats, but for which sufficient information is not available to indicate a need to list the species under ESA
- 42 species currently on the list of Species of Concern
- Several are classified as “overfished” or subject to “overfishing” – **see handout**



# Endangered Species Act Purposes and Policy

- Purposes – “...to provide a means whereby the **ecosystems** upon which endangered species and threatened species depend may be **conserved**”
- Policy – “...**all** Federal departments and agencies shall **seek to conserve** endangered species and threatened species and shall **utilize their authorities** in furtherance of the purposes of this Act.”



\* Sawfish Photo by FL Fish and  
Wildlife Conservation Commission

# ESA programs

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- Listing and Designating Critical Habitat (Section 4)
- Recovery (Section 4)
- Cooperation with States (Section 6)
- Interagency Cooperation (Section 7)
- International Cooperation (Section 8)
- Enforcement of the ESA (Section 9)
- Permits & Habitat Conservation Plan (Section 10)

<http://www.nmfs.noaa.gov/pr/programs.htm>

# Interagency Cooperation (50 CFR Part 402)

- Applies to Federal Agencies
  - Agencies shall review and use programs to promote the purpose of the ESA (sec.7(a)(1))
  - Consult to **insure** that **any action** authorized, funded, or carried out by such agency **is not likely to jeopardize** the continued existence of any endangered species or threatened species **or result in the destruction or adverse modification of designated critical habitat ...** (sec.7(a)(2))
    - Requires the use of the **best scientific and commercial data available**

<http://www.nmfs.noaa.gov/pr/laws/esa/policies.htm>

# Jeopardy and Adverse Modification

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Jeopardy – an action that would be expected, directly or indirectly, to **reduce appreciably the likelihood of both the survival and recovery** of a listed species in the wild by reducing the **reproduction, numbers, or distribution** of that species

Adverse modification – a direct or indirect alteration that **appreciably diminishes the conservation value** of critical habitat for a species

# Fishery Management Actions and Section 7(a)(2)

<b>Action</b>	NMFS' <i>approval</i> and <i>implementation</i> of the FMP, FMP amendment (framework adjustments, individual fishing quotas, experimental fisheries), regulations, TAC, and others
<b>Action Agency</b>	Sustainable Fisheries
<b>Consulting Agency</b>	Protected Resources
<b>Outcome</b>	“Biological Opinion” or “Concurrence Letter” that contains an assessment of the impacts of the action on threatened and endangered species

# Types of Consultations

Consultation Type	Document
Informal	Concurrence Letter
Formal	Biological Opinion
Informal Conference*	Conference Report
Formal Conference*	Conference Opinion
Early	Preliminary Biological Opinion

\* Applies to Species Proposed for listing

# Informal Consultation

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- Optional process: includes discussions and correspondence between the Action Agencies and the Services to determine if formal consultation is necessary
- Often used to identify modifications to the action that would avoid adverse effects to listed species or critical habitat



# Formal Consultation

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- Unavoidable adverse effects?
  - Action Agencies and the Services initiate formal consultation to determine whether the Action
    - Is likely to jeopardize the continued existence of threatened or endangered species
    - Is likely to destroy or adversely modify designated critical habitat

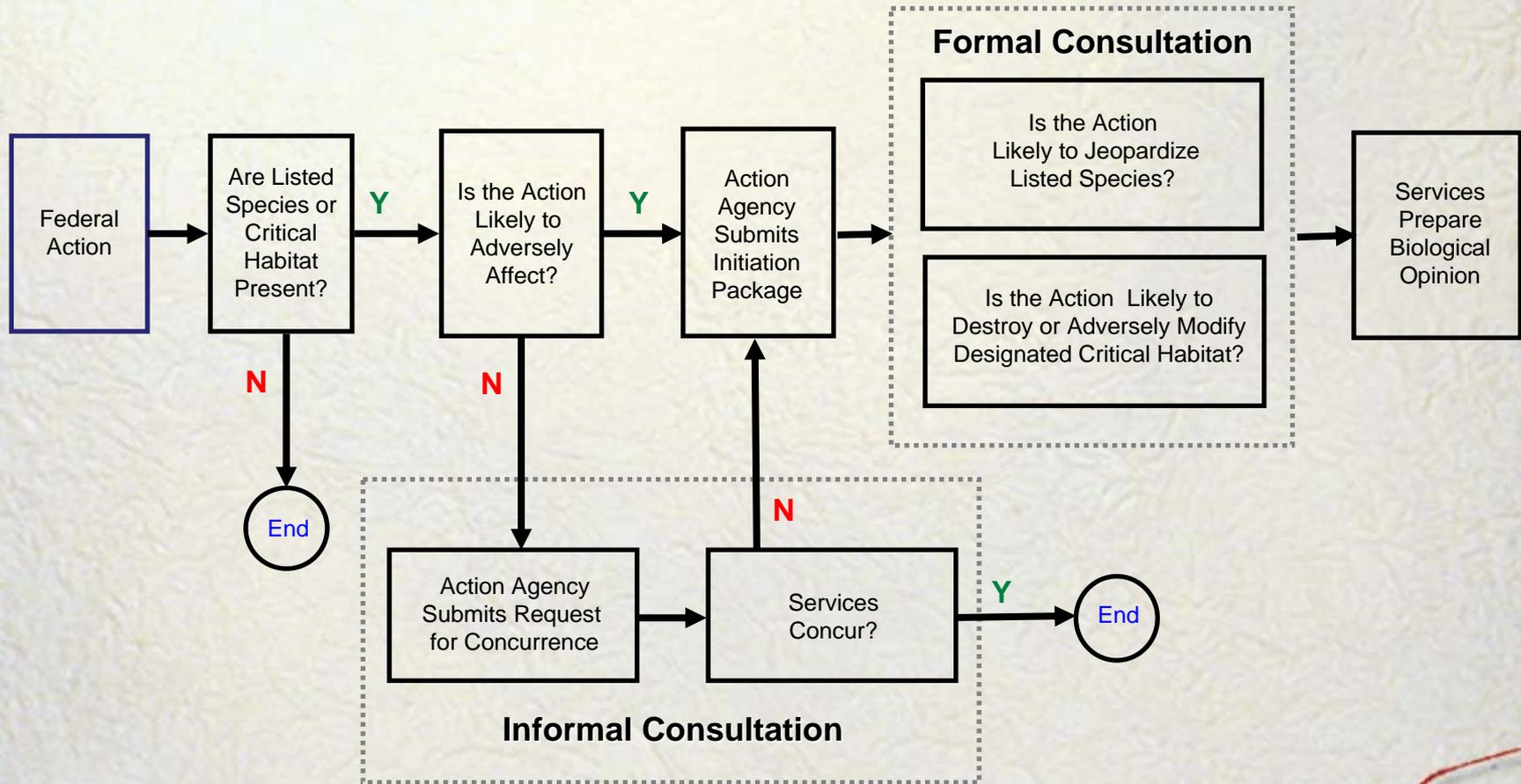
# Threshold for Formal Consultation

Must be set sufficiently low to allow Federal agencies to satisfy their duty to “insure” under section 7(a)(2)

“...burden on Federal agency to show the absence of likely, adverse effects to listed species or critical habitat”



# The Consultation Process



# Duration of Consultation

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- Formal consultation can last 135 days (once initiated) unless extended by mutual agreement
  - Concludes within 90 days after initiation
  - Services deliver biological opinion within 45 days after consultation concludes
- Technical Assistance Period and Informal Consultation varies by action
  - Not defined by regulation or statute

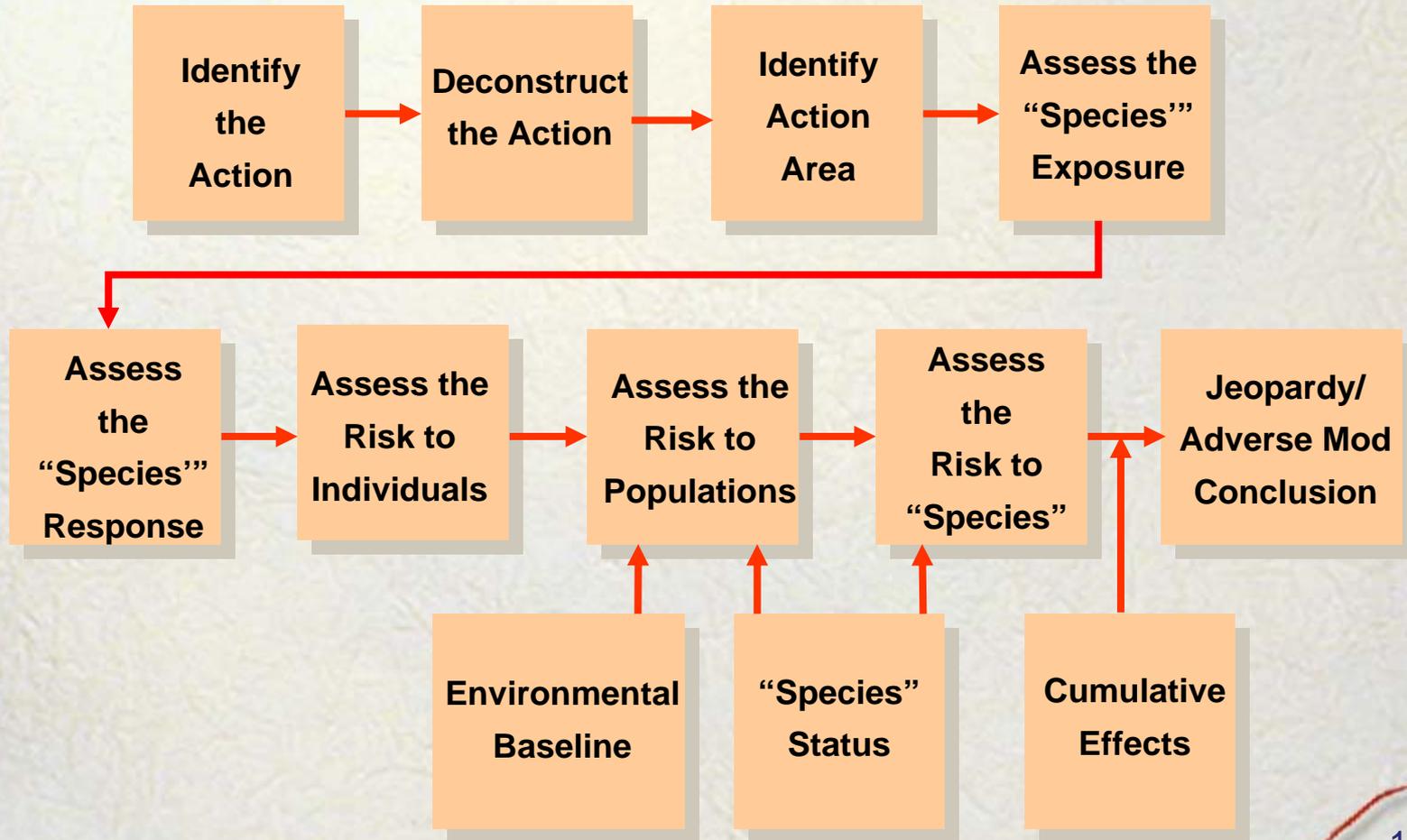
# The Initiation Package

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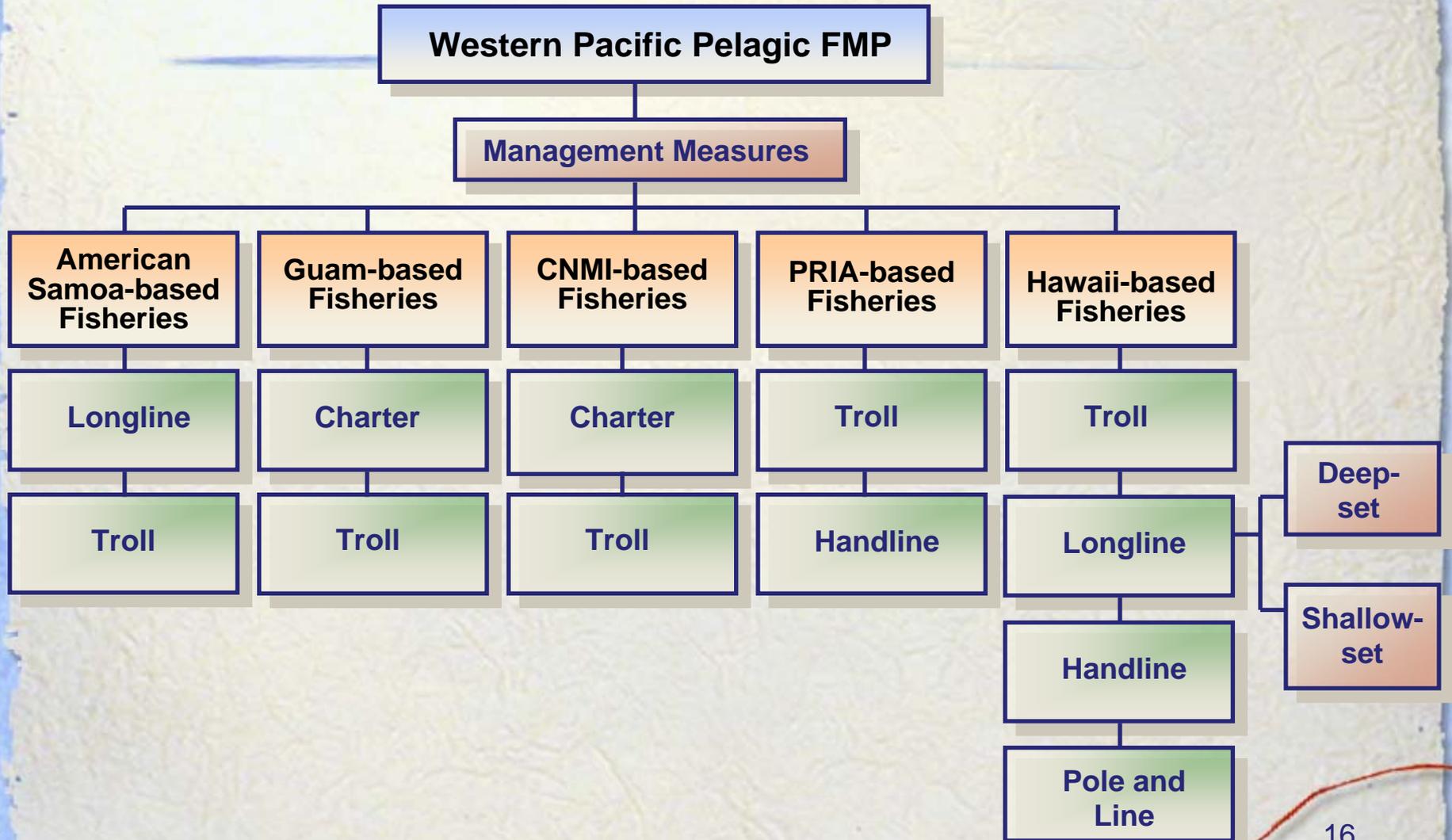
Regulation requires a written request for consultation and the following information:

- Description of the action
- Description of the specific area affected by the action
- Description of the listed species/critical habitat that may be affected by the action
- Description of the way in which they may be affected
- Any relevant reports (e.g., NEPA & others)
- Other relevant studies or available information

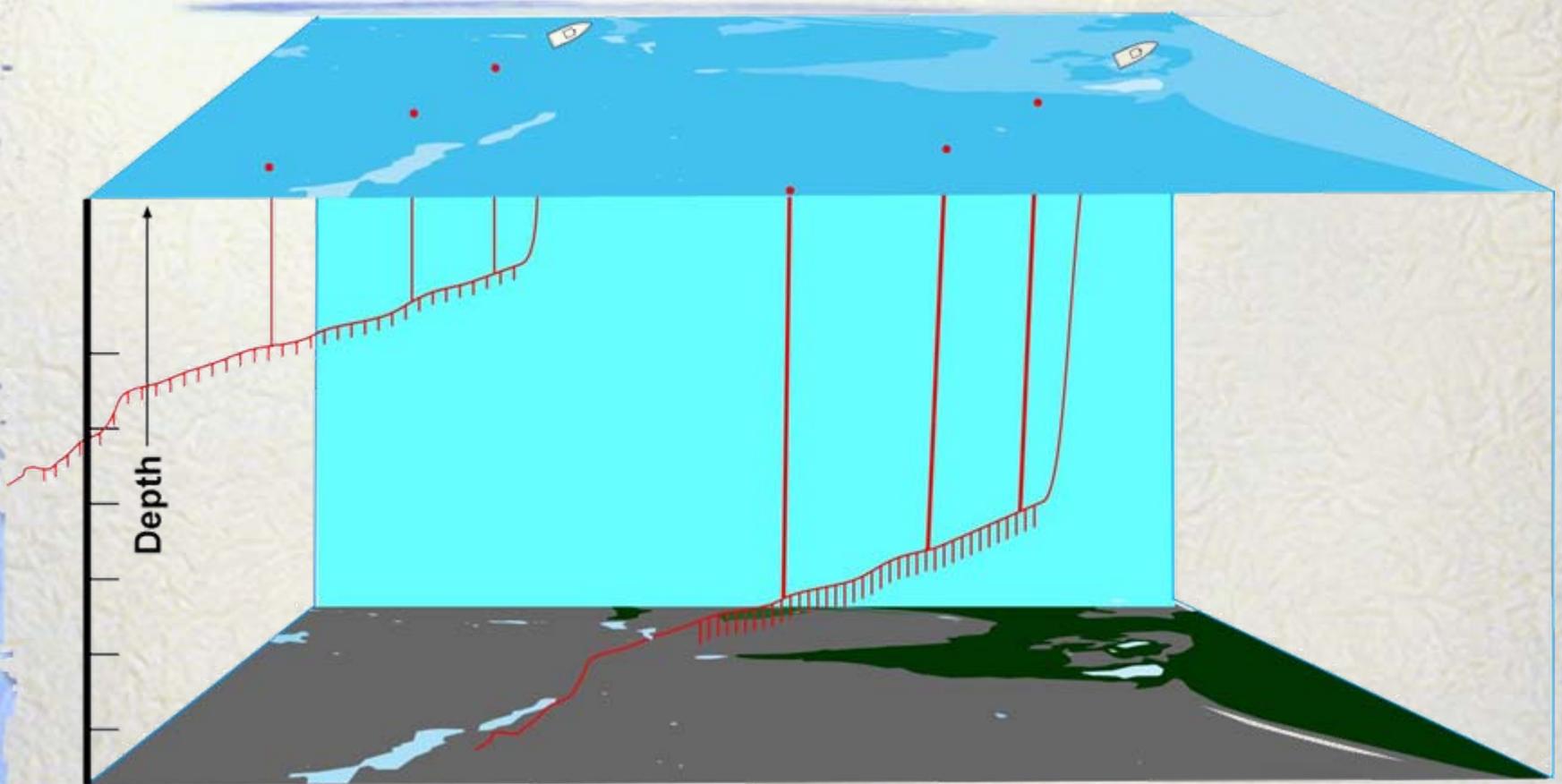
# Structure of the Assessment



# Example of a Deconstructed Fishery Action



# Hawaii Longline Fisheries



# Exposure Analysis

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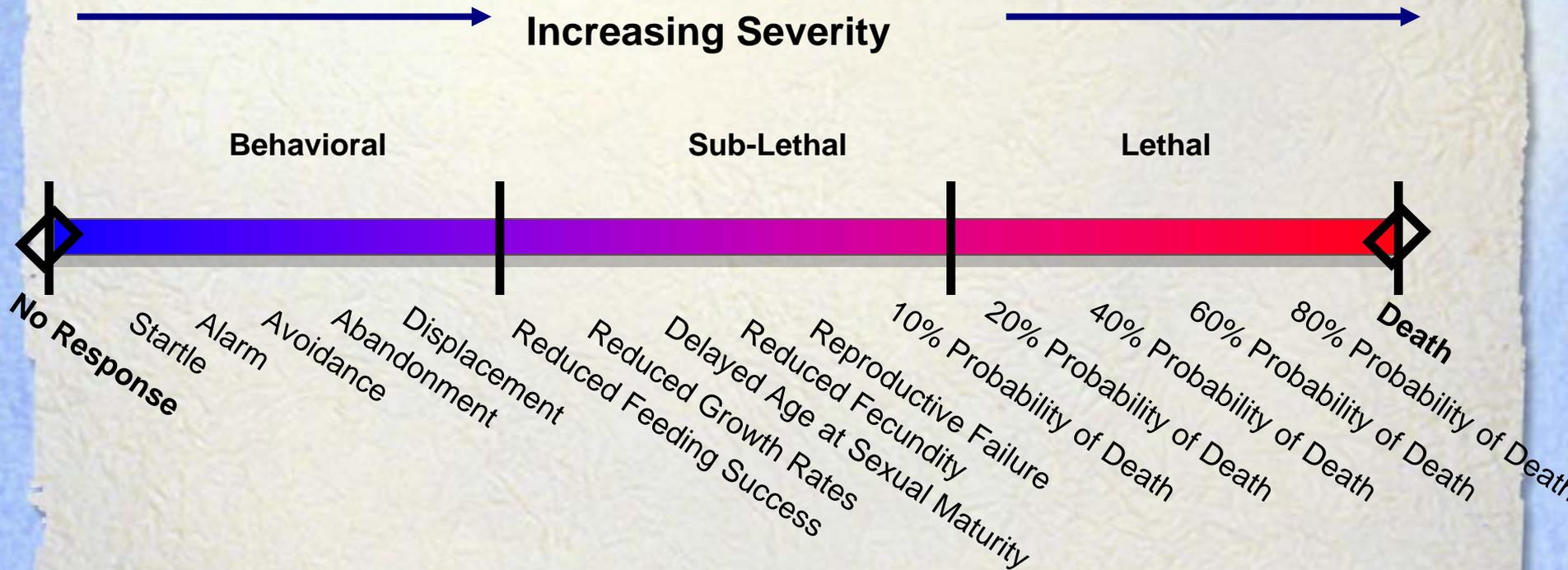
- How many listed individuals and what critical habitat would be exposed?
- Which populations do those individuals represent?
- What are the specific stressors associated with exposure?
- Where would exposure occur?
- When would exposure occur?
- How long would exposure occur?
- What is the frequency of the exposure?

# Response Analysis

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- Establish causal relationships between exposure and the probable responses of individuals that have been exposed; include responses to
  - Changes in habitat quality, quantity
  - Barriers to movement
  - Changes in trophic relationships
  - Changes in ecological processes that create and maintain particular conditions
- Duration, timing, intensity, severity, frequency

# Range of Responses



# Risk Characterization

- Identify probable changes in an individual's fitness
- Translate risk to population that result in changes to
  - Abundance
  - Population trend
  - Population structure
  - Live births per female
  - Fragmentation
  - Age composition
- Translate probable changes in population attributes to the species level

# Incidental Take Statements & Conservation Recommendations

- **Incidental take statements** specify the amount or the extent of incidental take & the **reasonable and prudent measures (RPMs)** that minimize impact of the take on listed species.
  - Set forth terms and conditions (including reporting requirements) to implement the RPMs
  - Complying with the terms and conditions of an ITS exempts the Federal agency from the take prohibitions
- **Conservation Recommendations** are recommendations for using authority to help conserve endangered and threatened species

# Post-Opinion Requirements

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When the Services issue a jeopardy or adverse modification biological opinion, Action Agencies have the following options:

- Implement one of the reasonable and prudent alternatives
- Disagree with the biological opinion and proceed with the proposed action (**but this risks legal exposure**)
- Apply to the Secretary of Interior for an exemption
- Decide not to undertake the action
- Initiate consultation on a modified action

# Reinitiating Consultation

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By regulation, Action Agencies or the Services shall reinitiate formal consultation if....

Discretionary Federal involvement or control over the action has been retained or is authorized by law, and

1. Incidental take is exceeded
2. New information reveals effects not considered
3. The action is modified to produce effects not considered in consultation or
4. New species or critical habitat is listed

