



**Module 3: Section 4—Determination of Endangered and Threatened Species**  
*Recovery, Planning and Implementation*

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Module 3: Section 4—Determination of Endangered and Threatened Species—Recovery, Planning and Implementation

**Objective**

Given a recovery plan, recognize if the plan has all of the required elements in accordance with the requirements listed in Section 4(f) of the ESA of 1973.



Credit: James Welver/USFWS

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**Topics**

- Recovery as a Process
- Statutory and Functional Requirements of Recovery Planning
- Recovery Plan Implementation
- Regulatory and Policy Tools
- 5-Year Reviews, Reclassification and Delisting
- Post- Delisting
- Exercises

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## Recovery as a Process



Credit: Jane Henderson/USFWS

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## Recovery as a Process

Recovery:

- Ultimate purpose of the ESA
- All Federal agencies are responsible

ESA Recovery Goal:

to restore listed species to a point where they no longer need the protections of the ESA. In practice, they should be secure and self-sustaining components of their ecosystem to reach this point.

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## Recovery as a Process

- Recovery is much more than a suite of actions implemented by the FWS
- Recovery involves recovery planning, which includes:
  - Analyzing the factors leading to a species' endangerment
  - Identifying the most effective ways to reverse those factors
  - Designing an effective recovery program around this knowledge, and
  - Implementing that program

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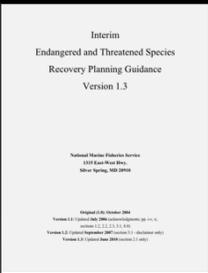
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## Recovery as a Process

NMFS and FWS have developed recovery planning guidance to help planners address all of these issues.



To learn more about the FWS/NMFS Recovery Planning Guidance, click on the link below:  
<http://www.nmfs.noaa.gov/pr/pdfs/recoveryguidance.pdf>

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## Recovery as a Process

A recovery plan must be implemented in order to benefit the species. This requires:

- Developing partnerships to ensure implementation of the recovery actions proposed
- Assessing the progress of recovery for each species, and modifying the recovery program as needed.

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## The Statutory and Functional Requirements of Recovery Plans



Credit: James Leupold/USFWS

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### The Statutory Requirements of Recovery Plans

- Section 4(f) of the ESA requires the: development and implementation of recovery plans for the purpose of conservation and survival of listed species.
- Formal recovery planning process: starts upon species listing but recovery activities should start before that time.
- A recovery plan is not required (section 4(f)(1)): *if* the Secretary(s) find that such a plan will not promote the conservation of the species

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### The Statutory Requirements of Recovery Plans

Recovery Plans “shall, to the maximum extent practicable . . . incorporate . . .”

- (i) “a description of such site-specific management actions as may be necessary to achieve the plan’s goal for the conservation and survival of the species;
- (ii) Objective, measurable criteria which...would result in the determination...that the species be removed from the list; and
- (iii) Estimates of time required and the cost to carry out those measures to achieve the plan’s goal and to achieve intermediate steps toward that goal.” [section 4(f)(1)(B)]

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### The Statutory Requirements of Recovery Plans

Approval of Recovery Plans — the Services shall:

“ . . . provide public notice and an opportunity for public review and comment on such plan...” and

“... consider all information presented during the public comment period prior to approval of the plan.”

“...each Federal agency shall, prior to implementation of a new or revised recovery plan, consider all information presented during the public comment period.” [section 4(f)(5)]

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### The Functional Requirements of Recovery Plans

Effective recovery plans must make a compelling case as to why the proposed recovery strategy and actions are the most effective route to species recovery.

FWS/NMFS Recovery Planning Guidance



Credit: Robert Payne

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### The Functional Requirements of Recovery Plans

Recovery plans should *also* include:

- a description of the species' relevant biology, including its biologically inherent vulnerabilities,
- an analysis of the threats impacting a species,
- a clearly articulated strategy for the species' recovery

FWS/NMFS Recovery Planning Guidance

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### The Functional Requirements of Recovery Plans

Recovery plans can focus on

- a single-species,
- multiple species,
- or an ecosystem;



Credit: USFWS

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## The Functional Requirements of Recovery Plans

Recovery plans can be developed

- in-house,
- by a contractor,
- by a State agency, or
- by a recovery team.



Credit: USFWS

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## The Functional Requirements of Recovery Plans

### Recovery Teams

The ESA calls for involvement of the public in agency decisions, and allows for, but does **not require** the use of recovery teams



Credit: Edward Peter Steenstra

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## The Functional Requirements of Recovery Plans

For wide-spread species or species with complex recovery issues, appointing a recovery team:

- initiates working relationships that can lead to mutual respect and long-term partnerships
- fosters better understanding of recommendations
- identifies issues and exposes faulty assumptions or logic

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## Recovery Plan Implementation



Credit: USFWS

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## Recovery Plan Implementation

The key to a successful recovery of the species —  
Implementation of a well-designed plan's actions

Species' recovery is supported by:

- partnerships with Federal and non-federal agencies,
- States,
- private landowners,
- Native American tribes, and
- Industry and conservation organizations, etc.

Sections 6, 7, 8, 9 and 10 of the ESA offer avenues to enhance species conservation efforts

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## Recovery Plan Implementation

Effective recovery plan implementation should:

- Be founded in science (i.e., The Plan)
- Be planning intensive
- Use a proactive approach
- Use creative and adaptable processes



Credit: USFWS

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## Recovery Plan Implementation

Effective recovery plan implementation should also:

- Involve outreach, partnerships and cross-program/cross-agency coordination
- Rely on appropriate:
  - species and habitat management tools
  - regulatory and policy tools
- Utilize appropriate monitoring and assessment

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## Recovery Plan Implementation - Partnerships

- Internal
  - Other FWS Programs
  - Other DOI Programs (e.g. BLM)
- External
  - Federal, State and local agencies
  - Tribes
  - Academia
  - Public and private landowners
  - Non-government organizations
  - Industry



Credit: Brian Jones/LRBWS

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## Species and habitat management tools

- Species management tools (examples)
  - Population augmentation or re-establishment
  - Active management (e.g., genetic manipulation)
- Habitat management tools (examples)
  - Active management (e.g., invasive species control)
  - Enhancement/restoration (e.g., dam removal)
  - Land acquisition/protection (including conservation easements)

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## Recovery Plan Implementation

### Regulatory and Policy Tools



Credit: B. Moore/Peterson/USFWS

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## Regulatory and Policy Tools

Section 6 – grants to States w/cooperative agreements

- HCP planning assistance
- HCP land acquisition
- recovery land acquisition
- non-traditional Section 6 funding



Credit: USFWS

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## Regulatory and Policy Tools

- **Section 7**
  - 7(a)(1) – Federal agencies have responsibilities to further the recovery of listed species
  - 7(a)(2) – Formal and informal consultation can be used to facilitate actions that can further recovery of a listed species
- **Section 10**
  - 10(a)(1)(A) – scientific research (recovery) permits, SHAs, CCAAs
  - 10(a)(1)(B) -- HCPs
  - 10(j) - experimental population

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### Regulatory and Policy Tools

**Policies**

- Peer Review (1994)
- Interagency Cooperation (1994)
- Role of State Agencies (1994)
- Vertebrate population (DPS) (1996)
- FWS Native American Policy & Secretarial/Executive Order (1994, 1997, 2000)
- Captive Propagation (2000)
- SHA policy and regulations (2004), draft handbook
- Recovery Guidance (joint NMFS/FWS - adopted by FWS in 2010)

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### 5-Year Reviews and Reclassification and Delisting



Credit: Jim Reid/USFWS

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### 5-year Reviews

The Services are required under the law to review the status of listed species every 5 years [4(c)(2)]. This provides an opportunity to evaluate whether:

- a species should be considered for delisting or reclassification,
- the species' recovery program needs re-evaluation, or
- the goals, criteria, strategy, or recovery actions of the recovery plan need revision.\*

\*Recovery plans should be updated/revised as needed

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### 5-Year Reviews

A 5-year review should assess the:

- Status and trends of the species;
- Status and trends of threats to the species;
- Progress made toward meeting recovery criteria;
- Whether the recovery criteria and strategy in the recovery plan are still applicable or outdated and in need of revision



Credit: Rich Macintosh/USFWS

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### Reclassification and Delisting

- Reclassification = changing a species' status from endangered to threatened or from threatened to endangered.
- Delisting = removing the species from the list (usually because it has recovered)

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### Reclassification and Delisting

- Lines of evidence used to trigger an evaluation for potential reclassification or delisting include:
  - The species' status and trends,
  - The status of threats to the species, and/or
  - The species' progress toward achieving the recovery criteria in the recovery plan.
- The final decision regarding whether to delist or reclassify is based on an evaluation of the 5 factors and whether it still meets the definition of endangered or threatened in the law.

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### Reclassification and Delisting

- Reclassification and delisting are a rulemaking process and require a proposed rule, public review and comment, and a final rule.
- The final determination to reclassify or delist will be based on the evidence collected by the agency as informed by any new information brought forth through the public comment process.

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### Post-Delisting Monitoring



Credit: Steve Hise and Merve

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### Post-Delisting Monitoring

The ESA requires the Services:  
“...to implement a system [plan] in cooperation with the States to monitor effectively for **not less than** five years the status of all species which have been recovered...” [section 4(g)]



Credit: Gary Stolz

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### Post-Delisting Monitoring

Delisting a species:

- Returns management to the states and other agencies
- Funding the post-delisting monitoring should be a shared responsibility



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### Post-Delisting Monitoring

Is designed to identify whether there is significant deterioration in the species' status as a result of removing the protections of the ESA

The Services may re-list a recovered species using an emergency listing process as in section 4(b)(7) "...to prevent a significant risk to the well being of any such recovered species." [4(g)(2)(b)]

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### It's Exercise Time!



Credit: iStockphoto.com

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## Conclusion



Credit: Ryan Hooper/USFWS

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## Objective

Given a recovery plan, recognize if the plan has all of the required elements in accordance with the requirements listed in Section 4(f) of the ESA of 1973.



Credit: James Welver/USFWS

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## Review

- Recovery plans are required and must have criteria for recovery, recovery actions, and estimates of cost and time.
- An effective recovery plan must also make a compelling case as to why the proposed recovery strategy and actions are the most effective route to species recovery.
- Even the best of plans will achieve little recovery if not implemented.

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### Review

- Both planning and implementation should involve experts, other agencies, interested parties, and the public.
- The 5-yr review provides an opportunity to review both the species' status and whether the recovery program for the species needs modification or revision.
- A good plan and its implementation should lead to reclassification or delisting of the species.

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### Review

- Reclassification and delisting evaluations can be triggered by several lines of evidence, but the determination ultimately is based on:
  - An evaluation of the 5 factors laid out in section 4(a)(1)(A-E), and
  - Whether the species meets the definition of endangered or threatened in the statute.
- A post-delisting monitoring plan is required for a minimum of 5 years, with a provision for emergency relisting if the species' condition deteriorates significantly.

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*Recovery, Planning and Implementation*

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