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United States General Accounting Office  
Washington, DC 20548

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February 15, 2001

The Honorable James V. Hansen  
Chairman, Committee on Resources  
House of Representatives

The Honorable Don Young  
House of Representatives

Subject: Endangered Species Act: Fee-Based Mitigation Arrangements

The Endangered Species Act places a variety of responsibilities on federal agencies and individuals to ensure that planned actions do not adversely affect species listed as threatened or endangered. Federal agencies must ensure that any actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of listed species or destroy or adversely modify their critical habitat. The act also makes it illegal to “take” listed wildlife.<sup>1</sup> Federal agencies generally deal with these responsibilities by consulting with the Fish and Wildlife Service<sup>2</sup> (Service) before undertaking any such actions; by adopting measures to mitigate (i.e., avoid, minimize, or compensate for) any potential adverse impacts; and by obtaining an incidental take exemption.<sup>3</sup> Nonfederal landowners’ activities must also avoid jeopardy and must not result in take of listed wildlife. If take is likely, the landowner may apply to the Service for an incidental take permit and prepare a Habitat Conservation Plan that may include paying a fee to a third party to create, improve, or manage habitat off-site or to fund activities that otherwise benefit the affected species.

Concerned about the lack of information available on fee-based mitigation arrangements, you asked us to provide information on (1) the various types of fee-based mitigation arrangements currently used by the Service; (2) who selects the alternative used to mitigate adverse impacts; (3) the Service’s role in setting fees and land exchange ratios; and (4) how the Service ensures that fees are used as intended and that desired mitigation results are achieved. We briefed your offices on the

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<sup>1</sup>Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect listed wildlife. Harm may include significant critical habitat modification.

<sup>2</sup>The National Marine Fisheries Service is the relevant agency for most endangered or threatened marine species. This report focuses only on the activities of the Fish and Wildlife Service.

<sup>3</sup>Take must be incidental to, not the purpose of, carrying out an otherwise lawful activity.

results of our review on February 1, 2001, using the enclosed briefing slides. (See encl. I.)

We interviewed Service officials and reviewed files in three Service regions (Portland, Albuquerque, and Denver) and four field offices (Sacramento, Salt Lake City, Phoenix, and Austin). At some of these locations we visited selected project sites and interviewed landowners who had been through the consultation and habitat conservation planning processes and had elected to use a fee-based mitigation arrangement. In addition, we interviewed key staff from the Service's Division of Endangered Species and the Department of the Interior's Solicitor's Office.

In summary, we found the following:

- **Eight types of fee-based arrangements are currently used at the locations we visited.** However, because the Service has no national database that summarizes all the fee-based arrangements currently in place, there may be other types of arrangements used at unvisited locations. The eight arrangements we found vary widely in size and complexity but include millions of dollars set aside for species protection activities. Seven of these arrangements require the landowner to act. Under these seven arrangements, the landowner (1) buys land outside the project area; (2) sets aside land already owned and pays a third party to manage it; (3) pays a third party to buy and/or manage land outside the project area; (4) buys credits in a conservation bank;<sup>4</sup> (5) pays a fee into a fund that a third party will use later to buy and manage habitat; (6) pays a fee into a water depletion fund to mitigate adverse impacts caused by withdrawing water; or (7) pays a third party to improve habitat on federal land. In an eighth alternative, for small projects covered by a larger programmatic agreement, a federal agency sets aside funding for mitigation in lieu of landowner payments because the administrative costs of collecting each payment would be greater than the payment itself.
- **The landowner is ultimately responsible for deciding whether to use a fee-based mitigation arrangement after considering its advantages and disadvantages.** This decision is made after completing the required consultation and/or habitat conservation planning process. Section 7 of the act requires interagency consultation with the Service if a landowner's proposed project is conducted by, funded by, or requires a permit from a federal agency and the project could adversely affect a listed species or critical habitat. As a result of consultation, the landowner may choose a fee-based arrangement to minimize or mitigate the project's adverse effects, and the Service must approve the arrangement. Section 10 of the act is used when there is no federal involvement but the project is likely to result in the incidental take of listed wildlife. The landowner prepares a Habitat Conservation Plan that may include a fee-based

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<sup>4</sup>A conservation bank is used to create, restore, enhance, or preserve habitat in perpetuity for listed species in advance of any project requiring mitigation. Credits are then available to use or to sell to others to meet future projects' conservation requirements. The Service determines the number of credits needed to meet a project's mitigation requirements.

arrangement to minimize or mitigate adverse impacts. If the Service approves the plan, it issues an incidental take permit that allows the project to proceed. Enclosure II contains a simplified flowchart illustrating the consultation, habitat conservation planning, and decisionmaking processes, and their outcomes.

- **The Service’s level of involvement in setting fees and establishing land exchange ratios (e.g., 3 acres of new habitat in exchange for each acre adversely affected by a project) varies by project and type of arrangement.** For example, the Service is not involved in setting the price of credits charged by conservation banks but does determine the number of credits required. The Service does determine the fee amount under other types of fee-based arrangements. In determining either fees or ratios, the Service is required to use the best scientific and commercial data available and to consider the needs of the affected species and conservation strategies. The fee amount can be influenced by factors such as land values; capital costs necessary to set up habitat preserves and conservation banks; costs necessary to restore, create, or enhance habitat to meet the biological needs of the species; stewardship costs necessary to manage the land in perpetuity; and costs of fund administration. The Service sets land exchange ratios after considering the quality of the habitat lost in relation to that being bought, the species involved, and whether the habitat is being preserved or created.
- **The Service has done limited monitoring to ensure fees are used as intended and desired mitigation results are achieved.** There are no national reports that summarize the Service’s monitoring efforts. At the locations we visited, the success of the mitigation efforts resulting from the payment of fees is largely unknown. Although monitoring requirements are a part of each approved project and the required reports are usually sent to the Service, few site visits are made to verify findings or evaluate results. Service officials cite a large workload, limited funding, and limited staff resources as hampering the Service’s ability to assess the success of mitigation efforts.

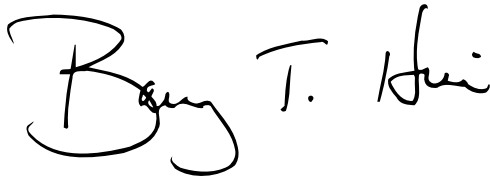
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We provided the Department of the Interior with a draft copy of this correspondence for comment. In commenting on the draft, the Department generally agreed with our findings and offered several technical and clarifying changes, which we have incorporated as appropriate. (See encl. III.)

We conducted our review from September 2000 through January 2001 in accordance with generally accepted government auditing standards.

We are sending copies of this letter to the Honorable Gale A. Norton, Secretary of the Interior; the Honorable Marshall P. Jones, Jr., Acting Director, Fish and Wildlife Service; and other interested parties. The letter will also be available on GAO's home page at <http://www.gao.gov>.

If you have any questions about this letter or need additional information, please call me on (202) 512-3841 or Julie Gerkens on (202) 512-9824. Key contributors to this report were Chris Abraham, Arleen Alleman, Jill Berman, and Gopaul Noojibail.

A handwritten signature in black ink that reads "Barry T. Hill". The signature is written in a cursive style with a large, looped initial "B".

Barry T. Hill  
Director  
Natural Resources  
and Environment



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# Endangered Species Act

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## Fee-Based Mitigation Arrangements

Prepared for the  
House Committee on Resources

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## Objectives

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- Identify various types of fee-based mitigation arrangements used to address “take” under the Endangered Species Act.
- Discuss who chooses a fee-based arrangement -- as opposed to other mitigation options -- and the advantages and disadvantages of fee-based arrangements.
- Determine the role of the Fish and Wildlife Service (Service) in setting fees and establishing land exchange ratios (e.g., 3 acres of new habitat in exchange for 1 acre that will be affected by a project).
- Describe how the Service ensures that fees are used as intended and achieve the desired results.



## Results

- Eight types of fee-based arrangements were used for mitigation in the selected locations.
- After considering the advantages and disadvantages of a fee-based mitigation arrangement, the landowner is ultimately responsible for choosing the mitigation option.
- The Service's level of involvement in setting fees and establishing land exchange ratios varies by type of fee-based arrangement and by project.
- The Service has done only limited monitoring to ensure fees are used as intended and desired mitigation results are achieved.

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## Scope

Available time did not permit a national survey of Service offices. Instead, we reviewed documents and interviewed Service officials in

- Headquarters
- Three of the seven regions (Portland, Albuquerque, Denver)
- Four field offices (Sacramento, Salt Lake City, Austin, and Phoenix)

We also visited selected projects and contacted landowners in each of the three regions reviewed.

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## Background

Two separate sections of the Endangered Species Act relate to land development activities: section 7 consultations and section 10 Habitat Conservation Plans.

- Section 7 of the act requires consultation with the Service whenever there is Federal involvement and the project may affect listed species or critical habitat.
- Section 10 of the act is used when there is no federal involvement but the project is likely to “take” -- harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect -- listed wildlife. Harm may include significant habitat modification.
- A much more limited set of prohibitions applies to listed plants.

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## Background (Section 7)

Section 7 of the act establishes an interagency consultation process that is used if a landowner’s proposed project is conducted by, funded by, or requires a permit from a federal agency. The agency must consult with the Service to insure that the proposed project does not jeopardize a listed species or adversely modify its critical habitat.

- The agency, assisted by the landowner, assesses whether the project may adversely affect a listed species or its critical habitat.
- The landowner and/or agency may include payment of a fee as part of the proposed action to minimize adverse effects.
- If adverse impacts to listed species or critical habitat cannot be avoided, the agency enters into formal consultation with the Service.

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## Background (Section 7) continued

- If, after formal consultation, the proposed project is likely to jeopardize a listed species or adversely modify its critical habitat, the Service will recommend one or more reasonable and prudent alternatives, which may involve payment of a fee.
- If the proposed project is not likely to cause jeopardy (or a reasonable and prudent alternative is implemented instead), the Service will issue an incidental take statement including measures to minimize the impact of any incidental take.
- If the landowner and federal agency implement the reasonable and prudent measures, any incidental take of listed wildlife is exempt from the act's prohibitions.

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## Background (Section 10)

Section 10 is used if a non-federal landowner's proposed project does not involve a federal agency action and will result in the incidental take of listed wildlife.

- The landowner must apply to the Service for an incidental take permit.
- The permit application must include a Habitat Conservation Plan (HCP), which includes measures to minimize and mitigate impacts to the listed species.
- While processing the permit application, the Service initiates an intra-Service section 7 consultation to determine whether the project will jeopardize a listed species or adversely modify critical habitat.
- If the HCP meets all requirements and the Service accepts the measures (which can involve payment of a fee), the permit is issued and the project may proceed.

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## **Types of Fee-Based Arrangements**

There is little national guidance on the types of fee-based mitigation arrangements the Service allows, and existing databases do not identify the type of fee-based arrangement used on each project.

At the locations visited, we found eight types of fee-based arrangements used to mitigate harm to species.

1. Landowner buys land outside the project area and pays a third party to manage it.
2. Landowner sets aside land already owned and pays a third party to manage it.
3. Landowner pays a third party or the permit holder to buy and/or manage land outside the project area.

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## **Types of Fee-Based Arrangements**

4. Landowner buys credits in a conservation bank in which the credits represent land or other habitat set aside for mitigation.
5. Landowner pays fee into a fund that will be used later to buy and manage habitat to protect a species when suitable land is found.
6. Landowner pays fee into a water depletion fund to mitigate harm caused by withdrawing water from a river.
7. Landowner pays fee to a federal agency or third party to improve habitat for a species on federal land.
8. For small projects covered by a programmatic consultation, a federal agency sets aside funding for mitigation in lieu of landowner payments because it is more cost efficient.

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## Who Selects the Mitigation Arrangement

According to Service officials, the landowner selects the final mitigation arrangement after negotiations conducted during the consultation or habitat conservation planning process.

- The decision is constrained by the biological needs of the species.
- The Service acts as an adviser to, or reviewer for, the landowner in considering the mitigation options.

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## Advantages of Fee-Based Mitigation Arrangements

Service officials mentioned the following as advantages of fee-based mitigation arrangements:

- Habitat may be less fragmented since larger tracts may be protected.
- Species may receive permanent protection through the use of conservation easements.

Landowners noted the following reasons to select fee-based mitigation arrangements:

- Fees are certain and final.
- Use of fee payments speeds up the approval process, especially when habitat conservation plans and conservation banks already exist.

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### **Disadvantages of Fee-Based Mitigation Arrangements**

Service officials stated that a disadvantage of some fee-based arrangements is that species protection may be delayed while appropriate habitat is being sought to establish conservation banks.

Landowners mentioned the following as disadvantages of fee-based mitigation arrangements:

- The fees are perceived as expensive and arbitrarily set.
- The process is confusing, expensive, time-consuming and frustrating.
- Often, no benefit for the species is evident.



### **Service's Role in Setting Fees and Land Exchange Ratios**

- The Service has not issued national guidance on setting fees or land exchange ratios for fee-based arrangements.
- The Service's level of involvement in setting fees or ratios varies by type of fee-based arrangement.
- When the Service sets the fee or land exchange ratio, the amount set varies by project depending on habitat type, quality, and how the project plan affects the species.
- Field office biologists are generally responsible for setting fees and land exchange ratios based on
  - Conservation strategies,
  - Best available scientific and commercial data, and
  - Needs of species.



## **Service's Role in Setting Fees and Land Exchange Ratios**

Factors that can influence the fee amount include

- Land values;
- Development costs, such as the capital costs necessary to set up habitat preserves and conservation banks;
- Costs necessary to restore, create or enhance habitat (depending on biological needs of the species), such as costs of planting beneficial vegetation or controlling noxious weeds;
- Projected stewardship costs to manage the land in perpetuity; and
- Administrative costs of managing the fund.

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## **Service's Role in Setting Fees and Land Exchange Ratios**

The Service does not set the price of conservation bank credits but must approve the bank selected by the landowner and determine how many credits must be bought.

- Credit prices are “market-based” and vary among banks.
- Banks are approved for specific species and areas.
- State wildlife agencies often participate in approving banks.
- Total cost to the landowner will vary according to the number of credits that the Service decides must be purchased and the prices the selected bank charges.

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### **Service's Role in Setting Fees and Land Exchange Ratios**

In general, land exchange ratios are set after consideration of

- Quality of the habitat lost in relation to that being bought,
- Whether habitat is being preserved or created, and
- Species involved.

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### **How the Service Ensures That Fees and Mitigation Achieve Desired Results**

No national reports summarize the Service's monitoring efforts.

The Service has done limited monitoring to ensure that fees are used as intended and desired mitigation results are achieved.

- Monitoring requirements are a part of each approved project.
- Service officials cite a lack of time, staff, and funding to follow up on monitoring.
- While reports are usually sent to the Service as required, few site visits are made to verify findings.

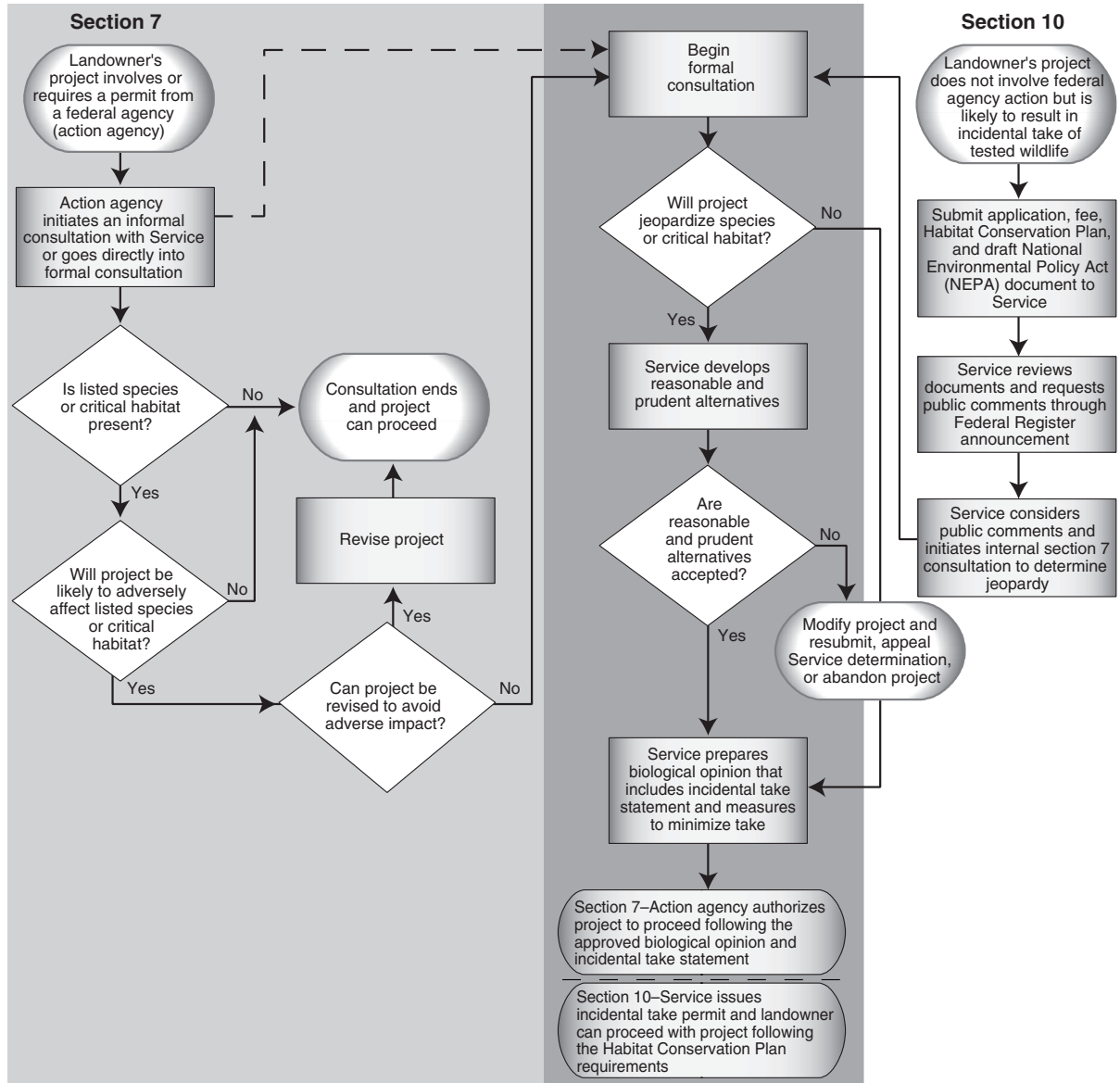
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- GAO's slide presentation does a fair job of describing the types of fee-based mitigation arrangements.
- Mitigation, in its broadest context, refers to any measure or action that avoids, minimizes, or compensates for adverse effects.
- The Service's primary role is to assist agencies and landowners in developing proposals consistent with the Endangered Species Act.
- The Service expects to spend \$2 million to monitor HCP compliance with permit terms and conditions this year. Detailed plans for implementing this measure are still being developed.

**GAO's Representation of the Consultation and Habitat Conservation Planning Processes as Presented in Service Documents**



Source: Prepared by GAO based on Fish and Wildlife Service information.

**Comments From the Department of the Interior**



**United States Department of the Interior**

OFFICE OF THE SECRETARY  
WASHINGTON, D.C. 20240

FEB 2 2001

Mr. Barry T. Hill  
Director, Natural Resources and Environment  
U.S. General Accounting Office  
441 G Street, N.W.  
Washington, D.C. 20548

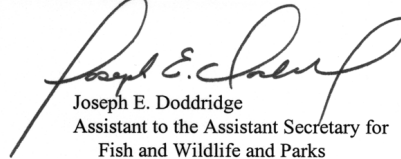
Dear Mr. Hill:

Thank you for providing the Department of the Interior the opportunity to review and comment on the draft GAO report entitled, "Endangered Species Act: Fee-based Mitigation Arrangements," (GAO-01-287R), received on January 26, 2001. Our ability to comment was limited by the short review time.

We appreciate the close coordination that your staff extended in the preparation of this report and we are pleased that many of our previous comments were incorporated into the briefing slides. While we generally agree with the findings, we have some suggestions to improve the clarity and accuracy of the report. While the presentation does not include any specific recommendations, the Department notes the mention that the Fish and Wildlife Service has done only limited monitoring to ensure fees are used as intended and desired mitigation results are achieved. The Department acknowledges the need to monitor the effectiveness of mitigation efforts to ensure that public resources are being adequately protected.

The enclosure provides our specific comments. Again, we appreciate the opportunity to comment and hope our comments will assist you in preparing the final report.

Sincerely,



Joseph E. Doddridge  
Assistant to the Assistant Secretary for  
Fish and Wildlife and Parks

Enclosure

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