

GAO

Report to the Chairman, Committee on
Science, Space, and Technology, House
of Representatives

August 1993

ENDANGERED
SPECIES

Factors Associated
With Delayed Listing
Decisions



Resources, Community, and
Economic Development Division

B-253022

August 5, 1993

The Honorable George E. Brown
Chairman, Committee on Science,
Space, and Technology
House of Representatives

Dear Mr. Chairman:

The Congress is expected to consider reauthorizing the Endangered Species Act (ESA) later this year. Referencing our past work examining actions that the Department of the Interior's Fish and Wildlife Service (FWS) had taken concerning the Northern spotted owl and the Mt. Graham red squirrel,¹ the former Chairman expressed overall concern about whether nonbiological considerations were being introduced in the ESA's process for identifying threatened and endangered species (listing process), which is required by law to be based solely on biological criteria.

In subsequent discussions with the former Chairman's office about the specific scope and objectives for our work, we agreed to examine FWS' listing process for six judgmentally selected species—the spotted frog, the Louisiana black bear, the spectacled eider (a large sea duck), the Steller's eider (the smallest of four eider species), the Jemez Mountains salamander, and the Bruneau Hot Springsnail. These species were selected because FWS' listing decisions for them had not been made within legislatively mandated time frames and there was concern that the delays occurred because nonbiological factors, such as the potential economic and other impacts of a listing decision, may have been considered. Specifically, we agreed to identify what factors and other circumstances delayed FWS' consideration of these species for listing and to examine FWS' decisions to protect two of the species through conservation agreements.²

Results in Brief

The delays in FWS' reaching listing decisions for the six species ranged from 5 months to 6 years. The specific circumstances involved in the delays for individual species varied. However, questions about whether the

¹Endangered Species: Spotted Owl Petition Evaluation Beset by Problems (GAO/RCED-89-79, Feb. 21, 1989) and Views on Fish and Wildlife Service's Biological Opinion Addressing Mt. Graham Astrophysical Facility (GAO/T-RCED-90-92, June 26, 1990).

²FWS refers to these types of agreements not only as conservation agreements but also as memorandums of agreement and memorandums of understanding. These agreements typically involve one or more federal, state, and/or private entities that voluntarily commit to undertake actions to conserve species or their habitats.

available biological information was sufficient to make a listing decision and concerns expressed by entities outside FWS as to the potential adverse economic or other impacts that could result from a listing were the factors most often present in the listing process. Both of these factors were present for three species; for two other species, one or the other of these factors was present. With regard to whether these factors contributed to delays, we found that questions about biological data did contribute to delays in reaching listing decisions for the four species for which this factor was present. Concerns about the potential impacts of listing a species contributed to a delayed listing decision for one of the species—the Bruneau Hot Springsnail. Other factors contributing to delayed decisions included FWS' (1) uncertainty about how to proceed with publishing a listing decision in light of the 1992 presidential moratorium on new regulations, (2) limited staff resources, and (3) efforts to establish conservation agreements to protect species as an alternative to listing the species.

In reviewing FWS' conservation agreements established for two of the species, we found that the agreements developed did not conform to FWS' policy and guidance. More specifically, the agreements either (1) did not provide for the species the level of protection called for in FWS' policy, (2) were not implemented by the time a listing decision was required, or (3) lacked monitoring provisions to ensure that they were carried out. These problems should be addressed if FWS is to use conservation agreements as an alternative to listing a species under the ESA.

Background

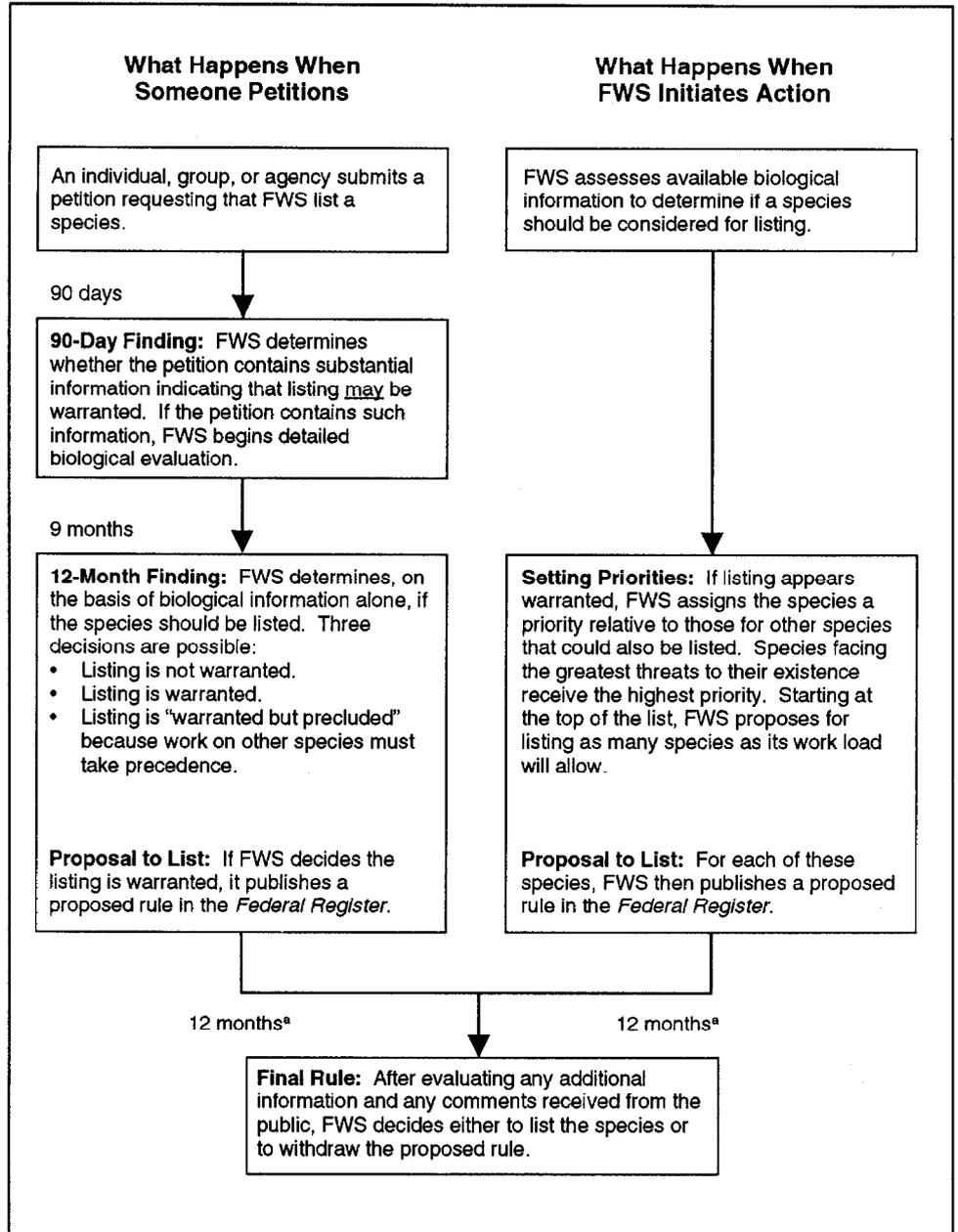
The ESA, as amended (16 U.S.C. 1531 et seq.), was enacted to protect fish, wildlife, and plants whose survival is in jeopardy. For a species to be designated (or listed) as endangered, it must be in danger of extinction throughout all or a significant portion of its range (the area where the species naturally occurs).³ The Secretary of the Interior, through FWS, is responsible for making such designations for freshwater and land species.⁴ Both the ESA and related regulations state that listing decisions are to be based solely on the best biological data available.

³The ESA also provides for listing a species as "threatened" if it is likely to become endangered in the foreseeable future. In this report, the term "endangered" also is used to refer to a species designated as threatened.

⁴The Secretary of Commerce, through the National Marine Fisheries Service, has this responsibility for saltwater species.

The process FWS uses for considering species for listing can begin either through a petition from an individual, group, or agency or through FWS' own initiative. Figure 1 summarizes the steps and time frames associated with the listing process.

Figure 1: Process for Considering Whether a Species Warrants Listing



^aThis period can be extended to a maximum of 18 months if there is disagreement about the sufficiency or accuracy of the available biological data.

Since the ESA's enactment in 1973, FWS routinely has not met required deadlines for reaching listing decisions. In an earlier report,⁵ we provided information on the number of listing petitions that FWS acted on between the enactment of the ESA and September 1991, as well as the number of FWS-initiated listing actions that were subject to the 1-year time frame for reaching a final decision following a proposed rule to list a species. We reported that for the 105 12-month findings required for petitioned listings, FWS met the deadline 33 percent of the time, was late by less than 6 months 45 percent of the time, and was late by more than 6 months 22 percent of the time; 18 percent of the time, FWS was over 1 year late. Of the 368 final rules required, 63 percent were issued within 1 year of the proposed rule (as required), 28 percent were late by less than 6 months, and 9 percent were late by more than 6 months; 4 percent were over 1 year late.

FWS' delays in reaching listing decisions were the subject of a recent lawsuit. In 1992, the Fund for Animals and other conservation groups brought suit against the Department of the Interior, charging the agency with unreasonable delays in listing species. In December 1992, the parties reached a court-approved settlement agreement. The agreement requires FWS to make listing determinations for a large number of identified species for which the available information is considered sufficient to support proposals for listing.

Variety of Factors Contributing to Delayed Decisions

Our examination of the circumstances associated with delays in reaching listing decisions disclosed that for each of the six species, one or more of the following five factors were present:

- questions by FWS biologists or others about whether the available biological data were sufficient to make the listing decision;
- concerns expressed by entities outside FWS about the potential economic or other impacts of a listing;
- uncertainty among FWS officials about the procedures to follow for issuing listing rules in light of the January 28, 1992, presidential moratorium on issuing new regulations;
- FWS' limited staff resources to conduct studies or complete other activities considered relevant to the listing decision; and
- FWS' efforts to develop and finalize conservation agreements for the species as an alternative to listing the species.

⁵Endangered Species Act: Types and Number of Implementing Actions (GAO/RCED-92-131BR, May 8, 1992).

Table 1 shows, for each of the six species, the length of the delay in meeting a legislatively established deadline for reaching a listing decision and the specific factors that we found were present during FWS' consideration of the species for listing.

Table 1: Length of Delay in and Factors Present During the Listing Process

	Spotted frog	Louisiana black bear	Spectacled eider	Steller's eider	Jemez Mountains salamander	Bruneau Hot Springsnail
Length of delay	3 years	5 months	5 months	5 months	14 months	6 years
Questions about the sufficiency of biological data	Yes	Yes	No	Yes	Yes	No
Concerns about potential impacts	Yes	Yes	No	No	Yes	Yes
1992 presidential moratorium	No	No	Yes	Yes	No	No
Limited staff resources	Yes	No	No	No	Yes	No
Development of conservation agreements	No	No	No	No	Yes	Yes

Note: For five of the species, whose consideration for listing was initiated by a petition, the delayed decision referred to is the 12-month finding. For the sixth species, the Bruneau Hot Springsnail, whose consideration for listing was initiated by FWS, the delay referred to occurred in issuing a final rule following the issuance of the proposed rule.

As shown in table 1, the specific factors present during the listing process for individual species varied, and multiple factors were present for five of the six species. However, questions about the sufficiency of the biological data (present for four species) and concerns about the potential impacts of a decision to list the species (also present for four species) were the factors most often occurring. Both of these factors were present in the listing process for three species.

In determining whether the factors we identified caused delays in reaching listing decisions, we found that questions about the sufficiency of the biological data contributed to the delays for the four species during whose consideration this factor occurred. In contrast, concerns about potential impacts contributed to the delay in reaching a listing decision for one species—the Bruneau Hot Springsnail. We also found that the remaining factors shown in table 1 contributed to the delays in reaching listing decisions when the factors were present during the listing process.

A discussion of the two most frequently occurring factors—questions regarding the sufficiency of the biological data and expressed concerns about the impacts of listing the species—follows. (App. I contains a more detailed discussion of the factors we found present in FWS' consideration of each species for listing.)

Questions About the Sufficiency of Biological Data

Under the ESA, FWS is to determine solely on the basis of the best biological data available whether species are endangered. During FWS' consideration of four of the six species, questions about the sufficiency of the biological data were a factor at the time FWS needed to make a listing decision. FWS biologists and other staff involved in the listing process discussed biological questions about data on the size and distribution of the species' populations, the genetic uniqueness of the species, and the nature of threats to the species' existence.

For two species, questions were raised about whether the distribution or size of the populations was accurately known. For the Steller's eider, FWS biologists differed over the validity of projections that could be made about the population from data that had been collected on the number of Steller's eiders wintering in Alaska. For the spotted frog, FWS sought additional data on the size and distribution of certain populations, including those along the Wasatch Front and West Desert, in Utah. According to some FWS biologists, such information was important for determining whether these populations qualified for protection under the ESA.

FWS questioned the genetic uniqueness of two species when it considered them for listing. Because FWS believed little was known about the spotted frog, the agency decided to obtain and evaluate research on whether certain spotted frog populations being considered for listing were genetically different from other spotted frogs. In the case of the Louisiana black bear, FWS undertook an effort to obtain additional data on the species' genetics. Specifically, FWS sought to determine if suspected interbreeding with other bear populations disqualified the Louisiana black bear from consideration for listing.

Finally, questions about the nature of the threats facing the Jemez Mountains salamander were raised. Specifically, biologists from FWS, the U.S. Department of Agriculture's Forest Service, and the New Mexico Department of Game and Fish expressed different views on the sufficiency

of evidence that logging practices posed a threat to the salamander's survival.

Concerns About the Potential Impacts of FWS' Decisions to List Species

For four of the species, groups or individuals raised concerns that a decision to list the species would adversely impact ongoing or planned activities in areas containing habitat for the species. When FWS was considering the Bruneau Hot Springsnail for listing, the Idaho Water Resources Board, the former Governor of Idaho, and two former Members of Congress informed FWS of their opposition to a listing. They expressed major concerns about the consequences a listing could have for the local economy. These entities believed that listing the snail had the potential to curtail the agricultural use of water from the aquifer that supplies the Bruneau Hot Springs.

For the Jemez Mountains salamander, a variety of groups, including the Forest Service, logging companies, a mining company, and the New Mexico Public Land Users Association, expressed opposition to a listing. The opposition centered on the adverse economic impacts or on restrictions that could result from listing the salamander. For example, the Forest Service believed the listing would place unnecessary limitations on the agency's management of the Santa Fe National Forest by requiring that FWS be consulted before timber sales and related actions were undertaken.

For the Louisiana black bear, two Louisiana state agencies and timber interests expressed concerns about FWS' listing the bear. One of the state agencies believed a listing would create considerable managerial difficulties for the agency, and the other state agency and timber interests believed that a listing would severely affect the state's timber industry.

For the spotted frog, according to FWS officials, a former Member of Congress expressed concern that listing the species could potentially delay or stop the construction of a major water development project.

Questions About Conservation Agreements as an Alternative to Listing

FWS' development of conservation agreements as an alternative to listing under the ESA contributed to delays in FWS' reaching listing decisions for the Bruneau Hot Springsnail and Jemez Mountains salamander. Furthermore, we found that the use of conservation agreements in these instances was inconsistent with the applicable policy and guidance. Our discussions with FWS officials and field biologists disclosed major

concerns about whether the agreements afforded sufficient protection for these species.

FWS' policy for developing and using conservation agreements in lieu of listing has varied over the past 10 years. In 1983, FWS adopted a policy allowing the use of conservation agreements as an alternative to listing, provided that they removed all known threats to the species that would otherwise warrant listing. FWS' guidance at that time, according to FWS' Deputy Director, intended that such agreements be in effect by the time a listing decision was required. The guidance also called for careful monitoring to ensure that the agreements' objectives were achieved and that any corrective actions, including listing, were instituted as necessary.

In May 1985, FWS discontinued its policy of using conservation agreements as an alternative to listing species. This decision remained in effect until February 1992, when FWS again decided to allow the use of these agreements. In explaining its 1992 policy decision, FWS characterized a conservation agreement as "an appropriate mechanism to use to maximize the protection of a candidate endangered or threatened species when . . . [the agreement] effectively removes known threats. . . ." In May 1993, the Deputy Director stated that FWS was in the process of revising its policy on conservation agreements and that a new policy would be issued in the near future.

As discussed below, the conservation agreements reached for the Bruneau Hot Springsnail and the Jemez Mountains salamander did not comply with FWS' policy and guidance.

Bruneau Hot Springsnail

Our review of the conservation agreement for the snail disclosed that the agreement was inconsistent with FWS' policy and guidance. First, the agreement was developed and finalized between August 1986 and early 1989, during the period when FWS had discontinued its policy of using such agreements. Second, even under FWS' former and current guidance on conservation agreements, the agreement covering the snail would be deficient because the parties never adopted specific plans for removing the primary known threat to the species—the loss of habitat due to reduced flows from warm water springs. Third, the agreement was not in effect at the time the final rule was required—in February 1987.

According to two FWS officials, the conservation agreement for the Bruneau Hot Springsnail was not an appropriate alternative to listing the

species under the ESA. One official with the Division of Endangered Species at FWS headquarters stated that the agreement was no more than a study plan that contained no significant protection for the snail. The other official, the supervisor of the FWS field office with primary responsibility for considering the snail for listing, expressed a similar view. The official stated that the conservation agreement was not an appropriate substitute for listing because the agreement did not provide for removing all threats to the snail. Both officials believed that a decision to list the snail under the ESA was warranted and that FWS should have listed the species at the time the decision was required.⁶

Jemez Mountains Salamander

We found that the conservation agreement for the Jemez Mountains salamander was also inconsistent with FWS' policy and guidance. The agreement was developed and finalized between December 1987 and May 1991—during the time when the agency had discontinued its policy of using conservation agreements. In addition, the agreement was not finalized at the time a 12-month finding for the salamander was required—February 1991. Moreover, the agreement did not contain provisions for either monitoring the salamander's overall condition or evaluating the effectiveness of the agreement.

We also found, however, that unlike the agreement for the snail, the agreement for the salamander contained provisions that, if followed, would remove the known threats posed by logging practices in the salamander's habitat. But our review of available documents and our discussions with biologists representing parties to the agreement disclosed that seismic testing had been planned and a noncommercial timber harvest had taken place without the approval and review of the team of biologists designated for these tasks by the agreement.

Conclusions

Our review of the circumstances surrounding FWS' delays in reaching listing decisions for six species showed that a number of factors can contribute to, or be associated with, such delays. The most common factors we found present during FWS' consideration of the six species for listing were FWS' questions about the sufficiency of the biological data needed to reach a listing decision and concerns expressed to FWS about the potential economic and other impacts of a species' listing. Of all the factors present, the questions about the sufficiency of the biological data

⁶In settling a court suit over its failure to make a final listing decision, FWS published a final rule listing the snail in January 1993.

constituted the factor most frequently contributing to delays in reaching listing decisions.

In reviewing FWS' efforts to implement conservation agreements to afford species protection as an alternative to listing the species, we found that the agreements developed and implemented for the Bruneau Hot Springsnail and Jemez Mountains salamander were, in many respects, inconsistent with FWS' policy and guidance. Whether a conservation agreement is an appropriate mechanism to protect species that would otherwise warrant listing under the ESA is a decision for FWS to make. However, on the basis of our findings concerning agreements for the snail and the salamander, we believe a conservation agreement, if it is to be an effective alternative to listing, should (1) address the known threats to a species that would otherwise warrant listing, (2) provide for monitoring to ensure the agreement's mechanisms for protecting the species are properly and fully implemented, and (3) be implemented in a timely manner.

Recommendations

We recommend that the Director, FWS, when authorizing the use of a conservation agreement to protect a species that would otherwise warrant listing under the ESA, ensure that the agreement (1) addresses the known threats to the species, (2) contains provisions for effective monitoring to ensure that the agreement's protection mechanisms are properly and fully implemented, and (3) is implemented in a timely manner. In addition, we recommend that the Director routinely review the effectiveness of such agreements following their implementation.

Agency Comments

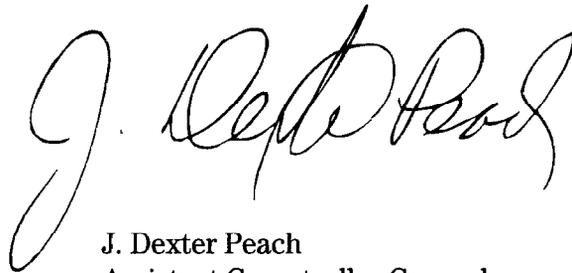
In commenting on a draft of this report, Interior's Assistant Secretary for Fish and Wildlife and Parks stated that Interior found the report to be generally accurate in portraying the five listings under the ESA. Interior stated that FWS accepts our recommendations and will incorporate them into a revised policy on conservation agreements currently planned to be distributed within FWS by the end of September 1993. Interior further commented that a broader effort to address the conservation needs of species that may warrant listing under the ESA is under way. Interior expects that this effort may result in forgoing formally listing some species as well as reducing the priority of other species for listing. (Interior's comments are included as app. II.)

In conducting this review, we examined relevant documentation and interviewed officials at FWS' headquarters, regional, and field offices who were responsible for reaching listing decisions for the six species. We also spoke with officials in state offices and other federal agencies and other knowledgeable individuals involved in the listing process. We performed our review between June 1992 and April 1993 in accordance with generally accepted government auditing standards. Our scope and methodology are discussed in detail in appendix III.

Unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date of this letter. At that time, we will send copies to the appropriate congressional committees, the Secretary of the Interior, and the Director of FWS. We will also make copies available to others upon request.

This work was done under the direction of James Duffus III, Director, Natural Resources Management Issues, who can be reached at (202) 512-7756 if you or your staff have any questions. Major contributors to this report are listed in appendix IV.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "J. Dexter Peach". The signature is written in black ink and is positioned to the left of the printed name.

J. Dexter Peach
Assistant Comptroller General

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Abbreviations

ESA	Endangered Species Act
FWS	U.S. Fish and Wildlife Service
GAO	General Accounting Office

Description of Six Species and Information on Their Consideration for Listing Under the Endangered Species Act

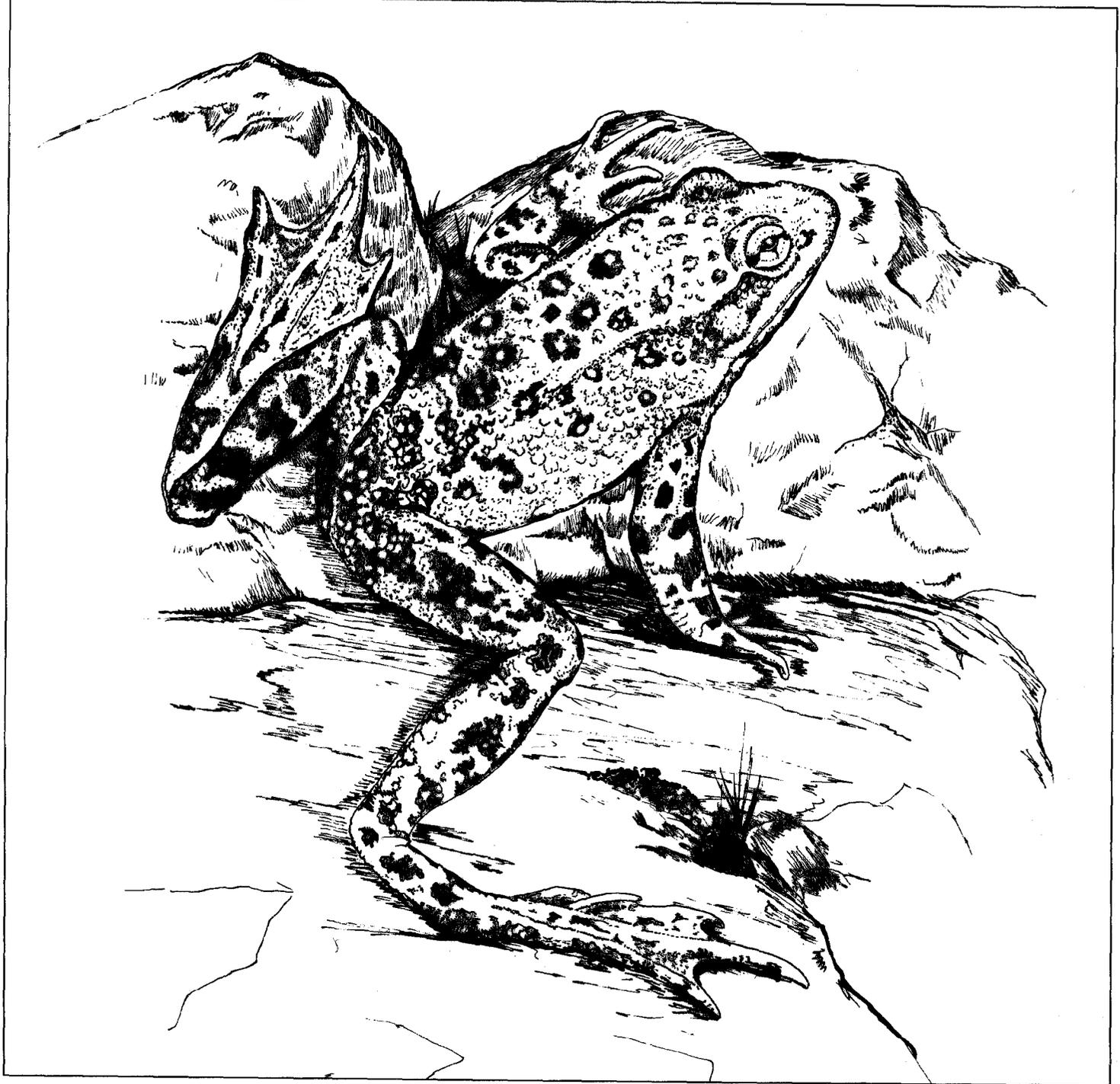
Our review examined the Fish and Wildlife Service's (FWS) consideration of whether or not to list six selected species under the Endangered Species Act (ESA). The species included in our review were the spotted frog, the Louisiana black bear, the spectacled eider, the Steller's eider, the Jemez Mountains salamander, and the Bruneau Hot Springsnail. Provided below for each species are a description of it, a brief history of FWS' consideration of it for listing under the ESA, and a discussion of the factors present during the listing process.

Spotted Frog

The spotted frog is a widely distributed species, with a main population that stretches from Alaska and Canada, through the Pacific Northwest, and into portions of Montana and Wyoming. Additional isolated populations exist in the southern and western portions of the species' range. The frog's habitat includes cold water springs and marshy edges of ponds, lakes, and slow-moving streams. The largest adults range in length from approximately 2-3/4 to 4 inches, depending on the frog's geographic location and sex. Adults have large dark spots on their backs and pigmentation on their abdomens ranging from yellow to red. Figure I.1 shows a typical adult spotted frog.

Appendix I
Description of Six Species and Information
on Their Consideration for Listing Under the
Endangered Species Act

Figure I.1: Spotted Frog



**Appendix I
Description of Six Species and Information
on Their Consideration for Listing Under the
Endangered Species Act**

History of Listing Process

In May 1989, an amateur herpetologist who had conducted field studies of the frog in Utah and Nevada, petitioned FWS on behalf of the Board of Directors of the Utah Nature Study Society to list the spotted frog under the ESA. The petitioners were concerned about the decline of the species along the Wasatch Front, in Utah, and in other portions of its range. They considered the spotted frog and other amphibians to be an indicator of the biological health of wetlands.

In October 1989, FWS published a 90-day finding concluding that the petition contained sufficient information to indicate a listing may be warranted. On the basis of information gathered during its review of the spotted frog's status, FWS concluded that the primary threat to the species was the destruction or modification of its wetland habitat. This destruction or modification can take such forms as agricultural development and the construction of roads, bridges, dams, and reservoirs. Other threats included the adverse impacts of livestock grazing and predation by nonnative species such as certain fishes and bullfrogs.

On May 7, 1993, about 3 years after a 12-month finding was required to be made, FWS published a decision that listing the spotted frog in portions of its range was warranted but precluded by higher priorities for listing. Specifically, FWS determined that while listing the main population was not warranted, listing four isolated populations—the West Coast population (western Washington and Oregon, and northeastern California), the Great Basin population (Nevada and southern Idaho), the Wasatch Front population (Utah), and the West Desert population (also in Utah)—was warranted but precluded. Table I.1 presents the key dates in the listing process for the spotted frog.

Table I.1: Key Dates in the Listing Process for the Spotted Frog

Date	Event
5/4/89	FWS received a petition to list the spotted frog.
10/17/89	FWS published a positive 90-day finding, concluding that the petition contained sufficient information to indicate that listing may be warranted.
5/4/90	Deadline passed for the 12-month finding.
5/7/93	FWS published a 12-month finding that listing the main population was not warranted but that listing certain other populations in portions of the species' range was warranted but precluded by higher priorities for listing.

Factors Present During Delay in Reaching a Listing Decision

A 12-month finding for the spotted frog was not made until 3 years after the legislative deadline passed for making the decision. Our work shows that three factors were associated with the delay in reaching the 12-month finding: questions about the sufficiency of the available biological data, expressed concerns about the potential economic and other impacts of a decision to list the species, and a lack of staff resources.

Questions About the Sufficiency of Biological Data

According to officials in FWS' regional office with responsibility for the listing, one reason for the delay in making the 12-month finding was the need to gather additional biological data on the spotted frog. These officials explained that little was known about the spotted frog, and FWS wanted to obtain information on the species' status, population distribution, and genetic classification. FWS officials told us they believed it was important to obtain this additional information before making a listing decision.

While the genetics research is not expected to be completed for several years, preliminary results discussed in the May 1993 12-month finding indicate that what was originally thought to be a single species of spotted frog may actually be two or more species and that one or more of these may have several subspecies. If this proves to be true, these species or subspecies will have a higher priority for listing than they currently do as distinct populations of one species.

Concern About the Impacts of Listing

In May 1990, the time a 12-month finding for the frog was due, the Director and other FWS officials involved in the listing process for the spotted frog met with a then Member of the Congress to discuss the status of FWS' consideration of the spotted frog. FWS officials who attended the meeting told us that the Member of the Congress expressed concern that listing the frog could potentially delay or stop the construction of a major water resource project, and therefore strongly opposed a listing. While the Member of the Congress made a strong impression on all in attendance at the meeting, these officials did not believe this expression of opposition significantly delayed FWS' efforts to reach a listing decision for the spotted frog.

Lack of Staff Resources

FWS officials told us that a contributing factor in the agency's delay in reaching a listing decision for the spotted frog was the lack of sufficient staff resources. According to one official, at the time the petition for the spotted frog was received, the responsible regional office was processing petitions for listing a number of species, including the black-footed ferret, white bark pine, paddle fish, pallid sturgeon, and Kanab ambersnail. This

heavy work load, the official explained, contributed to the office's inability to process the petition for the spotted frog within the deadlines established under the ESA.

Louisiana Black Bear

The Louisiana black bear, which is 1 of 16 subspecies of the American black bear, is larger than other black bears and is distinguished by a relatively long, narrow, and flat skull and by proportionately large molar teeth. (See fig. I.2.) Louisiana black bears may live for more than 25 years; large males can weigh 600 pounds or more. The bear's diverse diet includes roots, berries, grubs, mice, and deer. The current habitat for the bear is primarily the wooded areas along two rivers in Louisiana—the Tensas and the Atchafalaya.

Historically, the Louisiana black bear's range covered about 25 million acres of forest in the lower Mississippi River Valley. According to research conducted by FWS in the mid-1980s, changes such as the clear-cutting of timber to make way for agriculture and flood control projects had significantly reduced the bear's habitat. Today, the bear is confined to less than 1 million acres, according to FWS. FWS biologists estimate that the remaining population of Louisiana black bears numbers only about 100 to 200.

Appendix I
Description of Six Species and Information
on Their Consideration for Listing Under the
Endangered Species Act

Figure I.2: Louisiana Black Bear



**Appendix I
Description of Six Species and Information
on Their Consideration for Listing Under the
Endangered Species Act**

History of Listing Process

In March 1987, a conservationist from Lafayette, Louisiana, petitioned FWS to place the Louisiana black bear on the endangered species list. In response to the petition, FWS issued a 90-day finding in July 1987 concluding that the petition contained sufficient information to indicate that listing may be warranted. In August 1988 and again in August 1989, FWS published 12-month findings stating that listing was warranted but precluded because of FWS' efforts to list other higher-priority species. In June 1990, FWS published a proposed rule to list the bear, and in January 1992, the agency issued a final rule listing the bear. Table I.2 presents the key dates in the listing process for the Louisiana black bear.

Table I.2: Key Dates in the Listing Process for the Louisiana Black Bear

Date	Event
3/23/87	FWS received a petition to list the Louisiana black bear.
7/6/87	FWS issued a positive 90-day finding, concluding that the petition contained sufficient information to suggest that listing may be warranted.
3/23/88	Deadline passed for the 12-month finding.
8/19/88	FWS published a 12-month finding that listing was warranted but precluded because of work on higher-priority species.
8/10/89	FWS published a finding that continued higher-priority work was keeping the bear's listing status as "warranted but precluded."
6/21/90	FWS published a proposed rule to list the bear.
6/21/91	Deadline passed for the final rule.
9/20/91	FWS extended the deadline for issuing a final rule to 12/21/91.
12/21/91	Extended deadline for the final rule passed.
1/7/92	FWS published a final rule listing the bear.

Factors Present During Delay in Reaching a Listing Decision

Our work shows that FWS experienced a delay of about 5 months in reaching a 12-month finding in response to the petition to list the Louisiana black bear. We found that at the time the 12-month finding was due, two factors were present: questions about the sufficiency of the available biological data and expressed opposition to a decision to list the bear. We also found that these factors remained throughout the listing process.

Questions About the Sufficiency of Biological Data

According to FWS officials and records, after the petition to list the Louisiana black bear was received, there was a concern within FWS that additional biological data on the bear's status and genetic makeup would be needed in order to reach a decision. Specifically, FWS wanted to determine whether the Louisiana black bear had crossbred with other

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subspecies of American black bears transplanted from Minnesota into the Louisiana black bear's historic range by the Louisiana Department of Wildlife and Fisheries during the 1960s.¹

To address these questions, in 1988 FWS undertook a study in cooperation with the Louisiana Department of Wildlife and Fisheries to analyze genetic materials and skulls obtained from various black bear populations. The study, which was completed in July 1989, was then reviewed by experts in wildlife and mammalogy. According to this peer review, no available data indicated that the Louisiana black bear was not a valid subspecies. The peer review also found that crossbreeding with other black bears could not be conclusively proved; but even if crossbreeding had occurred, it should not have had a significant impact on the Louisiana black bear's genetic makeup. As a result of these findings, FWS published in June 1990 a proposed rule to list the bear as threatened.

In August 1991, about 2 months after a final rule was due to be published, FWS' Assistant Director for Fish and Wildlife Enhancement convened a panel of FWS biologists who were specialists on black bears to again review the available biological data. The panel of three biologists reported in September 1991 that although data supporting the validity of the subspecies were somewhat weak and that additional studies on this issue should be undertaken, the bear should be considered eligible for listing.

On September 20, 1991, FWS officially extended the deadline for publishing the final rule to list the bear until December 21, 1991, and reopened the period for public comment. FWS justified these steps by citing the substantial scientific disagreement regarding the taxonomic validity of the subspecies. According to FWS' lead field biologist for the listing, neither additional study by the agency during this period nor information received during the period for public comment provided any significant new data.

Concern About the Impacts of Listing

In response to the results of a 1986 survey by FWS on the bear's status, the Secretary of the Louisiana Department of Wildlife and Fisheries notified FWS that the department opposed listing the bear because it saw few benefits from a listing and because a listing would likely create considerable managerial difficulties for it. The Louisiana Department of Agriculture and Forestry, following FWS' June 1990 publication of the proposed rule to list the bear, also voiced its opposition to the listing. The Louisiana State Forester told FWS that efforts under way at that time to

¹Under FWS' policy at the time, the ESA's protection generally was not extended to hybrids (the product of crossbreeding between species or subspecies) because their genetic integrity was considered compromised.

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restore the bear's habitat were sufficient and that listing the bear would also severely affect the state's timber industry. In late 1990, however, the state's Department of Wildlife and Fisheries expressed its support for the listing.

Following fws' publication of the proposed rule to list the bear, timber interests also expressed concern about the potential adverse impact the listing would have on private landowners, especially on their timber production. These interests' reasons for not listing the bear focused on three biological issues: (1) the lack of accurate data on the bear's population, (2) the reversal of the loss of habitat, and (3) questions regarding the taxonomic validity of the subspecies. In October 1990, the timber industry formed the Black Bear Conservation Committee, initially out of concern about the potential adverse impact that listing the bear would have. This committee soon developed into a broad coalition of state, federal, academic, and private interests working in cooperation with fws to stabilize and manage existing bear populations and to restore the bear to suitable habitats throughout its historic range.

Spectacled Eider

The spectacled eider is a large sea duck that nests along the arctic coasts of Alaska and Siberia. The adult male has a black chest, white back, green head, and distinctive white eye patch from which the name "spectacled" derives. Females are brown with a less distinct eye patch. Figure I.3 shows an adult male spectacled eider.

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Figure I.3: Spectacled Eider



Spectacled eiders are diving birds that are thought to feed on bottom-dwelling mollusks and crustaceans. The eider's primary winter range is unknown but is presumed to be on the central and northwestern Bering Sea. Traditionally, most of the world's spectacled eider population nested on the Yukon-Kuskokwim Delta in western Alaska. This population has declined dramatically over the last 20 years.

History of Listing Process

Most information about populations of spectacled eiders is in the form of surveys conducted on nesting grounds. Over the years, this information has pointed to a substantial decrease in nesting populations. Because of

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this decline, a former FWS biologist who was familiar with the survey information filed a petition with FWS in December 1990 to list the spectacled eider as an endangered species.

In April 1991, FWS published a 90-day finding concluding that the petition presented substantial information indicating that listing may be warranted. A review of the eider's status by a biologist in FWS' Alaska region estimated that 2,700 pairs were nesting on the Yukon-Kuskokwim Delta, a 94-percent decline from the estimated 47,000 pairs in the early 1970s. The biologist concluded that if the downward trend continued, the nesting population would be cut in half every 3 years.

In May 1992, about 5 months after the 12-month finding was due, FWS published a proposed rule to list the spectacled eider. FWS concluded that the causes of the decline in the populations of the species were unknown. In May 1993, FWS published a final rule listing the eider. Table I.3 presents the key dates in the listing process for the spectacled eider.

Table I.3: Key Dates in the Listing Process for the Spectacled Eider

Date	Event
12/10/90	FWS received a petition to list the spectacled eider as endangered.
4/25/91	FWS published a positive 90-day finding, indicating that the petition contained sufficient information to suggest that listing may be warranted.
12/10/91	Deadline passed for the 12-month finding.
5/8/92	FWS published a proposed rule to list the eider as a threatened species.
5/10/93	FWS published a final rule listing the eider as threatened.

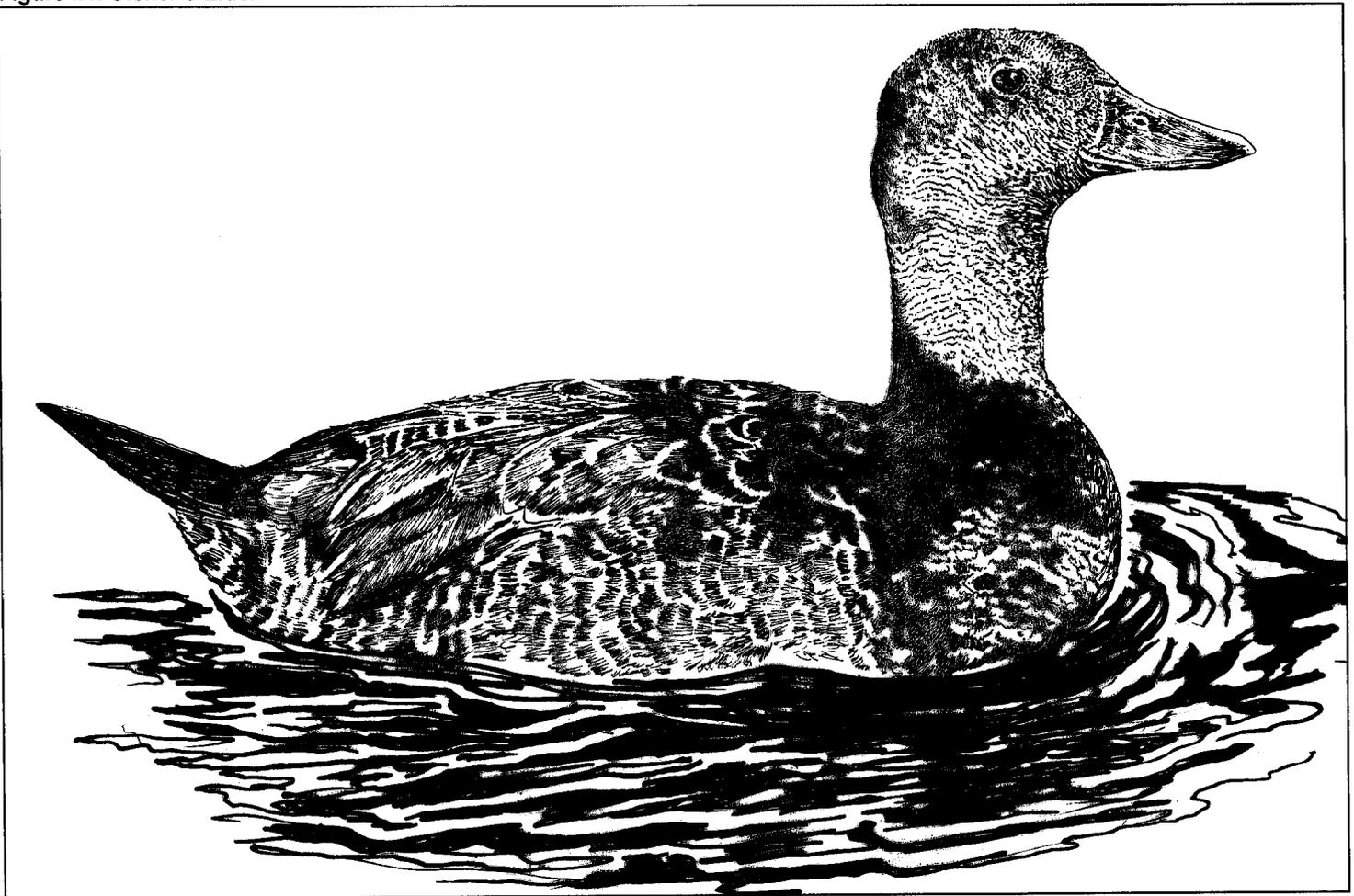
Factor Leading to Delayed Listing Decision

According to FWS' Deputy Director, the delay in publishing a 12-month finding to list the spectacled eider primarily resulted from FWS' uncertainty over how to proceed with listing-related regulations given the imposition of the President's January 1992 moratorium on new regulations. By February 1992, FWS had concluded that the spectacled eider should be proposed for listing. FWS initially considered, and then rejected, an internal proposal to obtain a "blanket" waiver from the President's moratorium for all regulations related to listings. FWS subsequently decided to require that an application for a waiver be made for each individual listing-related regulation. After FWS' Deputy Director requested that Interior waive the moratorium for publishing a listing decision for the spectacled eider, approval was given, and FWS published its proposed rule to list the eider.

Steller's Eider

The Steller's eider, a sea duck, is the smallest of four eider species. The adult male Steller's eider has a white head with a greenish tuft, a black eye patch, a black back, white shoulders, and a chestnut breast and belly. Females are mottled dark brown and have a blue and white pattern on their wings similar to that of a mallard. Figure I.4 shows an adult female Steller's eider.

Figure I.4: Steller's Eider



Most of the worldwide population of Steller's eiders spend the winter along Alaska's southwest coast. These eiders primarily nest during the summer on the Siberian tundra, although a small population nests in

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Alaska. The eiders generally feed in nearshore marine habitats on crustaceans and mollusks such as the blue mussel.

History of Listing Process

In December 1990, the same former FWS biologist who filed a petition to list the spectacled eider also petitioned FWS to list the Steller's eider. In April 1991, FWS published a 90-day finding concluding that the petition presented substantial information indicating that a listing may be warranted.

In response to the petition, FWS initiated a review of data that had been gathered during aerial surveys designed to count migratory waterfowl in Alaska, as well as information on the nesting population and nesting range of the Steller's eider. As a result of its review, FWS published, in early May 1992, its decision that listing the Steller's eider was warranted but precluded by higher-priority listing actions. FWS' decision was made about 5 months after the December 1991 deadline for the 12-month finding. In May 1993, FWS concluded that listing the Steller's eider continued to be warranted but precluded. Table I.4 presents key dates in the listing process for the Steller's eider.

Table I.4: Key Dates in the Listing Process for the Steller's Eider

Date	Event
12/10/90	FWS received a petition to list the Steller's eider.
4/25/91	FWS published a positive 90-day finding, indicating that the petition contained sufficient information to suggest that listing may be warranted.
12/10/91	Deadline passed for the 12-month finding.
5/8/92	FWS published a 12-month finding that the listing was warranted but precluded because of work on higher-priority species.
5/20/93	FWS concluded that listing the Steller's eider continued to be warranted but precluded.

Factors Leading to Delayed Listing Decision

Our work shows that two factors—questions regarding the sufficiency of the available biological data and the President's moratorium on new regulations—caused FWS to miss by almost 5 months the deadline for a listing decision on the Steller's eider.

Questions About the Sufficiency of Biological Data

Within FWS, debate about the sufficiency of the biological data for the Steller's eider occurred throughout the listing process, both at the regional and headquarters levels. In November 1991, FWS' Alaska Regional Director recommended to FWS headquarters that the Steller's eider not be listed, in

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large part because he believed the available biological data were insufficient to support a listing. FWS headquarters officials subsequently sought internal comments on the Regional Director's conclusion and received comments on both sides of the issue.

On February 12, 1992, about 2 months after the 12-month finding was due, FWS headquarters officials decided not to accept the Regional Director's position. Instead, the view of FWS' Assistant Director for Fish and Wildlife Enhancement was adopted. The Assistant Director believed that there was more evidence that a decline in the eider's population was occurring than there was evidence that the eider's population was stable.

**President's Moratorium on New
Regulations**

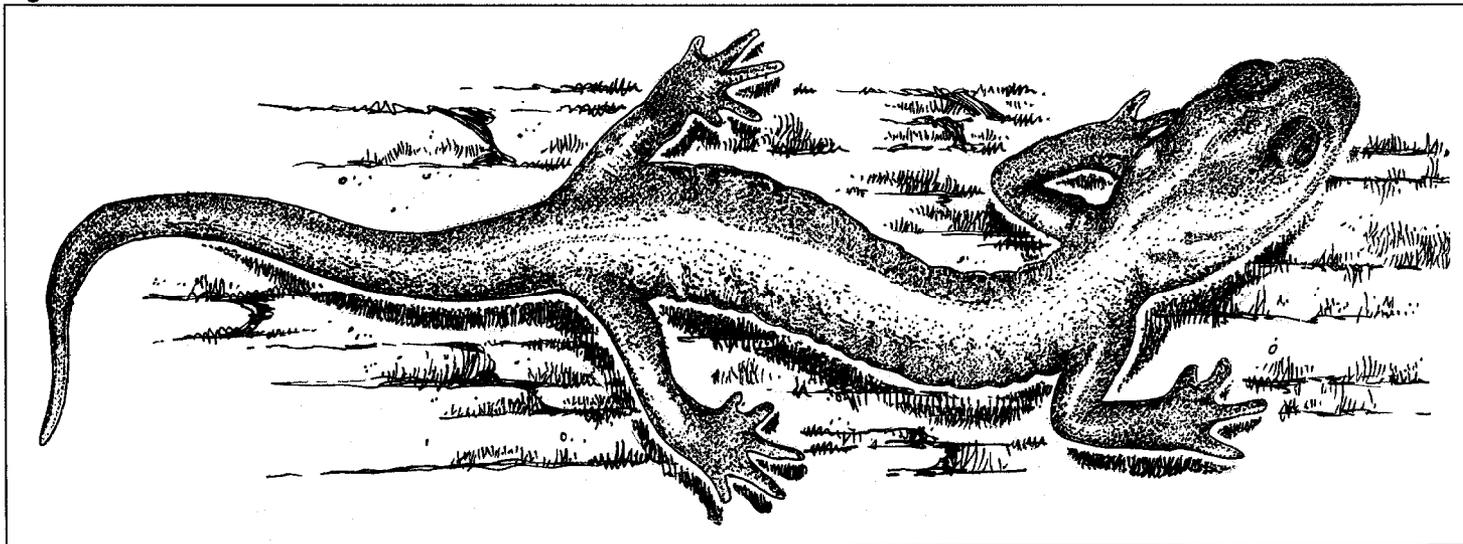
According to FWS' Deputy Director, the listing decision for the Steller's eider was also delayed because of uncertainty over how to proceed in light of the President's January 1992 moratorium on new regulations. While FWS reached its listing decision in February 1992, it did not publish the 12-month finding until May 1992, after the Deputy Director had obtained approval from Interior for a waiver from the moratorium.

**Jemez Mountains
Salamander**

The Jemez Mountains salamander, part of a family of lungless salamanders, is a pale brown amphibian between 1-1/4 inches and 5-1/2 inches long. (See fig. I.5.) It is found only in the Jemez Mountains of north-central New Mexico, where it lives in wooded areas of evergreen trees at elevations between 7,200 and 9,200 feet. Ninety percent of its habitat lies within an estimated 250-square-mile portion of the Santa Fe National Forest. The Forest Service has harvested timber in the Jemez Mountains for many years and plans to continue to do so in areas that are not closed to harvesting but that include habitat for the salamander.

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Figure I.5: Jemez Mountains Salamander



History of Listing Process

The Jemez Mountains salamander has been studied since about 1965. As early as the 1970s, these studies had documented that the salamander was vulnerable to forest management practices and prone to extinction. The identified threats included logging, the removal of vegetation, livestock grazing, fire, and severe outbreaks of tree disease—all of which were leading to drier conditions in the salamander's habitat.

In January 1975, the New Mexico Game and Fish Commission listed the salamander as an endangered species under state law. New Mexico Department of Game and Fish biologists told us that pursuant to the state listing, federal agencies, such as the Forest Service, are to designate the species as "sensitive" and give consideration to the species by trying to avoid actions that would adversely affect the species' habitat.

FWS initially considered the salamander for listing under the ESA in the early 1980s. In August 1982, FWS' Albuquerque Regional Office expressed concern to FWS headquarters about the potential for insect infestation and about continued logging within the salamander's habitat. In December 1982, FWS published a notice of review classifying the salamander as a category-2 species—a species that available data indicate may be endangered but that requires more study. Studies of the salamander's status were undertaken while logging and other activities in the salamander's habitat area continued.

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Between 1986 and 1992, FWS biologists and biologists under contract to the agency sampled 218 sites that they considered to be likely habitat for the salamander and found five or more salamanders at only 21 sites. On the basis of these and related findings, in October 1988 FWS began the process to list the salamander. Concurrently with that effort, FWS was involved with the Forest Service and the New Mexico Department of Game and Fish in developing a conservation agreement to protect the salamander. The concept of a conservation agreement was first proposed by the Forest Service in December 1987. However, by the end of 1989, neither work toward an agreement nor FWS' listing process had progressed to the point of providing protection for the species.

In February 1990, the Chairman of the FWS-appointed Herpetology Recovery Team, which had been studying the salamander, expressed concern over the lack of progress in protecting the salamander and petitioned FWS to list it. In September 1990, FWS published a positive 90-day finding, which stated that the petition presented substantial information indicating that a listing may be warranted. In May 1991, over 3 months after the deadline had passed for a 12-month finding, FWS, the Forest Service, and the New Mexico Department of Game and Fish signed a conservation agreement outlining actions that would be taken to protect the salamander in lieu of listing under the ESA. In April 1992, FWS published a 12-month finding that listing was not warranted because the protection provided by the conservation agreement would be implemented in lieu of listing. Table I.5 presents key dates in the listing process for the salamander.

Table I.5: Key Dates in the Listing Process for the Jemez Mountains Salamander

Date	Event
2/13/90	FWS received a petition to list the Jemez Mountains salamander as threatened.
9/18/90	FWS published a positive 90-day finding, indicating that the petition contained sufficient information to suggest that listing may be warranted.
2/13/91	Deadline passed for the 12-month finding.
5/30/91	FWS, the Forest Service, and the New Mexico Fish and Game Department signed a conservation agreement outlining actions to be taken to protect the salamander.
4/3/92	FWS published a 12-month finding that listing the Jemez Mountains salamander was not warranted because of the actions to be taken under the conservation agreement.

**Factors Present During
Delay in Reaching a Listing
Decision**

Our work disclosed four factors present during FWS' delay in reaching the 12-month finding for the Jemez Mountain salamander: questions about the sufficiency of the biological data, concern about the potential economic and other impacts of a decision to list the species, a lack of staff resources, and the development of a conservation agreement in lieu of a listing.

**Questions About the
Sufficiency of Biological Data**

Detailed studies on the salamander, ranging from doctoral theses to surveys for determining its status, were available to FWS during its consideration of whether listing the salamander was warranted. According to FWS biologists and other biologists, these studies were the basis for FWS' positive 90-day finding. However, the FWS biologist with lead responsibility for considering the salamander for listing told us that because in his view the biological evidence was not fully convincing, he revised his previous position that the species deserved listing. Specifically, after further review of the studies, the lead biologist questioned whether the data sufficiently established the nature of the threats to the salamander. He questioned whether FWS could confirm a causal link between modifications to the salamander's habitat, especially those resulting from logging, and declining salamander populations. Another biologist, however, expressed his view that the biological data used as the basis for the 90-day finding had clearly suggested listing and nothing had diminished the reasonableness of the data when the 12-month finding was required. This biologist further stated that listing decisions should be based on existing data, not data that still need to be gathered.

According to FWS, state, and other biologists involved in studying the salamander, there is continuing disagreement over whether the available biological data are sufficient to support a decision to list the salamander. Additional studies were ongoing as of March 1993.

**Concern About the Impacts of
Listing**

According to officials of FWS, the Forest Service, and the New Mexico Department of Game and Fish and documents obtained at these agencies, during FWS' deliberations several entities expressed their concern about the potential adverse economic and other impacts of a decision to list the salamander. These entities included the Forest Service, two logging companies, a mining company, and the New Mexico Public Land Users Association (a grass roots group of people who have lived in and around the Jemez Mountains and benefit from using public lands).

According to Forest Service officials, that agency expressed concern that listing the salamander could interfere with established practices in managing the Santa Fe National Forest and hamper the agency's general

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approach of allowing multiple uses of the forest. During FWS' consideration of the salamander for listing, the Forest Service prepared a number of external and internal documents that contained statements expressing opposition to a listing. For example, statements from the documents included, "We don't want the salamander listed," and, "[F]ederal listing . . . could actually hinder rather than assist protection and recovery." Similarly, a lumber company expressed its opposition to listing and requested that FWS consider the impacts of a listing decision "in terms of jobs, loss of local income, restriction of proper utilization of natural resources and impacts to the state and local communities."

FWS' Albuquerque Regional Director, who oversaw FWS' efforts leading to the conservation agreement for the salamander, told us FWS was aware of concerns about the salamander's listing. However, according to the Regional Director, while the concerns were officially considered as comments by FWS, they had no weight in the listing process.

Lack of Staff Resources

FWS officials told us that the lack of staff resources, to some degree, played a role in delaying the listing decision. According to these officials, if sufficient staff resources had been available in the mid-1980s, FWS' initial consideration of the salamander for listing may have proceeded in a more timely manner. These officials also stated that constrained staff resources contributed to delays in finalizing the conservation agreement because neither FWS nor the other parties to the agreement could devote the time needed to reconcile various disagreements that surfaced in drafting the agreement.

**Conservation Agreement in
Lieu of Listing**

FWS officials and others we interviewed said a major factor contributing to the delay in meeting the ESA's deadline for a listing decision on the salamander was the desire to develop, and the time involved in developing, a conservation agreement in lieu of listing. Biologists from FWS and the New Mexico Department of Game and Fish told us the conservation agreement was developed in response to the expressed concern about the impacts of listing the salamander. The Forest Service's memorandums we reviewed appear to support the biologists' views. For example, a Forest Service manager said in an internal memo, "I guess the . . . [conservation agreement] is workable just to keep the salamander from getting listed, . . . to stop the listing threat." This manager told us the memorandum's statements reflected the Forest Service's view that the salamander and other species be adequately protected through conservation agreements and other arrangements less formal than those required under the ESA.

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Biologists from FWS, the Forest Service, and the New Mexico Department of Game and Fish who were involved in developing the conservation agreement for the salamander stated that delays occurred in finalizing the agreement because of, among other things, the need to reconcile the viewpoints of many people and difficulties in coordinating the schedules of all of the parties involved.

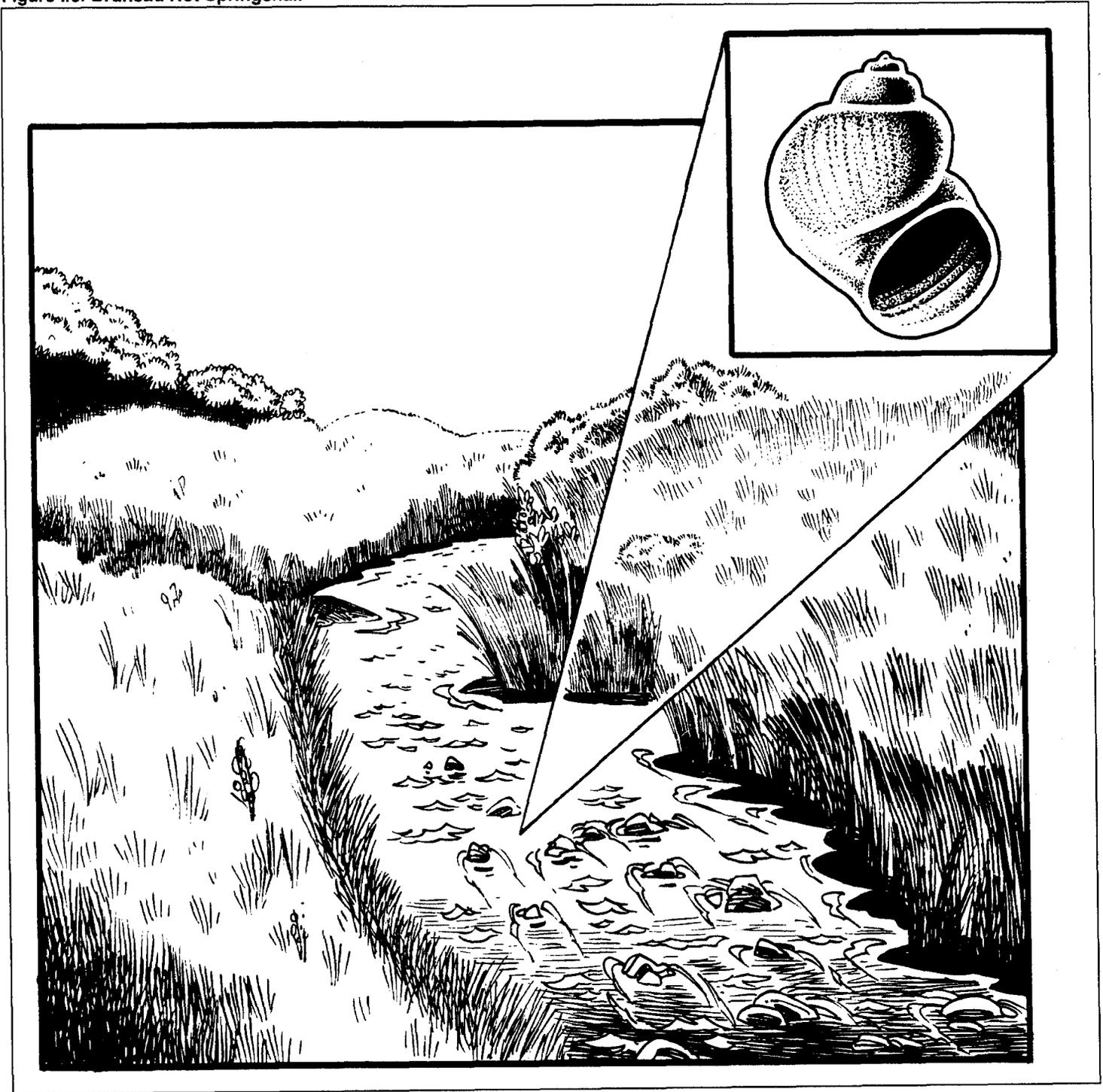
In May 1991, the conservation agreement was finalized and implemented in lieu of listing the salamander. The agreement called for the signatory agencies to implement protective measures immediately and for a team of biologists from the agencies to develop a management plan concerning the salamander by no later than May 1994. The management plan, after being approved by the agencies, is to be incorporated into the management plan for the Santa Fe National Forest. If the May 1994 deadline is not met, the agreement's protective measures will remain in effect until the management plan is approved and incorporated into the plan for the forest.

**Bruneau Hot
Springsnail**

The Bruneau Hot Springsnail is a tiny snail (less than 1/4 inch long) whose remaining habitat is restricted to small thermal springs and seeps along a 5-1/4-mile stretch of the Bruneau River, in southwest Idaho. The snail is most abundant in areas where the water temperature ranges from 77 to 96 degrees Fahrenheit. While its shell is transparent, the snail appears black because of the pigmentation of its body. Figure I.6 shows a greatly enlarged drawing of the snail.

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Figure I.6: Bruneau Hot Springsnail



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History of Listing Process

FWS first became aware of the Bruneau Hot Springsnail in 1979 when a biologist who had studied the species since 1959 informed FWS' Boise Field Office that the snail's habitat was disappearing. Under contract to FWS, the biologist conducted further studies on the snail's status and reported his findings to FWS in June 1982. His report and subsequent information gathered by FWS biologists indicated that the snail was threatened primarily by the destruction of its habitat caused by the agricultural demand for water drawn from the underlying geothermal aquifer. Other identified threats included sedimentation from flash flooding, livestock grazing, and predation by insects and nonnative fish.

In May 1984, FWS classified the snail as a category-1 species—a species for which FWS has adequate information to support a proposal for listing under the ESA. Accordingly, in August 1985, FWS published a proposed rule to list the snail. However, the agency did not issue a final rule to list the snail until January 1993, about 6 years after the decision was due. FWS' listing of the snail was prompted by a July 1992 lawsuit that charged the agency had violated the ESA by failing to make a final determination on the snail. Table I.6 presents key dates in the snail's listing process.

Table I.6: Key Dates in the Listing Process for the Bruneau Hot Springsnail

Date	Event
8/21/85	FWS published a proposed rule to list the Bruneau Hot Springsnail.
12/30/86	FWS extended its consideration of its proposed rule until February 1987 and reopened the public comment period.
2/6/87	Deadline for the final listing rule passed.
7/6/92	The Idaho Conservation League and the Committee for Idaho's High Desert sued FWS for failing to make a listing decision on the snail.
1/25/93	In order to settle the lawsuit, FWS published a final rule listing the snail.

Factors Leading to Delayed Listing Decision

Our work shows that two factors contributed to the delay in publishing a final rule to list the snail: concern about the potential adverse economic and other impacts of a decision to list and the development of a conservation agreement as an alternative to listing.

Concern About the Impacts of Listing

The initial period for public comment on FWS' proposed rule to list the snail lasted from August 1985 until February 1987. During this time, FWS received comments from a number of parties, including the former Governor of Idaho, the Idaho Water Resources Board, local farmers and ranchers, and other water users, expressing concern about the potential

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impacts that a listing could have on the local economy. According to FWS, during the period for public comment it received no substantive information indicating that the snail was more widely distributed or less threatened than originally thought.

In February 1988, two former Members of the Congress wrote to the Director, FWS, requesting that FWS not proceed with listing the snail at that time because doing so could have devastating effects on the local agricultural community. The former Members outlined a number of steps they believed would protect the snail and lead to its recovery without its being listed. They also offered their support for securing funds necessary to carry out these actions. They concluded by noting that unless the Director would assist them in this matter, they would object to consideration of a bill to reauthorize the ESA. In an April 1988 letter of response, the Director, FWS, stated he would comply with the request by the former Members and would delay the final decision on listing the snail pending adequate congressional funding for, and implementation of, a conservation agreement.

**Conservation Agreement in
Lieu of Listing**

FWS prepared a first draft of a conservation agreement in August 1986. The agreement's stated goal was to conserve and protect the snail without implementing the full protection offered by listing under the ESA. Subsequent drafts were prepared in September 1986 and March 1988.

In early 1989, FWS began implementing a conservation agreement for the snail. The parties that participated in the agreement included the U.S. Geological Survey, the Idaho Department of Water Resources, and Idaho State University. These entities agreed to provide FWS with such information as geological maps of the location, elevation, flow, and temperature of spring flows in the area; an analysis of the hydrology of the surrounding geothermal aquifer and the cause of reduced flows of water from the springs; and a study of the snail's biological, ecological, and physiological needs. In addition, FWS secured agreements with Owens Ranches, Inc., owners of much of the snail's remaining habitat, and Interior's Bureau of Land Management, which provided fencing to keep livestock from grazing in areas that are the snail's habitat.

Comments From the Department of the Interior



United States Department of the Interior

OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240

JUL 20 1993

Mr. James Duffus III
Associate Director, Resources, Community, and
Economic Development Division
General Accounting Office
Washington, D.C. 20548

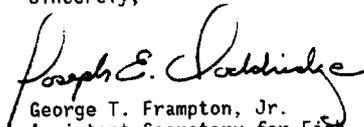
Dear Mr. Duffus:

This letter responds to your letter of June 22, 1993, to Secretary Babbitt requesting comments on the General Accounting Office's draft report entitled Endangered Species: Factors Associated With Delayed Listing Decisions (GAO/RCED-93-152).

The Department of the Interior has reviewed the draft report and finds it to be generally accurate in portraying the five listings under the Endangered Species Act that it examines.

I appreciate the opportunity to comment on this draft report. Specific reactions to the report's recommendations are enclosed.

Sincerely,

For 
George T. Frampton, Jr.
Assistant Secretary for Fish
and Wildlife and Parks

Enclosure

Appendix II
Comments From the Department of the
Interior

Fish and Wildlife Service Response
to Recommendations in the
General Accounting Office's Draft Report on
Delayed Endangered Species Listing Decisions

The draft report contains recommendations regarding the development of conservation agreements intended to benefit species that are candidates for listing as endangered or threatened. Specifically, it recommends, "...that the Director, FWS, when authorizing the use of a conservation agreement to protect a species that would otherwise warrant listing under the ESA, ensure that the agreement (1) addresses the known threats to the species, (2) contains provisions for effective monitoring actions to assure that the agreement's protection mechanisms are properly and fully implemented, and (3) is implemented in a timely manner. In addition, we recommend that the Director routinely review the effectiveness of such agreements following their implementation."

The Service accepts these recommendations, but wishes to provide some context within which its prelisting conservation efforts may be better understood. The report correctly notes a policy reversal in 1992 that allowed conservation agreements to be entered into that would neutralize threats to a species and render its listing unnecessary. Since that time, a broader effort has been mounted on behalf of candidate species, the principal intention of which is to address the conservation needs of candidate species in advance of their being listed. While it is contemplated that in some cases these efforts will allow formal listing to be foregone, the strategy also includes conservation actions that will slow the decline of species and possibly reduce their priority for listing, so that listing efforts can be concentrated where they are most needed to deal with less tractable problems. Policy is now being developed to guide this process, and should be distributed internally by the end of September 1993. The report's recommendations will be incorporated into this guidance.

The following minor factual errors were noted in the report:

Pg. 15, par. 1, lines 1-3; The Seismic testing referred to was planned but never conducted; the team of scientists did, in fact, have an opportunity to comment on it. The logging was a non-commercial harvest intended to restore a meadow. In retrospect, the Forest Service recognized that it should have been reviewed by the team.

Pg. 35, par. 3, line 9; "In May 1993, FWS published a finding..."

There was no published finding on Steller's eiders in 1993.

Pg. 36, Table I.4, bottom row; "FWS published a finding..."

See above: no finding was published.

Pg. 37, par. 2, line 5; "...did not publish final rule..."

Should read "...did not publish the 12-month finding..."

Now on p. 10.

Now on p. 28.

Now on p. 28.

Now on p. 29.

Scope and Methodology

The six species included in our review—the spotted frog, the Steller’s eider, the spectacled eider, the Louisiana black bear, the Jemez Mountains salamander, and the Bruneau Hot Springsnail—were judgmentally selected. They had been identified by FWS biologists and others as species about which FWS had not made timely listing decisions, and there was concern that the delays occurred because information other than biological data may have been considered by FWS’ decisionmakers.

In carrying out our work, we reviewed the ESA and FWS’ documents and records related to the agency’s consideration of each species. Relevant documentation we reviewed included FWS’ internal memorandums, correspondence received by FWS regarding species’ listings, studies and reports discussing the status of the species, and FWS’ policy and guidance statements on listings and conservation agreements. We also interviewed appropriate FWS headquarters officials and responsible FWS regional office officials and biologists involved in the decision-making, as well as knowledgeable individuals from organizations and agencies other than FWS who provided information to the agency during its consideration of the species for listing. The FWS regional and field offices we visited during the course of our work included those in Atlanta, Georgia; Jackson, Mississippi; Denver, Colorado; Salt Lake City, Utah; Albuquerque, New Mexico; Portland, Oregon; Boise, Idaho; and Anchorage, Alaska.

Major Contributors to This Report

Resources,
Community, and
Economic
Development
Division, Washington,
D.C.

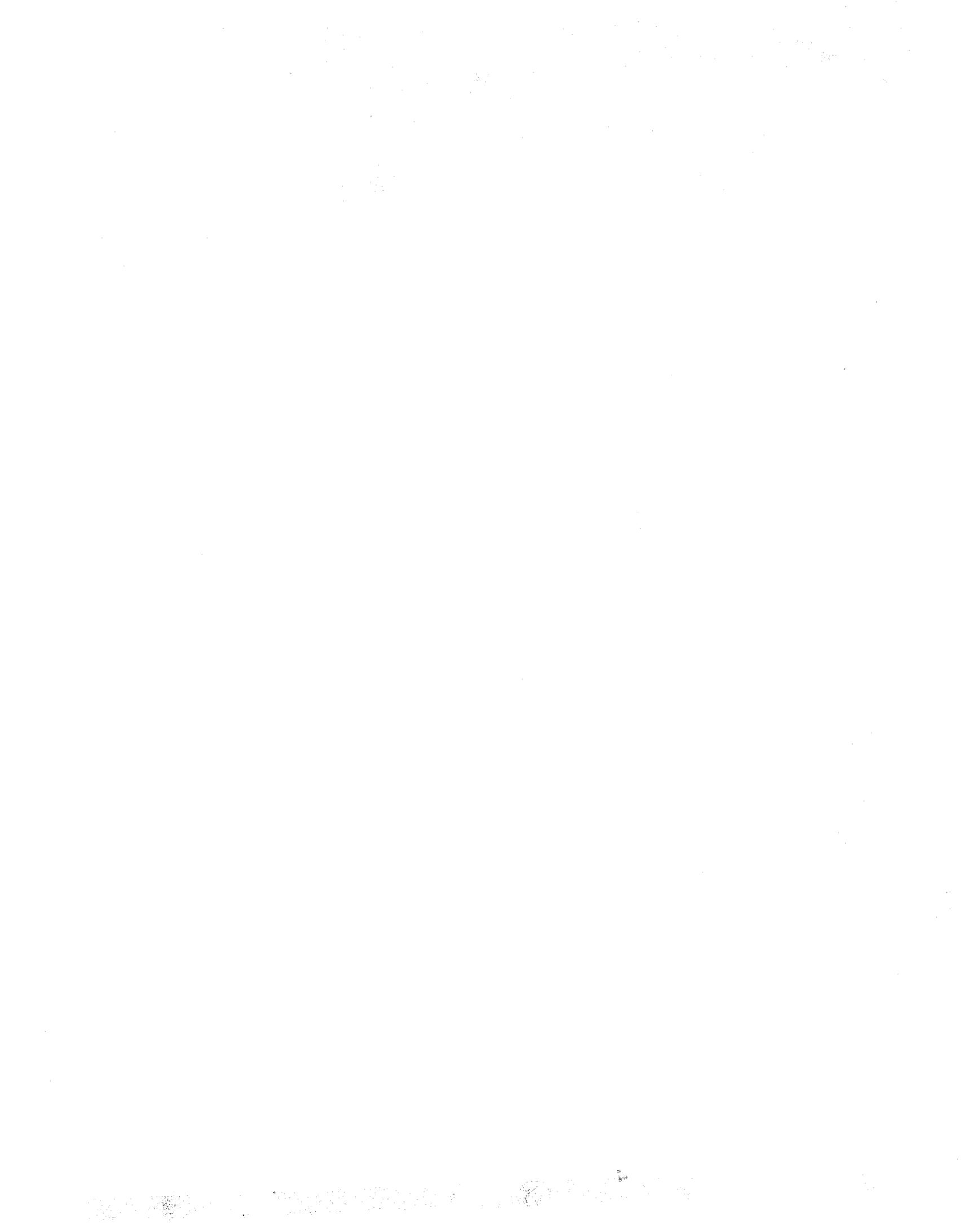
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