

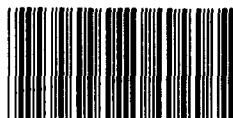
GAO

Report to the Honorable
Larry E. Craig, U.S. Senate

June 1991

NATIONAL FORESTS

Funding Fish and Wildlife Projects



144365

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**Resources, Community, and
Economic Development Division**

B-243013

June 12, 1991

**The Honorable Larry E. Craig
United States Senate**

Dear Senator Craig:

In response to a January 24, 1990, request of your predecessor, Senator James A. McClure, and subsequent discussion with your office, this report provides information on funds spent by various sources for fish and wildlife activities on national forest lands.

Although all national forest land is administered by the U.S. Department of Agriculture's Forest Service, funding for fish and wildlife activities comes from not only the Forest Service but also other federal government agencies, state and local governments, colleges and universities, Indian tribes, and private organizations (e.g., environmental and animal advocacy groups). Because the Forest Service tracks only part of the total amount being spent by these other sources, we sent a questionnaire to the supervisor of each national forest to obtain information on total funding for fish and wildlife activities provided by these other sources. We received responses from 114 of the 122 supervisors, a response rate of 93 percent.

To determine the kinds of projects that received outside funding and the funding arrangements that were used, we conducted detailed work at three national forests: the Boise National Forest in Idaho, the Cherokee in Tennessee and North Carolina, and the Lolo in Montana.

Results in Brief

Between October 1987 and June 1990, fish and wildlife activities that involved the participation of Forest Service staff totaled over \$202 million for the units responding to our questionnaire. Activities funded included revegetation of streamside areas, installation of fencing, and erosion control projects to maintain or improve fish and wildlife habitat or to provide for the recovery of species endangered or threatened with extinction on national forest system land. Of the \$202 million, \$154.6 million was from congressional appropriations for the national forest system. The remaining \$47.8 million, or about one-fourth of the total, came from outside sources, mainly state and local governments. Outside funding for fish and wildlife activities that directly involved Forest Service staff increased from about \$14.7 million in fiscal year 1988 to about

\$16.7 million in fiscal year 1989. Such outside funding totaled about \$16.4 million for approximately the first 9 months of fiscal year 1990.

Some fish and wildlife improvement projects, including scientific research by government agencies or colleges and universities, were also conducted on national forest system land but without Forest Service staff direct involvement. According to responses to our questionnaire, these projects totaled \$14.7 million from October 1988 through June 1990, a 21-month time frame.

Background

The Forest Service is organized into three branches: research, state and private forestry, and national forest system. The research programs seek better ways to use forest and rangeland resources by developing technology to reduce costs, increase productivity, and protect environmental quality. The research appropriations may fund activities that directly benefit fish and wildlife on national forest land.

The state and private forestry programs deal with timber, fire protection, and insect and disease control at the national forests. These programs are conducted in conjunction with state agencies. Although appropriations for this branch do not fund activities directly related to fish and wildlife, such activities may indirectly affect fish and wildlife.

The national forest system program receives the largest appropriation of the three branches. Under it, the Forest Service manages 191 million acres of federal land. This land is divided into 156 national forests, which, in turn, are managed by 122 forest supervisors, most of whom are responsible for an individual forest.

Under the Multiple-Use Sustained-Yield Act of 1960 (16 U.S.C. 528 et seq.), the Forest Service manages its land for five main uses: timber production, outdoor recreation, rangeland grazing, preservation of watershed, and habitat for fish and wildlife. This multiple-use concept requires the Forest Service to balance divergent, and sometimes competing, demands on the land. In recent years, increased attention has been focused on the relative amounts of money being spent for nonconsumptive forest activities, such as recreation or fish and wildlife habitat protection, as compared with consumptive activities, such as timber harvesting.

Fish and Wildlife Expenditures From National Forest System Appropriations

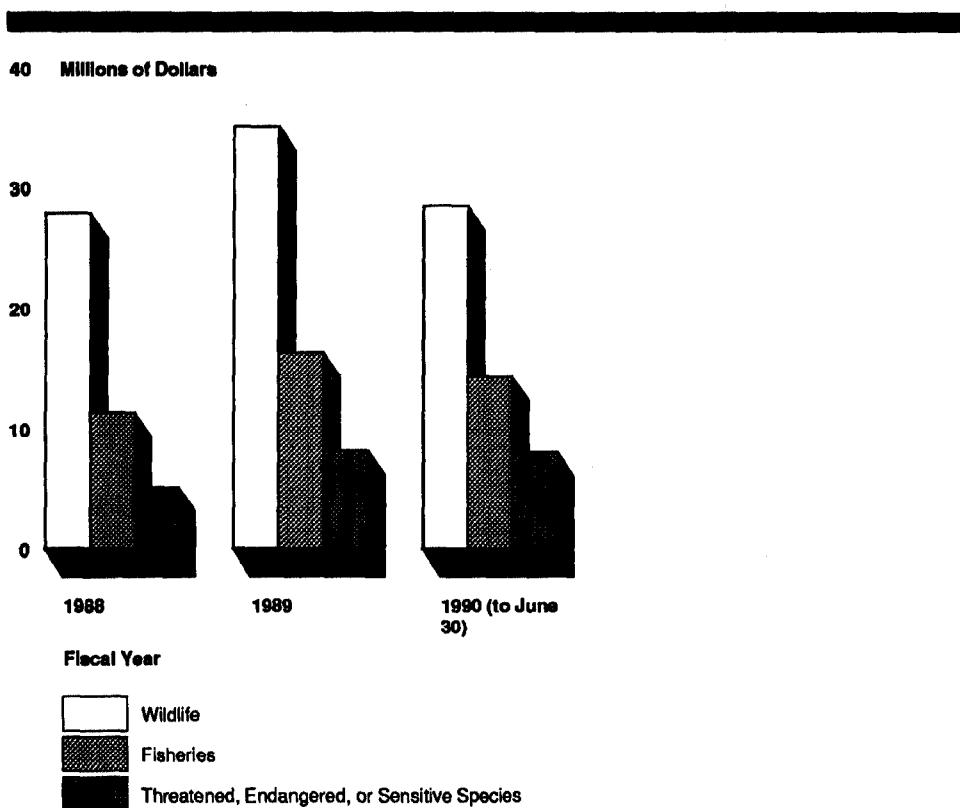
Officials of the 114 national forests reported that total fish and wildlife expenditures from national forest system appropriations were \$154.6 million for the approximately 33 months covered in our review.¹ These expenditures increased during the period. For fiscal year 1988, reported expenditures were \$44.3 million; for fiscal year 1989, they had grown to \$59.5 million, an increase of over 34 percent. For approximately the first 9 months of fiscal year 1990, reported expenditures were \$50.8 million. If fish and wildlife expenditures at the 114 national forests continued at the same level during the remainder of fiscal year 1990, expenditures for the total year would have been more than \$67 million.

Fish and wildlife management on national forest land covers a wide range of activities, beginning with the planning and administration of the resources; improving habitat for fish and wildlife species; conducting inventories and surveys of fish, wildlife, and plants; and taking steps to protect all species, including those endangered and threatened with extinction. We asked the forest supervisors to divide the expenditures for these activities into amounts for (1) wildlife; (2) fisheries; and (3) threatened, endangered, and sensitive species.² They reported that for the approximately 33-month period, wildlife expenditures were \$91.4 million; fisheries expenditures were \$42 million; and threatened, endangered, and sensitive species expenditures were \$21.2 million. Figure 1 shows these amounts by fiscal year.

¹The reported forest-level expenditures came from three national forest system funding sources: the wildlife and fish habitat management budget line item, the resource management budget line item for timber receipts, and the Knutson-Vandenberg Act trust fund. This trust fund includes deposits from purchasers of timber on national forest land to be used to, among other things, reforest timber sale areas and protect and improve resource values on timber sale areas in conjunction with timber management activities. The Secretary of Agriculture may use these trust funds without a specific congressional appropriation, because they are considered to be permanently appropriated for such use. The reported amounts do not include expenditures related to fish and wildlife staff support for activities such as timber sales, law enforcement, and land use planning. They also do not reflect expenditures made at levels of the Forest Service above the individual national forests, such as the nine regional offices or Forest Service headquarters, or amounts spent under separate appropriations for research.

²Endangered species are those in danger of extinction throughout all or a significant portion of their habitat. Threatened species are those likely to become endangered within the foreseeable future throughout all or a significant portion of their habitat. Sensitive species are those that may need special management attention to keep them from being listed as threatened or endangered species.

Figure 1: Reported Expenditures From National Forest System Appropriations, Fiscal Years 1988 Through 1990



Source: GAO presentation of Forest Service reported data.

Some Forest Service officials reported that while their expenditures for fish and wildlife activities are correct in total, often their expenditures for program operations are charged only to wildlife, which may help to explain why wildlife expenditures were so much greater than those for fisheries and for threatened, endangered, and sensitive species.

Outside Sources of Additional Fish and Wildlife Funding

Although many fish and wildlife activities are funded through Forest Service appropriations, under various federal laws, including the Cooperative Funds Act of June 30, 1914 (16 U.S.C. 498), Acceptance of Gifts Act of October 10, 1978 (7 U.S.C. 2269), Forest and Rangeland Renewable Resources Research Act (16 U.S.C. 1641-1646), Granger-Thye Act of April 24, 1950 (16 U.S.C. 572), and Volunteers in the National Forest Act of 1972 (16 U.S.C. 558a-d), the Forest Service is authorized to obtain

outside financial support as well.³ Under Forest Service regulations, such support must benefit the public and avoid conflicts of interest. This support can take the form of money, equipment, labor, or supplies and products.

We categorized financial support from outside sources into three main groups. The first two cover activities in which the national forest staff participate, and the third covers activities in which the national forest staff do not participate.

- The first group involves cost-share arrangements in which the Forest Service and outside sources such as state and local governments and others each pay part of the cost. For example, a state fish and wildlife agency may provide the labor and/or equipment needed to perform stream bed improvements for fish, while the Forest Service plans the project, bears the cost of supplies, and supervises the work. The Forest Service's Challenge Cost Share Program, established in 1986, uses federal appropriations for the Forest Service's share of such cost-share arrangements.
- The second group involves work that is performed by the national forest staff but is paid for entirely by outside sources. An example is a contract calling for the Forest Service to conduct specific habitat improvement work, such as reseeding wildlife openings for forage and cover, with the total cost of the labor, supplies, and equipment to be paid by an outside group, which would most often be a state or local agency.
- The third group involves activities in which the national forest staff are not directly involved. For example, researchers from a college or university may conduct wildlife or fisheries research that benefits the Forest Service without direct involvement by the national forest staff.

For our questionnaire, we categorized the providers of outside financial support as other federal agencies, state and local governments, private groups such as hunting and fishing clubs and individuals, universities and colleges, and Indian tribal units. Although forest supervisors reported that state and local governments generally provided the majority of outside financial support for fish and wildlife projects, 12 federal departments and agencies besides the Forest Service supplied about \$13.8 million, or 22 percent, of the total outside funding for fish

³Amounts contributed under the authority of these statutes are deposited into the Cooperative Work Trust Fund. The Secretary of Agriculture may use these funds without specific congressional appropriation, because they are considered to be permanently appropriated for such use.

and wildlife projects with and without national forest staff involvement. The departments and agencies were as follows:

- Department of Agriculture
Animal and Plant Health Inspection Service
- Department of the Army
Army Corps of Engineers
- Department of Commerce
National Marine Fisheries Service
- Department of Defense
Department of the Army
Department of the Navy
- Department of Energy
Bonneville Power Administration
- Department of the Interior
Bureau of Indian Affairs
Bureau of Land Management
Bureau of Reclamation
Fish and Wildlife Service
National Park Service
- Department of Labor
Employment and Training Administration

Financial Support for Projects Involving National Forest Staff

Forest supervisors responding to our questionnaire reported that outside support for fish and wildlife activities in which national forest staff were directly involved totaled almost \$47.8 million during the reporting period. About \$32.1 million (67 percent) of this amount involved cost-sharing among the Forest Service and other sources. The remaining \$15.7 million involved work that, while performed by the Forest Service, was paid for entirely by outside sources.

Cost-Share Projects

Of the \$32.1 million for cost-shared projects, almost \$13.5 million was for wildlife activities; almost \$14 million was for fisheries activities; and about \$4.7 million was for threatened, endangered, and sensitive species activities. These amounts included both dollars and estimates of in-kind contributions of labor, supplies, and equipment. Table 1 shows the financial support for cost-shared projects, by source, for fiscal years 1988, 1989, and 1990 (through June 30).

Table 1: Outside Sources of Funding for Fish and Wildlife Cost-Sharing Projects, October 1987 Through June 1990

	Dollars in thousands			
	Fiscal years			
	1988	1989	1990 (through June 30)	Total
Other federal agencies	\$1,512	\$2,344	\$2,089	\$5,945
State/local governments	4,909	5,933	6,841	17,683
Private groups/ individuals	1,752	2,428	2,860	7,040
Universities/colleges	165	550	562	1,277
Tribal units	36	52	76	164
Total	\$8,374	\$11,307	\$12,428	\$32,109

As shown in table 1, state and local governments were the largest contributors to cost-share projects, contributing more than 55 percent of the total received. Financial support toward cost-shared projects from outside sources consistently increased during the period. As shown, funding for approximately the first 9 months of fiscal year 1990 had already surpassed the totals for fiscal years 1988 and 1989.

Cost-sharing funds for the national forests were provided through the Challenge Cost Share Program⁴ and other cooperative agreements. The following are examples of activities sponsored under the Challenge Cost Share Program at the three forests we visited:

- At the Boise National Forest, the Idaho Fish and Game Department participated in a Challenge Cost Share project to survey boreal owls. The Fish and Game Department provided a survey crew and vehicle for the project valued at approximately \$1,000.
- At the Cherokee National Forest, the Forest Service entered into a project with the Sierra Club to improve the habitat for the red cockaded woodpecker by clearing undesirable bushes and trees. The Sierra Club provided cash as well as labor for the project valued at \$1,500.
- At the Lolo National Forest, 14 outside sources provided planning expertise, supplies, equipment, and labor valued at about \$25,300 to construct a major highway pull-off. The Forest Service designed this pull-off as an interpretive site to allow the general public and travelers to view big-horn sheep without endangering other motorists.

⁴According to the Forest Service, 57 outside participants were in the Challenge Cost Share Program in fiscal year 1986 (the first year of the program), 196 in fiscal year 1987, 429 in fiscal year 1988, and 867 in fiscal year 1989 (the last year data were available).

Appendices I through III provide more detailed descriptions of the kinds of projects at each of the three forests.

Of the 27 Forest Service officials who responded to our cost-share projects question, most commented favorably on such projects. Two officials said that the cost-share program is a great benefit to fish and wildlife and enhances relationships among the Forest Service, other agencies, and private groups. Another official said that by involving outside groups or individuals in projects, they can (1) get more done by supplementing Forest Service resources and (2) improve public relations at the same time.

However, several forest officials reported experiencing difficulties associated with implementing a program of cost-share projects. For example, three officials said that not enough Forest Service funding was available to meet the Forest Service's required share of the cost-share projects that could be implemented. Three officials said they were having difficulty tracking cooperatively funded fish and wildlife projects. Two officials reported having problems coordinating their budget cycles with the cycles of their cost-share partners, as well as meeting changing priorities in work to be accomplished or species to be protected.

Other Joint Projects

Projects involving work performed by national forest staff, but paid for entirely by outside sources, totaled about \$15.7 million for the 33 months. These contributions covered the cost of the labor, materials, and supplies needed by the Forest Service to perform the work. Table 2 shows these contributions, by source, for fiscal years 1988, 1989, and 1990 (through June 30). As with cost-share projects, these projects received most of their funding from state and local governments, which provided more than \$9 million, or about 60 percent of the total.

Table 2: Outside Sources of Funding for Other Joint Projects, October 1987 Through June 1990

	Fiscal years			
	1988		1989	1990 (through June 30)
	Dollars in thousands			Total
Other federal agencies	\$1,666	\$1,730	\$581	\$3,977
State/local governments	3,210	3,170	3,141	9,521
Private groups/ individuals	1,287	294	211	1,792
Universities/colleges	129	161	101	391
Tribal units	0	0	3	3
Total	\$6,292	\$5,355	\$4,037	\$15,684

The Cherokee National Forest provided us with some examples of other joint projects—these projects resulting from agreements the Forest Service has with the Tennessee Wildlife Resources Agency. Under these agreements, the Tennessee Wildlife Resources Agency provides \$80,000 for wildlife habitat improvements and at least \$15,000 for fisheries habitat improvements annually. These amounts pay for labor and supplies that the Forest Service uses to perform the work. Wildlife habitat improvement projects conducted under the agreement included mowing open acres of wildlife habitat, installing gates to prohibit vehicular access, and revegetating acreage. Fisheries projects included routine maintenance on in-stream fish cover structures,⁵ removal of undesirable species of fish from streams, and surveys of streams to identify fish species.

Financial Support for Projects With No National Forest Staff Involvement

Some fish and wildlife projects funded by outside sources have no direct involvement by the national forest staff, such as research conducted by scientists of other government agencies or from universities and colleges. While pretesting our questionnaire, we determined that forest officials' knowledge about such projects decreased with each passing year. Therefore, we asked for their estimates only as far back as the beginning of fiscal year 1989.

Forest supervisors estimated that fish and wildlife projects conducted on national forest lands without national forest staff involvement had a value of about \$14.7 million for the approximately 21 months reviewed. Table 3 shows the estimated values of these projects by source. As reported for projects with direct forest staff involvement, state and local governments provided most of the estimated funding—\$8.5 million or about 58 percent.

⁵Fish structures are designed to create overhead cover; create pools for rearing, spawning, and resting; and/or provide deeper channels for fish to move up and down stream.

Table 3: Sources of Funding for Fish and Wildlife Projects With No National Forest Staff Involvement, October 1988 Through June 1990

	Dollars in thousands		
	1989	1990 (through June 30)	Total
Other federal agencies ^a	\$1,572	\$2,327	\$3,899
State/local governments	3,677	4,834	8,511
Private groups/individuals	178	297	475
Universities/colleges	862	746	1,608
Tribal units	100	126	226
Total	\$6,389	\$8,330	\$14,719

^aIncludes Forest Service research funds as reported by 10 respondents. The research receives its own appropriation, and forest supervisors do not have direct control over its expenditures.

We conducted our field work between March 1990 and December 1990 in accordance with generally accepted government auditing standards. Our questionnaire for gathering information from the various national forests was developed after consulting with budget and financial management staff at Forest Service headquarters in Washington, D.C., and was pretested at eight forests. We conducted detailed reviews of projects and funding sources at the Boise, Cherokee, and Lolo National Forests. We chose these forests to obtain representation from various Forest Service regions and because the forests provided the opportunity to review various projects in which outside sources participate. More detailed information concerning our visits to the three forests are contained in appendixes I through III of this report. Appendix IV contains more details concerning our objectives, scope, and methodology. Appendix V contains a copy of the questionnaire we sent to each national forest supervisor.

Responsible officials of the Department of Agriculture provided official oral comments on a draft of this report. They generally agreed with the information as presented in the report and their comments, including two points of clarification on the manner in which the Forest Service may use funds, have been incorporated where appropriate.

As agreed with your office, we are sending a copy of this report to Senator McClure. 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 Secretary of Agriculture, the Chief of the Forest Service, and other interested parties and will make copies available to others upon request. Please contact me at

(202) 275-7756 if you or your staff have any questions concerning this report. Other major contributors to this report are listed in appendix VI.

Sincerely yours,



James Duffus III
Director, Natural Resources
Management Issues

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Abbreviations

BPA	Bonneville Power Administration
GAO	General Accounting Office

Fish and Wildlife Expenditures and Activities on the Boise National Forest

The Boise National Forest contains approximately 2.3 million acres in west-central Idaho north and east of the capital city of Boise. The forest has six ranger districts administered by a forest supervisor located in Boise.

The forest has a wide range of wildlife. Major big game species include mule deer, elk, mountain goat, black bear, and mountain lion. Coyote, bobcat, lynx, wolverine, gray wolf, and river otter are other large mammals found on the forest. Major small and upland game bird species are the blue spruce grouse, chukar partridge, gray (Hungarian) partridge, California quail, and mountain quail. Important birds of prey on the forest are the golden eagle, osprey, goshawk, prairie falcon, peregrine falcon, and red-tailed hawk.

The Boise National Forest supports a variety of fish species, including cutthroat trout, rainbow trout, brook trout, and bull trout. Chinook salmon and steelhead trout, two species that migrate to and from the ocean via the Columbia and Snake River systems, are also present.

Fish and Wildlife Expenditures

According to the Forest, expenditures from national forest appropriations constituted about 76 percent of total fish and wildlife expenditures reported by the Forest for fiscal years 1988 and 1989 and the first 9 months of fiscal year 1990. Outside sources accounted for 24 percent of the total fish and wildlife expenditures during that time. As shown in table I.1, such contributions rose considerably in 1989 compared with 1988. However, the funding for the first 9 months of 1990 showed a substantial drop. The percentage of outside funding to total funding for the fiscal years reviewed was almost 21 percent for fiscal year 1988, 28 percent for fiscal year 1989, and 20 percent for the first 9 months of fiscal year 1990.

Appendix I
Fish and Wildlife Expenditures and Activities
on the Boise National Forest

**Table I.1: Funding for Fish and Wildlife
on the Boise National Forest, October
1987 Through June 1990**

	Fiscal years		
	1988	1989	1990 (to June 30)
Forest Service expenditures	\$342,155	\$457,382	\$341,039
Outside contributions:			
Other federal agencies	57,878	118,778	33,165
State/local governments	7,159	19,538	3,600
Private groups	23,938	17,760	33,232
Universities/colleges	0	25,775	14,280
Total outside funding	88,975	181,851	84,277
Total funding	\$431,130	\$639,233	\$425,316

Sources of Funding for Cooperative Fish and Wildlife Projects

At the Boise National Forest, an average of 11 projects were conducted each year with at least some degree of outside funding. In all, we identified 22 outside funding sources. Most of the outside participation was solicited by Forest biologists located at the six district offices that administer activities on the Forest.

The majority of outside funding for fish and wildlife projects came from a federal agency, the Bonneville Power Administration (BPA). BPA has an agreement with the Forest Service for fisheries habitat enhancement work on three forests, including the Boise National Forest. Under this contract, the Forest staff conducts fisheries habitat enhancement work and bills BPA for the costs.

Two participating state agencies were the Idaho Department of Fish and Game and the Idaho Correctional Institute. Most of the other sources were local chapters of private organizations. They included such groups as the Idaho Wild Turkey Federation, Gem State Fly Fishermen, Boy Scouts, Ducks Unlimited, Glenns Ferry Wildlife Club, Emmett Kiwanis Club, Rocky Mountain Elk Foundation, and the Idaho Hunters Association. Boise State University was the only university participating in the Boise projects.

Appendix I
Fish and Wildlife Expenditures and Activities
on the Boise National Forest

Wildlife Projects	<p>Most of the wildlife projects on the Boise involved planting bitterbrush to improve winter range for deer, conducting prescribed burning,¹ and constructing nesting platforms and boxes for ducks and geese.</p> <ul style="list-style-type: none">• In fiscal year 1988, the Idaho Department of Fish and Game and the Idaho Hunters Association contributed \$16,524 in money and in-kind goods and services to a project for planting bitterbrush on the Arrowrock winter range. In fiscal year 1990, the Emmett Kiwanis Club and the local Boy Scouts contributed \$6,578 of in-kind goods and services to plant 10 acres of bitterbrush on the Danskin winter range.• In fiscal year 1988, Glenns Ferry Wildlife Club, the Idaho Hunters Association, and the Idaho Department of Fish and Game contributed \$1,405 of in-kind labor and materials to the construction of 25 geese nesting platforms. In fiscal year 1989, Ducks Unlimited contributed \$966 of in-kind labor to the construction of 20 nest boxes.• In fiscal year 1989, the Rocky Mountain Elk Foundation contributed \$1,500 to the prescribed burning of 300 acres. In the same year, the local Boy Scouts and the Idaho Department of Fish and Game contributed \$638 of in-kind labor for the prescribed burning of 127 acres.
Fisheries Projects	<p>Fisheries projects with outside financial support involved enhancement of habitat. In 1989, BPA, from its contractual agreement with the Forest Service, funded \$118,778 of fish habitat enhancement work. These enhancements included structural work such as fencing, fishways, and erosion control and nonstructural work such as revegetation of streamside areas. In fiscal year 1990, the Idaho Fly Fishermen's Association contributed \$8,500 of in-kind labor to install 10 fish structures in Squaw Creek.</p>
Threatened, Endangered, or Sensitive Species Projects	<p>The Boise National Forest had projects involving two wildlife species that were considered either endangered or sensitive. In fiscal year 1988, the Idaho Department of Fish and Game contributed \$2,500 of in-kind labor and equipment to a survey of the boreal owl, considered a sensitive species. In 1990, Boise State University contributed \$14,280 of in-kind labor and equipment to survey and prepare a management plan for the endangered bald eagle. The university provided clerical, mapping, reporting, and computer services.</p>

¹Prescribed burning is the intentional application of fire to wildlands—in either their natural or modified state—under such conditions as to allow the fire to be confined to a predetermined area and at the same time to produce the intensity of heat and rate of spread required to further certain planned objectives having to do with forestry care, wildlife management, and other activities.

Fish and Wildlife Expenditures and Activities on the Cherokee National Forest

The Cherokee National Forest, located in Tennessee and North Carolina, contains 623,565 acres, and it is divided into six ranger districts. It is administered by a forest supervisor located in Cleveland, Tennessee.

Wildlife on the Forest include big game, small game, and nongame species. Big game animals that are present in huntable numbers include black bear, wild turkey, whitetailed deer, and European boar. Small game include squirrel, grouse, and raccoon. The Forest's fisheries resources primarily include rainbow trout, brown trout, and brook trout.

Fish and Wildlife Expenditures

According to the Forest, expenditures from national forest appropriations constituted about 63 percent of total fish and wildlife expenditures for fiscal years 1988 and 1989 and the first 9 months of fiscal year 1990. Outside contributions for fish and wildlife projects rose during the period and constituted about 37 percent of the total expenditures. The percentage of outside funding to total funding for the fiscal years reviewed was about 34 percent for fiscal year 1988, 33 percent for fiscal year 1989, and 43 percent for the first 9 months of fiscal year 1990. Table II.1 shows the total funding for fish and wildlife activities on the Cherokee National Forest for the period reviewed.

Table II.1: Funding for Fish and Wildlife on the Cherokee National Forest, October 1987 Through June 1990

	Fiscal years		
	1988	1989	1990 (to June 30)
Forest Service expenditures	\$211,278	\$335,061	\$242,972
Outside contributions:			
Other federal agencies	700	700	0
State/local governments	99,180	149,600	137,255
Private groups	7,044	10,100	22,378
Universities/colleges	0	7,870	27,046
Total outside funding	106,924	168,270	186,679
Total funding	\$318,202	\$503,331	\$429,651

Sources of Funding for Cooperative Fish and Wildlife Projects

At the Cherokee National Forest, an average of 22 projects were conducted each year with at least some degree of outside funding. Most of the cooperative projects were the result of solicitation efforts by the Forest's staff officer and the Forest biologist. Some were also developed by staff at the six ranger districts.

The majority of the outside funding for fish and wildlife projects came from a state agency, the Tennessee Wildlife Resources Agency. This agency has had a cooperative agreement with the Forest since 1969 to help manage wildlife resources. The amount of this agreement is \$80,000 annually. According to the Chief, Wildlife Management Division, Tennessee Wildlife Resources Agency, since 1988, the agency has also had a cooperative agreement covering fisheries management; the annual contribution is \$15,000. The agency also contributes funding or in-kind goods and services for other fish and wildlife projects independent of the annual contractual amounts.

Most of the other sources of funding were local chapters of private organizations. They included such groups as Trout Unlimited, Quail Unlimited, the Southern Appalachian Sportsmen's Club, East Tennessee Wildlife Federation, Bear and Boar Association, Ruffed Grouse Society, National Wild Turkey Federation, and the Boy Scouts. Two Department of the Interior agencies also participated —the Fish and Wildlife Service and the National Park Service (Great Smoky Mountains National Park).

Wildlife Projects

For the period we reviewed, wildlife projects received approximately 69 percent of total outside funding. The largest of these funding sources was the \$80,000 annual contribution by the Tennessee Wildlife Resources Agency. In fiscal year 1989, the agency allocated \$80,000 to the Forest's six ranger districts. The level of funding for the districts ranged from \$12,275 to \$14,378. For example, the Ocoee Ranger District received \$12,352 for (1) mowing 98 acres of wildlife openings and rehabilitating 70 acres of wildlife openings to provide forage and cover for wildlife species, (2) maintaining 10 gates to prohibit public vehicular access, and (3) replacing two signs designed to inform the public of authorized hunting areas on the Cherokee National Forest.

Projects during the period we reviewed covered all three types of wildlife—big game, small game, and nongame species. For example:

- The Southern Appalachian Sportsmen's Club provided \$2,176 of in-kind labor and equipment and the Tennessee Wildlife Resources Agency contributed \$350 worth of seedlings to be planted for big game habitat improvement in fiscal year 1990. The wildlife project involved replanting and fertilizing of from 3 to 5 acres of wildlife openings to be used by the Forest's big game species.
- The Tennessee Wildlife Resources Agency entered into an additional \$18,000 agreement (beyond its usual \$80,000 contribution) in fiscal year

1990 to provide food, openings, and nesting cover for various game and nongame wildlife species.

Fisheries Projects

Fisheries projects that received outside financial support involved restocking streams, building fish structures, and removing fish species that compete for habitat with brook trout.

- In-kind goods and services valued at \$1,200 were provided in fiscal year 1988 to restock the Hiwassee River with rainbow and brown trout. The Tennessee Wildlife Resources Agency contributed fish; the Tennessee State Park Service, along with the Appalachian Chapter of Trout Unlimited, contributed staff supervision.
- A fiscal year 1990 appropriation of \$8,400 from the Tennessee Wildlife Resources Agency was used to identify the location of existing fish structures, evaluate their condition, and perform construction or maintenance work on 84 such structures.
- A brook trout restoration project conducted in 1989 was designed to remove rainbow trout from 11 streams to which brook trout are native. The Tennessee Wildlife Resources Agency contributed \$6,100 to this project.

**Threatened, Endangered,
or Sensitive Species
Projects**

Two of the Forest's cooperatively funded projects were for species of wildlife that were considered either threatened, endangered, or sensitive. One project is designed to monitor the nesting of the endangered peregrine falcon. In 1990, the Tennessee Wildlife Resources Agency provided \$2,500 in labor and equipment for the project. The second project involved an inventory of 19 species of small mammals considered to be threatened, endangered, or sensitive. In fiscal year 1990, Tennessee Technological University donated \$23,546 for labor, facilities, vehicles, and clerical support.

Fish and Wildlife Expenditures and Activities on the Lolo National Forest

The Lolo National Forest is located in western Montana, where it surrounds the city of Missoula. The Forest, which contains approximately 2 million acres, is divided into six ranger districts and is administered by a forest supervisor located in Missoula.

The Lolo National Forest provides habitat for significant populations of deer, moose, bear, and elk. Other wildlife found on the Forest include Rocky Mountain bighorn sheep, mountain goat, black bear, wolverine, Canada lynx, mountain lion, and bobcat. In addition, the Forest has several species considered endangered or threatened, such as the bald eagle, peregrine falcon, grizzly bear, and gray wolf.

Several species of fish are also prevalent. Game fish can be found on about 95 percent of the fish habitat within the Forest, and populations are relatively stable. Trout populations within the Forest are estimated to be about 906,000.

Fish and Wildlife Expenditures

According to the Forest, expenditures from national forest appropriations constituted about 86 percent of total fish and wildlife expenditures reported by the Forest for fiscal years 1988 and 1989 and the first 9 months of fiscal year 1990. Outside sources of funding for fish and wildlife projects constituted about 14 percent of the total expenditures for such projects for the 33 months. The percentage of outside funding to total funding for the fiscal years reviewed was about 6 percent for fiscal year 1988, 20 percent for fiscal year 1989, and 14 percent for the first 9 months of fiscal year 1990. Table III.1 shows the total funding for fish and wildlife activities on the Lolo National forest for the period reviewed.

Table III.1: Funding for Fish and Wildlife on the Lolo National Forest, October 1987 Through June 1990

	Fiscal years		
	1988	1989	1990 (to June 30)
Forest Service expenditures	\$221,880	\$318,403	\$208,281
Outside contributions:			
Other federal agencies	0	10,000	0
State/local governments	6,500	39,000	5,000
Private groups	7,300	16,500	28,500
Universities/colleges	0	12,000	0
Tribal units	0	300	0
Total outside funding	13,800	77,800	33,500
Total funding	\$235,680	\$396,203	\$241,781

Sources of Funding for Cooperative Fish and Wildlife Projects

At the Lolo National Forest, an average of six projects were conducted each year with at least some degree of outside funding. In all, we identified 23 outside sources. Fifteen of the 23 outside sources were private entities. The Rocky Mountain Elk Foundation, an international organization with headquarters in Missoula, was the main participant. Sources other than private entities were five state or local government agencies, one federal agency, one university, and one tribal unit.

The Forest occasionally paid agencies or organizations to do work on fish and wildlife activities. For example, the Forest contributed to a survey of owls that was conducted by the Montana Department of Fish, Wildlife and Parks.

Wildlife Projects

The Forest's wildlife projects dealt mainly with prescribed burning to improve the habitat of big game animals such as deer, moose, big horn sheep, and elk. In fiscal year 1988, the National Wildlife Federation; the Montana Department of Fish, Wildlife and Parks; and the Rocky Mountain Elk Foundation provided \$9,800 for prescribed burns on 2,455 acres. In fiscal year 1990, the Rocky Mountain Elk Foundation and the Montana Department of Fish, Wildlife and Parks contributed \$13,500 of in-kind goods and services to four projects for prescribed burns on approximately 1,000 acres of winter range.

For the period we reviewed, the Forest had one wildlife project not related to prescribed burns. In fiscal year 1989, 14 outside donors contributed a total of \$25,300 in money and in-kind goods and services to build a viewing area for bighorn sheep. The project was initiated after a highway patrolman, who was repeatedly confronted with traffic jams when people tried to watch bighorn sheep from the highway, contacted forest and local government officials about developing a pull-off from the highway that would accommodate those who wished to view the sheep.

Fisheries Projects

Fisheries projects involving outside sources were geared toward improving fish habitat. The projects involved three main activities: constructing and maintaining fish structures, conducting studies, and creating interpretive sites.

- Structures for creating pools and other habitat for fish provide critical areas for rearing, spawning, and over-wintering habitats. In fiscal year 1988, the local chapter of Trout Unlimited contributed \$2,000 of in-kind

Appendix III
Fish and Wildlife Expenditures and Activities
on the Lolo National Forest

labor to install 20 habitat improvement structures in Petty Creek. In fiscal year 1990, the Montana Bass Federation contributed \$5,000 of in-kind materials and labor to install 30 habitat improvement structures in Seeley Lake.

- In fiscal year 1989, the Bureau of Land Management and the Montana Department of Fish, Wildlife and Parks contributed \$22,000 of in-kind labor to a fisheries study on the Blackfoot River. The study addressed local concerns about declining fisheries in the river system.
- In fiscal year 1990, the Rock Creek Advisory Council contributed \$15,000 to build an interpretative site located within the Rock Creek drainage. The site is designed to provide increased enjoyment and understanding of the fisheries and streamside relationship.

**Threatened, Endangered,
or Sensitive Species
Projects**

During the period under review, projects involving outside funding were conducted within the Forest that dealt with species of wildlife classified as sensitive: the boreal owl and the harlequin duck. In fiscal year 1989, the Montana Department of Fish, Wildlife and Parks contributed \$10,000 of in-kind labor to a survey of the distribution of the boreal and other owls. Ultimately, this project will allow the development of management strategies for the boreal owl. In fiscal year 1989, the Natural Heritage Program contributed \$4,000 of in-kind labor to a survey of nesting populations of harlequin ducks in several areas of the Forest.

Objectives, Scope, and Methodology

By letter dated January 24, 1990, Senator James A. McClure asked us to determine the various sources and amounts of funding being used for fish and wildlife activities on national forest lands. Senator McClure subsequently retired from the Senate in January 1991 at the conclusion of the 101st Congress. Prior to his retirement, agreement was reached that we would issue the report resulting from this request to Senator Larry E. Craig who succeeded Senator McClure.

Although the Forest Service knows generally which public and private entities support fish and wildlife projects on national forest lands, it has not attempted to tally or track the total amount of money being spent. In order to determine the extent to which the Forest Service's budget is supplemented by significant amounts of outside funding that is spent on fish and wildlife, we developed a questionnaire to be sent to all national forest supervisors. In developing the questionnaire, we worked with Forest Service headquarters officials in Washington, D.C., and regional and national forest officials in several states.

We mailed the final questionnaire to each of the 122 national forest supervisors throughout the Forest Service. Some of these forest supervisors have management responsibility for more than one national forest; collectively, the 122 forest supervisors manage all of the 156 national forests. After one mail follow-up and two telephone follow-ups, we ended data collection in November 1990. We obtained responses from 114 forest supervisors for a response rate of 93 percent.

In the questionnaire, if the Forest Service was an active participant in the fish and wildlife activities being funded in whole or in part by others on its land, we asked questionnaire respondents to indicate how much was spent on such activities for fiscal years 1988 and 1989 and the first 9 months of fiscal year 1990, a period ending on June 30, 1990. If there was no direct involvement by the Forest Service in such activities, we requested information for fiscal year 1989 and the first 9 months of fiscal year 1990, since such information was more difficult to ascertain. Although we asked in our questionnaire for information through the first 9 months of fiscal year 1990, we were informed that some forests—because of a misunderstanding—reported information through the first 10 months of fiscal year 1990. We do not know the number of forests that may have reported information for the 10-month period, nor do we know the amount of funds spent on the forests during July 1990. (App. V contains a copy of the questionnaire.)

To obtain more detailed information on the types of projects undertaken with outside funding and on the specific entities providing financial support, we visited three national forests: the Boise National Forest in Idaho, the Cherokee National Forest in Tennessee and North Carolina, and the Lolo National Forest in Montana. We chose these forests because they provided us an opportunity to review a wide variety of projects implemented with outside funding. We interviewed program and project managers, and we reviewed project files and financial records concerning these projects. Information obtained from each of these three forests was developed into case study examples of actual projects and activities implemented with outside funding. (See apps. I through III for our findings on each of the three national forests.)

We conducted our work between March 1990 and December 1990 in accordance with generally accepted government auditing standards.

Questionnaire



U.S. GENERAL ACCOUNTING OFFICE

SURVEY OF FUNDING FOR FISH AND WILDLIFE ACTIVITIES ON NATIONAL FORESTS

The General Accounting Office, an agency that evaluates federal programs for the U.S. Congress, is conducting a review of funding for fish and wildlife activities on national forests. As a part of this review we are mailing this questionnaire to all National Forest Supervisors' offices. Through the questionnaire we are attempting to identify funding for such activities during fiscal years 1988 through 1990. We are interested in activities funded by the Forest Service, other federal agencies, state governmental agencies, universities or colleges, other private sources, and tribal governments.

- Using available information and your best professional judgment please complete this questionnaire for your forest(s).
- Please return the completed questionnaire within 15 days of receipt in the enclosed self-addressed business-reply envelope. We realize this is a very busy period for your office, but our reporting deadlines require this timing.

If you have any questions regarding this questionnaire, please contact Linda Bade-Percival at (503) 235-8500, Ralph Lamoreaux at (202) 634-6384 or John Johnson at (202) 634-6372. If the business-reply envelope is missing or has been misplaced please return the questionnaire to:

U.S. General Accounting Office
Attn: Ralph Lamoreaux
Room 4476
441 G St., N.W.
Washington, DC 20548

Thank you for your assistance.

(Place mailing label here)

Forest Supervisor:

Name: _____

Telephone Number: (_____) _____

Wildlife and Fisheries Staff Officer:

Name: _____

Telephone Number: (_____) _____

Today's date: _____ / _____ / _____
Mo. Day Yr.

Appendix V
Questionnaire

1. During fiscal years 1988, 1989, and 1990, how much did this forest spend for the following fish and wildlife activities (see activity codes)? We are interested in the total yearly expenditures and unpaid obligations charged to the following fund codes: NFWF (National Forest System - Wildlife and Fish Habitat Management), RMTR (Resource Management, Timber Receipts), and CWKV (Knutson-Vandenberg).

All FY 1988 and 1989 figures should be obtained from your forest's year end unit financial statement. FY 1990 figures should be obtained from the June, 1990 month-end unit financial statement. To obtain expenditures for anadromous and inland fish in FY 1988 and 1989 divide CF codes based on your best professional judgement.

Wildlife	Anadromous Fish	Inland Fish	Threatened, Endangered, and Sensitive Species
- Habitat improvement (Structure and Non-structure) (CW221, CW222)	- Habitat improvement (Structure and Non-structure) (CA221, CA222)	- Habitat improvement (Structure and Non-structure) (CI221, CI222)	- Habitat improvement (Structure and Non-structure) (CT221, CT222)
- Maintenance (CW23)	- Maintenance (CA23)	- Maintenance (CI23)	- Maintenance (CT23)
- Operations (CW1, CW11, CW111, CW112, CW12, CW121)	- Operations (CA1, CA11, CA111, CA112, CA12, CA121)	- Operations (CI1, CI11, CI111, CI112, CI12, CI121)	- Operations (CT1, CT11, CT111, CT112, CT12, CT121)
<u>FY</u>			
1988	\$.00	\$.00	\$.00
1989	\$.00	\$.00	\$.00
1990 (As of June 30)	\$.00	\$.00	\$.00

Appendix V
Questionnaire

2. During fiscal year 1988, how much did this forest receive in actual dollar contributions and what was the estimated dollar value of in-kind contributions (staff hours, materials, supplies, and equipment) received from all OUTSIDE (non-Forest Service) sources for cooperative cost sharing fish and wildlife activities in the following areas?

	Wildlife	Anadromous Fish	Inland Fish	Threatened, Endangered, and sensitive species
	- Habitat improvement (Structure and Non-structure)			
	- Maintenance	- Maintenance	- Maintenance	- Maintenance
	- Operations	- Operations	- Operations	- Operations
<u>Federal Agencies</u>				
Dollar Contributions	\$.00	\$.00	\$.00	\$.00
In-kind Contributions	\$.00	\$.00	\$.00	\$.00
<u>State/local governments</u>				
Dollar Contributions	\$.00	\$.00	\$.00	\$.00
In-kind Contributions	\$.00	\$.00	\$.00	\$.00
<u>Private Organizations/ individuals</u>				
Dollar Contributions	\$.00	\$.00	\$.00	\$.00
In-kind Contributions	\$.00	\$.00	\$.00	\$.00
<u>Universities/colleges</u>				
Dollar Contributions	\$.00	\$.00	\$.00	\$.00
In-kind Contributions	\$.00	\$.00	\$.00	\$.00
<u>Tribal units</u>				
Dollar Contributions	\$.00	\$.00	\$.00	\$.00
In-kind Contributions	\$.00	\$.00	\$.00	\$.00

Appendix V
Questionnaire

3. During fiscal year 1989, how much did this forest receive in actual dollar contributions and what was the estimated dollar value of in-kind contributions (staff hours, materials, supplies, and equipment) received from all OUTSIDE (non-Forest Service) sources for cooperative cost sharing fish and wildlife activities in the following areas?

Wildlife	Anadromous Fish	Inland Fish	Threatened, Endangered, and Sensitive Species
- Habitat Improvement (Structure and Non-structure)			
- Maintenance	- Maintenance	- Maintenance	- Maintenance
- Operations	- Operations	- Operations	- Operations
Federal Agencies			
Dollar Contributions	\$.00	\$.00	\$.00
In-kind Contributions	\$.00	\$.00	\$.00
State/local governments			
Dollar Contributions	\$.00	\$.00	\$.00
In-kind Contributions	\$.00	\$.00	\$.00
Private Organizations/ individuals			
Dollar Contributions	\$.00	\$.00	\$.00
In-kind Contributions	\$.00	\$.00	\$.00
Universities/collages			
Dollar Contributions	\$.00	\$.00	\$.00
In-kind Contributions	\$.00	\$.00	\$.00
Tribal units			
Dollar Contributions	\$.00	\$.00	\$.00
In-kind Contributions	\$.00	\$.00	\$.00

Appendix V
Questionnaire

4. During fiscal year 1990 (As of June 30), how much did this forest receive in actual dollar contributions and what was the estimated dollar value of in-kind contributions (staff hours, materials, supplies, and equipment) received from all **OUTSIDE** (non-Forest Service) sources for cooperative cost sharing fish and wildlife activities in the following areas?

	Wildlife	Anadromous Fish	Inland Fish	Threatened, Endangered, and Sensitive Species
	- Habitat improvement (Structure and Non-structure)			
	- Maintenance	- Maintenance	- Maintenance	- Maintenance
	- Operations	- Operations	- Operations	- Operations
<u>Federal Agencies</u>				
Dollar Contributions	\$.00	\$.00	\$.00	\$.00
In-kind Contributions	\$.00	\$.00	\$.00	\$.00
<u>State/local governments</u>				
Dollar Contributions	\$.00	\$.00	\$.00	\$.00
In-kind Contributions	\$.00	\$.00	\$.00	\$.00
<u>Private Organizations/ individuals</u>				
Dollar Contributions	\$.00	\$.00	\$.00	\$.00
In-kind Contributions	\$.00	\$.00	\$.00	\$.00
<u>Universities/colleges</u>				
Dollar Contributions	\$.00	\$.00	\$.00	\$.00
In-kind Contributions	\$.00	\$.00	\$.00	\$.00
<u>Tribal units</u>				
Dollar Contributions	\$.00	\$.00	\$.00	\$.00
In-kind Contributions	\$.00	\$.00	\$.00	\$.00

Appendix V
Questionnaire

5. During fiscal years 1988, 1989, and 1990, how much did this forest receive in actual dollar contributions and what was the estimated dollar value of in-kind contributions (staff hours, materials, supplies, and equipment) received from all outside (non-Forest Service) sources for fish and wildlife activities that were **COMPLETELY** funded by outside sources, that is where there was complete proponent financing and **NO** cost sharing took place but where Forest Service staff may have performed work?

	<u>FY 1988</u>	<u>FY 1989</u>	<u>FY 1990</u> (as of June 30)
<u>Federal agencies</u>			
Dollar Contributions:	\$.00	\$.00	\$.00
In-kind Contributions:	\$.00	\$.00	\$.00
<u>State/local governments</u>			
Dollar Contributions:	\$.00	\$.00	\$.00
In-kind Contributions:	\$.00	\$.00	\$.00
<u>Private organizations/individuals</u>			
Dollar Contributions:	\$.00	\$.00	\$.00
In-kind Contributions:	\$.00	\$.00	\$.00
<u>Universities/colleges</u>			
Dollar Contributions:	\$.00	\$.00	\$.00
In-kind Contributions:	\$.00	\$.00	\$.00
<u>Tribal units</u>			
Dollar Contributions:	\$.00	\$.00	\$.00
In-kind Contributions:	\$.00	\$.00	\$.00

Appendix V
Questionnaire

The next section of the questionnaire deals with fish and wildlife activities that take place on your forest but where your forest plays no part. These activities can include (but are not limited to) academic research projects, fish or wildlife inventories, and threatened and endangered species studies. Often these activities are done under special use permits. **DO NOT** include law enforcement activities undertaken by federal agencies or state and local governments.

For these activities we are only interested in those that took place in fiscal years 1989 and 1990. Again, remember for these activities staff from your forest did no work and your forest spent no money.

6. Please give a very brief description of the activity as described above, the agency or organization performing the activity, an estimate of the dollar value of the work done on your forest, and the name and phone number of a contact person for the agency or organization.

<u>Activity</u>	<u>Agency/organization</u>	<u>Dollar Value</u>	<u>Contact Person</u>	<u>Name</u>	<u>Phone Number</u>
FY 1989:					
1.					
2.					
3.					
4.					
5.					
FY 1990:					
1.					
2.					
3.					
4.					
5.					

If there are more than five activities in either fiscal year **PLEASE REPRODUCE** this page and give information for **ALL** activities in FY 1989-1990.

Appendix V
Questionnaire

7. If you have any further comments on funding of fish and wildlife activities, please feel free to add them below.

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