# FEDERAL AND STATE ENDANGERED SPECIES EXPENDITURES

# FISCAL YEAR 1990





Compiled by U.S. Fish & Wildlife Service January 1991

#### **Executive Summary**

Purpose: Section 18 of the Endangered Species Act (Act) of 1973 requires the Secretary of the Interior (working through the Fish and Wildlife Service) to annually report certain expenditures for the conservation of threatened and endangered species. This report presents these expenditures for Fiscal Year 1990.

Background: Only those expenditures that are reasonably identifiable for a species are to be reported. All Federal agencies and those States receiving Section 6 grant-in-aid funds pursuant to the Act are to report. The first report for Fiscal Year 1989 reported expenditures totaling more than \$43 million for the conservation of 347 of 554 species listed as threatened and endangered as of September 30, 1989. Since only a few foreign species are receiving expenditures from U.S. governmental agencies, these reports are largely restricted to a discussion concerning listed U.S. species.

Results: Expenditures totaling more than \$102 million are reported here for 477 of the 591 threatened and endangered species (Table 1). Expenditures are identified by species and reported separately for the Fish and Wildlife Service (Service), the States, and in aggregate for all other reporting Federal agencies.

The Service and 12 other Federal agencies identified expenditures for the conservation of individual threatened and endangered species. Another five agencies responded that their expenditures were not reasonably identifiable to species. Responses from all reporting Federal agencies are included in Appendix 1. Expenditures were reported for approximately 80 percent of all United States listed species with a median expenditure of \$13,150 (range of \$100 to \$9.7 million) per species. Half of all expenditures were made on approximately 2.1 percent of those 477 species for which expenditures were reported (Table 2). This result is slightly lower than the 3 percent of the species reported for FY 1989 that received half of those species with reported expenditures.

A good faith effort was made to develop species by species expenditures for this report. However, the information presented still does not reflect the total National effort toward threatened and endangered species conservation and continues to present an incomplete funding picture. A significant portion of threatened and endangered species conservation activities includes law enforcement, consultation, recovery coordination and other actions that are not easily or reasonably identified by species. Accounting procedures by all agencies for most staff salaries, operations, maintenance and other support services are not recorded by species. Also not reported here are the extensive efforts of the private sector; many groups, individuals, corpor-

ations, and others have contributed a considerable amount of resources and volunteer time towards listed species.

This report tabulates more than twice the expenditures (\$43 million) as the report for FY 1989. The Fish and Wildlife Service estimates that almost all of the increase is from better reporting by the various agencies and not from any significant increase in resources expended by most of the agencies on endangered and threatened species.

# ENDANGERED SPECIES EXPENDITURES FISCAL YEAR 1990

#### PURPOSE OF THIS REPORT

The Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.) (Act) was reauthorized and amended on October 7, 1988, under Public Law 100-478. A new Section 18 was added to the Act that requires the Fish and Wildlife Service (Service) to report on certain expenditures on a species-by-species basis. The Section reads:

SEC. 18. On or before January 15, 1990, and each January 15 thereafter, the Secretary of the Interior, acting through the Fish and Wildlife Service, shall submit to the Congress an annual report covering the preceding fiscal year which shall contain--

(1) the accounting on a species by species basis of all reasonably identifiable Federal expenditures made primarily for the conservation of endangered or threatened species pursuant to this Act; and

(2) an accounting on a species by species basis of all reasonably identifiable expenditures made primarily for the conservation of endangered or threatened species pursuant to this Act by states receiving grants under Section 6.

This document constitutes the second report by the Service pursuant to the requirements of Section 18 of the Act. The report covers Fiscal Year 1990 (October 1989 - September 1990).

The term "State" as used in this report is defined in section 3(17) of the Act to mean any of the several States, the District of Columbia, the Commonwealth of Puerto Rico, American Samoa, the Virgin Islands, Guam, and the Trust Territory of the Pacific Islands.

The term "conservation," as defined in section 3(3) of the Act, means the use of all methods and procedures necessary to bring any endangered or threatened species to the point where the measures provided for by the Act are no longer necessary--including, but not limited to research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping, and transplantation. For the purposes of this report, the definition of conservation is further expanded to include any and all actions taken by Federal and State agencies to protect or enhance threatened and endangered species (listed species) pursuant to the Act.

#### BACKGROUND

## <u>Defining "Reasonably Identifiable Expenditures"</u>

The purpose of the above 1988 amendment was to obtain information with which to assess claims that a disproportionate effort is being made to

conserve a few, highly visible species at the expense of numerous, less well-known species that may have greater need for protection. The Service met with staff of the House Merchant Marine and Fisheries Committee and the Senate Environment and Public Works Committee for clarification of intent and purpose of the amendment. As a result of these discussions, the Service determined that a good faith effort was expected to develop and obtain data that are "reasonably identifiable" (Appendix 2). Also, that extensive or extraordinary measures to develop exceptionally precise statistics were not expected. The report was not expected to "pro-rate" staff salaries and other normal operational and maintenance costs that are expended for multiple species purposes.

Since it is recognized that certain expenditures would not be included, this report is not a complete representation of all Federal and State expenditures for the conservation of specific listed species. The expenditures reported in this and the preceding 1989 report do not necessarily constitute all expenditures made for each species. This report does not present cost accounting in the sense of an accountant's ledger of credits and debits of all Federal and State funds available and their expenditure. This report does represent a compilation of those reasonably identifiable expenditures identified independently by the various Federal and the State agencies.

#### Coverage

Expenditures for FY 1990 are reported here for 477 threatened and endangered species (80.1 percent) of the 591 species that were listed under United States jurisdiction at 50 CFR Part 17 on September 30, 1990. A few species, which were known historically to occur in the United States but are not listed in the United States, are not included (ex. jaguar, short-tailed albatross, swift fox, thick-billed parrot) in the tabulation; a few reports to the Service included expenditures made in the United States on these unlisted populations.

There were a few expenditures reported for entirely foreign species by some reporting agencies and are not included in Tables 1 and 2:

SPECIES	AGENCY	AMOUNT(\$000s)
Elephant, African 🛪	FWS	\$350.0
Parrot, Bahama	. APHIS	\$ 0.5

Some vertebrate species have more than a single listing in 50 CFR 17.11 or 17.12 when one population is listed as endangered and another as threatened (ex., gray wolf, bald eagle). For the purposes of reporting of expenditures, such multiple listings have usually been combined. Some species are listed more than once because more than one subspecies is listed at 50 CFR Part 17 (ex. American peregrine falcon, and Arctic peregrine falcon). These are reported separately.

Some reasonably identifiable expenditures were received or made by the Service (Appendix 1) but were not included for multiple species or for habitat groups of species (ex. ten Hawaiian forest birds, six Idaho riverine species). Whenever required, the reporting agency was queried for a species by species distribution of the expenditure. It has been possible to include some of these multi-species projects or habitat groups in this report, since many agencies are now better prepared to track such expenditures for individual listed species. In other cases, agencies were queried to ensure that reported amounts were for listed populations of vertebrates and not unlisted populations (ex. least tern, brown pelican).

The Service did not report land acquisition funds in the tables of expenditures for FY 1989. It is now clear that other Federal agencies reported land acquisition funds in last year's report and even more in this year's tabulation (Tables 1 and 2). The Service's land acquisitions have been included in this report, when they were identifiable to a species. Such Federal expenditures have greatly inflated the amounts reported for many species and appear to constitute about one-quarter of the total amount.

SECTION 18(1), FEDERAL EXPENDITURES

#### Expenditures by the Fish and Wildlife Service

The Service's operational categories of expenditures include fisheries, refuges, land acquisition, law enforcement, research, and Regional and field operations for listing, recovery, consultation, environmental contaminant and habitat conservation activities. All reasonably identifiable expenditures that could be attributed to individual species that were made by these operational categories have been included.

For example, reasonably identifiable expenditures for research programs included large sums for species where an intensive effort is underway to save a species from extinction (ex. whooping crane, California condor), and smaller sums where only a minor research effort exists. The Refuges program identified specific listed species as a major responsibility of certain refuges. The Columbian white-tailed deer, Key deer, Hawaiian monk seal, and masked bobwhite quail are examples of listed species where the appropriate National Wildlife Refuge is devoted nearly entirely to their management and recovery. Other listed species use these and many other refuges for all or part of their life cycles. Only "dedicated" refuge expenditures that are reasonably identifiable on a species basis are included in this report.

Listed fish species benefit from Fisheries programs, but costs are seldom identifiable to a particular species. For example, the Dexter fish hatchery in southeast Arizona has achieved a remarkable record in the propagation and maintenance of listed southwestern fishes. Attributing costs on a species by species basis for the dozen or so species managed at Dexter is difficult. Few species-specific expenditures could be reasonably identified in the Law Enforcement program for specific endangered species. The 75

percent Federal contribution under Section 6 of the Act for each species is included in the amounts shown in FWS TOTAL in Table 1. The 25 percent State share for each species for which a Federal contribution was made is presumed to be included in the STATE TOTAL column of Table 1, as reported to the International Association of Fish and Wildlife Agencies (IAFWA).

A significant portion of the Service's funds for consultations, listing and recovery are incorporated into salaries, operations and maintenance costs. As a result, they are not reasonably identifiable. Only salaries, operation and maintenance costs of individual species coordinators ( $\underline{ex}$ . whooping crane, red wolf, grizzly bear, sea turtle, sea otter) are included in this report.

## Expenditures by Other Federal Agencies

A request was sent from the Service to other Federal agencies that were identified by the Service as likely to have species-specific expenditures under the Act, to report all reasonably identifiable expenditures. The Service provided background information identifying reasonably identifiable expenditures (Appendix 2 and copies of FY 1989 report). A number of Agencies responded with letters indicating that they did not have any reasonably identifiable expenditures for individual species. Correspondence from all responding Agencies are included in Appendix 1. The data identified by those responding Federal agencies for individuals species have been consolidated in the OTHER FED column of this report (Table 1).

## SECTION 18(2), STATE EXPENDITURES

The Committee staffs anticipated that not all States would be willing to voluntarily submit their expenditures for a variety of reasons. As a result, the Secretary was expected to only submit those expenditure figures that were voluntarily provided. In order to maximize the return of information, the assistance of the IAFWA was sought by the Service to coordinate the reporting of reasonably identifiable expenditures made by States that received grants-in-aid under Section 6 of the Act. At this time, all States have one or more cooperative agreements under Section 6 and are eligible to receive some of those grant monies.

As the States reported to the IAFWA, the latter tabulated the data by species and provided them to the Service. Total States expenditures are reported in Table 1 under the column STATE TOTAL. Data were not sought or provided to the Service on an individual State's expenditures by species or which States did or did not report.

#### SUMMARY OF DATA

Table 1 reports the reasonably identifiable expenditures for each species by the Service, other Federal Agencies, and the States. Table 2 ranks each

species in descending order by the GRAND TOTAL of Table 1; a cumulative total and percentage is also provided to assist the reader.

Expenditures totaling more than \$102.3 million are reported here for the conservation of 477 threatened and endangered species (Table 1). Expenditures are identified by species and reported separately for the Service and in aggregate for all other Federal agencies reporting and the States. Expenditures for Category 1 and 2 review species (candidates) or other unlisted species were excluded because only listed species are reported here. For example, even though Congress appropriated money for the prelisting recovery of candidates, these species are not listed and, therefore, are not reported here.

A total of \$102,343,700 are tabulated (Table 1) in this report for FY 1990. Four-fifths (477) of the 591 listed United States species have reasonably identifiable expenditures reported from one or more sources. It is assumed that this total may not represent total expenditures for individual species because all expenditures may not have been reasonably identifiable. Ten (1.9 percent) of the listed species have reported expenditures that account for about half of the total amount reported here (Table 2). Three of these are threatened species, and one other is a multiple listing, including both endangered and threatened populations. Twenty-four species have reported expenditures exceeding \$1 million. Fifty-eight species (10 percent of the list) account for 90 percent of all reported expenditures (Table 2). The reported expenditures have a median amount of \$13,150 (range of \$9.7 million to \$100) per species.

The following is a list from Table 2 of the ten species with the highest reported expenditures in Fiscal Year 1990:

1990 RANK		STATUS	Total (\$000s)	1989 RANK
1 2 3 4 5 6 7 8 9	Owl, northern spotted Vireo, least Bell's Bear, grizzly or brown Woodpecker, red-cockaded Panther, Florida Tortoise, desert (Mojave pop.) Eagle, bald (48 conterminous States pop.) Ocelot Jaguarundi (TX-Mex. ssp.) Falcon, American peregrine	T E E E,T E	\$9,687.16 9,168.80 5,882.54 5,194.03 4,113.85 4,091.40 3,510.74 2,980.20 2,893.10 2,873.32	N/A 13 2 3 14 26 1 123 lowest 4

Many of the significant changes in rank between 1989 and 1990 are a result of land acquisitions (ex. jaguarundi, ocelot).

It is probable that, despite the difficulties inherent in this reporting system, about 2 percent of the species did in fact receive approximately half of the reasonably identifiable funding (Table 2). This conclusion was expected. Not only do Congress and some State legislatures identify

specific appropriations for most of these species, but State and Federal natural resource managers use the public interest in these species to help protect other species in the same habitats or imperiled by the same threats. The species identified by Congress as deserving of specific appropriations are the same species that drive interest and participation in the considerable State and private sector effort on behalf of listed species.

A good faith effort was made to develop species by species expenditures for this report. However, the information presented again this year does not reflect the total governmental (Federal and State) effort toward threatened and endangered species conservation and presents an incomplete funding picture. Therefore, the reader is cautioned against making comparisons with other reports on threatened and endangered species expenditures beyond that which is provided below. A significant portion of threatened and endangered species conservation activities at all levels include law enforcement, consultation, recovery coordination and other actions that are not easily or reasonably funded by species. Accounting procedures for staff salaries, operational and maintenance and other support service are not normally creditable towards individual species totals. Also, there exists significant variability among the various Federal and State agency reports.

### COMPARISON TO FY 1989 REPORT AND OTHER REPORTS

The amendment requiring this report was passed in the first quarter of FY 1989. The Service, other Federal agencies, and State agencies gathered the best available data with little opportunity for advance planning and coordination in that year. This FY 1990 report has greatly benefited by the FY 1989 experience that provided for such planning and coordination. Future reports are expected to provide more meaningful data on the conservation of threatened and endangered species, pursuant to the intent of Section 18 of the Act. An increase in future reported amounts is expected as most federal and State agencies increase their capabilities to track and report such expenditures.

Because of the better planning and coordination within the reporting agencies, this report cannot be directly compared. The Service considers the tripling of the amounts reported from FY 1989 to FY 1990 to be almost completely an artifact of better accounting by the agencies. Real dollar increases or decreases cannot be calculated or inferred from the overall or individual totals.

Annual variations in the amounts reported on individual species may reflect land acquisitions and similar high cost expenditures that are not a part of normal ongoing conservation efforts. The Tumamoc globe-berry had a 1989 total of \$1,167,300 and was ranked ninth of 554 species; in the present report the species has a rank within the 591 species of 60 with a total of \$214,440. In 1989, a major land acquisition took place by the Bureau of Reclamation. Similar differences are to be found between the 1989 and 1990 reports.

The Service has provided previous reports on <u>estimated</u> allocations by species for the current or forthcoming years as requested by the House Appropriations Committee staff. The reader of this report is cautioned that there are important differences in the assumptions that led to each of these reports. The data in this report are considered more precise than previous reports on estimated allocations, since they represent actual expenditures. However, they may be biased, since they only include reasonably identifiable expenditures.

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Table 1.

# Reasonably Identifiable Federal and State Expenditures during FY 1990.

The list of species in Table 1 essentially follows the taxonomic and nomenclatural conventions used in 50 CFR Part 17 for the identification and sequence of names. For ease of reference, the alphabetized, inverted common name is provided within each group (usually Class) of animals. Thus, the gray bat is found with other bats under "Bat, gray" within mammals, and Judge Tait's mussel is found under "Mussel, Judge Tait's" within the clams. Groups of animals follow the sequence: Mammals, Birds, Reptiles, Amphibians, Fishes, Snails, Clams, and Arthropods (which are further divided). Plants are alphabetized by inverted common name except when there is no common name. In such cases, scientific names are provided for plants, and the phrase "=Sci. Name" is provided parenthetically. If a reader should need other information about the names, historical range, or status of an endangered or threatened species, the species can be found in 50 CFR 17.11 (wildlife) or 17.12 (plants). The STATUS column indicates whether the species is endangered (E), threatened (T), or with two populations under separate classifications (E,T).

Service expenditures (FWS TOTAL) and other Federal agencies expenditures (OTHER FED) are totaled in the FED TOTAL column. The STATE TOTAL is the amount reported by the IAFWA to the Service.

TABLE 1. Endangered and Threatened Species Total Reported Expenditures (\$000s) for Fiscal Year 1990

SPECIES (50 CFR Part 17)	STATUS	FWS TOTAL	OTHER FED	FED TOTAL	STATE TOTAL	GRAND TOTAL
Bat, gray	Е	61.9	18.8	80.7	148.4	229.1
Bat, Hawaiian hoary	Е			0.0	1.0	1.0
Bat, Indiana	Ε	40.7	67.1	107.7	95.1	202.9
Bat, little Mariana fruit	ε	11.6		11.6		11,6
Bat, Mariana fruit	Έ	41.6	4.0	45.6		45.6
Bat, Mexican long-nosed	E		1.3	1.3		1.3
Bat, Ozark big-eared	E	50.1	0.5	50.6	8.3	58.9
Bat, Sanborn's long-nosed	Elimin	16.5	178.0	194.5		194.5
Bat, Virginia big-eared	E	10.5	100.0	110.5	13.6	124.1
Bear, grizzly or brown	T	679.2	4107.3	4786.5	1096.0	5882.5
Caribou, woodland (Selkirk Mtn. pop)	E	311.1	102.0	413.1	134.0	547.1
Cougar, eastern	ε	2.3	1.3	3.6		3.6
Deer, Columbian white-tailed	E 81	61.6	0.0	61.6	3.0	64.6
Deer, key	Ε	1336.8		1336.8	33.0	1369.8
Dugong	E			0.0		0.0
Ferret, black-footed	Ε	690.6	289.6	980.2	146.5	1126.7
Fox, San Joaquin kit	E	17.1	513.1	530.2		530.2
Jaguarundi (TX-Mex. ssp.)	ε	2892.1	1.0	2893.1		2893,1
Jaguarundi (AZ-Mex. ssp.)	Ε	0.9		0.9		0.9
Manatee, West Indian (Florida)	E	709.6	35.4	745.0	11.0	756.0
Mouse, Alabama beach	E	2.0		2.0		2.0
Mouse, Anastasia Island beach	E	1.0	1.0	2.0	30.0	32.0
Mouse, Choctawahatchee beach	E	2.1		2.1	0.5	2.6
Mouse, Key Largo cotton	E			0.0		0.0
Mouse, Perdido Key beach	E	2.1	45.0	47.1		47.1
Mouse, Salt marsh harvest	E	91.7	543.5	635.2		635.2
Mouse, southeastern beach	T	1.4		1.4		1.4
Ocelot	E	2924.3	55.9	2980.2		2980.2
Otter, southern sea	T	1259.9	7.8	1267.7		1267.7
Panther, Florida	Ε	1040.1	2763.8	3803.9	310.0	4113.9
Prairie dog, Utah	T	19.4	10.7	30.1		30.1
Pronghorn, Sonoran	E	51.2	63.0	114.2		114.2
Rabbit, Lower Keys	E		20.0	20.0	0.5	20.5
Rat, Fresno kangaroo	E		4.0	4.0		4.0
Rat, giant kangaroo	E	18.8	20.0	38.8		38.8
Rat, Morro Bay kangaroo	Ε	35.0	14	35.0		35.0
Rat, Stephens' kangaroo	E	74.2	83.0	157.2		= 157.2
Rat, Tipton kangaroo	E II	28.3	9.5	37.8		37.8
Sea-lion, Steller (=northern)	T	2.0	767.5	769.5		769.5
Seal, Caribbean monk	E			0.0		0.0
Seal, Guadalupe fur	T			0.0		0.0
Seal, Hawaiian monk	E	105.0	430.0	535.0	5.0	540.0
Shrew, Dismal Swamp southeastern	T	7.0	1.0	8.0	10.0	18.0
Squirrel, Carolina northern flying	E	30.0		30.0	5.5	35.5
Squirrel, Delmarva Peninsula fox	E	18.6		18.6	13.8	32.4
Şquirrel, Mount Graham red	E	56.0	400.0	456.0		456.0
Squirrel, Virginia northern flying	E		55.8	55.8	12.2	68.0
Vole, Amargosa	E	2.0		2.0		2.0
Vole, Hualapai Mexican	E	14.3	2.0	16.3		16.3
Whale, blue	E		1.2	1.2		1.2

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SPECIES (50 CFR Part 17)	<b>S</b>	TATUS	FWS TOTAL	OTHER FED	FED TOTAL	STATE TOTAL	GRAND TOTAL
Whale, bowhead		E		500.5	500.5		500.5
Whate, finback		E		28.1	28.1		28.1
Whale, gray		E		18.8	18.8		18.8
Whate, humpback		E		274.2	274.2		274.2
Whale, right		E		284.5	284.5	1.7	286.2
Whale, Sei		E		5.2	5.2		5.2
Whale, sperm		E		4.2	4.2		4.2
Wolf, gray		E,T	802.0	1373.6	2175.6	43.0	2218.6
Wolf, red		E	681.8	79.3	761.1	3.5	764.6
Woodrat, Key Largo		E			0.0		0.0
MANMALS subtotals S Birds	pecies:	60	\$14,204.1	\$13,272.6	\$27,476.8	\$2,125.6	\$29,602.4
Akepa, Hawaii (honeycreeper)		E	129.2		129.2		129.2
Akepa, Maui (honeycreeper)		E			0.0		0.0
Akialoa, Kauai (honeycreeper)		E			0.0		0.0
Akiapolaau (honeycreeper)		E	129.2		129.2		129.2
Blackbird, yellow-shouldered		Ε	80.0	1.0	81.0	8.0	89.0
Bobwhite, masked (quail)		Ε	1630.5		1630.5		1630.5
Broadbill, Guam		E	11.6		11.6		11.6
Caracara, Audubon's (Florida) creste	d	T =	1.2		1.2		1.2
Condor, California		E	847.7	45.0	892.7		892.7
Coot, Hawaiian (=alae keo keo)		E	92.7	8.0	100.7		100.7
Crane, Mississippi sandhill		E	1229.3	2.2	1231.5	1.2	1232.7
Crane, whooping		Ε	1789.7	259.2	2048.9	35.4	2084.3
Creeper, Hawaiian		E	129.2		129.2		129.2
Creeper, Molokai (Kakawahie)		E			0.0		0.0
Creeper, Oahu (alauwahio)		E			0.0		0.0
Crow, Hawaiian ('alala)		E	50.2		50.2	60.0	110.2
Crow, Mariana		E	44.9	10.0	54.9		54.9
Curtew, eskimo		E	31.5	0.5	32.0		32.0
Duck, Hawaiian (Koloa)		E	136.7	16.5	153.2	5.0	158.2
Duck, Laysan		E	17.0		17.0	2.0	19.0
Eagle, bald (48 conterminous States	pop.)	E,T	620.0	1931.4	2551.4	959.4	3510.7
Falcon, American peregrine		E	1047.0	1275.3	2322.3	551.0	2873.3
Falcon, Arctic peregrine		T	129.3	20.4	149.7	0.3	150.0
Falcon, northern aplomado		Ε	7.7	1.8	9.5		9.5
Finch, Laysan (honeycreeper)		E	17.0		17.0		17.0
Finch, Nihoa (honeycreeper)		E	17.0		17.0		17.0
Goose, Aleutian Canada		E	362.0	12.7	374.7		374.7
Goose, Hawaiian (nene)		Ε	44.0	55.2	99.2	55.0	154.2
Hawk, Hawaiian (Io)		E	129.2		129.2		129.2
Honeycreeper, crested ('akohekohe)		Ε			0.0		0.0
Jay, Florida scrub		T	12.4	80.5	© 92.9	18.0	110.9
Kingfisher, Guam Micronesian		E	44.9	4.0	48.9		48.9
Kite, Everglade snail (FL pop.)		E	76.9	5.4	82.3	35.0	117.3
Mallard, Mariana		E			0.0		0.0
Megapode, Micronesian (La Perouse's)		E			0.0		0.0
Millerbird, Nihoa (old world warbler	)	E	17.0		17.0		17.0
Monarch, Tinian		T			0.0		0.0
Moorhen (gallinule), Hawaiian common		E	92.7	6.0	98.7		98.7
Moorhen (gallinule), Mariana common		E	11.6	5.5	17.1		17.1

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SPECIES (50 CFR Part 17)	STATUS	FWS TOTAL	OTHER FED	FED TOTAL	STATE TOTAL	GRAND TOTA
Nightjar (whip-poor-will), Puerto Rico	E	6.0		6.0	0.2	6.2
Nukupu'u (honeycreeper)	Ε			0.0	140 3160	0.0
'O'o, Kauai (= 'O'o 'A'a)(honeyeater)	E			0.0		0.0
'O'u (honeycreeper)	E	4.2		4.2		4.2
Owl, northern spotted	T	853.8	8633.4	9487.2	200.0	9687.2
Palila (honeycreeper)	Ε			0.0		0.0
Parrot, Puerto Rican	E	902.0	317.4	1219.4	50.0	1269.4
Parrotbill, Maui (honeycreeper)	E		••	0.0		0.0
Pelican, brown (all, ex. SE US)	E	131.3	480.4	611.7		611.7
Petrel, Hawaiian dark-rumped	E		22.7	22.7		22.7
Pigeon, Puerto Rican plain	Ē	95.5	1.2	96.7	64.5	161.2
Plover, piping	E.T	392.0	622.6	1014.6	198.3	1212.8
Polouli (honeycreeper)	ε,,	372.0	322.0	0.0	170.3	0.0
Prairie-chicken, Attwater's	Ε	377.6	5.3	382.9		382.9
Rail, California clapper	ΝĒ	57.2	32.5	89.7		89.7
Rail, Guam	E	87.3	36.3			
Rail, light-footed clapper	E	110.1	20/4 0	87.3		87.3
The second secon	E	89.0	2046.0	2156.1		2156.1
Rail, Yuma clapper Shearwater, Newell's Townsend's	2 T		9.4	98.4		98.4
		6.0	4.0	10.0		10.0
Shrike, San Clemente loggerhead	E		22.2	22.2		22.2
Sparrow, Cape Sable seaside	Ε	1.2	68.9	70.1		70.1
Sparrow, dusky seaside	E			0.0		0.0
Sparrow, Florida grasshopper	E		12.0	12.0	25.0	37.0
Sparrow, San Clemente sage	Т		11.0	11.0		11.0
Starling, Ponape mountain	E			0.0		0.0
Stilt, Hawaiian (=Ae'o)	E	92.7	118.1	210.8		210.8
Stork, wood (SE US pop.)	E	56.4	6.2	62.6	1.2	63.7
Swiftlet, Mariana gray (=Vanikoro)	E	11.6		11.6		11.6
Tern, California least	Ε	172.6	2510.0	2682.6		2682.6
Tern, least (interior US pop.)	E	282.7	351.3	634.0	40.0	674.0
Tern, roseate (W Hemisphere pops.)	E,T	30.5	9.0	39.5	27.7	67.2
Thrush, large Kawai	Ε			0.0		0.0
Thrush, Molokai (olomaio)	Ε			0.0		0.0
Thrush, small Kauai (puaiohi)	ε			0.0		0.0
Towhee, Inyo brown	T			0.0		0.0
Vireo, black-capped	E	75.8	148.3	224.1	0.1	= 224.2
Vireo, least Bell's	E	135.0	9033.8	9168.8		9168.8
Warbler (wood), Bachman's	E	4.8	13.5	18.3		18.3
Warbler (wood), golden-cheeked	E	110.8	31.5	142.3		142.3
Warbler (wood), Kirtland's	Ε	625.7	57.5	683.2	1,0	684.2
Warbler (willow), nightingale reed	E			0.0		0.0
White-eye, bridled	E	11.6		11.6		11.6
White-eye, Ponape great	E			0.0		0.0
Woodpecker, ivory-billed	E		5.6	5.6		5.6
Woodpecker, red-cockaded	Ē	310.3	4836.2	5146.6	47.5	5194.0
BIRDS subtotals Specie		\$14,013.0	\$33,150.4	\$47,163.4	\$2,385.7	
Reptiles Species		214,013.0		err, 103.4	ac,303.1	\$49,549.1
Anole, Culebra Island giant	E					
	7			0.0	0.3	0.3
Bos, Mona	•		2 -	0.0	1.3	1.3
Boa, Puerto Rican	Ε		3.5	3.5	0.3	3.8
MAIN VICTOR ISLANDS TOMA						

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0.0

0.0

Boa, Virgin Islands tree

Page 1 49-61-65						
Page 4 (Table 1) SPECIES (50 CFR Part 17) S	TATUS	FWS TOTAL	OTHER FED	FED TOTAL	STATE TOTAL	GRAND TOTAL
Crocodile, American	E	14.6	1.4	16.0	18.0	34.0
Crocodile, saltwater (=estuarine)	E	14.0	1.4	0.0	10.0	0.0
Gecko, Monito	E			0.0		0.0
Iguana, Hona ground	T			0.0	1.3	1.3
Lizard, blunt-nosed leopard	É	192.5	29.5	222.0	. 1.3	222.0
Lizard, Coachella Valley fringe-toed	ī	19.0	6.0	25.0		25.0
Lizard, Island night	Ť	17.0	10.9	10.9		10.9
Lizard, Istano might	E	2.0	10.9	2.0		2.0
Rattlesnake, New Mexican ridge-nosed	Ť	4.8	0.8	5.6	0.7	6.2
Skink, blue-tailed mole	Ť	7.0	0.0	0.0	0.7	0.0
Skink, sand	Ť			0.0		
Snake, Atlantic salt marsh	Ť			0.0		0.0
	T m	1 /	2.0	3.4		0.0
Snake, Concho water Snake, eastern indigo		1.4			4.0	3.4
	T	2.5	8.5	11.0	1.0	12.0
Snake, San Francisco garter	E	19.9	21.0	40.9		40.9
Tortoise, desert (Mojave pop.)	T	460.9	3330.5	3791.4	300.0	4091.4
Tortoise, gopher (western pop.)	T	29.5	119.3	148.8	4.5	153.3
Turtle, Alabama red-bellied	E	23.0		23.0		23.0
Turtle, flattened musk	T		9.5	9.5		9.5
Turtle, green sea	E,T	172.7	491.1	663.8	17.0	680.8
Turtle, hawksbill sea (=carey)	E	140.7	36.9	177.6	12.1	189.7
Turtle, Kemp's (Atlantic) ridley sea	E	92.8	677.4	770.2	96.0	866.2
Turtle, leatherback sea	E	132.1	100.1	232.2	11.0	243.2
Turtle, loggerhead sea	T	261.0	649.5	910.5	50.0	960.5
Turtle, olive (Pacific) ridley sea	E,T	62.2		62.2		62.2
Turtle, Plymouth red-bellied	E			0.0	2.2	2.2
Turtle, ringed sawback	T	9.9		9.9	1.6	11.5
Amph i bi ans						
Coqui, golden	T			0.0	0.2	0.2
Salamander, Cheat Mountain	T			0.0	1.3	1.3
Salamander, desert slender	E			0.0		0.0
Salamander, Red Hills	T			0.0		- 0.0
Salamander, San Marcos	T	11.9	0.4	12.3		12.3
Salamander, Santa Cruz long-toed	E	29.0	8.0	37.0		37.0
Salamander, Shenandoah	E		5.0	5.0	5.0	10.0
Salamander, Texas blind	ε		0.2	0.2		0.2
Toad, Houston	ε	37.9	8.0	38.7		38.7
Toad, Puerto Rican crested	T	6.0		6.0	8.0	14.0
Toad, Wyoming	E	90.0		90.0	29.0	119.0
HERPTILES Subtotals Species: Fish	42	\$1,816.2	\$5,512.1	\$7,328.3	\$560.8	\$7,889.1
Catfish, Yaqui	T	33.0		33.0		33.0
Cavefish, Alabama	E		0.2	0.2		0.2
Cavefish, Ozark	T	23.5	3.9	27.4	2,1	29.4
Chub, bonytail	ε	272.6	3.9	276.5	15.8	292.3
Chub, Borax Lake	E	10.0	20.0	30.0		30.0
Chub, Chihuahua	ī	12.0	2.9	14.9	3.5	18.4
Chub, humpback	E	274.3	114.3	388.6	15.0	403.6
Chub, Hutton tui	T	614.3	0.4	0.4	13.0	0.4
Chub, Mohave tui	E	5.0	19.0	24.0		24.0
Chub, Owens tui	E	5.4	10.0	15.4		15.4

Page 5 (Table 1)	100	E 86		55		
SPECIES (50 CFR Part 17)	STATUS .	FWS TOTAL	OTHER FED	FED TOTAL	STATE TOTAL	GRAND TOTAL
Chub, Pahranagat roundtail (=bonytail)	ε	16.3		16.3	0.4	16.7
Chub, stender	T			0.0	15.2	15.2
Chub, Sonora	T	0.9	2.0	2.9		2.9
Chub, spotfin	T		6.3	6.3	19.8	26.1
Chub, Virgin River	E	22.5	4.0	26.5	1.3	27.8
Chub, Yaqui	E	50.0		50.0	all persons	50.0
Cui-ui	E	209.6	483.0	692.6		692.6
Dace, Ash Meadows speckled	E	45.0		45.0		45.0
Dace, blackside	T		16.5	16.5	0.4	16.8
Dace, Clover Valley speckled	E			0.0	0.1	0.1
Dace, desert	T			0.0	0.6	0.6
Dace, Foskett speckled	T			0.0		0.0
Dace, Independence Valley speckled	E	* *	S	0.0	0.1	0.1
Dace, Kendall Warm Springs	E		2.0	2.0		2.0
Dace, Moapa	Ε	54.0		54.0	0.6	54.6
Darter, amber	E	15.6	2.5	18.0	0.6	18.6
Darter, bayou	T	18.0	1.5	19.5	2.3	21.8
Darter, boulder (=Elk River)	E	14.8	1.0	15.8	0.4	16.2
Darter, fountain	E	42.2	0.5	42.7		42.7
Darter, Leopard	T	22.1	36.2	58.3	0.2	58.4
Darter, Maryland	Ε		8.0	0.8		0.8
Darter, Niangua	T	0.2	6.0	6.2		6.2
Darter, Okaloosa	E	20.9	270.3	291.2		291.2
Darter, slackwater	T		2.0	2.0	0.3	2.3
Darter, snail	T	1.7	6.5	8.2	0.4	8.6
Darter, watercress	E	7.0	0.8	7.8	2.0	9.8
Gambusia, Big Bend	E	10.3	3.0	13.3		13.3
Gambusia, Clear Creek	E	2.0	0.8	2.8		2.8
Gambusia, Pecos	E	6.2	1.9	8.1		8.1
Gambusia, San Marcos	E	14.5	0.2	14.7		14.7
Killifish, Pahrump	E	7.0	3.0	10.0	0.5	10.5
Logperch, Conasauga	E	15.7	2.5	18.2	6.6	24.8
Logperch, Roanoke	E		14.4	14.4	15.0	29.4
Madtom, Neosho	T	11.2	1.0	12.2	2.0	14.2
Madtom, Scioto	E		0.8	0.8		8.0
Madtom, Smoky	E	3.8	3.4	7.2	4.2	11.4
Madtom, yellowfin	T	3.8	3.8	7.6	19.2	26.8
Minnow, Loach	T	11.4	23.1	34.5		34.5
Pupfish, Ash Meadows Amargosa	E	45.0	3.0	48.0		48.0
Pupfish, Comanche Springs	E	10.0		10.0		10.0
Pupfish, desert	E	46.3	7.0	53.3		53.3
Pupfish, Devil's Hole	E	44.0	10.3	54.3		54.3
Pupfish, Leon Springs	E	9.5	0.4	9.9		9.9
Pupfish, Owens	E		15.0	15.0		15.0
Pupfish, Warm Springs	E	45.0		45.0		45.0
Salmon, chinook (Sacramento R. winter run)	T	186.7	2119.8	2306.5		2306.5
Sculpin, pygmy	T	3.0		3.0		3.0
Shiner, beautiful	T	27.0		27.0		27.0
Shippe Cope Espe			7.0	7.0		

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T

T

18.0

3.0

15.8

0.8

3.0

33.8

0.8

1.0

0.1

4.0

33.8

0.9

Shiner, Cape Fear

Shiner, Pecos bluntnose

Silverside, Waccamaw

Page 6 (Table 1) . SPECIES (50 CFR Part 17)	STATUS	FWS TOTAL	OTHER FED	FED TOTAL	STATE TOTAL	GRAND TOTAL
Spikedace	T	8.9	26.5	35.4		35.4
Spinedace, Big Spring	T	10.0	21.0	31.0	1.5	32.5
Spinedace, Little Colorado	T	32.9	24.8	57.7		57.7
Spinedace, White River	E	6.0		6.0	0.6	6.6
Springfish, Hiko White River	E	8.6		8.6		8.6
Springfish, Railroad Valley	T	3.0	4.0	7.0	0.3	7.3
Springfish, White River	E	3.0	3.5	6.5		6.5
Squawfish, Colorado	E	592.1	1558.9	2151.0	17.7	2168.6
Stickleback, unarmored threespine	E		23.2	23.2		23.2
Sturgeon, pallid	E	128.0	64.5	192.5	75.5	268.0
Sturgeon, shortnose	E	158.0	188.2	346.2	54.0	400.2
Sucker, June	Ε	30.0	0.8	30.8		30.8
Sucker, Lost River	E	20.8	3.9	24.7		24.7
Sucker, Hodoc	E	2.4	29.0	31.4		31.4
Sucker, shortnose	E	19.0	3.9	22.9		22.9
Sucker, Warner	T	17.9	12.4	30.3		30.3
Topminnow, Gila (incl. Yaqui)	E	136.5	22.5	159.0		159.0
Trout, Apache	T	227.2	54.0	281.2		281.2
Trout, Gila	E	20.1	7.6	27.7		27.7
Trout, greenback cutthroat	т	58.5	39.0	97.5	3.0	100.5
Trout, Lahontan cutthroat	T	387.5	1258.3	1645.8		1645.8
Trout, Little Kern golden	T		43.6	43.6		43.6
Trout, Paiute cutthroat	T		50.0	50.0		50.0
Woundfin	E	28.2	7.5	35.7	1.3	37.0
FISH Subtotals Species		\$3,595.5	\$6,695.5	\$10,291.0	\$283.4	\$10,574.4
VERTEBRATES Subtotals Species		\$33,628.9	\$58,630.6	\$92,259.5	\$5,355.4	\$97,614.9
INVERTEBRATES						,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Sneils						
Shagreen, Magazine Mountain	т			0.0		0.0
Snail, Chittenango ovate amber	Т			0.0	2.0	2.0
Snail, flat-spired three-toothed	T		2.0	2.0	0.8	2.8
Snail, Iowa Pleistocene	Ē	233.4	4.1	237.5	2.5	240.0
Snail, Noonday	T			0.0		0.0
Snails, Oahu tree (29-41 spp.)	E	2.1		2.1	2.0	4.1
Snail, painted snake coiled forest	7		1.2	1.2	0.2	1.3
Snail, Stock Island	T			0.0	-	0.0
Snail, Virginia fringed mountain	E			0.0	1.0	1.0
Class	_					.,,
Fanshell	E		6.1	6.1	4.5	10.6
Fatmucket, Arkansas	T		6.0	6.0	7.2	6.0
Heelsplitter, inflated	Ţ	2.5	0.0	2.5	0.3	2.8
Mussel, Curtus	E	5.0	5.3	10.3	1.0	11.3
Mussel, dwarf wedge	E	3.0	8.8	8.8	8.3	17.1
Mussel, Judge Tait's	E	5.0	6.6	11.6	5.0	16.6
Mussel, Marshall's	E	5.0	0.4	5.4	3.0	5.4
Mussel, penitent	E	5.0	7.0	12.0	1.0	13.0
Mussel, ring pink (=golf stick pearly)	E	5.0	16.3	16.3	3.5	19.8
Pearlshell, Louisiana	E	5.0	10.8	15.8	3.7	15.8
Pearly mussel, Alabama lamp	E	5.0	0.1	5.1	3.5	8.6
Pearly musset, Ataoama tamp Pearly musset, Appalachain monkeyface	E	3.0	2.5	2.5	4.5	7.0
Pearty musset, Apparachain monkeyrace Pearty musset, birdwing	E		8.2	8.2	4.5	12.7
really messer, bit calling	=		9.2	9.2	4.3	16.1

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Page 7 (Table 1)		9			51	
SPECIES (50 CFR Part 17)	STATUS	FWS TOTAL	OTHER FED	FED TOTAL	STATE TOTAL	GRAND TOTAL
Pearly mussel, cracking	ε		11.2	11.2	4.5	15.7
Pearly mussel, Cumberland bean	Ε	6.3	10.9	17.1	4.5	21.6
Pearly mussel, Cumberland monkeyface	E		3.6	3.6	4.5	8.1
Pearly mussel, Curtis'	E		2.0	2.0	1.0	3.0
Pearly mussel, dromedary	E		0.7	0.7	4.5	5.2
Pearly mussel, green-blossom	E		6.4	6.4	4.5	10.9
Pearly mussel, Higgins' eye	E	36.5	326.6	363.1	4.6	367.7
Pearly mussel, little-wing	E	6.3	13.0	19.2	4.5	23,7
Pearly mussel, orange-footed	E	1.0	41.7	42.7	3.5	46.2
Pearly mussel, pale lilliput	Ε	5.0	5.2	10.2	3.5	13.7
Pearly mussel, pink mucket	E		45.4	45.4	5.8	51.2
Pearly mussel, purple cat's paw	Ε			0.0	3.5	3.5
Pearly mussel, tubercled-blossom	E		0.4	0.4	3.6	4.0
Pearly mussel, turgid-blossom	E			0.0	3.5	3.5
Pearly mussel, white cat's paw	E	41.3	1.5	42.8	2.8	45.6
Pearly mussel, white wartyback	Ε		21.8	21.8	3.5	25.3
Pearly mussel, yellow-blossom	Ε		1.1	1.1	3.5	4.6
Pigtoe, fine-rayed	Ε		3.5	3.5	4.5	8.0
Pigtoe, rough	E		8.6	8.6	4.5	13.1
Pigtoe, shiny	E		0.8	0.8	4.5	5.3
Pocketbook, fat	Ε.	7.1	95.0	102.1	2.8	104.9
Pocketbook, speckled	Ε			0.0	2	0.0
Riffle shell, tan	Ε		4.0	4.0	4.5	8.5
Spinymussel, James River (=Virginia)	Ε		16.5	16.5	5.1	21.6
Spinymussel, Tar River	E	9.6	0.8	10.4	10.0	20.4
Shell, stirrup	E	5.0	0.8	5.8		5.8
Crustaceans						3.0
Amphipod, Hay's spring	E		4.0	4.0		4.0
Crayfish, Cave	E			0.0	8.4	8.4
Crayfish, Nashville	Е		1.5	1.5	0.5	2.0
Crayfish, Shasta (=placid)	E	20.0		20.0		20.0
Isopod, Madison Cave	T		0.8	0.8	1.0	1.8
Isopod, Socorro	E	10.1	0.4	10.5	2.8	13.3
Shrimp, Alabama cave	ε	25.0	0.5	25.5		25.5
Shrimp, California freshwater	Ε	33.7	1.0	34.7		34.7
Shrimp, Kentucky Cave	E		41.3	41.3		41.3
Shrimp, Squirrel Chimney (=Florida) cave Insects	T			0.0		0.0
Beetle, Amer. burying (=giant carrion)	E	18.0	38.9	56.9	8.3	65.2
Beetle, delta green ground	T			0.0		0.0
Beetle, Kretschmarr Cave mold	E	0.5		0.5		0.5
Beetle, northeastern beach tiger	T		0.5	0.5	3.6	4.1
Beetle, Puritan tiger	T			0.0	2.1	2.1
Beetle, Tooth Cave ground	Ε	0.5		0.5		0.5
Beetle, valley elderberry longhorn	T	34.2	917.4	951.6		951.6
Butterfly, bay checkerspot	T	18.0		18.0		
Butterfly, El Segundo blue	E			0.0		0.0
Butterfly, Lange's metalmark	E	13.0		13.0		13.0
Butterfly, lotis blue	Ε	2.1		2.1		2.1
Butterfly, mission blue	E		9.0	9.0		9.0
Butterfly, Oregon silverspot	Т	9.5	45.0	54.5	25.0	79.5

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	Page 8 (Table 1)						
	SPECIES (50 CFR Part 17)	STATUS	FWS TOTAL	OTHER FED	FED TOTAL	STATE TOTAL	GRAND TOTAL
	Butterfly, Palos Verde blue	E			0.0		0.0
	Butterfly, San Bruno elfin	E		3.0	3.0		3.0
	Butterfly, Schaus swallowtail	Ε			0.0		0.0
	Butterfly, Smith's blue	E	16.5	8.0	24.5		24.5
	Moth, Kern primrose sphinx	T	0.3		0.3		0.3
	Naucorid, Ash Meadows		2.0		2.0	0.6	2.6
	Skipper, Pawnee montane	T			0.0		0.0
	Arachnids				_		•••
	Harvestman, Bee Creek Cave	E	0.5		0.5		0.5
	Pseudoscorpion, Tooth Cave	E	0.5		0.5		0.5
	Spider, Tooth Cave	E	0.5		0.5		0.5
	INVERTEBRATES Subtotals	Species: 81	\$590.9	\$1,777.3	\$2,368.2	\$198.6	\$2,566.8
	Plants	2881		0.00	_		·
	Achyranthes splendens var. rotunda	ita (=Sc. N)E			0.0		0.0
	Agave, Arizona	E	1.1	11.6	12.7		12.7
	'Akoko, Ewa Plains	E			0.0		0.0
	Amphianthus, little	T	2.0		2.0	0.3	2.3
	Arrowhead, bunched	Ε	10.5	1.2	11.7		11.7
	Aster, decurrent false	T	22.0	12.9	34.9	1.8	36.7
	Aster, Florida golden	Ε			0.0		0.0
	Aster, Ruth's golden	Ε	5.0	20.0	25.0		25.0
	Avens, spreading	E		8.8	8.8		8.8
	Barberry, Truckee	E			0.0		0.0
	Bariaco	E	0.5		0.5		0.5
	Bear-poppy, dwarf	Ε	0.7	8.0	8.7		8.7
	Beardtongue, Penland	E	3.0		3.0		3.0
	Beauty, Harper's	ε		3.3	3.3		3.3
	Bellflower, Brooksville	Ε			0.0		0.0
	Bidens, cuneate	E			0.0		0.0
	Birch, Virginia round-leaf	Ε		7.5	7.5		7.5
	Bird's beak, palmate-bracted	Ē		0.5	0.5		0.5
	Bird's-beak, salt marsh	Ε	8.0	26.0	34.0		34.0
	Bittercress, small-anthered	E			0.0		0.0
	Bladder-pod, lyrate	T	2.0	100	2.0		2.0
	Bladder-pod, Missouri	E	14.2	13.0	27.2	0.5	27.7
	Bladder-pod, white	E	5.0		5.0		5.0
	Bladderpod, Dudley Bluffs	Т			0.0	0.2	0.2
	Blazingstar, Ash Meadows	Т	2.0		2.0		2.0
	Blazingstar, Heller's	T			0.0		0.0
	Blazingstar, scrub	E			0.0		0.0
	Blue-star, Kearney's	E			0.0		0.0
	Bluet, Roan Mountain	E	0.8	5.5	6.3		6.3
	Bonamia, Florida	T			0.0		0.0
	Boxwood, Vahl's	E			0.0	0.3	0.3
4.0	Broom, San Clemente Island	E		13.6	13.6		13.6
	Buckwheat, steamboat	Ε		6.0	6.0		6.0
	Bush-clover, prairie	Ť	34.7	3.6	38.3	4.0	42.3
	Bush-mallow, San Clemente Island	E		2.6	2.6		2.6
	Buttercup, autumn	E	2.8		2.8		2.8
	Button, Mohr's Barbara	E	2.0		2.0		2.0
	Cactus, Arizona hedgehog	E	1.0	5.0	6.0		6.0

Page 9	(Table 1)						£	
	SPECIES (50 CFR Part 1	17)	STATUS	FWS TOTAL	OTHER FED	FED TOTAL	STATE TOTAL	GRAND TOTAL
Cactus	Bakersfield		E		2.0	2.0		2.0
-	black lace		li E	0.3	2.5	2.8		2.8
•	Brady pincushion		E	0.5	3.0	3.5		3.5
•	bunched cory		T	0.6	1.1	1.7		1.7
•	Chisos Mtn. hedgehog		T	1	0.4	0.4		0.4
	Cochise pincushion		ΙŤ	2.4	1.2	3.6		3.6
	Key tree		Ε		***	0.0		0.0
•	Knowlton		E	15.8	0.8	16.6	5.0	21.6
	Kuenzler hedgehog		E	6.3	1.4	7.7	3.5	11.2
	Lee pincushion		Ť	0.1	117	0.1	3.3	0.1
	Lloyd's hedgehog		E	0.1	1.7	1.8		1.8
	Lloyd's Mariposa		ī	0.6	***	0.6		0.6
	Mesa Verde		ī	22.9	4.5	27.4	4.8	32.2
•	Nellie cory		ξ		4.3	0.0	7.0	0.0
,	Nichol's Turk's head		E		5.0	5.0		5.0
	Peebles Navajo		£		7.7	7.7	Cal Ballonia	7.7
=	San Rafael		E	1.0	2.0	3.0		3.0
	Siler pincushion		E	0.7	7.1	7.8		7.8
	Sneed pincushion		⊗ E	0.8	3.7	4.5		
	•			u.o	5.5	5.5		4.5
•	spineless hedgehog		E	0.7		•		5.5
•	Tobusch fishhook		E	0.3 5.6	2.3	13.6		2.6
•	Unita Basin hookless				8.0	5.2		13.6
•	Wright fishhook		E	0.2	5.0			5.2
	mirabilis (=Sci. name)		E			0.0		0.0
	y, spring-loving		τ -	2.0		2.0		2.0
	-mallow, pedate		E		8.0	8.0		8.0
Chumbo,	-		T.	2.0		2.0	_	2.0
	oil, Robbins		E			0.0	5.0	5.0
	ose, Arizona		E	1.5	10.9	12.4	+1 HO1 -	12.4
-	running buffalo		E	5.0		5.0	6.8	11.8
	wer, Tennessee purple		Ε	6.5	2.3	8.8		8.8
•	thistle, Loch Lomand		E			0.0		0.0
•	toad-flax		⊕ E	0.2		0.2		0.2
•	nia, Jones		T	0.2	0.5	0.7		0.7
	, Santa Cruz		E			0.0		0.0
-	l akes ide		Ţ	2.0	_	2.0	4.9	6.9
Daisy,			E	0.2	3.0	3.2		3.2
	sis hellerana (=Sci. Na	ime)	E			0.0		0.0
	ower, Texas prairie		E	1.8	6.3	8.1		8.1
Dogweed			Ε	2.3		2.3		2.3
Огормог	t, Canby's		E	9.5	5.6	15.1	8.0	15.9
Erubia			Ε	2.0		2.0		2.0
Euphorb	ia (=Chamaesyce) garber	i (≡Sci. Na	me) T			0.0		0.0
Evening	-primrose, Antioch Dune	!S	E	6.0		6.0		6.0
Evening	-primrose, Eureka Valle	!y	£			0.0		0.0
Evening	-primrose, San Benito		T		20.0	20.0		20.0
Fern, A	leutian shield		E	6.0	2.0	8.0		8.0
Fern, A	merican hant's-tongue		T	0.5		0.5		0.5
Fern, E	lfin tree		E	0.5		0.5		0.5
Fiddlen	eck, Large-flowered		E	15.0		15.0		15.0
Fleaban	e, Rhizome		T	12.5	2.7	15.2	3.0	18.2

Page 10 (Table 1)						
	TATUS	FWS TOTAL	OTHER FED	FED TOTAL	STATE TOTAL	GRAND TOTAL
Four-o'clock, MacFarlane's	Ę	1.0	11.5	12.5	4.0	16.5
Frankenia, Johnston's	E		0.8	0.8		0.8
Gardenia, Natu (Hawaiian)	E	1.0		1.0		1.0
Geocarpon minimum (=Sci. Name)	T		1.0	-1.0	=002.1	3.1
Gerardia, sandplain	E	1.7		1.7	2.5	4.2
Globe-berry, Tumamoc	E	1.5	212.9	214.4		214.4
Goetzea, Beautiful (matabuey)	E			0.0		0.0
Goldenrod, Blue Ridge	T	0.8	4.2	5.0		5.0
Goldenrod, Houghton's	T			0.0		0.0
Goldenrod, Short's	E			0.0		0.0
Goldenrod, white-haired	T	2.5	11.2	13.7		13.7
Gooseberry, Miccosukee (Florida)	T		0.3	0.3		0.3
Gouania hillebrandii (=Sci. Name)	E			0.0		0.0
Grass, Eureka Dune	E			0.0		0.0
Grass, Solano	Ε			0.0		0.0
Groundsel, San Francisco Peaks	T	0.8	5.0	5.8		5.8
Gumplant, Ash Meadows	T	2.0		2.0		2.0
Haplostachys haplostachya var. angustifolia	E	3.2		3.2		3.2
Harperella	E	8.7		8.7	1.0	9.7
Heartleaf, dwarf-flowered	T	1.2		1.2		1.2
Heather, mountain golden	T	3.3	9.5	12.8		12.8
Higuero de Sierra	E			0.0		0.0
Holly, Cook's	E	0.5		0.5		0.5
Hypericum, highlands scrub	E			0.0		0.0
Indian paintbrush, San Clemente Island	Ε.		2.6	2.6		2.6
Iris, dwarf take	T	122.7	2.0	124.7		124.7
Ivesia, Ash Meadows	T	2.0		2.0		2.0
Jewelflower, California	E		5.3	5.3		5.3
Kauai hau kuahiwi	E	1.9		1.9		1.9
Ko'oloa'ula	E	1.5		1.5		1.5
Koki'o (=hau-hele'ula or Hawaii tree cottor	1) E			0.0		0.0
Kakio, Cooke's	Ε	1.0		1.0		1.0
Ladies'-tresses, Navasota	Ε		6.0	6.0		6.0
Lagu, Hyan	Ε			0.0		0.0
Larkspur, San Clemente Island	ε		2.6	2.6		2.6
Lead-plant, Crenulate	E			0.0		0.0
Leather flower, Alabama	Ε	26.0		26.0		26.0
Lily, Minnesota trout	E	41.8	0.4	42.2		42.2
Lipochaeta venosa (=Sci. Name)	E	4.0		4.0		4.0
Liveforever, Santa Barbara Island	E			0.0		0.0
Locoweed, Fassett's	T	3.5		3.5	1.0	4.5
Lomatium, Bradshaw's	E	1.0	18.3	19.3	0.8	20.1
Loosestrife, rough-leaved	E		20.0	20.0		20.0
Lousewort, Furbish	E			0.0		0.0
Lupine, scrub	E			0.0		0.0
Mallow, Kern	E		10.0	10.0		10.0
Mallow, Peter's Mountain	E			0.0		0.0
Manaca, palma de	T	2.0		2.0		2.0
Manzanita, Presido (=Raven's)	E			0.0		0.0
Meadowrue, Cooley's	E			0.0		0.0
Mesa-mint, San Diego	E	30.2	1.0	31.2		31.2

Dage 11 (Table 1)						
Page 11 (Table 1) SPECIES (50 CFR Part 17)	CTATUE	EUR TOTAL	OTHER SED	CED TOTAL	CTATE TOTAL	COAND TOTAL
SPECIES (30 CFR PART 17)	STATUS	FWS TOTAL	OTHER FED	FED TOTAL	STATE TOTAL	GRAND TOTAL
Milk-vetch, Ash meadows	T 89	2.0		2.0	•	2.0
Milk-vetch, heliotrope	1	2.0	1.0	1.0		1.0
Milk-vetch, Jesup's	∞ E		1.0	0.0	1.3	1.3
Milk-vetch, Mancos	E	9.1	2.5	11.6	4.2	15.8
Milk-vetch, Osterhout	E	3.0	2.5	3.0	4.2	4
Milkpea. Small's	E	3.0				3.0
Milkweed, Mead's	ī	24 6	12.0	0.0	0.5	0.0
Milkweed, Welsh's	Ť	21.5 1.7	12.0 5.0	33.5	0.5	34.0
Mint, Garrett's (=scrub, in part)		1.7	5.0	6.7		6.7
	£			0.0		0.0
Mint, Lakela's	£			0.0		0.0
Mint, longspurred	E			0.0		0.0
Mint, scrub	E	2.5		0.0		0.0
Monkey-flower, Michigan	E	2.5		2.5		2.5
Monkshood, northern wild	T	223.3		223.3	2.8	226.0
nustaid, carter s	E			0.0		0.0
Mustard, slender-petaled	E		5.0	5.0		5.0
Naupaka, dwarf	E			0.0		0.0
Negra, cobana	T	3.0		3.0		3.0
Niterwort, Amargosa	E	2.0		2.0		2.0
Oak, Hinckley	ī			0.0		0.0
Orchid, eastern prairie fringed	T	26.0	3.0	29.0	3.0	32.0
Orchid, western prairie fringed	T	56.9	43.2	100.1	5.0	105.1
Palo de Ramon	E			0.0		0.0
Panicgrass, Carter's	E	0.4		0.4		0.4
Pawpaw, beautiful	E			0.0		0.0
Pawpaw, four-petal	E			0.0		0.0
Pawpaw, Rugel's	E			0.0		0.0
Pelos del diablo	E			0.0		0.0
Pennyroyal, McKittrick	T	0.2	1.1	1.3		1.3
Pennyroyal, Todsen's	E	11.2	7.6	18.8	5.0	23.8
Penstemon, blowout	E	15.0		15.0	13.0	28.0
Peperomia, Wheeler's	E	2.5		2.5		2.5
Phacelia, clay	E	6.7		6.7		6.7
Phacelia, North Park	E			0.0	0.2	0.2
Pink, swamp	T		3.5	3.5	10.7	14.2
Pitaya, Davis' green	E			0.0	1	0.0
Pitcher plant, green	E	32.0	8.8	40.8	1.5	42.3
Pitcher plant, mountain sweet	E	6.0		6.0		6.0
Pitcher-plant, Alabama canebrake	E	1.0		1.0		1.0
Plum, scrub	Ε			0.0		0.0
Pogonia, small whorled	Ε		13.5	13.5	4.2	17.7
Polygala, tiny	E			0.0		0.0
Pondberry	E	1.0	97.3	98.3	1.7	100.0
Poppy, Sacramento prickly	ξ	2.4	1.0	3.4		3.4
Poppy-mailow, Texas	E		1.5	1.5		1.5
Potato-bean, Price's	T.	10.6	3.0	13.6	0.5	14.1
Prickly-apple, fragrant	Ε			0.0		0.0
Prickly-ash, St. Thomas	E	2.0		2.0		2.0
Primrose, Maguire	ī	2.6	3.0	* 5.6		5.6
Quillwort, black spored	Ē.	0.8		0.8	0.3	1.1
Quiliwort, mat-forming	E	0.8		0.8	0.3	1.1
	-				4.4	

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SPECIES (50 CFR Part 17)	STATUS	FWS TOTAL	OTHER FED	FED TOTAL	STATE TOTAL	GRAND TOTAL
Battleyand baims	-	3.0		7.0	0.5	
Rattleweed, hairy Rhododendron, Chapman	E E	3.0		3.0	0.5	3.5
• •	_	0.0		0.0		0.0
Ridge-cress (=pepper-cress), Barneby	E	0.9		0.9		0.9
, Rock-cress, McDonald's	E			0.0		0.0
Rock-cress, shale barren	E		2.5	2,5	1.0	3.5
Rosa, palo de	E			0.0		. 0.0
Rush-pea, stender	E	0.5	1.8	2.3		2.3
Sand-verbena, large-fruited	E			0.0		0.0
Sandalwood, Lanai or 'iliahi	E	02	17.1	17, 1		17.1
Sandwort, Cumberland	E	1.0	0.9	1.9		1.9
Schiedea, Diamond Head	Ε			0.0		0.0
Sedge, Navajo	I		2.0	2.0		2.0
Silversword, 'Ahinahina Mauna Kea	E			0.0	3.0	3.0
Skullcap, large-flowered	E		3.5	3.5	0.4	3.9
Snakeroot .	E			0.0		0.0
Snowbells, Texas	E	4.0		4.0		4.0
Spineflower, stender-horned	μE		15.0	15.0		15.0
Spiraea, Virginia	T	2.5	4.7	7.2	0.8	8.0
Spurge	Ε			0.0		0.0
Stenogyne angustifolia var. angustifoli	a E	3.2		3.2		3.2
Sumac, Michaux's	E	1.5	16.0	17.5	0.8	18.3
Sunray, Ash Meadows	T	2.0		2.0		2.0
Thistle, Pitcher's	T	9.2	39.0	48.2	0.3	48.5
Thistle, Sacramento Hountains	T	5.5	2.0	7.5	4.5	12.0
Thornmint, San Mateo	E			0.0	35	0.0
Torreya, Florida	Ε	3.5	1.2	4.7	23.4	28.1
Townsendia, Last Chance	T	2.6	9.0	11.6		11.6
Tree, pygmy fringe	E			0.0		0.0
Trillium, persistent	E	1.2	6.2	7.4	0.5	7.9
Trillium, relict	E	1.2	0.2	1.2	0.3	1.5
Twinpod, Dudley Bluffs	T			0.0	0.2	0.2
Uh iuhi	E			0.0	2.0	2.0
Vetch, Hawaiian	E	0.3		0.3	2.0	0.3
Wallflower, Contra Costa	E	6.0		6.0		
Warea, wide-leaf		6.0				6.0
Water-plantain, Kral's	E			0.0		0.0
1 100				0.0		0.0
Water-willow, Cooley's	E			0.0		0.0
Whitlow-wort, papery	T			0.0		0.0
Wild-buckwheat, clay-loving	E	1.0	2.2	3.2		3.2
Wild-buckwheat, gypsum	T	0.2		0.2	3.0	3.2
Wild-rice, Texas	Ε	10.0	0.2	10.2		10.2
Wire-lettuce, Malheur	E	20.0	10.0	30.0		30.0
Wi reweed	£			0.0		0.0
Woolly-star, Santa Ana River	Ε		8.0	8.0		8.0
Wooly-star, Hoover's	T		15.0	15.0		15.0
Wooly-threads, San Joaquin	Ε		5.0	5.0		5.0
Ziziphus, florida	E			0.0		0.0
Palo de Nigua	E			0.0		0.0
PLANTS Subtotals Specie	es: 239	\$1,042.5	\$972.3	\$2,014.8	\$147.2	\$2,162.0
TOTAL AMOUNTS Specie	es: 591	\$35,262.2	\$61,380.3	\$96,642.5	\$5,701.2	\$102,343.7