

## **Appendix A. Reports Provided by Other Federal Agencies**

### **Department of Agriculture:**

Animal and Plant Health Inspection Service  
Forest Service  
Natural Resources Conservation Service

### **Department of Commerce:**

National Oceanic and Atmospheric Administration

### **Department of Defense:**

Office of the Under Secretary  
(representing Air Force, Army, Coast Guard, Defense Logistics Agency, Marine Corps, and Navy)  
Army Corps of Engineers

### **Department of Energy:**

Bonneville Power Administration

### **Department of the Interior:**

Bureau of Indian Affairs  
Bureau of Land Management  
Bureau of Reclamation  
National Park Service  
Office of Surface Mining\*  
U.S. Geological Survey

### **Department of Transportation:**

Federal Aviation Administration  
Federal Highway Administration

### **Department of the Treasury:**

Customs Service\*

### **Other:**

Environmental Protection Agency  
  
Federal Energy Regulatory Commission  
  
Nuclear Regulatory Commission  
  
Smithsonian Institution  
  
Tennessee Valley Authority

\*--indicates Agency with no reasonably identifiable expenditures



United States  
Department of  
Agriculture

December 5, 2001

Marketing and  
Regulatory  
Programs

Animal and  
Plant Health  
Inspection  
Service

Washington, DC  
20250

Mr. Marshall P. Jones, Jr.  
Acting Director  
Fish and Wildlife Service  
Department of the Interior  
1849 C Street, NW  
Washington, DC 20240

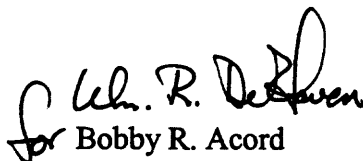
Dear Mr. Jones:

Enclosed is the Animal and Plant Health Inspection Service's (APHIS) report on the expenditures related to the conservation of endangered and threatened species under the Endangered Species Act for Fiscal Years 1999 and 2000.

Enclosures 1 and 3 are the lists of expenditures that APHIS has identified for particular species in Fiscal Years 1999 and 2000, respectively. We have included these figures on the printed copies of the Microsoft EXCEL spreadsheets. All of these activities were implemented by Wildlife Services. Enclosures 2 and 4 are the total amounts that APHIS has spent in Fiscal Years 1999 and 2000, respectively, for endangered and threatened species for which particular species could not be identified.

Should you have any questions concerning this data, please contact Nancy Sweeney, Policy and Program Development, Environmental Services at 301-734-7681.

Sincerely,

  
Bobby R. Acord  
Administrator

Enclosures



APHIS - Protecting American Agriculture  
An Equal Opportunity Employer

ENCLOSURE 1

**EXPENDITURES FOR THE PROTECTION OF  
ENDANGERED AND THREATENED SPECIES  
BY THE WILDLIFE SERVICES PROGRAM  
DURING FY 1999**

<u>SPECIES PROTECTED</u>	<u>TOTAL COST</u>
Ahinahina	232.00
`Akepa, Hawaii	3,640.00
`Akepa, Maui	232.00
`Akiapola`au	3,640.00
Alani	232.00
Bat, Mariana fruit	25,000.00
Bear, grizzly	39,629.00
Bear, Louisiana black	18,873.00
<i>Bonamia menziesii</i>	232.00
Butterfly, Karner blue	1,000.00
Coot, Hawaiian	19,571.00
Creeper, Hawaii	3,640.00
Crow, Mariana	25,000.00
Deer, Columbian white-tailed	1,293.00
<i>Diplazium molokaiense</i>	232.00
Duck, Hawaiian	19,571.00

Eagle, bald	5,157.00
Falcon, peregrine	23,430.00
Ferret, black-footed	45,224.00
Flycatcher, southwestern willow	1,140.00
Fox, San Joaquin kit	2,005.00
Frog, California red-legged	6,581.00
<i>Geranium arboreum</i>	232.00
<i>Geranium multiflorum</i>	232.00
Goose, Aleutian Canada	149,424.00
Goose, Hawaiian	7,686.00
Hawk, Hawaiian	3,640.00
Honeycreeper, crested	1,623.00
Iguana, Cuban ground	8,008.00
Jaguar	23,355.00
Kauila	232.00
Kio'ele	3,640.00
Kuahiwi laukahi	232.00
Mahoe	232.00
Moorhen, Hawaiian common	19,571.00
Moorhen, Mariana common	15,000.00
Mouse, Anastasia Island beach	3,550.00
Mouse, Choctawhatchee beach	3,550.00
Mouse, Perdido Key beach	8,650.00

Mouse, salt marsh harvest	17,518.00
Mouse, St. Andrew beach	2,530.00
Nukupu'u	232.00
'O'u	232.00
Paintbrush, golden	3,200.00
Palila	3,640.00
Parrot, Puerto Rican	14,089.00
Parrotbill, Maui	1,623.00
Pearlshell, Louisiana	5,303.00
Pigtoe, finerayed	57.33
Pigtoe, rough	57.33
Pigtoe, shiny	57.34
<i>Plantanthera holochila</i>	232.00
Plover, piping	8,806.00
Plover, western snowy	70,106.00
Prairie-chicken, Attwater's greater	6,979.00
Prairie dog, Utah	6,577.00
Rail, California clapper	124,139.00
Rail, Guam	37,235.00
Rail, light-footed clapper	16,577.00
Salmon, chinook	97,928.00
Salmon, chum	328.00
Salmon, sockeye	15,235.00

Sandalwood, Lanai	232.00
Sea turtle, green	14,349.00
Sea turtle, hawksbill	46,491.00
Sea turtle, leatherback	10,800.00
Sea turtle, loggerhead	32,805.00
Sheep, bighorn	8,879.00
Shrike, San Clemente loggerhead	367,159.00
Shiner, Arkansas River	393.00
<i>Silene lanceolata</i>	3,640.00
Snails, Oahu tree	12,234.00
Sparrow, Florida grasshopper	257.00
Spiny mussel, James	172.00
Steelhead	97,927.00
<i>Stenogyne angustifolia</i> var. <i>angustifolia</i>	3,640.00
Stilt, Hawaiian	23,426.00
Stork, wood	50.00
Swiftlet, Mariana gray	37,235.00
Tern, California least	211,155.00
Tern, least	2,297.00
Tern, roseate	8,419.00
<i>Tetramolopium lepidotum</i> ssp. <i>lepidotum</i>	3,640.00
Tortoise, desert	1,600.00
Trout, bull	5,305.00

Trout, coastal cutthroat	328.00
Vireo, black-capped	33,657.00
Vireo, least Bell's	17,912.00
Warbler, golden-cheeked	33,262.00
Wolf, gray	208,382.00
Wolf, Mexican	61,039.00
Woodpecker, red-cockaded	<u>393.00</u>
Total	2,174,170.00

ENCLOSURE 2

**ENDANGERED AND THREATENED SPECIES  
EXPENDITURES NOT ASSOCIATED WITH  
A PARTICULAR SPECIES**

The total for the Animal and Plant Health Inspection Service for  
Fiscal Year 1999:

**\$ 1,701,137.00**





United States  
Department of  
Agriculture

Forest  
Service

Washington Office

14<sup>th</sup> & Independence SW  
P.O. Box 96090  
Washington, DC 20090-6090

File Code: 2670  
Date: AUG 19 2002

Mr. Steve Williams  
Director, U.S. Fish and Wildlife Service  
U.S. Department of Interior  
MS 3012-MIB  
1849 C Street NW  
Washington, DC 20240

Dear Mr. Williams:

The enclosed information is in response to your April 23, 2002, request for an accounting of Forest Service expenditures on threatened and endangered species. The two enclosed reports summarize Forest Service Fiscal Year (FY) 1999 and FY 2000 expenditures. The reported funds do not include contributions made by partners. No land acquisitions for threatened or endangered species occurred in either year.

Based on reports from Forest Service field offices, the Forest Service expended funds on 281 threatened and endangered species in FY 1999, and on 184 species in FY 2000. The expenditures given are from the Forest Service appropriations for threatened and endangered species and other wildlife and fish habitat management, and also from research and other agency program appropriations that were used to benefit threatened and endangered species. Expenditures that were reasonably identifiable for specific threatened and endangered species in FY 1999 were \$28,354,700; expenditures in FY 2000 were \$15,792,305.

If you need additional information on our expenditures, please contact Marc Bosch, National TES Program Leader, at 202-205-1220.

Sincerely,

  
JAMES T. GLADEN  
Director, Watershed, Fish, Wildlife, Air, and Rare Plants

Enclosures

cc:  
Regional Foresters  
Director, WFWAR, Research and Development  
Director, Cooperative Forestry, SPF



Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

1999 Data Request For Federal Agencies

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Mammals	bat, gray	Myotis grisescens	E	86,500	
Mammals	bat, Hawaiian hoary	Lasiurus cinereus semotus	E		
Mammals	bat, Indiana	Myotis sodalis	E	643,000	
Mammals	bat, lesser long-nosed	Leptonycteris curasoae yerbabuenae	E	106,500	
Mammals	bat, little Mariana fruit	Pteropus tokudae	E		
Mammals	bat, Mariana fruit	Pteropus mariannus mariannus	E		
Mammals	bat, Mexican long-nosed	Leptonycteris nivalis	E	5,000	
Mammals	bat, Ozark big-eared	Corynorhinus townsendii ingens	E	15,000	
Mammals	bat, Virginia big-eared	Corynorhinus townsendii virginianus	E	30,000	
Mammals	bear, grizzly	Ursus arctos horribilis	T	862,000	
Mammals	bear, Louisiana black	Ursus americanus luteolus	T	1,000	
Mammals	caribou, woodland	Rangifer tarandus caribou	E	23,500	
Mammals	deer, Columbian white-tailed	Odocoileus virginianus leucurus	E		
Mammals	deer, Key	Odocoileus virginianus clavium	E		
Mammals	ferret, black-footed	Mustela nigripes	E	218,500	
Mammals	fox, San Joaquin kit	Vulpes macrotis mutica	E	500	
Mammals	jaguar	Panthera onca	E	14,500	
Mammals	jaguarundi, Gulf Coast	Herpailurus yagouaroundi cacomitli	E		
Mammals	jaguarundi, Sinaloa	Herpailurus yagouaroundi tolteca	E	5,000	
Mammals	kangaroo rat, Fresno	Dipodomys nitratoides exilis	E		
Mammals	kangaroo rat, giant	Dipodomys ingens	E	200	
Mammals	kangaroo rat, Morro Bay	Dipodomys heermanni morroensis	E		
Mammals	kangaroo rat, San Bernardino Merriam's	Dipodomys merriami parvus	E	9,500	
Mammals	kangaroo rat, Stephens'	Dipodomys stephensi	E		
Mammals	kangaroo rat, Tipton	Dipodomys nitratoides nitratoides	E		
Mammals	manatee, West Indian	Trichechus manatus	E		
Mammals	mountain beaver, Point Arena	Aplodontia rufa nigra	E		
Mammals	Mouse, Alabama beach	Peromyscus polionotus ammobates	E		
Mammals	Mouse, Anastasia Island beach	Peromyscus polionotus phasma	E		
Mammals	Mouse, Choctawhatchee beach	Peromyscus polionotus allophrys	E		
Mammals	Mouse, Key Largo cotton	Peromyscus gossypinus allapaticola	E		
Mammals	mouse, Pacific pocket	Perognathus longimembris pacificus	E		
Mammals	Mouse, Perdido Key beach	Peromyscus polionotus trissyllepsis	E	20,500	
Mammals	mouse, Preble's meadow jumping	Zapus hudsonius preblei	T		
Mammals	mouse, salt marsh harvest	Reithrodontomys raviventris	E		
Mammals	Mouse, southeastern beach	Peromyscus polionotus niveiventris	T		
Mammals	mouse, St. Andrew beach	Peromyscus polionotus peninsularis	E		
Mammals	ocelot	Leopardus pardalis	E	5,000	
Mammals	otter, southern sea	Enhydra lutris nereis	T	200	

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Mammals	panther, Florida	<i>Puma concolor coryi</i>	E		
Mammals	prairie dog, Utah	<i>Cynomys parvidens</i>	T	51,500	
Mammals	pronghorn, Sonoran	<i>Antilocapra americana sonoriensis</i>	E		
Mammals	puma, eastern	<i>Puma concolor cougar</i>	E	700	
Mammals	rabbit, Lower Keys marsh	<i>Sylvilagus palustris hefneri</i>	E		
Mammals	rice rat	<i>Oryzomys palustris natator</i>	E		
Mammals	sea-lion, Steller	<i>Eumetopias jubatus</i>	E, T	1,300	
Mammals	seal, Caribbean monk	<i>Monachus tropicalis</i>	E		
Mammals	seal, Guadalupe fur	<i>Arctocephalus townsendi</i>	T		
Mammals	seal, Hawaiian monk	<i>Monachus schauinslandi</i>	E		
Mammals	sheep, bighorn	<i>Ovis canadensis</i>	E	23,000	
Mammals	sheep, bighorn	<i>Ovis canadensis californiana</i>	E	63,000	
Mammals	squirrel, Carolina northern flying	<i>Glaucomys sabrinus coloratus</i>	E	79,000	
Mammals	squirrel, Delmarva Peninsula fox	<i>Sciurus niger cinereus</i>	E		
Mammals	squirrel, Mount Graham red	<i>Tamiasciurus hudsonicus grahamensis</i>	E	10,000	
Mammals	squirrel, Virginia northern flying	<i>Glaucomys sabrinus fuscus</i>	E	7,500	
Mammals	vole, Amargosa	<i>Microtus californicus scirpensis</i>	E		
Mammals	vole, Florida salt marsh	<i>Microtus pennsylvanicus dukecampbelli</i>	E		
Mammals	vole, Hualapai Mexican	<i>Microtus mexicanus hualpaiensis</i>	E		
Mammals	whale, blue	<i>Balaenoptera musculus</i>	E		
Mammals	whale, bowhead	<i>Balaena mysticetus</i>	E		
Mammals	whale, finback	<i>Balaenoptera physalus</i>	E		
Mammals	whale, humpback	<i>Megaptera novaeangliae</i>	E		
Mammals	whale, right	<i>Balaena glacialis</i>	E		
Mammals	whale, Sei	<i>Balaenoptera borealis</i>	E		
Mammals	whale, sperm	<i>Physeter catodon</i>	E		
Mammals	wolf, gray	<i>Canis lupus</i>	E, T	378,000	
Mammals	wolf, red	<i>Canis rufus</i>	E		
Mammals	woodrat, Key Largo	<i>Neotoma floridana smalli</i>	E		
<b>Mammals Total</b>				2660400	
Birds	akepa, Hawaii	<i>Loxops coccineus coccineus</i>	E	10,000	
Birds	akepa, Maui	<i>Loxops coccineus ochraceus</i>	E		
Birds	akiapola, Kauai	<i>Hemignathus procerus</i>	E		
Birds	akiapola, au	<i>Hemignathus munroi</i>	E	10,000	
Birds	Albatross, short-tailed	<i>Phoebastria albatrus</i>	E		
Birds	blackbird, yellow-shouldered	<i>Agelaius xanthomus</i>	E		
Birds	bobwhite, masked	<i>Colinus virginianus ridgwayi</i>	E	3,500	
Birds	broadbill, Guam	<i>Myiagra freycineti</i>	E		
Birds	cahow	<i>Pterodroma cahow</i>	E		
Birds	caracara, Audubon's crested	<i>Polyborus plancus audubonii</i>	T		
Birds	condor, California	<i>Gymnogyps californianus</i>	E	254,500	

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Birds	coot, Hawaiian	Fulca americana alai	E		
Birds	crane, Mississippi sandhill	Grus canadensis pulla	E	500	
Birds	crane, whooping	Grus americana	E	7,500	
Birds	creeper, Hawaii	Oreomystis mana	E	10,000	
Birds	creeper, Molokai	Paroreomyza flammea	E		
Birds	creeper, Oahu	Paroreomyza maculata	E		
Birds	crow, Hawaiian	Corvus hawaiiensis	E		
Birds	crow, Mariana	Corvus kubaryi	E		
Birds	crow, white-necked	Corvus leucognaphalus	E		
Birds	curlew, Eskimo	Numenius borealis	E	2,000	
Birds	duck, Hawaiian	Anas wyvilliana	E		
Birds	duck, Laysan	Anas laysanensis	E		
Birds	eagle, bald	Haliaeetus leucocephalus	T	1,013,000	
Birds	eider, spectacled	Somateria fischeri	T		
Birds	eider, Steller's	Polysticta stelleri	T		
Birds	falcon, American peregrine	Falco peregrinus anatum	DM	344,000	
Birds	falcon, northern aplomado	Falco femoralis septentrionalis	E	12,000	
Birds	finch, Laysan	Telespyza cantans	E		
Birds	finch, Nihoa	Telespyza ultima	E		
Birds	flycatcher, southwestern willow	Empidonax traillii extimus	E	458,500	
Birds	gnatcatcher, coastal California	Poliopitila californica californica	T	15,500	
Birds	goose, Hawaiian	Branta sandvicensis	E		
Birds	hawk, Hawaiian	Buteo solitarius	E	5,000	
Birds	hawk, Puerto Rican broad-winged	Buteo platypterus brunnescens	E	1,000	
Birds	hawk, Puerto Rican sharp-shinned	Accipiter striatus venator	E	1,000	
Birds	honeycreeper, crested	Palmeria dolei	E		
Birds	jay, Florida scrub	Aphelocoma coerulescens	T	61,000	
Birds	kingfisher, Guam Micronesian	Halcyon cinnamomina cinnamomina	E		
Birds	kite, Everglade snail	Rostrhamus sociabilis plumbeus	E		
Birds	mallard, Mariana	Anas oustaleti	E		
Birds	megapode, Micronesian	Megapodius laperouse	E		
Birds	millerbird, Nihoa	Acrocephalus familiaris kingi	E		
Birds	monarch, Tinian	Monarcha takatsukasae	T		
Birds	moorhen, Hawaiian common	Gallinula chloropus sandvicensis	E		
Birds	moorhen, Mariana common	Gallinula chloropus guami	E		
Birds	murrelet, marbled	Brachyramphus marmoratus marmoratus	T	1,290,500	
Birds	nightjar, Puerto Rican	Caprimulgus noctitherus	E		
Birds	nukupu' u	Hemignathus lucidus	E		
Birds	'o'o, Kauai	Moho braccatus	E		
Birds	'o'u	Psittirostra psittacea	E		
Birds	owl, Mexican spotted	Strix occidentalis lucida	T	991,000	

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Birds	owl, northern spotted	<i>Strix occidentalis caurina</i>	T	2,877,000	
Birds	palila	<i>Loxioides bailleui</i>	E		
Birds	parrot, Puerto Rican	<i>Amazona vittata</i>	E	201,000	
Birds	parrotbill, Maui	<i>Pseudonestor xanthophrys</i>	E		
Birds	pelican, brown	<i>Pelecanus occidentalis</i>	E	1,000	
Birds	petrel, Hawaiian dark-rumped	<i>Pterodroma phaeopygia sandwichensis</i>	E		
Birds	pigeon, Puerto Rican plain	<i>Columba inornata wetmorei</i>	E		
Birds	Plover, piping	<i>Charadrius melodus</i>	E, T	5,000	
Birds	plover, western snowy	<i>Charadrius alexandrinus nivosus</i>	T	22,000	
Birds	po'ouli	<i>Melamprosops phaeosoma</i>	E		
Birds	prairie-chicken, Attwater's greater	<i>Tympanuchus cupido attwateri</i>	E		
Birds	pygmy-owl, cactus ferruginous	<i>Glaucidium brasilianum cactorum</i>	E	38,500	
Birds	rail, California clapper	<i>Rallus longirostris obsoletus</i>	E		
Birds	rail, Guam	<i>Rallus owstoni</i>	E		
Birds	rail, light-footed clapper	<i>Rallus longirostris levipes</i>	E		
Birds	rail, Yuma clapper	<i>Rallus longirostris yumanensis</i>	E		
Birds	shearwater, Newell's Townsend's	<i>Puffinus auricularis newelli</i>	T		
Birds	shrike, San Clemente loggerhead	<i>Lanius ludovicianus meamsi</i>	E	2,000	
Birds	sparrow, Cape Sable seaside	<i>Ammodramus maritimus mirabilis</i>	E		
Birds	sparrow, Florida grasshopper	<i>Ammodramus savannarum floridanus</i>	E		
Birds	sparrow, San Clemente sage	<i>Amphispiza belli clementeae</i>	T		
Birds	stilt, Hawaiian	<i>Himantopus mexicanus knudseni</i>	E		
Birds	stork, wood	<i>Mycteria americana</i>	E	50,500	
Birds	swiftlet, Mariana gray	<i>Aerodramus vanikorensis bartschi</i>	E		
Birds	tern, California least	<i>Sterna antillarum browni</i>	E		
Birds	tern, least	<i>Sterna antillarum</i>	E	9,000	
Birds	tern, roseate	<i>Sterna dougallii dougallii</i>	E, T		
Birds	thrush, large Kauai	<i>Myadestes myadestinus</i>	E		
Birds	thrush, Molokai	<i>Myadestes lanaiensis rutha</i>	E		
Birds	thrush, small Kauai	<i>Myadestes palmeri</i>	E		
Birds	towhee, Inyo California	<i>Pipilo crissalis eremophilus</i>	T		
Birds	vireo, black-capped	<i>Vireo atricapillus</i>	E		
Birds	vireo, least Bell's	<i>Vireo bellii pusillus</i>	E	96,500	
Birds	warbler, Bachman's	<i>Vermivora bachmanii</i>	E	1,000	
Birds	warbler, golden-cheeked	<i>Dendroica chrysoparia</i>	E		
Birds	warbler, Kirtland's	<i>Dendroica kirtlandii</i>	E	479,000	
Birds	warbler, nightingale reed	<i>Acrocephalus luscini</i>	E		
Birds	white-eye, bridled	<i>Zosterops conspicillatus conspicillatus</i>	E		
Birds	woodpecker, ivory-billed	<i>Campephilus principalis</i>	E		
Birds	woodpecker, red-cockaded	<i>Picoides borealis</i>	E	3,230,500	
<b>Birds Total</b>				<b>11,503,500</b>	

Feder Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Reptiles	anole, Culebra Island giant	Anolis roosevelti	E		
Reptiles	boa, Mona	Epicrates monensis monensis	T		
Reptiles	boa, Puerto Rican	Epicrates inornatus	E	67,200	
Reptiles	boa, Virgin Islands tree	Epicrates monensis granti	E		
Reptiles	crocodile, American	Crocodylus acutus	E		
Reptiles	gecko, Monito	Sphaerodactylus micropithecus	E		
Reptiles	iguana, Mona ground	Cyclura stejnegeri	T		
Reptiles	lizard, blunt-nosed leopard	Gambelia silus	E	1,000	
Reptiles	lizard, Coachella Valley fringe-toed	Uma inornata	T		
Reptiles	lizard, Island night	Xantusia riversiana	T		
Reptiles	lizard, St. Croix ground	Ameiva polops	E		
Reptiles	rattlesnake, New Mexican ridge-nosed	Crotalus willardi obscurus	T	28,500	
Reptiles	sea turtle, green	Chelonia mydas	E, T		
Reptiles	sea turtle, hawksbill	Eretmochelys imbricata	E		
Reptiles	sea turtle, Kemp's ridley	Lepidochelys kempi	E		
Reptiles	sea turtle, leatherback	Demochelys coriacea	E		
Reptiles	sea turtle, loggerhead	Caretta caretta	T		
Reptiles	sea turtle, olive ridley	Lepidochelys olivacea	E, T		
Reptiles	skink, bluetail mole	Eumeces egregius lividus	T		
Reptiles	skink, sand	Neoseps reynoldsi	T		
Reptiles	snake, Atlantic salt marsh	Nerodia clarkii taeniata	T		
Reptiles	snake, Concho water	Nerodia paucimaculata	T		
Reptiles	snake, copperbelly water	Nerodia erythrogaster neglecta	T		
Reptiles	snake, eastern indigo	Drymarchon corais couperi	T	500	
Reptiles	snake, giant garter	Thamnophis gigas	T		
Reptiles	snake, Lake Erie water	Nerodia sipedon insularum	T		
Reptiles	snake, San Francisco garter	Thamnophis sirtalis tetrataenia	E		
Reptiles	tortoise, desert	Gopherus agassizii	T	4,000	
Reptiles	tortoise, gopher	Gopherus polyphemus	T	80,000	
Reptiles	turtle, Alabama red-belly	Pseudemys alabamensis	E		
Reptiles	turtle, bog	Clemmys muhlenbergii	T	200	
Reptiles	turtle, flattened musk	Sternotherus depressus	T		
Reptiles	turtle, Plymouth redbelly	Pseudemys rubriventris bangsi	E		
Reptiles	turtle, ringed map	Graptemys oculifera	T		
Reptiles	turtle, yellow-blotched map	Graptemys flavimaculata	T		
Reptiles	whipsnake, Alameda	Masticophis lateralis euryxanthus	T		
<b>Reptiles Total</b>				181400	
Amphibians	coqui, golden	Eleutherodactylus jasperi	T		
Amphibians	frog, California red-legged	Rana aurora draytonii	T	191,200	
Amphibians	guajon	Eleutherodactylus cooki	T		
Amphibians	salamander, Barton Springs	Eurycea sosorum	E		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Amphibians	salamander, Cheat Mountain	Plethodon nettingi	T	500	
Amphibians	salamander, desert slender	Batrachoseps aridus	E		
Amphibians	salamander, flatwoods	Ambystoma cingulatum	T	38,000	
Amphibians	salamander, Red Hills	Phaeognathus hubrichti	T		
Amphibians	salamander, San Marcos	Eurycea nana	T		
Amphibians	salamander, Santa Cruz long-toed	Ambystoma macrodactylum croceum	E		
Amphibians	salamander, Shenandoah	Plethodon shenandoah	E		
Amphibians	salamander, Sonoran tiger	Ambystoma tigrinum stebbinsi	E	6,500	
Amphibians	salamander, Texas blind	Typhlomolge rathbuni	E		
Amphibians	toad, arroyo	Bufo microscaphus californicus	E	674,000	
Amphibians	toad, Houston	Bufo houstonensis	E		
Amphibians	toad, Puerto Rican crested	Peltophryne lemur	T		
Amphibians	toad, Wyoming	Bufo hemiophrys baxteri	E		
<b>Amphibians Total</b>				<b>910200</b>	
Fishes	catfish, Yaqui	Ictalurus pricei	T		
Fishes	cavefish, Alabama	Speoplatyrhinus poulsoni	E		
Fishes	cavefish, Ozark	Amblyopsis rosae	T	100	
Fishes	chub, bonytail	Gila elegans	E	7,500	
Fishes	chub, Borax Lake	Gila boraxobius	E		
Fishes	chub, Chihuahua	Gila nigrescens	T	1,000	
Fishes	chub, humpback	Gila cypha	E	7,200	
Fishes	chub, Hutton tui	Gila bicolor ssp.	T		
Fishes	chub, Mohave tui	Gila bicolor mohavensis	E	2,000	
Fishes	chub, Oregon	Oregonichthys crameri	E	38,000	
Fishes	chub, Owens tui	Gila bicolor snyderi	E		
Fishes	chub, Pahrnagat roundtail	Gila robusta jordani	E		
Fishes	chub, slender	Erimystax cahni	T		
Fishes	chub, Sonora	Gila ditaenia	T	4,500	
Fishes	chub, spotfin	Cyprinella monacha	T		
Fishes	chub, Virgin River	Gila robusta seminuda	E		
Fishes	chub, Yaqui	Gila purpurea	E	5,500	
Fishes	cui-ui	Chasmistes cujus	E		
Fishes	dace, Ash Meadows speckled	Rhinichthys osculus nevadensis	E		
Fishes	dace, blackside	Phoxinus cumberlandensis	T	16,000	
Fishes	dace, Clover Valley speckled	Rhinichthys osculus oligoporus	E		
Fishes	dace, desert	Eremichthys acros	T		
Fishes	dace, Foskett speckled	Rhinichthys osculus ssp.	T		
Fishes	dace, Independence Valley speckled	Rhinichthys osculus lethoporus	E		
Fishes	dace, Kendall Warm Springs	Rhinichthys osculus thermalis	E	8,000	
Fishes	dace, Moapa	Moapa coriacea	E		
Fishes	darer, amber	Percina antesella	E	300	

Feder. Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Fishes	darler, bayou	Etheostoma rubrum	T		
Fishes	darler, bluemask	Etheostoma sp.	E		
Fishes	darler, boulder	Etheostoma wapiti	E		
Fishes	darler, Cherokee	Etheostoma scotti	T		
Fishes	darler, duskytail	Etheostoma percnum	E	1,300	
Fishes	darler, Etowah	Etheostoma etowahae	E	5,000	
Fishes	darler, fountain	Etheostoma fonticola	E		
Fishes	darler, goldline	Percina aurolineata	T		
Fishes	darler, leopard	Percina pantherina	T	54,000	
Fishes	darler, Maryland	Etheostoma sellare	E		
Fishes	darler, Niangua	Etheostoma nianguae	T		
Fishes	darler, Okaloosa	Etheostoma okaloosae	E		
Fishes	darler, relict	Etheostoma chienense	E		
Fishes	darler, slackwater	Etheostoma boschungii	T		
Fishes	darler, snail	Percina tanasi	T		
Fishes	darler, watercress	Etheostoma nuchale	E		
Fishes	gambusia, Big Bend	Gambusia gaigei	E		
Fishes	gambusia, Clear Creek	Gambusia heterochir	E		
Fishes	gambusia, Pecos	Gambusia nobilis	E		
Fishes	gambusia, San Marcos	Gambusia georgei	E		
Fishes	goby, tidewater	Eucyclogobius newberryi	E	300	
Fishes	logperch, Conasauga	Percina jenkinsi	E	300	
Fishes	logperch, Roanoke	Percina rex	E		
Fishes	madtom, Neosho	Noturus placidus	T		
Fishes	madtom, pygmy	Noturus stanauli	E		
Fishes	madtom, Scioto	Noturus trautmani	E		
Fishes	madtom, smoky	Noturus baileyi	E	700	
Fishes	madtom, yellowfin	Noturus flavipinnis	T	700	
Fishes	minnow, loach	Tiaroga cobitis	T	122,500	
Fishes	minnow, Rio Grande silvery	Hybognathus amarus	E		
Fishes	pikeminnow, Colorado	Ptychocheilus lucius	E	49,000	
Fishes	poolfish, Pahrump	Empetrichthys latos	E		
Fishes	pupfish, Ash Meadows Amargosa	Cyprinodon nevadensis mionectes	E		
Fishes	pupfish, Comanche Springs	Cyprinodon elegans	E		
Fishes	pupfish, desert	Cyprinodon macularius	E	400	
Fishes	pupfish, Devils Hole	Cyprinodon diabolis	E		
Fishes	pupfish, Leon Springs	Cyprinodon bovinus	E		
Fishes	pupfish, Owens	Cyprinodon radiosus	E		
Fishes	pupfish, Warm Springs	Cyprinodon nevadensis pectoralis	E		
Fishes	salmon, chinook	Oncorhynchus tshawytscha	E, T	2,842,000	
Fishes	salmon, chum	Oncorhynchus keta	T	138,500	



Feder Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Fishes	salmon, coho	Oncorhynchus kisutch	T	664,500	
Fishes	salmon, sockeye	Oncorhynchus nerka	E, T	120,000	
Fishes	sculpin, pygmy	Cottus pygmaeus	T		
Fishes	shiner, Arkansas River	Notropis girardi	T	1,000	
Fishes	shiner, beautiful	Cyprinella formosa	T		
Fishes	shiner, blue	Cyprinella caerulea	T	300	
Fishes	shiner, Cahaba	Notropis cahabae	E		
Fishes	shiner, Cape Fear	Notropis mekistocholas	E		
Fishes	shiner, palezone	Notropis albizonatus	E	500	
Fishes	shiner, Pecos bluntnose	Notropis simus pecosensis	T		
Fishes	shiner, Topeka	Notropis topeka	E	500	
Fishes	silverside, Waccamaw	Menidia extensa	T		
Fishes	smelt, delta	Hypomesus transpacificus	T		
Fishes	spikedace	Meda fulgida	T	198,500	
Fishes	spinedace, Big Spring	Lepidomeda mollispinis pratensis	T		
Fishes	spinedace, Little Colorado	Lepidomeda vittata	T	16,900	
Fishes	spinedace, White River	Lepidomeda albivallis	E		
Fishes	splittail, Sacramento	Pogonichthys macrolepidotus	T	600	
Fishes	springfish, Hiko White River	Crenichthys baileyi grandis	E		
Fishes	springfish, Railroad Valley	Crenichthys nevadae	T		
Fishes	springfish, White River	Crenichthys baileyi baileyi	E		
Fishes	steelhead	Oncorhynchus mykiss	E, T	3,041,500	
Fishes	stickleback, unarmored threespine	Gasterosteus aculeatus williamsoni	E	74,500	
Fishes	sturgeon, Gulf	Acipenser oxyrinchus desotoi	T	500	
Fishes	sturgeon, pallid	Scaphirhynchus albus	E	4,000	
Fishes	sturgeon, shortnose	Acipenser brevirostrum	E	200	
Fishes	sturgeon, white	Acipenser transmontanus	E	1,200	
Fishes	sucker, June	Chasmistes liorus	E	15,500	
Fishes	sucker, Lost River	Deltistes luxatus	E	76,500	
Fishes	Sucker, Modoc	Catostomus microps	E	58,000	
Fishes	sucker, razorback	Xyrauchen texanus	E	48,500	
Fishes	Sucker, shortnose	Chasmistes brevirostris	E	72,500	
Fishes	sucker, Warner	Catostomus warnerensis	T	5,000	
Fishes	topminnow, Gila	Poeciliopsis occidentalis	E	26,500	
Fishes	trout, Apache	Oncorhynchus apache	T	10,000	
Fishes	trout, bull	Salvelinus confluentus	T	2,804,000	
Fishes	trout, Gila	Oncorhynchus gilae	E	54,000	
Fishes	trout, greenback cutthroat	Oncorhynchus clarki stomias	T	152,000	
Fishes	trout, Lahontan cutthroat	Oncorhynchus clarki henshawi	T	229,500	
Fishes	trout, Little Kern golden	Oncorhynchus aguabonita whitei	T	35,500	
Fishes	trout, Paiute cutthroat	Oncorhynchus clarki seleniris	T	78,000	

Feder Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Fishes	woundfin	Plagopterus argentissimus	E		
<b>Fishes Total</b>				11095000	
Clams	acornshell, southern	Epioblasma othcaloogensis	E	2,000	
Clams	bankclimber, purple	Elliptoides sloatianus	T		
Clams	bean, Cumberland	Villosa trabalis	E	7,000	
Clams	bean, purple	Villosa perpurpurea	E		
Clams	blossom, green	Epioblasma torulosa gubernaculum	E		
Clams	blossom, tubercled	Epioblasma torulosa torulosa	E	500	
Clams	blossom, turgid	Epioblasma turgidula	E		
Clams	blossom, yellow	Epioblasma florentina florentina	E	500	
Clams	catpaw	Epioblasma obliquata obliquata	E	500	
Clams	catpaw, white	Epioblasma obliquata perobliqua	E		
Clams	clubshell	Pleurobema clava	E	10,500	
Clams	clubshell, black	Pleurobema curtum	E		
Clams	clubshell, ovate	Pleurobema perovatum	E	8,000	
Clams	clubshell, southern	Pleurobema decisum	E	8,000	
Clams	combshell, Cumberlandian	Epioblasma brevidens	E	500	
Clams	combshell, southern	Epioblasma penita	E	5,500	
Clams	combshell, upland	Epioblasma metastrata	E	2,000	
Clams	elktoe, Appalachian	Alasmidonta raveneliana	E	1,400	
Clams	elktoe, Cumberland	Alasmidonta atropurpurea	E	2,500	
Clams	fanshell	Cyrogenia stegaria	E	15,500	
Clams	fatmucket, Arkansas	Lampsilis powelli	T	500	
Clams	heelsplitter, Alabama	Potamilus inflatus	T		
Clams	heelsplitter, Carolina	Lasmigona decorata	E	700	
Clams	higgins eye	Lampsilis higginsii	E		
Clams	kidneyshell, triangular	Ptychobranchus greeni	E	8,000	
Clams	lampmussel, Alabama	Lampsilis virescens	E		
Clams	lilliput, pale	Toxolasma cylindrellus	E		
Clams	mapleleaf, winged	Quadrula fragosa	E		
Clams	moccasinshell, Alabama	Medionidus acutissimus	T	8,500	
Clams	moccasinshell, Coosa	Medionidus parvulus	E	3,000	
Clams	moccasinshell, Gulf	Medionidus penicillatus	E		
Clams	moccasinshell, Ochlockonee	Medionidus simpsonianus	E		
Clams	monkeyface, Appalachian	Quadrula sparsa	E		
Clams	monkeyface, Cumberland	Quadrula intermedia	E		
Clams	mucket, orangenacre	Lampsilis perovalis	T	8,000	
Clams	mucket, pink	Lampsilis abrupta	E	1,000	
Clams	mussel, oyster	Epioblasma capsaeformis	E	5,000	
Clams	pearshell, Louisiana	Margaritifera hembeli	T	7,000	
Clams	pearlymussel, birdwing	Conradilla caelata	E		

Feder Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Clams	pearlymussel, cracking	Hemistena lata	E	500	
Clams	pearlymussel, Curtis	Epioblasma florentina curtisii	E	500	
Clams	pearlymussel, dromedary	Dromus dromas	E	500	
Clams	pearlymussel, littlewing	Pegias fabula	E	1,300	
Clams	pearlymussel, white wartyback	Plethobasus cicatricosus	E		
Clams	pigtoe, Cumberland	Pleurobema gibberum	E		
Clams	pigtoe, dark	Pleurobema furvum	E	5,500	
Clams	pigtoe, finerayed	Fusconaia cuneolus	E		
Clams	pigtoe, flat	Pleurobema marshalli	E		
Clams	pigtoe, heavy	Pleurobema taitianum	E		
Clams	pigtoe, oval	Pleurobema pyriforme	E		
Clams	pigtoe, rough	Pleurobema plenum	E	500	
Clams	pigtoe, shiny	Fusconaia cor	E		
Clams	pigtoe, southern	Pleurobema georgianum	E	5,500	
Clams	pimpleback, orangefoot	Plethobasus cooperianus	E		
Clams	pocketbook, fat	Potamilus capax	E		
Clams	pocketbook, finelined	Lampsilis atilis	T	5,500	
Clams	pocketbook, Ouachita rock	Arkansia wheeleri	E	500	
Clams	pocketbook, shinyrayed	Lampsilis subangulata	E		
Clams	pocketbook, speckled	Lampsilis streckeri	E		
Clams	rabbitsfoot, rough	Quadrula cylindrica strigillata	E		
Clams	riffleshell, northern	Epioblasma torulosa rangiana	E	10,500	
Clams	riffleshell, tan	Epioblasma florentina walkeri	E	1,500	
Clams	ring pink	Obovaria retusa	E	500	
Clams	slabshell, Chipola	Elliptio chipolaensis	T		
Clams	spiny mussel, James	Pleurobema collina	E		
Clams	spiny mussel, Tar River	Elliptio steinstansana	E		
Clams	stirrupshell	Quadrula stapes	E		
Clams	three-ridge, fat	Amblema neisterii	E		
Clams	wedgemussel, dwarf	Alasmidonta heterodon	E		
<b>Clams Total</b>				<b>138900</b>	
Snails	ambersnail, Kanab	Oxyloma haydeni kanabensis	E		
Snails	elimia, lacy	Elimia crenatella	T		
Snails	limpet, Banbury Springs	Lanx sp.	E		
Snails	lioplax, cylindrical	Lioplax cyclostomaformis	E		
Snails	marstonia, royal	Pyrgulopsis ogmorhaphe	E		
Snails	pebblesnail, flat	Lepyrium showalteri	E		
Snails	riversnail, Anthony's	Atheamia anthonyi	E		
Snails	rocksnail, painted	Leptoxis taeniata	T		
Snails	rocksnail, plicate	Leptoxis plicata	E		
Snails	rocksnail, round	Leptoxis ampla	T		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Snails	shagreen, Magazine Mountain	Mesodon magazinensis	T	2,500	
Snails	snail, Bliss Rapids	Taylorconcha serpenticola	T		
Snails	snail, Chittenango ovate amber	Succinea chittenangoensis	T		
Snails	snail, flat-spined three-toothed	Triodopsis platysayoides	T		
Snails	snail, Iowa Pleistocene	Discus macclintocki	E		
Snails	snail, Morro shoulderband	Helminthoglypta walkeriana	E		
Snails	snail, noonday	Mesodon clarki nantahala	T		
Snails	snail, painted snake coiled forest	Anguispira picta	T		
Snails	snail, Snake River physa	Physa natricina	E		
Snails	snail, Stock Island tree	Orthalicus reses	T		
Snails	snail, tulotoma	Tulotoma magnifica	E		
Snails	snail, Utah valvata	Valvata utahensis	E		
Snails	snail, Virginia fringed mountain	Polygyriscus virginianus	E		
Snails	snails, Oahu tree	Achatinella spp.	E		
Snails	springsnail, Alamosa	Tryonia alamosae	E		
Snails	springsnail, Bruneau Hot	Pyrgulopsis bruneauensis	E		
Snails	springsnail, Idaho	Fontelicella idahoensis	E		
Snails	springsnail, Socorro	Pyrgulopsis neomexicana	E		
<b>Snails Total</b>				2500	
Insects	beetle, American burying	Nicrophorus americanus	E	29,500	
Insects	beetle, Coffin Cave mold	Batrisodes texanus	E		
Insects	beetle, Comal Springs dryopid	Stygoparnus comalensis	E		
Insects	beetle, Comal Springs riffle	Heterelmis comalensis	E		
Insects	beetle, delta green ground	Elaphrus viridis	T		
Insects	beetle, Hungerford's crawling water	Brychius hungerfordi	E		
Insects	beetle, Kretschmarr Cave mold	Texamaurops reddelli	E		
Insects	beetle, Mount Hermon June	Polyphylla barbata	E		
Insects	beetle, Tooth Cave ground	Rhadine persephone	E		
Insects	beetle, valley elderberry longhorn	Desmocerus californicus dimorphus	T	5,000	
Insects	butterfly, bay checkerspot	Euphydryas editha bayensis	T		
Insects	butterfly, Behren's silverspot	Speyeria zerene behrensii	E		
Insects	butterfly, callippe silverspot	Speyeria callippe callippe	E		
Insects	butterfly, El Segundo blue	Euphilotes battoides allyni	E		
Insects	butterfly, Kamer blue	Lycæides melissa samuelis	E	124,500	
Insects	butterfly, Lange's metalmark	Apodemia mormo langei	E		
Insects	butterfly, lotis blue	Lycæides argyrognomon lotis	E		
Insects	butterfly, mission blue	Icaricia icarioides missionensis	E		
Insects	butterfly, Mitchell's satyr	Neonympha mitchellii mitchellii	E		
Insects	butterfly, Myrtle's silverspot	Speyeria zerene myrtleae	E		
Insects	butterfly, Oregon silverspot	Speyeria zerene hippolyta	T	9,000	
Insects	butterfly, Palos Verdes blue	Glaucopsyche lygdamus palosverdesensis	E		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Insects	butterfly, Quino checkerspot	Euphydryas editha quino	E		
Insects	butterfly, Saint Francis' satyr	Neonympha mitchellii francisci	E		
Insects	butterfly, San Bruno elfin	Callophrys mossii bayensis	E		
Insects	butterfly, Schaus swallowtail	Heracles aristodemus ponceanus	E		
Insects	butterfly, Smith's blue	Euphilotes enoptes smithi	E	20,000	
Insects	butterfly, Uncompahgre fritillary	Boloria acrocroma	E	14,000	
Insects	dragonfly, Hine's emerald	Somatochlora hineana	E	27,000	
Insects	fly, Delhi Sands flower-loving	Rhaphiomidas terminatus abdominalis	E		
Insects	grasshopper, Zayante band-winged	Trimerotropis infantilis	E		
Insects	moth, Kern primrose sphinx	Euproserpinus euterpe	T		
Insects	naucorid, Ash Meadows	Ambrysus amargosus	T		
Insects	skipper, Laguna Mountains	Pyrgus ruralis lagunae	E	20,000	
Insects	skipper, Pawnee montane	Hesperia leonardus montana	T		
Insects	tiger beetle, northeastern beach	Cicindela dorsalis dorsalis	T		
Insects	tiger beetle, Puritan	Cicindela puritana	T		
<b>Insects Total</b>				249000	
Arachnids	harvestman, Bee Creek Cave	Texella reddelli	E		
Arachnids	harvestman, Bone Cave	Texella reyesi	E		
Arachnids	pseudoscorpion, Tooth Cave	Tartarocreagris texana	E		
Arachnids	spider, spruce-fir moss	Microhexura montivaga	E	4,500	
Arachnids	spider, Tooth Cave	Neoleptoneta myopica	E		
<b>Arachnids Total</b>				4500	
Crustaceans	amphipod, Hay's Spring	Stygobromus hayi	E		
Crustaceans	amphipod, Illinois cave	Gammarus acherondytes	E		
Crustaceans	amphipod, Peck's cave	Stygobromus pecki	E		
Crustaceans	crayfish, cave	Cambarus zophonastes	E		
Crustaceans	crayfish, cave	Cambarus aculabrum	E		
Crustaceans	crayfish, Nashville	Orconectes shoupi	E		
Crustaceans	crayfish, Shasta	Pacifastacus fortis	E		
Crustaceans	fairly shrimp, Conservancy	Branchinecta conservatio	E	500	
Crustaceans	fairly shrimp, longhorn	Branchinecta longiantenna	E	500	
Crustaceans	fairly shrimp, Riverside	Streptocephalus woottoni	E		
Crustaceans	fairly shrimp, San Diego	Branchinecta sandiegonensis	E		
Crustaceans	fairly shrimp, vernal pool	Branchinecta lynchi	T	1,000	
Crustaceans	isopod, Lee County cave	Lirceus usdagalun	E		
Crustaceans	isopod, Madison Cave	Antrolana lira	T		
Crustaceans	isopod, Socorro	Thermosphaeroma thermophilus	E		
Crustaceans	shrimp, Alabama cave	Palaemonias alabamiae	E		
Crustaceans	shrimp, California freshwater	Syncaris pacifica	E		
Crustaceans	shrimp, Kentucky cave	Palaemonias ganteri	E		
Crustaceans	shrimp, Squirrel Chimney Cave	Palaemonetes cummingi	T		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Crustaceans	tadpole shrimp, vernal pool	Lepidurus packardii	E	500	
<b>Crustaceans Total</b>				<b>2500</b>	
Flowering Plants	a'e	Zanthoxylum hawaiiense	E		
Flowering Plants	a'e	Zanthoxylum dipetalum tomentosum	E		
Flowering Plants	agave, Arizona	Agave arizonica	E	6,000	
Flowering Plants	'aiea	Nothoestrum breviflorum	E	18,000	
Flowering Plants	'aiea	Nothoestrum peltatum	E		
Flowering Plants	'akoko	Euphorbia haeleeleana	E		
Flowering Plants	'akoko	Chamaesyce rockii	E		
Flowering Plants	'akoko	Chamaesyce herbstii	E		
Flowering Plants	'akoko	Chamaesyce kuwaleana	E		
Flowering Plants	'akoko	Chamaesyce celastroides kaenana	E		
Flowering Plants	'akoko	Chamaesyce halemanui	E		
Flowering Plants	'akoko	Chamaesyce deppeana	E		
Flowering Plants	'akoko, Ewa Plains	Chamaesyce skottsbergii kalaeloana	E		
Flowering Plants	alani	Melicope saint-johnii	E		
Flowering Plants	alani	Melicope ovalis	E		
Flowering Plants	alani	Melicope adscendens	E		
Flowering Plants	alani	Melicope zahlbruckneri	E		
Flowering Plants	alani	Melicope reflexa	E		
Flowering Plants	alani	Melicope quadrangularis	E		
Flowering Plants	alani	Melicope pallida	E		
Flowering Plants	alani	Melicope munroi	E		
Flowering Plants	alani	Melicope balloui	E		
Flowering Plants	alani	Melicope knudsenii	E		
Flowering Plants	alani	Melicope lydgatei	E		
Flowering Plants	alani	Melicope mucronulata	E		
Flowering Plants	alani	Melicope haupeensis	E		
Flowering Plants	allocarya, Calistoga	Plagiobothrys strictus	E		
Flowering Plants	alopecurus, Sonoma	Alopecurus aequalis sonomensis	E		
Flowering Plants	amaranth, seabeach	Amaranthus pumilus	T		
Flowering Plants	ambrosia, south Texas	Ambrosia cheiranthifolia	E		
Flowering Plants	amphianthus, little	Amphianthus pusillus	T		
Flowering Plants	'anaunau	Lepidium arbuscula	E		
Flowering Plants	'anunu	Sicyos alba	E		
Flowering Plants	arrowhead, bunched	Sagittaria fasciculata	E		
Flowering Plants	aster, decurrent false	Boltonia decurrens	T		
Flowering Plants	aster, Florida golden	Chrysopsis floridana	E		
Flowering Plants	aster, Ruth's golden	Pityopsis ruthii	E	2,500	
Flowering Plants	aupaka	Isodendrion laurifolium	E		
Flowering Plants	aupaka	Isodendrion hosakae	E		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	aupaka	Isodendron longifolium	T		
Flowering Plants	avens, spreading	Geum radiatum	E	1,300	
Flowering Plants	'awikiwiki	Canavalia molokaiensis	E		
Flowering Plants	awiwi	Hedyotis cookiana	E		
Flowering Plants	awiwi	Centaurium sebaeoides	E		
Flowering Plants	ayenia, Texas	Ayenia limitaris	E		
Flowering Plants	Baccharis, Encinitas	Baccharis vanessae	T		
Flowering Plants	barberry, island	Berberis pinnata insularis	E		
Flowering Plants	barberry, Nevin's	Berberis nevinii	E		
Flowering Plants	barberry, Truckee	Berberis sonnei	E		
Flowering Plants	bariaco	Trichilia triacantha	E		
Flowering Plants	beaked-rush, Knieskern's	Rhynchospora knieskernii	T		
Flowering Plants	bear-poppy, dwarf	Arctomecon humilis	E		
Flowering Plants	beardtongue, Penland	Penstemon penlandii	E		
Flowering Plants	beargrass, Britton's	Nolina brittoniana	E		
Flowering Plants	beauty, Harper's	Harperocalis flava	E	11,000	
Flowering Plants	bedstraw, El Dorado	Galium californicum sierrae	E		
Flowering Plants	bedstraw, island	Galium buxifolium	E		
Flowering Plants	bellflower, Brooksville	Campanula robinsiae	E		
Flowering Plants	birch, Virginia round-leaf	Betula uber	T		
Flowering Plants	bird's beak, palmate-bracted	Cordylanthus palmatus	E		
Flowering Plants	bird's-beak, Pennell's	Cordylanthus tenuis capillaris	E		
Flowering Plants	bird's-beak, salt marsh	Cordylanthus maritimus maritimus	E		
Flowering Plants	bird's-beak, soft	Cordylanthus mollis mollis	E		
Flowering Plants	birds-in-a-nest, white	Macbridea alba	T	11,000	
Flowering Plants	bittercress, small-anthered	Cardamine micranthera	E		
Flowering Plants	bladderpod, Dudley Bluffs	Lesquerella congesta	T		
Flowering Plants	bladderpod, kodachrome	Lesquerella tumulosa	E		
Flowering Plants	bladderpod, lyrate	Lesquerella lyrata	T		
Flowering Plants	bladderpod, Missouri	Lesquerella filiformis	E		
Flowering Plants	bladderpod, San Bernardino Mountains	Lesquerella kingii bernardina	E	65,500	
Flowering Plants	bladderpod, Spring Creek	Lesquerella perforata	E		
Flowering Plants	bladderpod, white	Lesquerella pallida	E		
Flowering Plants	blazingstar, Ash Meadows	Mentzelia leucophylla	T		
Flowering Plants	blazingstar, Heller's	Liatris helleri	T	200	
Flowering Plants	blazingstar, scrub	Liatris ohlingerae	E		
Flowering Plants	blue-star, Kearney's	Amsonia kearneyana	E		
Flowering Plants	bluecurls, Hidden Lake	Trichostema austrorontanum compactum	T		
Flowering Plants	bluegrass, Hawaiian	Poa sandvicensis	E		
Flowering Plants	bluegrass, Mann's	Poa mannii	E		
Flowering Plants	bluegrass, Napa	Poa napensis	E		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	bluegrass, San Bernardino	<i>Poa atropurpurea</i>	E	28,500	
Flowering Plants	bluet, Roan Mountain	<i>Hedyotis purpurea montana</i>	E	500	
Flowering Plants	bonamia, Florida	<i>Bonamia grandiflora</i>	T		
Flowering Plants	boxwood, Vahl's	<i>Buxus vahlII</i>	E		
Flowering Plants	brodiaea, Chinese Camp	<i>Brodiaea pallida</i>	T		
Flowering Plants	brodiaea, thread-leaved	<i>Brodiaea filifolia</i>	T	8,000	
Flowering Plants	broom, San Clemente Island	<i>Lotus dendroideus traskiae</i>	E		
Flowering Plants	buckwheat, cushenbury	<i>Eriogonum ovalifolium vineum</i>	E	65,500	
Flowering Plants	buckwheat, lone	<i>Eriogonum apricum</i>	E		
Flowering Plants	buckwheat, scrub	<i>Eriogonum longifolium gnaphalifolium</i>	T		
Flowering Plants	buckwheat, steamboat	<i>Eriogonum ovalifolium williamsiae</i>	E		
Flowering Plants	bulrush, Northeastern	<i>Scirpus ancistrochaetus</i>	E	500	
Flowering Plants	bush-clover, prairie	<i>Lespedeza leptostachya</i>	T		
Flowering Plants	bush-mallow, San Clemente Island	<i>Malacothamnus clementinus</i>	E		
Flowering Plants	bush-mallow, Santa Cruz Island	<i>Malacothamnus fasciculatus nesioticus</i>	E		
Flowering Plants	buttercup, autumn	<i>Ranunculus acriformis aestivalis</i>	E		
Flowering Plants	butterweed, Layne's	<i>Senecio layneae</i>	T	1,300	
Flowering Plants	butterwort, Godfrey's	<i>Pinguicula ionantha</i>	T		
Flowering Plants	button, Mohr's Barbara	<i>Marshallia mohrii</i>	T		
Flowering Plants	button-celery, San Diego	<i>Eryngium aristulatum parishii</i>	E		
Flowering Plants	cactus, Arizona hedgehog	<i>Echinocereus triglochidiatus arizonicus</i>	E	6,500	
Flowering Plants	cactus, Bakersfield	<i>Opuntia treleasei</i>	E		
Flowering Plants	cactus, black lace	<i>Echinocereus reichenbachii albertii</i>	E		
Flowering Plants	cactus, Brady pincushion	<i>Pediocactus bradyi</i>	E		
Flowering Plants	cactus, Chisos Mtn. hedgehog	<i>Echinocereus chisoensis chisoensis</i>	T		
Flowering Plants	cactus, Cochise pincushion	<i>Coryphantha robbinsorum</i>	T		
Flowering Plants	cactus, Key tree	<i>Pilosocereus robinii</i>	E		
Flowering Plants	cactus, Knowlton	<i>Pediocactus knowltonii</i>	E		
Flowering Plants	cactus, Kuenzler hedgehog	<i>Echinocereus fendleri kuenzleri</i>	E	21,000	
Flowering Plants	cactus, Lee pincushion	<i>Coryphantha sneedii leei</i>	T		
Flowering Plants	cactus, Lloyd's hedgehog	<i>Echinocereus lloydii</i>	DR		
Flowering Plants	cactus, Lloyd's Mariposa	<i>Echinomastus mariposensis</i>	T		
Flowering Plants	cactus, Mesa Verde	<i>Sclerocactus mesae-verdae</i>	T		
Flowering Plants	cactus, Nellie cory	<i>Coryphantha minima</i>	E		
Flowering Plants	cactus, Nichol's Turk's head	<i>Echinocactus horizontalonius nicholii</i>	E		
Flowering Plants	cactus, Peebles Navajo	<i>Pediocactus peeblesianus peeblesianus</i>	E		
Flowering Plants	cactus, Pima pineapple	<i>Coryphantha scheeri robustispina</i>	E	7,500	
Flowering Plants	cactus, San Rafael	<i>Pediocactus despainii</i>	E	1,500	
Flowering Plants	cactus, Siler pincushion	<i>Pediocactus sileri</i>	T		
Flowering Plants	cactus, Sneed pincushion	<i>Coryphantha sneedii sneedii</i>	E		
Flowering Plants	cactus, star	<i>Astrophytum asterias</i>	E		



Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	cactus, Tobusch fishhook	Ancistrocactus tobuschii	E		
Flowering Plants	cactus, Unita Basin hookless	Sclerocactus glaucus	T	5,500	
Flowering Plants	cactus, Winkler	Pediocactus winkleri	T	300	
Flowering Plants	cactus, Wright fishhook	Sclerocactus wrightiae	E		
Flowering Plants	campion, fringed	Silene polypetala	E		
Flowering Plants	capa rosa	Callicarpa ampla	E	500	
Flowering Plants	cat's-eye, Terlingua Creek	Cryptantha crassipes	E		
Flowering Plants	ceanothus, coyote	Ceanothus ferrisae	E		
Flowering Plants	ceanothus, Pine Hill	Ceanothus roderickii	E		
Flowering Plants	ceanothus, Vail Lake	Ceanothus ophiochilus	T		
Flowering Plants	centaury, spring-loving	Centaurium namophilum	T		
Flowering Plants	chaff-flower, round-leaved	Achyranthes splendens rotundata	E		
Flowering Plants	chaffseed, American	Schwalbea americana	E	89,500	
Flowering Plants	checker-mallow, Kenwood Marsh	Sidalcea oregana valida	E		
Flowering Plants	checker-mallow, Nelson's	Sidalcea nelsoniana	T	500	
Flowering Plants	checker-mallow, pedate	Sidalcea pedata	E	32,500	
Flowering Plants	chupacallos	Pleodendron macranthum	E	500	
Flowering Plants	cinquefoil, Robbins'	Potentilla robbinsiana	E	2,000	
Flowering Plants	clarkia, Pismo	Clarkia speciosa immaculata	E		
Flowering Plants	clarkia, Presidio	Clarkia franciscana	E		
Flowering Plants	clarkia, Springville	Clarkia springvillensis	T	6,500	
Flowering Plants	clarkia, Vine Hill	Clarkia imbricata	E		
Flowering Plants	cliff-rose, Arizona	Purshia subintegra	E	20,500	
Flowering Plants	clover, Monterey	Trifolium trichocalyx	E		
Flowering Plants	clover, running buffalo	Trifolium stoloniferum	E	6,000	
Flowering Plants	clover, showy Indian	Trifolium amoenum	E		
Flowering Plants	cobana negra	Stahlia monosperma	T		
Flowering Plants	coneflower, smooth	Echinacea laevigata	E	6,500	
Flowering Plants	coneflower, Tennessee purple	Echinacea tennesseensis	E		
Flowering Plants	cory cactus, bunched	Coryphantha ramillosa	T		
Flowering Plants	cress, toad-flax	Schoenocrambe suffrutescens	E		
Flowering Plants	crownbeard, big-leaved	Verbesina dissita	T		
Flowering Plants	crownscale, San Jacinto Valley	Atriplex coronata notatior	E		
Flowering Plants	cycladenia, Jones	Cycladenia humilis jonesii	T		
Flowering Plants	daisy, lakeside	Hymenoxys herbacea	T	6,000	
Flowering Plants	daisy, Maguire	Erigeron maguirei	T		
Flowering Plants	daisy, Parish's	Erigeron parishii	T	65,500	
Flowering Plants	dawn-flower, Texas prairie	Hymenoxys texana	E		
Flowering Plants	dogweed, ashy	Thymophylla tephroleuca	E		
Flowering Plants	dropwort, Canby's	Oxypolis canbyi	E	1,000	
Flowering Plants	dudleya, Conejo	Dudleya abramsii parva	T		

Feder Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	dudleya, marcescent	Dudleya cymosa marcescens	T		
Flowering Plants	dudleya, Santa Clara Valley	Dudleya setchellii	E		
Flowering Plants	dudleya, Santa Cruz Island	Dudleya nesiotica	T		
Flowering Plants	dudleya, Verity's	Dudleya verityi	T		
Flowering Plants	dudleyea, Santa Monica Mountains	Dudleya cymosa ovatifolia	T	6,000	
Flowering Plants	dwarf-flax, Marin	Hesperolinon congestum	T		
Flowering Plants	erubia	Solanum dryophilum	E		
Flowering Plants	evening-primrose, Antioch Dunes	Oenothera deltoides howellii	E		
Flowering Plants	evening-primrose, Eureka Valley	Oenothera avita eurekaensis	E		
Flowering Plants	evening-primrose, San Benito	Camissonia benitensis	T		
Flowering Plants	fiddleneck, large-flowered	Amsinckia grandiflora	E		
Flowering Plants	flannelbush, Mexican	Fremontodendron mexicanum	E		
Flowering Plants	flannelbush, Pine Hill	Fremontodendron californicum decumbens	E		
Flowering Plants	fleabane, Zuni	Erigeron rhizomatus	T	5,000	
Flowering Plants	four-o'clock, MacFarlane's	Mirabilis macfarlanei	T	11,000	
Flowering Plants	frankenia, Johnston's	Frankenia johnstonii	E		
Flowering Plants	fringe-tree, pygmy	Chionanthus pygmaeus	E		
Flowering Plants	fringepod, Santa Cruz Island	Thysanocarpus conchuliferus	E		
Flowering Plants	gardenia, Hawaiian	Gardenia brighamii	E		
Flowering Plants	geranium, Hawaiian red-flowered	Geranium arboreum	E		
Flowering Plants	gerardia, sandplain	Agalinis acuta	E		
Flowering Plants	gilia, Hoffmann's slender-flowered	Gilia tenuiflora hoffmannii	E		
Flowering Plants	gilia, Monterey	Gilia tenuiflora arenaria	E		
Flowering Plants	goetzea, beautiful	Goetzea elegans	E		
Flowering Plants	goldenrod, Blue Ridge	Solidago spithamaea	T	400	
Flowering Plants	goldenrod, Houghton's	Solidago houghtonii	T		
Flowering Plants	goldenrod, Short's	Solidago shortii	E		
Flowering Plants	goldenrod, white-haired	Solidago albopilosa	T		
Flowering Plants	goldfields, Burke's	Lasthenia burkei	E		
Flowering Plants	goldfields, Contra Costa	Lasthenia conjugens	E		
Flowering Plants	gooseberry, Miccosukee	Ribes echinellum	T	300	
Flowering Plants	gourd, Okeechobee	Cucurbita okeechobeensis okeechobeensis	E		
Flowering Plants	grass, California Orcutt	Orcuttia californica	E		
Flowering Plants	grass, Colusa	Neostapfia colusana	T		
Flowering Plants	grass, Eureka Dune	Swallenia alexandrae	E		
Flowering Plants	grass, Solano	Tuctoria mucronata	E		
Flowering Plants	grass, Tennessee yellow-eyed	Xyris tennesseensis	E		
Flowering Plants	ground-plum, Pyne's	Astragalus bibullatus	E		
Flowering Plants	groundsel, San Francisco Peaks	Senecio franciscanus	T	100	
Flowering Plants	gumplant, Ash Meadows	Grindelia fraxino-pratensis	T		
Flowering Plants	haha	Cyanea humboldtiana	E		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	haha	Cyanea grimesiana grimesiana	E		
Flowering Plants	haha	Cyanea pinnatifida	E		
Flowering Plants	haha	Cyanea hamatiflora hamatiflora	E		
Flowering Plants	haha	Cyanea mannii	E		
Flowering Plants	haha	Cyanea glabra	E		
Flowering Plants	haha	Cyanea dunbarii	E		
Flowering Plants	haha	Cyanea copelandii copelandii	E		
Flowering Plants	haha	Cyanea asarifolia	E		
Flowering Plants	haha	Cyanea macrostegia gibsonii	E		
Flowering Plants	haha	Cyanea lobata	E		
Flowering Plants	haha	Cyanea hamatiflora carlsonii	E		
Flowering Plants	haha	Cyanea grimesiana obatae	E		
Flowering Plants	haha	Cyanea copelandii haleakalaensis	E		
Flowering Plants	haha	Cyanea longiflora	E		
Flowering Plants	haha	Cyanea koolauensis	E		
Flowering Plants	haha	Cyanea remyi	E		
Flowering Plants	haha	Cyanea acuminata	E		
Flowering Plants	haha	Cyanea undulata	E		
Flowering Plants	haha	Cyanea truncata	E		
Flowering Plants	haha	Cyanea recta	T		
Flowering Plants	haha	Cyanea procera	E		
Flowering Plants	haha	Cyanea stictophylla	E		
Flowering Plants	haha	Cyanea platyphylla	E		
Flowering Plants	haha	Cyanea shipmannii	E	10,000	
Flowering Plants	haha	Cyanea st-johnii	E		
Flowering Plants	haha	Cyanea superba	E		
Flowering Plants	haha	Cyanea mceldowneyi	E		
Flowering Plants	haha	Cyanea crispa	E		
Flowering Plants	ha'iwale	Cyrtandra dentata	E		
Flowering Plants	ha'iwale	Cyrtandra viridiflora	E		
Flowering Plants	ha'iwale	Cyrtandra tintinnabula	E		
Flowering Plants	ha'iwale	Cyrtandra limahuliensis	T		
Flowering Plants	ha'iwale	Cyrtandra munroi	E		
Flowering Plants	ha'iwale	Cyrtandra giffardii	E		
Flowering Plants	ha'iwale	Cyrtandra crenata	E		
Flowering Plants	ha'iwale	Cyrtandra subumbellata	E		
Flowering Plants	ha'iwale	Cyrtandra polyantha	E		
Flowering Plants	hala pepe	Pleomele hawaiiensis	E	18,000	
Flowering Plants	harebells, Avon Park	Crotalaria avonensis	E		
Flowering Plants	harperella	Ptilimnium nodosum	E	4,000	
Flowering Plants	hau kuahiwi	Hibiscadelphus giffardianus	E		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	hau kuahiwi	Hibiscadelphus hualalaiensis	E		
Flowering Plants	hau kuahiwi	Hibiscadelphus woodii	E		
Flowering Plants	heartleaf, dwarf-flowered	Hexastylis naniflora	T	200	
Flowering Plants	heather, mountain golden	Hudsonia montana	T	6,500	
Flowering Plants	heau	Exocarpos luteolus	E		
Flowering Plants	hedyotis, Na Pali beach	Hedyotis st.-johnii	E		
Flowering Plants	hibiscus, Clay's	Hibiscus clayi	E		
Flowering Plants	higo, chumbo	Harrisia portoricensis	T		
Flowering Plants	higuero de sierra	Crescentia portoricensis	E		
Flowering Plants	holei	Ochrosia kilaueaensis	E		
Flowering Plants	holly, Cook's	Ilex cookii	E		
Flowering Plants	Honohono	Haplostachys haplostachya	E		
Flowering Plants	howellia, water	Howellia aquatilis	T	33,000	
Flowering Plants	hypericum, highlands scrub	Hypericum cumulicola	E		
Flowering Plants	iliau, dwarf	Wilkesia hobbayi	E		
Flowering Plants	indian paintbrush, San Clemente Island	Castilleja grisea	E		
Flowering Plants	ipomopsis, Holy Ghost	Ipomopsis sancti-spiritus	E	500	
Flowering Plants	iris, dwarf lake	Iris lacustris	T		
Flowering Plants	irisette, white	Sisyrinchium dichotomum	E		
Flowering Plants	ischaemum, Hilo	Ischaemum byrone	E		
Flowering Plants	ivesia, Ash Meadows	Ivesia kingii eremica	T		
Flowering Plants	jacquemontia, beach	Jacquemontia reclinata	E		
Flowering Plants	jewelflower, California	Caulanthus californicus	E	2,000	
Flowering Plants	jewelflower, Metcalf Canyon	Streptanthus albidus albidus	E		
Flowering Plants	jewelflower, Tiburon	Streptanthus niger	E		
Flowering Plants	joint-vetch, sensitive	Aeschynomene virginica	T		
Flowering Plants	kamakahala	Labordia triflora	E		
Flowering Plants	kamakahala	Labordia tinifolia lanaiensis	E		
Flowering Plants	kamakahala	Labordia cyrtandrae	E		
Flowering Plants	kamakahala	Labordia tinifolia wahiawaensis	E		
Flowering Plants	kamakahala	Labordia lydgatei	E		
Flowering Plants	kauai hau kuahiwi	Hibiscadelphus distans	E		
Flowering Plants	kaula	Colubrina oppositifolia	E		
Flowering Plants	kaulu	Pteralyxia kauaiensis	E		
Flowering Plants	ki'o'ele	Hedyotis coriacea	E		
Flowering Plants	kiponapona	Phyllostegia racemosa	E	10,000	
Flowering Plants	kohe malama malama o kanaloa	Kanaloa kahoolawensis	E		
Flowering Plants	koki'o	Kokia drynarioides	E	18,000	
Flowering Plants	koki'o ke'oke'o	Hibiscus waimeae hannerae	E		
Flowering Plants	koki'o ke'oke'o	Hibiscus arnottianus immaculatus	E		
Flowering Plants	koki'o, (=Cooke's koki'o)	Kokia cookei	E		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	koki'o, (=Kaua'i koki'o)	<i>Kokia kauaiensis</i>	E		
Flowering Plants	kolea	<i>Myrsine linearifolia</i>	T		
Flowering Plants	kolea	<i>Myrsine juddii</i>	E		
Flowering Plants	ko'oko'olau	<i>Bidens micrantha kalealaha</i>	E		
Flowering Plants	ko'oko'olau	<i>Bidens wiebkei</i>	E		
Flowering Plants	ko'oloa'ula	<i>Abutilon menziesii</i>	E		
Flowering Plants	Kopa	<i>Hedyotis schlechtendahlana remyi</i>	E		
Flowering Plants	kuahiwi laukahi	<i>Plantago princeps</i>	E		
Flowering Plants	kuahiwi laukahi	<i>Plantago hawaiensis</i>	E		
Flowering Plants	kuawawaenohu	<i>Alsindendron lychnoides</i>	E		
Flowering Plants	kula wahine noho	<i>Isodendron pyriform</i>	E		
Flowering Plants	kulu'i	<i>Nototrichium humile</i>	E		
Flowering Plants	ladies'-tresses, Canelo Hills	<i>Spiranthes delitescens</i>	E	4,000	
Flowering Plants	ladies'-tresses, Navasota	<i>Spiranthes parksii</i>	E	3,000	
Flowering Plants	ladies'-tresses, Ute	<i>Spiranthes diluvialis</i>	T	152,500	
Flowering Plants	Lagu, Hyan	<i>Serianthes nelsonii</i>	E		
Flowering Plants	larkspur, San Clemente Island	<i>Delphinium variegatum kinkiense</i>	E		
Flowering Plants	lau'ehu	<i>Panicum nihauense</i>	E		
Flowering Plants	lauhilihi, (=Ma'oli'oli)	<i>Schiedea stellarioides</i>	E		
Flowering Plants	layia, beach	<i>Layia camosa</i>	E		
Flowering Plants	lead-plant, Crenulate	<i>Amorpha crenulata</i>	E		
Flowering Plants	leather flower, Alabama	<i>Clematis socialis</i>	E		
Flowering Plants	leather flower, Morefield's	<i>Clematis morefieldii</i>	E		
Flowering Plants	lessingia, San Francisco	<i>Lessingia germanorum</i>	E		
Flowering Plants	liliwai	<i>Acaena exigua</i>	E		
Flowering Plants	lily, Minnesota dwarf trout	<i>Erythronium propullans</i>	E		
Flowering Plants	lily, Pitkin Marsh	<i>Lilium pardalinum pitkinense</i>	E		
Flowering Plants	lily, Western	<i>Lilium occidentale</i>	E	500	
Flowering Plants	liveforever, Laguna Beach	<i>Dudleya stolonifera</i>	T		
Flowering Plants	liveforever, Santa Barbara Island	<i>Dudleya taskiae</i>	E		
Flowering Plants	locoweed, Fassett's	<i>Oxytropis campestris chartacea</i>	T	5,000	
Flowering Plants	lomatium, Bradshaw's	<i>Lomatium bradshawii</i>	E		
Flowering Plants	loosestrife, rough-leaved	<i>Lysimachia asperulaefolia</i>	E		
Flowering Plants	lo'ulu	<i>Pritchardia remota</i>	E		
Flowering Plants	lo'ulu	<i>Pritchardia viscosa</i>	E		
Flowering Plants	lo'ulu	<i>Pritchardia napaliensis</i>	E		
Flowering Plants	lo'ulu	<i>Pritchardia affinis</i>	E		
Flowering Plants	lo'ulu	<i>Pritchardia schattaueri</i>	E		
Flowering Plants	lo'ulu	<i>Pritchardia kaalae</i>	E		
Flowering Plants	lo'ulu	<i>Pritchardia munroi</i>	E		
Flowering Plants	lo'ulu, (=wahane)	<i>Pritchardia aylmer-robinsonii</i>	E		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	lousewort, Furbish	Pedicularis furbishiae	E		
Flowering Plants	love grass, Fosberg's	Eragrostis fosbergii	E		
Flowering Plants	lupine, clover	Lupinus tidestromii	E		
Flowering Plants	lupine, scrub	Lupinus aridorum	E		
Flowering Plants	mahoe	Alectryon macrococcus	E		
Flowering Plants	makou	Peucedanum sandwicense	T		
Flowering Plants	malacothrix, island	Malacothrix squalida	E		
Flowering Plants	Malacothrix, Santa Cruz Island	Malacothrix indecora	E		
Flowering Plants	mallow, Kern	Eremalche kernensis	E		
Flowering Plants	mallow, Peter's Mountain	Iliamna corei	E	2,000	
Flowering Plants	manaca, palma de	Calyptronoma rivalis	T		
Flowering Plants	manioc, Walker's	Manihot walkerae	E		
Flowering Plants	manzanita, Del Mar	Arctostaphylos glandulosa crassifolia	E		
Flowering Plants	manzanita, lone	Arctostaphylos myrtifolia	T		
Flowering Plants	manzanita, Morro	Arctostaphylos morroensis	T		
Flowering Plants	manzanita, pallid	Arctostaphylos pallida	T		
Flowering Plants	Manzanita, Presidio	Arctostaphylos hookeri ravenii	E		
Flowering Plants	manzanita, Santa Rosa Island	Arctostaphylos confertiflora	E		
Flowering Plants	ma' o hau hele, (=native yellow hibiscus)	Hibiscus brackenridgei	E		
Flowering Plants	ma' oli' oli	Schiedea kealiae	E		
Flowering Plants	ma' oli' oli	Schiedea apokremnos	E		
Flowering Plants	mapele	Cyrtandra cyaneoides	E		
Flowering Plants	mariposa lily, Tiburon	Calochortus tiburonensis	T		
Flowering Plants	maua	Xylosma crenatum	E		
Flowering Plants	meadowfoam, Butte County	Limnanthes floccosa californica	E		
Flowering Plants	meadowfoam, Sebastopol	Limnanthes vinculans	E		
Flowering Plants	meadowrue, Cooley's	Thalictrum cooleyi	E		
Flowering Plants	mehamehame	Flueggea neowawraea	E		
Flowering Plants	mesa-mint, Otay	Pogogyne nudiuscula	E		
Flowering Plants	mesa-mint, San Diego	Pogogyne abramsii	E		
Flowering Plants	milk-vetch, Applegate's	Astragalus applegatei	E		
Flowering Plants	milk-vetch, Ash meadows	Astragalus phoenix	T		
Flowering Plants	milk-vetch, Braunton's	Astragalus brauntonii	E		
Flowering Plants	milk-vetch, Clara Hunt's	Astragalus clarianus	E		
Flowering Plants	milk-vetch, Coachella Valley	Astragalus lentiginosus coachellae	E	1,000	
Flowering Plants	milk-vetch, coastal dunes	Astragalus tener titi	E		
Flowering Plants	milk-vetch, Cushenbury	Astragalus albens	E	65,500	
Flowering Plants	milk-vetch, Fish Slough	Astragalus lentiginosus piscinensis	T		
Flowering Plants	milk-vetch, heliotrope	Astragalus montii	T	1,000	
Flowering Plants	milk-vetch, Jesup's	Astragalus robbinsii jesupi	E		
Flowering Plants	milk-vetch, Lane Mountain	Astragalus jaegerianus	E		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	milk-vetch, Mancos	Astragalus humillimus	E		
Flowering Plants	milk-vetch, Osterhout	Astragalus osterhoutii	E		
Flowering Plants	milk-vetch, Peirson's	Astragalus magdalenae peirsonii	T		
Flowering Plants	milk-vetch, Sentry	Astragalus cremnophylax cremnophylax	E		
Flowering Plants	milk-vetch, triple-ribbed	Astragalus tricarinatus	E		
Flowering Plants	milkpea, Small's	Galactia smallii	E		
Flowering Plants	milkweed, Mead's	Asclepias meadii	T	7,500	
Flowering Plants	milkweed, Welsh's	Asclepias welshii	T		
Flowering Plants	mint, Garrett's	Dicerandra christmanii	E		
Flowering Plants	mint, Lakela's	Dicerandra immaculata	E		
Flowering Plants	mint, longspurred	Dicerandra comutissima	E		
Flowering Plants	mint, scrub	Dicerandra frutescens	E		
Flowering Plants	monardella, willow	Monardella linoides viminea	E		
Flowering Plants	monkey-flower, Michigan	Mimulus glabratus michiganensis	E		
Flowering Plants	monkshood, northern wild	Aconitum noveboracense	T		
Flowering Plants	morning-glory, Stebbins'	Calystegia stebbinsii	E		
Flowering Plants	mountain balm, Indian Knob	Eriodictyon altissimum	E		
Flowering Plants	mountain-mahogany, Catalina Island	Cercocarpus traskiae	E		
Flowering Plants	mustard, Carter's	Warea carteri	E		
Flowering Plants	mustard, Penland alpine fen	Eutrema penlandii	T	1,000	
Flowering Plants	mustard, slender-petaled	Thelypodium stenopetalum	E	29,500	
Flowering Plants	na'ena'e	Dubautia latifolia	E		
Flowering Plants	na'ena'e	Dubautia plantaginea humilis	E		
Flowering Plants	na'ena'e	Dubautia pauciflora	E		
Flowering Plants	na'ena'e	Dubautia herbstobatae	E		
Flowering Plants	nani wai'ale'ale	Viola kauaiensis wahiawaensis	E		
Flowering Plants	nanu	Gardenia manni	E		
Flowering Plants	naupaka, dwarf	Scaevola coriacea	E		
Flowering Plants	navarretia, few-flowered	Navarretia leucocephala pauciflora	E		
Flowering Plants	navarretia, many-flowered	Navarretia leucocephala plieantha	E		
Flowering Plants	navarretia, spreading	Navarretia fossalis	T		
Flowering Plants	nehe	Lipochaeta fauriei	E		
Flowering Plants	nehe	Lipochaeta waimeaensis	E		
Flowering Plants	nehe	Lipochaeta tenuifolia	E		
Flowering Plants	nehe	Lipochaeta lobata leptophylla	E		
Flowering Plants	nehe	Lipochaeta kamolensis	E		
Flowering Plants	nehe	Lipochaeta micrantha	E		
Flowering Plants	nehe	Lipochaeta venosa	E		
Flowering Plants	nioi	Eugenia koolauensis	E		
Flowering Plants	niterwort, Amargosa	Nitrophila mohavensis	E		
Flowering Plants	No common name	Achyranthes mutica	E		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	No common name	Bonamia menziesii	E	9,000	
Flowering Plants	No common name	Schiedea sarmentosa	E		
Flowering Plants	No common name	Schiedea membranacea	E		
Flowering Plants	No common name	Schiedea hookeri	E		
Flowering Plants	No common name	Sanicula purpurea	E		
Flowering Plants	No common name	Phyllostegia parviflora	E		
Flowering Plants	No common name	Phyllostegia knudsenii	E		
Flowering Plants	No common name	Phyllostegia hirsuta	E		
Flowering Plants	No common name	Lobelia gaudichaudii koolauensis	E		
Flowering Plants	No common name	Neraudia ovata	E		
Flowering Plants	No common name	Hesperomannia arbuscula	E		
Flowering Plants	No common name	Hesperomannia arborescens	E		
Flowering Plants	No common name	Hedyotis parvula	E		
Flowering Plants	No common name	Hedyotis degeneri	E		
Flowering Plants	No common name	Gouania vitifolia	E		
Flowering Plants	No common name	Gouania meyenii	E		
Flowering Plants	No common name	Gouania hillebrandii	E		
Flowering Plants	No common name	Geocarpon minimum	T		
Flowering Plants	No common name	Gahnia lanaiensis	E		
Flowering Plants	No common name	Phyllostegia kaalaensis	E		
Flowering Plants	No common name	Eugenia woodburyana	E		
Flowering Plants	No common name	Phyllostegia mannii	E		
Flowering Plants	No common name	Ilex sintensisii	E	500	
Flowering Plants	No common name	Cranichis ricartii	E		
Flowering Plants	No common name	Vernonia proctorii	E		
Flowering Plants	No common name	Trematolobelia singularis	E		
Flowering Plants	No common name	Stenogyne campanulata	E		
Flowering Plants	No common name	Stenogyne bifida	E		
Flowering Plants	No common name	Spermolepis hawaiiensis	E		
Flowering Plants	No common name	Silene perlmanii	E		
Flowering Plants	No common name	Schiedea nuttallii	E		
Flowering Plants	No common name	Schiedea kauaiensis	E		
Flowering Plants	No common name	Sanicula mariversa	E		
Flowering Plants	No common name	Phyllostegia wawrana	E		
Flowering Plants	No common name	Phyllostegia warshaueri	E		
Flowering Plants	No common name	Phyllostegia velutina	E		
Flowering Plants	No common name	Phyllostegia waimeae	E		
Flowering Plants	No common name	Mariscus fauriei	E		
Flowering Plants	No common name	Lysimachia maxima	E		
Flowering Plants	No common name	Lysimachia lydgatei	E		
Flowering Plants	No common name	Lyonia truncata proctorii	E		



Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	No common name	Leptocereus grantianus	E		
Flowering Plants	No common name	Catesbaea melanocarpa	E		
Flowering Plants	No common name	Auerodendron pauciflorum	E		
Flowering Plants	No common name	Aristida chaseae	E		
Flowering Plants	No common name	Remya montgomeryi	E		
Flowering Plants	No common name	Alsinidendron viscosum	E		
Flowering Plants	No common name	Schoepfia arenaria	T		
Flowering Plants	No common name	Schiedea spergulina spergulina	T		
Flowering Plants	No common name	Schiedea spergulina leiopoda	E		
Flowering Plants	No common name	Schiedea lydgatei	E		
Flowering Plants	No common name	Schiedea helleri	E		
Flowering Plants	No common name	Schiedea haleakalensis	E		
Flowering Plants	No common name	Gesneria pauciflora	T		
Flowering Plants	No common name	Myrcia paganii	E		
Flowering Plants	No common name	Mariscus pennatiformis	E		
Flowering Plants	No common name	Temstroemia subsessilis	E		
Flowering Plants	No common name	Silene hawaiiensis	T		
Flowering Plants	No common name	Poa siphonoglossa	E		
Flowering Plants	No common name	Platanthera holochila	E		
Flowering Plants	No common name	Phyllostegia mollis	E		
Flowering Plants	No common name	Mitracarpus polycladus	E		
Flowering Plants	No common name	Mitracarpus maxwelliae	E		
Flowering Plants	No common name	Lysimachia filifolia	E		
Flowering Plants	No common name	Lobelia monostachya	E		
Flowering Plants	No common name	Lepanthes eltoroensis	E	500	
Flowering Plants	No common name	Daphnopsis hellerana	E		
Flowering Plants	No common name	Cordia bellonis	E		
Flowering Plants	No common name	Chamaecrista glandulosa mirabilis	E		
Flowering Plants	No common name	Calyptanthes thomasiana	E		
Flowering Plants	No common name	Viola oahuensis	E		
Flowering Plants	No common name	Viola lanaiensis	E		
Flowering Plants	No common name	Viola helenae	E		
Flowering Plants	No common name	Vigna o-wahuensis	E		
Flowering Plants	No common name	Tetramolopium rockii	T		
Flowering Plants	No common name	Tetramolopium remyi	E		
Flowering Plants	No common name	Tetramolopium lepidotum lepidotum	E		
Flowering Plants	No common name	Tetramolopium filiforme	E		
Flowering Plants	No common name	Tetramolopium arenarium	E		
Flowering Plants	No common name	Stenogyne kanehoana	E		
Flowering Plants	No common name	Stenogyne angustifolia angustifolia	E		
Flowering Plants	No common name	Silene lanceolata	E		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	No common name	<i>Silene alexandri</i>	E		
Flowering Plants	No common name	<i>Schiedea kaalae</i>	E		
Flowering Plants	No common name	<i>Remya kauaiensis</i>	E		
Flowering Plants	No common name	<i>Phyllostegia glabra lanaiensis</i>	E		
Flowering Plants	No common name	<i>Neraudia sericea</i>	E		
Flowering Plants	No common name	<i>Neraudia angulata</i>	E		
Flowering Plants	No common name	<i>Munroidendron racemosum</i>	E		
Flowering Plants	No common name	<i>Lobelia oahuensis</i>	E		
Flowering Plants	No common name	<i>Lobelia niihauensis</i>	E		
Flowering Plants	No common name	<i>Hesperomannia lydgatei</i>	E		
Flowering Plants	No common name	<i>Alsinidendron trinerve</i>	E		
Flowering Plants	No common name	<i>Alsinidendron obovatum</i>	E		
Flowering Plants	No common name	<i>Abutilon sandwicense</i>	E		
Flowering Plants	No common name	<i>Abutilon eremitopetalum</i>	E		
Flowering Plants	No common name	<i>Schiedea verticillata</i>	E		
Flowering Plants	No common name	<i>Amaranthus brownii</i>	E		
Flowering Plants	nohoanu	<i>Geranium multiflorum</i>	E		
Flowering Plants	oak, Hinckley	<i>Quercus hinckleyi</i>	T		
Flowering Plants	oha	<i>Delissea rivularis</i>	E		
Flowering Plants	oha	<i>Delissea undulata</i>	E		
Flowering Plants	oha	<i>Delissea subcordata</i>	E		
Flowering Plants	oha	<i>Delissea rhytidosperra</i>	E		
Flowering Plants	oha wai	<i>Clermontia drepanomorpha</i>	E		
Flowering Plants	oha wai	<i>Clermontia peleana</i>	E		
Flowering Plants	oha wai	<i>Clermontia oblongifolia brevipes</i>	E		
Flowering Plants	oha wai	<i>Clermontia samuelii</i>	E		
Flowering Plants	oha wai	<i>Clermontia oblongifolia mauiensis</i>	E		
Flowering Plants	oha wai	<i>Clermontia pyrularia</i>	E	10,000	
Flowering Plants	oha wai	<i>Clermontia lindseyana</i>	E	10,000	
Flowering Plants	ohai	<i>Sesbania tomentosa</i>	E		
Flowering Plants	ohe'ohe	<i>Tetraplasandra gymnocarpa</i>	E		
Flowering Plants	olulu	<i>Brighamia insignis</i>	E		
Flowering Plants	onion, Munz's	<i>Allium munzii</i>	E	10,000	
Flowering Plants	opuhe	<i>Urera kaalae</i>	E		
Flowering Plants	orchid, eastern prairie fringed	<i>Platanthera leucophaea</i>	T		
Flowering Plants	orchid, western prairie fringed	<i>Platanthera praeclara</i>	T	149,000	
Flowering Plants	orcutt grass, Greene's	<i>Tuctoria greenei</i>	E	1,600	
Flowering Plants	orcutt grass, hairy	<i>Orcuttia pilosa</i>	E		
Flowering Plants	orcutt grass, Sacramento	<i>Orcuttia viscida</i>	E		
Flowering Plants	orcutt grass, San Joaquin	<i>Orcuttia inaequalis</i>	T		
Flowering Plants	orcutt grass, slender	<i>Orcuttia tenuis</i>	T	15,500	

**Federal Listed Endangered and Threatened Wildlife and Plants**  
**As of Fiscal Year 1999 (September 30, 1999)**

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	owl's-clover, fleshy	Castilleja campestris succulenta	T		
Flowering Plants	oxytheca, cushenbury	Oxytheca parishii goodmaniana	E	65,500	
Flowering Plants	paintbrush, ash-grey	Castilleja cinerea	T		
Flowering Plants	paintbrush, golden	Castilleja levisecta	T		
Flowering Plants	paintbrush, soft-leaved	Castilleja mollis	E		
Flowering Plants	paintbrush, Tiburon	Castilleja affinis neglecta	E		
Flowering Plants	palo Colorado	Temstroemia luquillensis	E	500	
Flowering Plants	palo de jazmin	Styrax portoricensis	E	500	
Flowering Plants	palo de nigua	Cornutia obovata	E		
Flowering Plants	palo de ramon	Banara vanderbiltii	E		
Flowering Plants	palo de rosa	Ottoschulzia rhodoxylon	E		
Flowering Plants	pamakani	Tetramolopium capillare	E		
Flowering Plants	pamakani	Viola chamissoniana chamissoniana	E		
Flowering Plants	panicgrass, Carter's	Panicum fauriei carteri	E		
Flowering Plants	pau'ala, (=alulu)	Brighamia rockii	E		
Flowering Plants	pawpaw, beautiful	Deeringothamnus pulchellus	E		
Flowering Plants	pawpaw, four-petal	Asimina tetramera	E		
Flowering Plants	pawpaw, Rugel's	Deeringothamnus rugelii	E		
Flowering Plants	pelos del diablo	Aristida portoricensis	E		
Flowering Plants	pennyroyal, Todsens	Hedeoma todsenii	E	500	
Flowering Plants	penstemon, blowout	Penstemon haydenii	E	1,000	
Flowering Plants	pentachaeta, Lyon's	Pentachaeta lyonii	E		
Flowering Plants	pentachaeta, white-rayed	Pentachaeta bellidiflora	E		
Flowering Plants	peperomia, Wheeler's	Peperomia wheeleri	E		
Flowering Plants	phacelia, clay	Phacelia argillacea	E	2,000	
Flowering Plants	phacelia, island	Phacelia insularis insularis	E		
Flowering Plants	phacelia, North Park	Phacelia formosula	E		
Flowering Plants	phlox, Texas trailing	Phlox nivalis texensis	E		
Flowering Plants	pigeon wings	Clitoria fragrans	T		
Flowering Plants	pilo	Hedyotis mannii	E		
Flowering Plants	pink, swamp	Helonias bullata	T	1,600	
Flowering Plants	pinkroot, gentian	Spigelia gentianoides	E		
Flowering Plants	piperia, Yador's	Piperia yadonii	E		
Flowering Plants	pitaya, Davis' green	Echinocereus viridiflorus davisii	E		
Flowering Plants	pitcher-plant, Alabama canebrake	Sarracenia rubra alabamensis	E		
Flowering Plants	pitcher-plant, green	Sarracenia oreophila	E	200	
Flowering Plants	pitcher-plant, mountain sweet	Sarracenia rubra jonesii	E		
Flowering Plants	plum, scrub	Prunus geniculata	E		
Flowering Plants	po'e	Portulaca sclerocarpa	E		
Flowering Plants	pogonia, small whorled	Isotria medeoloides	T	7,900	
Flowering Plants	polygala, Lewton's	Polygala lewtonii	E	3,000	

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	polygala, tiny	Polygala smallii	E		
Flowering Plants	pondberry	Lindera melissifolia	E	112,000	
Flowering Plants	pondweed, Little Aguja Creek	Potamogeton clystocarpus	E		
Flowering Plants	popolo 'aiakeakua	Solanum sandwicense	E		
Flowering Plants	popolo ku mai	Solanum incompletum	E		
Flowering Plants	poppy, Sacramento prickly	Argemone pleiacantha pinnatisecta	E	500	
Flowering Plants	poppy-mallow, Texas	Callirhoe scabruscula	E		
Flowering Plants	potato-bean, Price's	Apios priceana	T	5,000	
Flowering Plants	potentilla, Hickman's	Potentilla hickmanii	E		
Flowering Plants	prairie-clover, leafy	Dalea foliosa	E		
Flowering Plants	prickly-apple, fragrant	Cereus eriophorus fragrans	E		
Flowering Plants	prickly-ash, St. Thomas	Zanthoxylum thomsonianum	E		
Flowering Plants	primrose, Maguire	Primula maguirei	T		
Flowering Plants	pussypaws, Mariposa	Calyptidium pulchellum	T	600	
Flowering Plants	pu'uka'a	Cyperus trachysanthos	E		
Flowering Plants	rattleweed, hairy	Baptisia arachnifera	E		
Flowering Plants	reed-mustard, Barneby	Schoenocrambe barnebyi	E		
Flowering Plants	reed-mustard, clay	Schoenocrambe argillacea	T		
Flowering Plants	remya, Maui	Remya mauiensis	E		
Flowering Plants	rhododendron, Chapman	Rhododendron chapmanii	E		
Flowering Plants	ridge-cress, Barneby	Lepidium barnebyanum	E		
Flowering Plants	rock-cress, Braun's	Arabis perstellata	E		
Flowering Plants	rock-cress, Hoffmann's	Arabis hoffmannii	E		
Flowering Plants	rock-cress, McDonald's	Arabis mcdonaldiana	E	10,000	
Flowering Plants	rock-cress, shale barren	Arabis serotina	E	2,500	
Flowering Plants	rockcress, Santa Cruz Island	Sibara filifolia	E		
Flowering Plants	rosemary, Apalachicola	Conradina glabra	E		
Flowering Plants	rosemary, Cumberland	Conradina verticillata	T	600	
Flowering Plants	rosemary, Etonia	Conradina etonia	E		
Flowering Plants	rosemary, short-leaved	Conradina brevifolia	E		
Flowering Plants	roseroot, Leedy's	Sedum integrifolium leedyi	T		
Flowering Plants	rush-pea, slender	Hoffmannseggia tenella	E		
Flowering Plants	rush-rose, island	Helianthemum greenei	T		
Flowering Plants	sand-verbena, large-fruited	Abronia macrocarpa	E		
Flowering Plants	sandalwood, Lanai or 'iliahi	Santalum freycinetianum lanaiense	E		
Flowering Plants	sandbur, agrimony or Kamanomano	Cenchrus agrimonioides	E		
Flowering Plants	sandlace	Polygonella myriophylla	E		
Flowering Plants	sandwort, Bear Valley	Arenaria ursina	T		
Flowering Plants	sandwort, Cumberland	Arenaria cumberlandensis	E	600	
Flowering Plants	sandwort, Marsh	Arenaria paludicola	E		
Flowering Plants	schiedea, Diamond Head	Schiedea adamantis	E		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	seablite, California	Suaeda californica	E		
Flowering Plants	seagrass, Johnson's	Halophila johnsonii	T		
Flowering Plants	sedge, Navajo	Carex specuicola	T		
Flowering Plants	sedge, white	Carex albida	E		
Flowering Plants	silversword, Haleakala	Argyroxiphium sandwicense macrocephalum	T		
Flowering Plants	silversword, Mauna Kea	Argyroxiphium sandwicense sandwicense	E		
Flowering Plants	silversword, Mauna Loa	Argyroxiphium kauense	E		
Flowering Plants	skullcap, Florida	Scutellaria floridana	T		
Flowering Plants	skullcap, large-flowered	Scutellaria montana	E	5,000	
Flowering Plants	snakeroot	Eryngium cuneifolium	E		
Flowering Plants	sneezeweed, Virginia	Helenium virginicum	T		
Flowering Plants	snowbells, Texas	Styrax texanus	E		
Flowering Plants	spineflower, Ben Lomond	Chorizanthe pungens hartwegiana	E		
Flowering Plants	spineflower, Howell's	Chorizanthe howellii	E		
Flowering Plants	spineflower, Monterey	Chorizanthe pungens pungens	T		
Flowering Plants	spineflower, Orcutt's	Chorizanthe orcuttiana	E		
Flowering Plants	spineflower, Robust	Chorizanthe robusta	E		
Flowering Plants	spineflower, slender-horned	Dodecahema leptoceras	E	11,000	
Flowering Plants	spineflower, Sonoma	Chorizanthe valida	E		
Flowering Plants	spiraea, Virginia	Spiraea virginiana	T	500	
Flowering Plants	spurge, deltoid	Chamaesyce deltoidea deltoidea	E		
Flowering Plants	spurge, Garber's	Chamaesyce garberi	T		
Flowering Plants	spurge, Hoover's	Chamaesyce hooveri	T		
Flowering Plants	spurge, telephus	Euphorbia telephioides	T		
Flowering Plants	stonecrop, Lake County	Parvisedum leiocarpum	E		
Flowering Plants	sumac, Michaux's	Rhus michauxii	E		
Flowering Plants	sunburst, Hartweg's golden	Pseudobahia bahiifolia	E		
Flowering Plants	sunburst, San Joaquin adobe	Pseudobahia peirsonii	T		
Flowering Plants	sunflower, Eggert's	Helianthus eggertii	T	500	
Flowering Plants	sunflower, San Mateo woolly	Eriophyllum latilobum	E		
Flowering Plants	sunflower, Schweinitz's	Helianthus schweinitzii	E	800	
Flowering Plants	sunray, Ash Meadows	Enceliopsis nudicaulis corrugata	T		
Flowering Plants	sunshine, Sonoma	Blennosperma bakeri	E		
Flowering Plants	taraxacum, California	Taraxacum californicum	E		
Flowering Plants	tarplant, Otay	Hemizonia conjugens	T		
Flowering Plants	thelypody, Howell's spectacular	Thelypodium howellii spectabilis	T		
Flowering Plants	thistle, Chorro Creek bog	Cirsium fontinale obispoense	E		
Flowering Plants	thistle, fountain	Cirsium fontinale fontinale	E		
Flowering Plants	thistle, Loch Lomond coyote	Eryngium constancei	E		
Flowering Plants	thistle, Pitcher's	Cirsium pitcheri	T		
Flowering Plants	thistle, Sacramento Mountains	Cirsium vinaceum	T	500	

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	thistle, Suisun	Cirsium hydrophilum hydrophilum	E		
Flowering Plants	thormmint, San Diego	Acanthomintha ilicifolia	T	10,000	
Flowering Plants	thormmint, San Mateo	Acanthomintha obovata duttonii	E		
Flowering Plants	townsendia, Last Chance	Townsendia aprica	T	500	
Flowering Plants	trillium, persistent	Trillium persistens	E	200	
Flowering Plants	trillium, relict	Trillium reliquum	E	400	
Flowering Plants	twinpod, Dudley Bluffs	Physaria obcordata	T		
Flowering Plants	uhiuhi	Caesalpinia kavaense	E	13,000	
Flowering Plants	uvillo	Eugenia haematocarpa	E	500	
Flowering Plants	vervain, Red Hills	Verbena californica	T		
Flowering Plants	vetch, Hawaiian	Vicia menziesii	E		
Flowering Plants	wallflower, Ben Lomond	Erysimum teretifolium	E		
Flowering Plants	wallflower, Contra Costa	Erysimum capitatum angustatum	E		
Flowering Plants	wallflower, Menzies'	Erysimum menziesii	E		
Flowering Plants	walnut, West Indian or nogal	Juglans jamaicensis	E		
Flowering Plants	warea, wide-leaf	Warea amplexifolia	E		
Flowering Plants	water-plantain, Kral's	Sagittaria secundifolia	T	100	
Flowering Plants	water-umbel, Huachuca	Lilaeopsis schaffneriana recurva	E	30,500	
Flowering Plants	water-willow, Cooley's	Justicia cooleyi	E		
Flowering Plants	watercress, Gambel's	Rorippa gambellii	E		
Flowering Plants	whitlow-wort, papery	Paronychia chartacea	T		
Flowering Plants	wild-buckwheat, clay-loving	Eriogonum pelinophilum	E		
Flowering Plants	wild-buckwheat, gypsum	Eriogonum gypsophilum	T		
Flowering Plants	wild-buckwheat, southern mountain	Eriogonum kennedyi austromontanum	T		
Flowering Plants	wild-rice, Texas	Zizania texana	E		
Flowering Plants	wire-lettuce, Malheur	Stephanomeria malheurensis	E		
Flowering Plants	wireweed	Polygonella basiramaia	E		
Flowering Plants	woodland-star, San Clemente Island	Lithophragma maximum	E		
Flowering Plants	woolly-star, Hoover's	Eriastrum hooveri	T	2,000	
Flowering Plants	woolly-star, Santa Ana River	Eriastrum densifolium sanctorum	E	1,000	
Flowering Plants	wooly-threads, San Joaquin	Lembertia congdonii	E		
Flowering Plants	ziziphus, Florida	Ziziphus celata	E	45,000	
<b>Flowering Plants Total</b>				<b>1,439,200</b>	
Conifers and Cycads	cypress, Gowen	Cupressus goveniana goveniana	T		
Conifers and Cycads	cypress, Santa Cruz	Cupressus abramsiana	E		
Conifers and Cycads	Torreya, Florida	Torreya taxifolia	E	45,000	
<b>Conifers and Cycads Total</b>				<b>45,000</b>	
Ferns and Allies	diellia, asplenium-leaved	Diellia erecta	E		
Ferns and Allies	fern, Alabama streak-sorus	Thelypteris pilosa alabamensis	T	1,000	
Ferns and Allies	fern, Aleutian shield	Polystichum aleuticum	E		
Ferns and Allies	fern, American hart's-tongue	Asplenium scolopendrium americanum	T		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Ferns and Allies	fern, Elfin tree	Cyathea dryopteroides	E		
Ferns and Allies	fern, pendant kihi	Adenophorus periens	E		
Ferns and Allies	ihī ihī	Marsilea villosa	E		
Ferns and Allies	No common name	Asplenium fragile insulare	E		
Ferns and Allies	No common name	Diellia falcata	E		
Ferns and Allies	No common name	Diellia pallida	E		
Ferns and Allies	No common name	Thelypteris yaucoensis	E		
Ferns and Allies	No common name	Thelypteris verecunda	E		
Ferns and Allies	No common name	Thelypteris inabonensis	E		
Ferns and Allies	No common name	Tectaria estremerana	E		
Ferns and Allies	No common name	Polystichum calderonense	E		
Ferns and Allies	No common name	Elaphoglossum serpens	E		
Ferns and Allies	No common name	Diellia unisora	E		
Ferns and Allies	No common name	Adiantum vivessii	E		
Ferns and Allies	No common name	Diplazium molokaiense	E		
Ferns and Allies	No common name	Pteris lidgatei	E		
Ferns and Allies	pauoa	Ctenitis squamigera	E		
Ferns and Allies	quillwort, black spored	Isoetes melanospora	E		
Ferns and Allies	quillwort, Louisiana	Isoetes louisianensis	E	120,000	
Ferns and Allies	quillwort, mat-forming	Isoetes tegetiformans	E		
Ferns and Allies	wawae'iole	Huperzia mannii	E		
Ferns and Allies	wawae'iole, (=ha'iwale)	Phlegmariurus nutans	E		
<b>Ferns and Allies Total</b>				121,000	
Lichens	cladonia, Florida perforate	Cladonia perforata	E		
Lichens	lichen, rock gnome	Gymnoderma lineare	E	1,600	
<b>Lichens Total</b>				1,600	
<b>Grand Total</b>				28,354,700	
Can't find:					
Flowering Plant	amole, cammatta canyon (purple)	Chlorogalum purpureum var. reductum	T	5,000	



United States  
Department of  
Agriculture

Natural  
Resources  
Conservation  
Service

P.O. Box 2890  
Washington, D.C.  
20013

To OES

JAN 10 2002

Mr. Marshall Jones Jr.  
Acting Director  
Fish and Wildlife Service  
U.S. Department of Interior  
1849 C Street N.W., Mail Stop-3012  
Washington, D.C. 20240

Dear Mr. Jones:

This is in response to your request for information on the U.S. Department of Agriculture, Natural Resources Conservation Service expenditures made primarily for the conservation of endangered or threatened species pursuant to the Endangered Species Act. Based on information provided by our State Biologists, we have compiled a list of all States' FY-1999 and FY-2000 expenditures for endangered and threatened species conservation and recovery work. The information will be provided on diskette to Ms. Martha Bayliss-Larson, Program Specialist, U.S. Fish and Wildlife Service.

If you have any questions or concerns regarding this matter, please contact Howard Hankin, National Aquatic Ecologist at (202) 690-0082.

Sincerely,

DIANE E. GELBURD  
Director  
Ecological Sciences Division

Attachment

cc:

Lawrence E. Clark, Deputy Chief for Science and Technology, NRCS, Washington, D.C.  
Martha Balis-Larsen, Program Specialist, U.S. Fish and Wildlife Service, Fairfax, Virginia



Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

3/27/02  
Page 1 of 31

1999 Data Request For Federal Agencies - USDA/NRCS Submis

\$3,000

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Mammals	bat, gray	Myotis grisescens	E	\$3,000	
Mammals	bat, Hawaiian hoary	Lasiurus cinereus semotus	E	\$8,990	
Mammals	bat, Indiana	Myotis sodalis	E	\$6,680	
Mammals	bat, lesser long-nosed	Leptonycteris curasoae yerbabuena	E	\$9,000	
Mammals	bat, little Mariana fruit	Pteropus tokudae	E		
Mammals	bat, Mariana fruit	Pteropus mariannus mariannus	E		
Mammals	bat, Mexican long-nosed	Leptonycteris nivalis	E	\$6,500	
Mammals	bat, Ozark big-eared	Corynorhinus townsendii ingens	E	\$2,000	
Mammals	bat, Virginia big-eared	Corynorhinus townsendii virginianus	E		
Mammals	bear, grizzly	Ursus arctos horribilis	T	\$601,000	
Mammals	bear, Louisiana black	Ursus americanus luteolus	T	\$112,534	\$300,000
Mammals	caribou, woodland	Rangifer tarandus caribou	E		
Mammals	deer, Columbian white-tailed	Odocoileus virginianus leucurus	E		
Mammals	deer, Key	Odocoileus virginianus clavium	E		
Mammals	ferret, black-footed	Mustela nigripes	E	\$2,400	
Mammals	fox, San Joaquin kit	Vulpes macrotis mutica	E		
Mammals	jaguar	Panthera onca	E	\$3,360	
Mammals	jaguarundi, Gulf Coast	Herpailurus yagouaroundi cacomitli	E		
Mammals	jaguarundi, Sinaloa	Herpailurus yagouaroundi tolteca	E	\$300	
Mammals	kangaroo rat, Fresno	Dipodomys nitratoides exilis	E		
Mammals	kangaroo rat, giant	Dipodomys ingens	E		
Mammals	kangaroo rat, Morro Bay	Dipodomys heermanni morroensis	E		
Mammals	kangaroo rat, San Bernardino Merriam's	Dipodomys merriami parvus	E		
Mammals	kangaroo rat, Stephens'	Dipodomys stephensi	E		
Mammals	kangaroo rat, Tipton	Dipodomys nitratoides nitratoides	E		
Mammals	manatee, West Indian	Trichechus manatus	E		
Mammals	mountain beaver, Point Arena	Aplodontia rufa nigra	E		
Mammals	Mouse, Alabama beach	Peromyscus polionotus ammobates	E		
Mammals	Mouse, Anastasia Island beach	Peromyscus polionotus phasma	E		
Mammals	Mouse, Choctawhatchee beach	Peromyscus polionotus allophrys	E		
Mammals	Mouse, Key Largo cotton	Peromyscus gossypinus allapaticola	E		
Mammals	mouse, Pacific pocket	Perognathus longimembris pacificus	E		
Mammals	Mouse, Perdido Key beach	Peromyscus polionotus trissyllepsis	E		
Mammals	mouse, Preble's meadow jumping	Zapus hudsonius preblei	T	\$4,500	
Mammals	mouse, salt marsh harvest	Reithrodontomys raviventris	E		
Mammals	Mouse, southeastern beach	Peromyscus polionotus niveiventris	T		
Mammals	mouse, St. Andrew beach	Peromyscus polionotus peninsularis	E		
Mammals	ocelot	Leopardus pardalis	E	\$300	

Source: U.S. Fish and Wildlife Service's Threatened and Endangered Species System

USDA\_NRCSsp\_99\_00.xls

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Invertebrate Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Mammals	otter, southern sea	Enhydra lutris nereis	T		
Mammals	panther, Florida	Puma concolor coryi	E		
Mammals	prairie dog, Utah	Cynomys parvidens	T		
Mammals	pronghorn, Sonoran	Antilocapra americana sonoriensis	E		
Mammals	puma, eastern	Puma concolor cougar	E		
Mammals	rabbit, Lower Keys marsh	Sylvilagus palustris hefneri	E		
Mammals	rice rat	Oryzomys palustris natator	E		
Mammals	sea-lion, Steller	Eumetopias jubatus	E, T		
Mammals	seal, Caribbean monk	Monachus tropicalis	E		
Mammals	seal, Guadalupe fur	Arctocephalus townsendi	T		
Mammals	seal, Hawaiian monk	Monachus schauinslandi	E		
Mammals	sheep, bighorn	Ovis canadensis	E		
Mammals	sheep, bighorn	Ovis canadensis californiana	E		
Mammals	squirrel, Carolina northern flying	Glaucomys sabrinus coloratus	E		
Mammals	squirrel, Delmarva Peninsula fox	Sciurus niger cinereus	E		
Mammals	squirrel, Mount Graham red	Tamiasciurus hudsonicus grahamensis	E		
Mammals	squirrel, Virginia northern flying	Glaucomys sabrinus fuscus	E		
Mammals	vole, Amargosa	Microtus californicus scirpensis	E		
Mammals	vole, Florida salt marsh	Microtus pennsylvanicus dukecampbelli	E		
Mammals	vole, Hualapai Mexican	Microtus mexicanus hualpaiensis	E	\$1,500	
Mammals	whale, blue	Balaenoptera musculus	E		
Mammals	whale, bowhead	Balaena mysticetus	E		
Mammals	whale, finback	Balaenoptera physalus	E		
Mammals	whale, humpback	Megaptera novaeangliae	E		
Mammals	whale, right	Balaena glacialis	E		
Mammals	whale, Sei	Balaenoptera borealis	E		
Mammals	whale, sperm	Physeter catodon	E		
Mammals	wolf, gray	Canis lupus	E, T	\$300	
Mammals	wolf, red	Canis rufus	E		
Mammals	woodrat, Key Largo	Neotoma floridana smalli	E		
Birds	akepa, Hawaii	Loxops coccineus coccineus	E		
Birds	akepa, Maui	Loxops coccineus ochraceus	E		
Birds	akiapola, Kauai	Hemignathus procerus	E		
Birds	akiapola, au	Hemignathus munroi	E		
Birds	Albatross, short-tailed	Phoebastria albatrus	E		
Birds	blackbird, yellow-shouldered	Agelaius xanthomus	E		\$8,662
Birds	bobwhite, masked	Colinus virginianus ridgwayi	E		
Birds	broadbill, Guam	Myiagra freycineti	E		
Birds	cahow	Pterodroma cahow	E		
Birds	caracara, Audubon's crested	Polyborus plancus audubonii	T		

Federally Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Birds	condor, California	Gymnogyps californianus	E		
Birds	coot, Hawaiian	Fulica americana alai	E	\$19,689	
Birds	crane, Mississippi sandhill	Grus canadensis pulla	E	\$100	
Birds	crane, whooping	Grus americana	E	\$25,545	
Birds	creeper, Hawaii	Oreomystis mana	E		
Birds	creeper, Molokai	Paroreomyza flammea	E	\$2,380	
Birds	creeper, Oahu	Paroreomyza maculata	E		
Birds	crow, Hawaiian	Corvus hawaiiensis	E	\$5,000	
Birds	crow, Mariana	Corvus kubaryi	E		
Birds	crow, white-necked	Corvus leucognaphalus	E		
Birds	curlew, Eskimo	Numenius borealis	E	\$1,000	
Birds	duck, Hawaiian	Anas wyvilliana	E	\$22,325	
Birds	duck, Laysan	Anas laysanensis	E		
Birds	eagle, bald	Haliaeetus leucocephalus	T	\$652,500	\$5,000
Birds	eider, spectacled	Somateria fischeri	T		
Birds	eider, Steller's	Polysticta stelleri	T		
Birds	falcon, American peregrine	Falco peregrinus anatum	DM	\$2,500	\$8,662
Birds	falcon, northern aplomado	Falco femoralis septentrionalis	E	\$300	
Birds	finch, Laysan	Telespyza cantans	E		
Birds	finch, Nihoa	Telespyza ultima	E		
Birds	flycatcher, southwestern willow	Empidonax traillii extimus	E	\$6,950	
Birds	gnatcatcher, coastal California	Poliophtila californica californica	T		
Birds	goose, Hawaiian	Branta sandvicensis	E	\$105,887	
Birds	hawk, Hawaiian	Buteo solitarius	E	\$13,013	
Birds	hawk, Puerto Rican broad-winged	Buteo platypterus brunnescens	E		
Birds	hawk, Puerto Rican sharp-shinned	Accipiter striatus venator	E		
Birds	honeycreeper, crested	Palmeria dolei	E		
Birds	jay, Florida scrub	Aphelocoma coerulescens	T		
Birds	kingfisher, Guam Micronesian	Halcyon cinnamomina cinnamomina	E		
Birds	kite, Everglade snail	Rostrhamus sociabilis plumbeus	E		
Birds	mallard, Mariana	Anas oustaleti	E		
Birds	megapode, Micronesian	Megapodius laperouse	E		
Birds	millerbird, Nihoa	Acrocephalus familiaris kingi	E		
Birds	monarch, Tinian	Monarcha takatsukasae	T		
Birds	moorhen, Hawaiian common	Gallinula chloropus sandvicensis	E	\$16,438	
Birds	moorhen, Mariana common	Gallinula chloropus guami	E		
Birds	murrelet, marbled	Brachyramphus marmoratus marmoratus	T	\$5,000	
Birds	nightjar, Puerto Rican	Caprimulgus noctitherus	E		
Birds	nukupu'u	Hemignathus lucidus	E	\$802	
Birds	'o'o, Kauai	Moho braccatus	E	\$802	

Federal Listed Endangered and Threatened Wildlife and Plants

As of Fiscal Year 1999 (September 30, 1999)

3/27/02

Page 4 of 31

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Birds	o'u	Psittirostra psittacea	E		
Birds	owl, Mexican spotted	Strix occidentalis lucida	T	\$6,590	
Birds	owl, northern spotted	Strix occidentalis caurina	T		
Birds	palila	Loxioides bailleui	E		
Birds	parrot, Puerto Rican	Amazona vittata	E		
Birds	parrotbill, Maui	Pseudonestor xanthophrys	E		
Birds	pelican, brown	Pelecanus occidentalis	E	\$150	
Birds	petrel, Hawaiian dark-rumped	Pterodroma phaeopygia sandwichensis	E		
Birds	pigeon, Puerto Rican plain	Columba inornata wetmorei	E		
Birds	Plover, piping	Charadrius melodus	E, T	\$23,145	\$130,000
Birds	plover, western snowy	Charadrius alexandrinus nivosus	T		
Birds	po'ouli	Melamprosops phaeosoma	E		
Birds	prairie-chicken, Attwater's greater	Tympanuchus cupido attwateri	E	\$50,000	
Birds	pygmy-owl, cactus ferruginous	Glaucidium brasilianum cactorum	E	\$1,000	
Birds	rail, California clapper	Rallus longirostris obsoletus	E		
Birds	rail, Guam	Rallus owstoni	E		
Birds	rail, light-footed clapper	Rallus longirostris levipes	E		
Birds	rail, Yuma clapper	Rallus longirostris yumanensis	E	\$150	
Birds	shearwater, Newell's Townsend's	Puffinus auricularis newelli	T		
Birds	shrike, San Clemente loggerhead	Lanius ludovicianus mearnsi	E		
Birds	sparrow, Cape Sable seaside	Ammodramus maritimus mirabilis	E		
Birds	sparrow, Florida grasshopper	Ammodramus savannarum floridanus	E		
Birds	sparrow, San Clemente sage	Amphispiza belli clementeae	T		
Birds	stilt, Hawaiian	Himantopus mexicanus knudseni	E	\$39,686	
Birds	stork, wood	Mycteria americana	E	\$1,700,000	\$3,500,000
Birds	swiftlet, Mariana gray	Aerodramus vanikorensis bartschi	E		
Birds	tern, California least	Sterna antillarum browni	E		
Birds	tern, least	Sterna antillarum	E	\$22,100	\$8,662
Birds	tern, roseate	Sterna dougallii dougallii	E, T	\$2,000	
Birds	thrush, large Kauai	Myadestes myadestinus	E		
Birds	thrush, Molokai	Myadestes lanaiensis rutha	E	\$2,379	
Birds	thrush, small Kauai	Myadestes palmeri	E	\$803	
Birds	towhee, Inyo California	Pipilo crissalis eremophilus	T		
Birds	vireo, black-capped	Vireo atricapillus	E	\$9,000	
Birds	vireo, least Bell's	Vireo bellii pusillus	E		
Birds	warbler, Bachman's	Vermivora bachmanii	E		
Birds	warbler, golden-cheeked	Dendroica chrysoparia	E		
Birds	warbler, Kirtland's	Dendroica kirtlandii	E		
Birds	warbler, nightingale reed	Acrocephalus luscina	E		
Birds	white-eye, bridled	Zosterops conspicillatus conspicillatus	E		

Federally Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Birds	woodpecker, ivory-billed	Campephilus principalis	E		
Birds	woodpecker, red-cockaded	Picoides borealis	E	\$44,303	
Reptiles	anole, Culebra Island giant	Anolis roosevelti	E		
Reptiles	boa, Mona	Epicrates monensis monensis	T		
Reptiles	boa, Puerto Rican	Epicrates inornatus	E		
Reptiles	boa, Virgin Islands tree	Epicrates monensis granti	E		
Reptiles	crocodile, American	Crocodylus acutus	E		
Reptiles	gecko, Monito	Sphaerodactylus micropithecus	E		
Reptiles	iguana, Mona ground	Cyclura stejnegeri	T		
Reptiles	lizard, blunt-nosed leopard	Gambelia silus	E		
Reptiles	lizard, Coachella Valley fringe-toed	Uma inornata	T		
Reptiles	lizard, Island night	Xantusia riversiana	T		
Reptiles	lizard, St. Croix ground	Ameiva polops	E		
Reptiles	rattlesnake, New Mexican ridge-nosed	Crotalus willardi obscurus	T	\$7,045	
Reptiles	sea turtle, green	Chelonia mydas	E, T		
Reptiles	sea turtle, hawksbill	Eretmochelys imbricata	E		
Reptiles	sea turtle, Kemp's ridley	Lepidochelys kempii	E		
Reptiles	sea turtle, leatherback	Dermochelys coriacea	E		
Reptiles	sea turtle, loggerhead	Caretta caretta	T		
Reptiles	sea turtle, olive ridley	Lepidochelys olivacea	E, T		
Reptiles	skink, bluetail mole	Eumeces egregius lividus	T		
Reptiles	skink, sand	Neoseps reynoldsi	T		
Reptiles	snake, Atlantic salt marsh	Nerodia clarkii taeniata	T		
Reptiles	snake, Concho water	Nerodia paucimaculata	T		
Reptiles	snake, copperbelly water	Nerodia erythrogaster neglecta	T		\$3,000
Reptiles	snake, eastern indigo	Drymarchon corais couperi	T		
Reptiles	snake, giant garter	Thamnophis gigas	T		
Reptiles	snake, Lake Erie water	Nerodia sipedon insularum	T		
Reptiles	snake, San Francisco garter	Thamnophis sirtalis tetrataenia	E		
Reptiles	tortoise, desert	Gopherus agassizii	T	\$200	
Reptiles	tortoise, gopher	Gopherus polyphemus	T	\$15,179	
Reptiles	turtle, Alabama red-belly	Pseudemys alabamensis	E		
Reptiles	turtle, bog	Clemmys muhlenbergii	T	\$20,000	
Reptiles	turtle, flattened musk	Sternotherus depressus	T		
Reptiles	turtle, Plymouth redbelly	Pseudemys rubriventris bangsi	E		
Reptiles	turtle, ringed map	Graptemys oculifera	T	\$63	
Reptiles	turtle, yellow-blotched map	Graptemys flavimaculata	T		
Reptiles	whipsnake, Alameda	Masticophis lateralis euryxanthus	T		
Amphibians	coqui, golden	Eleutherodactylus jasperi	T		
Amphibians	frog, California red-legged	Rana aurora draytonii	T	\$1,500	

**Federally Listed Endangered and Threatened Wildlife and Plants**  
**As of Fiscal Year 1999 (September 30, 1999)**

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Amphibians	guajon	Eleutherodactylus cooki	T		
Amphibians	salamander, Barton Springs	Eurycea sosorum	E		
Amphibians	salamander, Cheat Mountain	Plethodon nettingi	T		
Amphibians	salamander, desert slender	Batrachoseps aridus	E		
Amphibians	salamander, flatwoods	Ambystoma cingulatum	T		
Amphibians	salamander, Red Hills	Phaeognathus hubrichti	T		
Amphibians	salamander, San Marcos	Eurycea nana	T		
Amphibians	salamander, Santa Cruz long-toed	Ambystoma macrodactylum croceum	E		
Amphibians	salamander, Shenandoah	Plethodon shenandoah	E		
Amphibians	salamander, Sonoran tiger	Ambystoma tigrinum stebbinsi	E	\$250	
Amphibians	salamander, Texas blind	Typhlomolge rathbuni	E		
Amphibians	toad, arroyo	Bufo microscaphus californicus	E		
Amphibians	toad, Houston	Bufo houstonensis	E		
Amphibians	toad, Puerto Rican crested	Peltophryne lemur	T		
Amphibians	toad, Wyoming	Bufo hemiophrys baxteri	E	\$4,000	
Fishes	catfish, Yaqui	Ictalurus pricei	T		
Fishes	cavefish, Alabama	Speoplatyrhinus poulsoni	E		
Fishes	cavefish, Ozark	Amblyopsis rosae	T		
Fishes	chub, bonytail	Gila elegans	E	\$500	
Fishes	chub, Borax Lake	Gila boraxobius	E		
Fishes	chub, Chihuahua	Gila nigrescens	T		
Fishes	chub, humpback	Gila cypha	E	\$500	
Fishes	chub, Hutton tui	Gila bicolor ssp.	T		
Fishes	chub, Mohave tui	Gila bicolor mohavensis	E		
Fishes	chub, Oregon	Oregonichthys crameri	E		
Fishes	chub, Owens tui	Gila bicolor snyderi	E		
Fishes	chub, Pahrnagat roundtail	Gila robusta jordani	E		
Fishes	chub, slender	Erimystax cahni	T		
Fishes	chub, Sonora	Gila ditaenia	T		
Fishes	chub, spotfin	Cyprinella monacha	T		
Fishes	chub, Virgin River	Gila robusta seminuda	E		
Fishes	chub, Yaqui	Gila purpurea	E		
Fishes	cui-ui	Chasmistes cujus	E		
Fishes	dace, Ash Meadows speckled	Rhinichthys osculus nevadensis	E		
Fishes	dace, blackside	Phoxinus cumberlandensis	T		
Fishes	dace, Clover Valley speckled	Rhinichthys osculus oligoporus	E		
Fishes	dace, desert	Eremichthys acros	T		
Fishes	dace, Fosskett speckled	Rhinichthys osculus ssp.	T		
Fishes	dace, Independence Valley speckled	Rhinichthys osculus lethoporus	E		
Fishes	dace, Kendall Warm Springs	Rhinichthys osculus thermalis	E		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Invertebrate Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Fishes	dace, Moapa	Moapa coriacea	E		
Fishes	darler, amber	Percina antesella	E		
Fishes	darler, bayou	Etheostoma rubrum	T		
Fishes	darler, bluemark	Etheostoma sp.	E		
Fishes	darler, boulder	Etheostoma wapiti	E		
Fishes	darler, Cherokee	Etheostoma scotti	T		
Fishes	darler, duskytail	Etheostoma percnum	E		
Fishes	darler, Etowah	Etheostoma etowahae	E		
Fishes	darler, fountain	Etheostoma fonticola	E		
Fishes	darler, goldline	Percina aurolineata	T		
Fishes	darler, leopard	Percina pantherina	T		
Fishes	darler, Maryland	Etheostoma sellare	E		
Fishes	darler, Niangua	Etheostoma nianguae	T		
Fishes	darler, Okaloosa	Etheostoma okaloosae	E		
Fishes	darler, relict	Etheostoma chienense	E		
Fishes	darler, slackwater	Etheostoma boschungii	T		
Fishes	darler, snail	Percina tanasi	T	\$7,500	
Fishes	darler, watercross	Etheostoma nuchale	E		
Fishes	gambusia, Big Bend	Gambusia gaigei	E		
Fishes	gambusia, Clear Creek	Gambusia heterochir	E		
Fishes	gambusia, Pecos	Gambusia nobilis	E	\$45	
Fishes	gambusia, San Marcos	Gambusia georgei	E		
Fishes	goby, tidewater	Eucyclogobius newberryi	E		
Fishes	logperch, Conasauga	Percina jenkinsi	E		
Fishes	logperch, Roanoke	Percina rex	E		
Fishes	madtom, Neosho	Noturus placidus	T	\$1,000	
Fishes	madtom, pygmy	Noturus stanauli	E		
Fishes	madtom, Scioto	Noturus trautmani	E		
Fishes	madtom, smoky	Noturus baileyi	E		
Fishes	madtom, yellowfin	Noturus flavipinnis	T		
Fishes	minnow, loach	Tiaroga cobitis	T	\$2,590	
Fishes	minnow, Rio Grande silvery	Hybognathus amarus	E	\$90	
Fishes	pikeminnow, Colorado	Ptychocheilus lucius	E	\$2,500	
Fishes	poolfish, Pahrump	Empetrichthys latos	E		
Fishes	pupfish, Ash Meadows Amargosa	Cyprinodon nevadensis mionectes	E		
Fishes	pupfish, Comanche Springs	Cyprinodon elegans	E	\$1,000	
Fishes	pupfish, desert	Cyprinodon macularius	E		
Fishes	pupfish, Devils Hole	Cyprinodon diabolis	E		
Fishes	pupfish, Leon Springs	Cyprinodon bovinus	E		
Fishes	pupfish, Owens	Cyprinodon radiosus	E		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Fishes	pupfish, Warm Springs	Cyprinodon nevadensis pectoralis	E		
Fishes	salmon, chinook	Oncorhynchus tshawytscha	E, T	\$2,596,300	\$1,324,000
Fishes	salmon, chum	Oncorhynchus keta	T	\$220,500	\$132,500
Fishes	salmon, coho	Oncorhynchus kisutch	T		
Fishes	salmon, sockeye	Oncorhynchus nerka	E, T	\$220,500	\$132,500
Fishes	sculpin, pygmy	Cottus pygmaeus	T		
Fishes	shiner, Arkansas River	Notropis girardi	T	\$22,750	
Fishes	shiner, beautiful	Cyprinella formosa	T		
Fishes	shiner, blue	Cyprinella caerulea	T	\$2,500	
Fishes	shiner, Cahaba	Notropis cahabae	E		
Fishes	shiner, Cape Fear	Notropis mekistocholas	E		
Fishes	shiner, palezone	Notropis albizonatus	E		
Fishes	shiner, Pecos bluntnose	Notropis simus pecosensis	T		
Fishes	shiner, Topeka	Notropis topeka	E	\$100	
Fishes	silverside, Waccamaw	Menidia extensa	T		
Fishes	smelt, delta	Hypomesus transpacificus	T		
Fishes	spikedace	Meda fulgida	T	\$1,545	
Fishes	spinedace, Big Spring	Lepidomeda mollispinis pratensis	T		
Fishes	spinedace, Little Colorado	Lepidomeda vittata	T	\$5,000	
Fishes	spinedace, White River	Lepidomeda albivallis	E		
Fishes	splittail, Sacramento	Pogonichthys macrolepidotus	T		
Fishes	springfish, Hiko White River	Crenichthys baileyi grandis	E		
Fishes	springfish, Railroad Valley	Crenichthys nevadae	T		
Fishes	springfish, White River	Crenichthys baileyi baileyi	E		
Fishes	steelhead	Oncorhynchus mykiss	E, T	\$1,944,200	\$927,000
Fishes	stickleback, unarmored threespine	Gasterosteus aculeatus williamsoni	E		
Fishes	sturgeon, Gulf	Acipenser oxyrinchus desotoi	T	\$63	
Fishes	sturgeon, pallid	Scaphirhynchus albus	E	\$21,500	
Fishes	sturgeon, shortnose	Acipenser brevirostrum	E	\$500	
Fishes	sturgeon, white	Acipenser transmontanus	E		
Fishes	sucker, June	Chasmistes liorus	E		
Fishes	sucker, Lost River	Deltistes luxatus	E		
Fishes	Sucker, Modoc	Catostomus microps	E		
Fishes	sucker, razorback	Xyrauchen texanus	E	\$1,250	
Fishes	Sucker, shortnose	Chasmistes brevirostris	E		
Fishes	sucker, Warner	Catostomus warnerensis	T		
Fishes	topminnow, Gila	Poeciliopsis occidentalis	E	\$4,000	
Fishes	trout, Apache	Oncorhynchus apache	T	\$200	
Fishes	trout, bull	Salvelinus confluentus	T	\$227,500	\$132,500
Fishes	trout, Gila	Oncorhynchus gilae	E		



Federally Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Fishes	trout, greenback cutthroat	Oncorhynchus clarki stomias	T		
Fishes	trout, Lahontan cutthroat	Oncorhynchus clarki henshawi	T		
Fishes	trout, Little Kern golden	Oncorhynchus aguabonita whitei	T		
Fishes	trout, Paiute cutthroat	Oncorhynchus clarki seleniris	T		
Fishes	woundfin	Plagopterus argentissimus	E		
Clams	acornshell, southern	Epioblasma othcaloogensis	E		
Clams	bankclimber, purple	Elliptoideus sloatianus	T		
Clams	bean, Cumberland	Villosa trabalis	E		
Clams	bean, purple	Villosa perpurpurea	E		
Clams	blossom, green	Epioblasma torulosa gubernaculum	E		
Clams	blossom, tubercled	Epioblasma torulosa torulosa	E		
Clams	blossom, turgid	Epioblasma turgidula	E		
Clams	blossom, yellow	Epioblasma florentina florentina	E		
Clams	catpaw	Epioblasma obliquata obliquata	E		
Clams	catpaw, white	Epioblasma obliquata perobliqua	E		
Clams	clubshell	Pleurobema clava	E		
Clams	clubshell, black	Pleurobema curtum	E		
Clams	clubshell, ovate	Pleurobema perovatum	E		
Clams	clubshell, southern	Pleurobema decisum	E		
Clams	combshell, Cumberlandian	Epioblasma brevidens	E		
Clams	combshell, southern	Epioblasma penita	E		
Clams	combshell, upland	Epioblasma metastriata	E		
Clams	elktoe, Appalachian	Alasmidonta raveneliana	E		
Clams	elktoe, Cumberland	Alasmidonta atropurpurea	E		
Clams	fanshell	Cyprogenia stegaria	E		
Clams	fatmucket, Arkansas	Lampsilis powelli	T		
Clams	heelsplitter, Alabama	Potamilus inflatus	T	\$205	
Clams	heelsplitter, Carolina	Lasmigona decorata	E		
Clams	higgins eye	Lampsilis higginsii	E		
Clams	kidneyshell, triangular	Ptychobranthus greeni	E		
Clams	lampmussel, Alabama	Lampsilis virescens	E		
Clams	lilliput, pale	Toxolasma cylindrellus	E		
Clams	mapleleaf, winged	Quadrula fragosa	E		
Clams	moccasinshell, Alabama	Medionidus acutissimus	T		
Clams	moccasinshell, Coosa	Medionidus parvulus	E		
Clams	moccasinshell, Gulf	Medionidus penicillatus	E		
Clams	moccasinshell, Ochlockonee	Medionidus simpsonianus	E		
Clams	monkeyface, Appalachian	Quadrula sparsa	E		
Clams	monkeyface, Cumberland	Quadrula intermedia	E		
Clams	mucket, oranogenacre	Lampsilis perovalis	T		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Clams	mucket, pink	Lampsilis abrupta	E	\$7,500	
Clams	mussel, oyster	Epioblasma capsaeformis	E		
Clams	pearlshell, Louisiana	Margaritifera hembeli	T		
Clams	pearlymussel, birdwing	Conradilla caelata	E		
Clams	pearlymussel, cracking	Hemistena lata	E		
Clams	pearlymussel, Curtis	Epioblasma florentina curtisii	E		
Clams	pearlymussel, dromedary	Dromus dromas	E		
Clams	pearlymussel, littlewing	Pegias fabula	E		
Clams	pearlymussel, white wartyback	Plethobasus cicatricosus	E		
Clams	pigtoe, Cumberland	Pleurobema gibberum	E	\$11,500	
Clams	pigtoe, dark	Pleurobema furvum	E		
Clams	pigtoe, finereyed	Fusconaia cuneolus	E		
Clams	pigtoe, flat	Pleurobema marshalli	E		
Clams	pigtoe, heavy	Pleurobema taitianum	E		
Clams	pigtoe, oval	Pleurobema pyriforme	E		
Clams	pigtoe, rough	Pleurobema plenum	E		
Clams	pigtoe, shiny	Fusconaia cor	E		
Clams	pigtoe, southern	Pleurobema georgianum	E		
Clams	pimpleback, orangefoot	Plethobasus cooperianus	E		
Clams	pocketbook, fat	Potamilus capax	E		
Clams	pocketbook, finelined	Lampsilis altilis	T		
Clams	pocketbook, Ouachita rock	Arkansia wheeleri	E		
Clams	pocketbook, shinyrayed	Lampsilis subangulata	E		
Clams	pocketbook, speckled	Lampsilis streckeri	E		
Clams	rabbitsfoot, rough	Quadrula cylindrica strigillata	E		
Clams	riffleshell, northern	Epioblasma torulosa rangiana	E		
Clams	riffleshell, tan	Epioblasma florentina walkeri	E		
Clams	ring pink	Obovaria retusa	E		
Clams	slabshell, Chipola	Elliptio chipolaensis	T		
Clams	spiny mussel, James	Pleurobema collina	E		
Clams	spiny mussel, Tar River	Elliptio steinstansana	E		
Clams	stirrupshell	Quadrula stapes	E		
Clams	three-ridge, fat	Amblema neislerii	E		
Clams	wedgemussel, dwarf	Alasmidonta heterodon	E	\$500	
Snails	ambersnail, Kanab	Oxyloma haydeni kanabensis	E		
Snails	elimia, lacy	Elimia crenatella	T		
Snails	limpet, Banbury Springs	Lanx sp.	E		
Snails	lioplax, cylindrical	Lioplax cyclostomaformis	E		
Snails	marstonia, royal	Pyrgulopsis ogmorhappe	E		
Snails	pebblesnail, flat	Lepyrium showalteri	E		

Federal, Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Snails	riversnail, Anthony's	Athearnia anthonyi	E		
Snails	rocksnail, painted	Leptoxis taeniata	T		
Snails	rocksnail, plicate	Leptoxis plicata	E		
Snails	rocksnail, round	Leptoxis ampla	T		
Snails	shagreen, Magazine Mountain	Mesodon magazinensis	T		
Snails	snail, Bliss Rapids	Taylorconcha serpenticola	T		
Snails	snail, Chittenango ovate amber	Succinea chittenangoensis	T		
Snails	snail, flat-spined three-toothed	Triodopsis platysayoides	T		
Snails	snail, Iowa Pleistocene	Discus macclintocki	E		
Snails	snail, Morro shoulderband	Helminthoglypta walkeriana	E		
Snails	snail, noonday	Mesodon clarki nantahala	T		
Snails	snail, painted snake coiled forest	Anguispira picta	T		
Snails	snail, Snake River physa	Physa natricina	E		
Snails	snail, Stock Island tree	Orthalicus reses	T		
Snails	snail, tulotoma	Tulotoma magnifica	E		
Snails	snail, Utah valvata	Valvata utahensis	E		
Snails	snail, Virginia fringed mountain	Polygyriscus virginianus	E		
Snails	snails, Oahu tree	Achatinella spp.	E		
Snails	springsnail, Alamosa	Tryonia alamosae	E		
Snails	springsnail, Bruneau Hot	Pyrgulopsis bruneauensis	E		
Snails	springsnail, Idaho	Fontelicella idahoensis	E		
Snails	springsnail, Socorro	Pyrgulopsis neomexicana	E		
Insects	beetle, American burying	Nicrophorus americanus	E	\$3,000	
Insects	beetle, Coffin Cave mold	Batrisodes texanus	E		
Insects	beetle, Comal Springs dryopid	Stygoparnus comalensis	E		
Insects	beetle, Comal Springs riffle	Heterelmis comalensis	E		
Insects	beetle, delta green ground	Elaphrus viridis	T		
Insects	beetle, Hungerford's crawling water	Brychius hungerfordi	E		
Insects	beetle, Kretschmarr Cave mold	Texamaurops reddelli	E		
Insects	beetle, Mount Hermon June	Polyphylla barbata	E		
Insects	beetle, Tooth Cave ground	Rhadine persephone	E		
Insects	beetle, valley elderberry longhorn	Desmocerus californicus dimorphus	T		
Insects	butterfly, bay checkerspot	Euphydryas editha bayensis	T		
Insects	butterfly, Behren's silverspot	Speyeria zerene behrensii	E		
Insects	butterfly, callippe silverspot	Speyeria callippe callippe	E		
Insects	butterfly, El Segundo blue	Euphilotes battoides allyni	E		
Insects	butterfly, Karner blue	Lycaeides melissa samuelis	E	\$24,500	
Insects	butterfly, Lange's metalmark	Apodemia mormo langei	E		
Insects	butterfly, lotis blue	Lycaeides argyrognomon lotis	E		
Insects	butterfly, mission blue	Icaricia icarioides missionensis	E		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Insects	butterfly, Mitchell's satyr	<i>Neonympha mitchellii mitchellii</i>	E		
Insects	butterfly, Myrtle's silverspot	<i>Speyeria zerene myrtleae</i>	E		
Insects	butterfly, Oregon silverspot	<i>Speyeria zerene hippolyta</i>	T		
Insects	butterfly, Palos Verdes blue	<i>Glaucopteryx lygdamus palosverdesensis</i>	E		
Insects	butterfly, Quino checkerspot	<i>Euphydryas editha quino</i>	E		
Insects	butterfly, Saint Francis' satyr	<i>Neonympha mitchellii francisci</i>	E		
Insects	butterfly, San Bruno elfin	<i>Callophrys mossii bayensis</i>	E		
Insects	butterfly, Schaus swallowtail	<i>Heraclides aristodemus ponceanus</i>	E		
Insects	butterfly, Smith's blue	<i>Euphilotes enoptes smithi</i>	E		
Insects	butterfly, Uncompahgre fritillary	<i>Boloria acrocneuma</i>	E		
Insects	dragonfly, Hine's emerald	<i>Somatochlora hineana</i>	E		
Insects	fly, Delhi Sands flower-loving	<i>Rhaphiomidas terminatus abdominalis</i>	E		
Insects	grasshopper, Zayante band-winged	<i>Trimerotropis infantilis</i>	E		
Insects	moth, Kern primrose sphinx	<i>Euproserpinus euterpe</i>	T		
Insects	naucorid, Ash Meadows	<i>Ambrysus amargosus</i>	T		
Insects	skipper, Laguna Mountains	<i>Pyrgus ruralis lagunae</i>	E		
Insects	skipper, Pawnee montane	<i>Hesperia leonardus montana</i>	T		
Insects	tiger beetle, northeastern beach	<i>Cicindela dorsalis dorsalis</i>	T		
Insects	tiger beetle, Puritan	<i>Cicindela puritana</i>	T		
Arachnids	harvestman, Bee Creek Cave	<i>Texella reddelli</i>	E		
Arachnids	harvestman, Bone Cave	<i>Texella reyesi</i>	E		
Arachnids	pseudoscorpion, Tooth Cave	<i>Tartarocreagriss texana</i>	E		
Arachnids	spider, spruce-fir moss	<i>Microhexura montivaga</i>	E		
Arachnids	spider, Tooth Cave	<i>Neoleptoneta myopica</i>	E		
Crustaceans	amphipod, Hay's Spring	<i>Stygobromus hayi</i>	E		
Crustaceans	amphipod, Illinois cave	<i>Gammarus acherondytes</i>	E		
Crustaceans	amphipod, Peck's cave	<i>Stygobromus pecki</i>	E		
Crustaceans	crayfish, cave	<i>Cambarus zophonastes</i>	E		
Crustaceans	crayfish, cave	<i>Cambarus aculabrum</i>	E		
Crustaceans	crayfish, Nashville	<i>Orconectes shoupi</i>	E		
Crustaceans	crayfish, Shasta	<i>Pacifastacus fortis</i>	E		
Crustaceans	fairy shrimp, Conservancy	<i>Branchinecta conservatio</i>	E		
Crustaceans	fairy shrimp, longhorn	<i>Branchinecta longiantenna</i>	E		
Crustaceans	fairy shrimp, Riverside	<i>Streptocephalus woottoni</i>	E		
Crustaceans	fairy shrimp, San Diego	<i>Branchinecta sandiegonensis</i>	E		
Crustaceans	fairy shrimp, vernal pool	<i>Branchinecta lynchi</i>	T		
Crustaceans	isopod, Lee County cave	<i>Lirceus usdagalun</i>	E		
Crustaceans	isopod, Madison Cave	<i>Antrolana lira</i>	T		
Crustaceans	isopod, Socorro	<i>Thermosphaeroma thermophilus</i>	E		
Crustaceans	shrimp, Alabama cave	<i>Palaemonias alabamiae</i>	E		

Federally Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Crustaceans	shrimp, California freshwater	<i>Syncares pacifica</i>	E		
Crustaceans	shrimp, Kentucky cave	<i>Palaemonias ganteri</i>	E		
Crustaceans	shrimp, Squirrel Chimney Cave	<i>Palaemonetes cummingsi</i>	T		
Crustaceans	tadpole shrimp, vernal pool	<i>Lepidurus packardii</i>	E		
Flowering Plants	a'e	<i>Zanthoxylum hawaiiense</i>	E	\$2,379	
Flowering Plants	a'e	<i>Zanthoxylum dipetalum tomentosum</i>	E		
Flowering Plants	agave, Arizona	<i>Agave arizonica</i>	E	\$300	
Flowering Plants	'aiea	<i>Nothocestrum breviflorum</i>	E		
Flowering Plants	'aiea	<i>Nothocestrum peltatum</i>	E		
Flowering Plants	'akoko	<i>Euphorbia haeleeleana</i>	E		
Flowering Plants	'akoko	<i>Chamaesyce rockii</i>	E		
Flowering Plants	'akoko	<i>Chamaesyce herbstii</i>	E		
Flowering Plants	'akoko	<i>Chamaesyce kuwaleana</i>	E		
Flowering Plants	'akoko	<i>Chamaesyce celastroides kaenana</i>	E		
Flowering Plants	'akoko	<i>Chamaesyce halemanui</i>	E		
Flowering Plants	'akoko	<i>Chamaesyce deppeana</i>	E		
Flowering Plants	'akoko, Ewa Plains	<i>Chamaesyce skottsbergii kalaeloana</i>	E		
Flowering Plants	alani	<i>Melicope saint-johnii</i>	E		
Flowering Plants	alani	<i>Melicope ovalis</i>	E		
Flowering Plants	alani	<i>Melicope adscendens</i>	E	\$3,334	
Flowering Plants	alani	<i>Melicope zahlbruckneri</i>	E		
Flowering Plants	alani	<i>Melicope reflexa</i>	E	\$12,375	
Flowering Plants	alani	<i>Melicope quadrangularis</i>	E		
Flowering Plants	alani	<i>Melicope pallida</i>	E		
Flowering Plants	alani	<i>Melicope munroi</i>	E		
Flowering Plants	alani	<i>Melicope balloui</i>	E		
Flowering Plants	alani	<i>Melicope knudsenii</i>	E		
Flowering Plants	alani	<i>Melicope lydgatei</i>	E		
Flowering Plants	alani	<i>Melicope mucronulata</i>	E	\$2,379	
Flowering Plants	alani	<i>Melicope haupuensis</i>	E		
Flowering Plants	allocarya, Calistoga	<i>Plagiobothrys strictus</i>	E		
Flowering Plants	alopecurus, Sonoma	<i>Alopecurus aequalis sonomensis</i>	E		
Flowering Plants	amaranth, seabeach	<i>Amaranthus pumilus</i>	T		
Flowering Plants	ambrosia, south Texas	<i>Ambrosia cheiranthifolia</i>	E		
Flowering Plants	amphianthus, little	<i>Amphianthus pusillus</i>	T		
Flowering Plants	'anaunau	<i>Lepidium arbuscula</i>	E		
Flowering Plants	'anunu	<i>Sicyos alba</i>	E		
Flowering Plants	arrowhead, bunched	<i>Sagittaria fasciculata</i>	E		
Flowering Plants	aster, decurrent false	<i>Boltonia decurrens</i>	T		
Flowering Plants	aster, Florida golden	<i>Chrysopsis floridana</i>	E		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	aster, Ruth's golden	Pityopsis ruthii	E		
Flowering Plants	aupaka	Isodendron laurifolium	E		
Flowering Plants	aupaka	Isodendron hosakae	E		
Flowering Plants	aupaka	Isodendron longifolium	T		
Flowering Plants	avens, spreading	Geum radiatum	E		
Flowering Plants	`awikiwiki	Canavalia molokaiensis	E	\$2,379	
Flowering Plants	awiwi	Hedyotis cookiana	E		
Flowering Plants	awiwi	Centaurium sebaeoides	E		
Flowering Plants	ayenia, Texas	Ayenia limitaris	E		
Flowering Plants	Baccharis, Encinitas	Baccharis vanessae	T		
Flowering Plants	barberry, island	Berberis pinnata insularis	E		
Flowering Plants	barberry, Nevin's	Berberis nevinii	E		
Flowering Plants	barberry, Truckee	Berberis sonnei	E		
Flowering Plants	bariaco	Trichilia triacantha	E		
Flowering Plants	beaked-rush, Knieskern's	Rhynchospora knieskernii	T		
Flowering Plants	bear-poppy, dwarf	Arctomecon humilis	E		
Flowering Plants	beardtongue, Penland	Penstemon penlandii	E		
Flowering Plants	beargrass, Britton's	Nolina brittoniana	E		
Flowering Plants	beauty, Harper's	Harperocalis flava	E		
Flowering Plants	bedstraw, El Dorado	Galium californicum sierrae	E		
Flowering Plants	bedstraw, island	Galium buxifolium	E		
Flowering Plants	bellflower, Brooksville	Campanula robinsiae	E		
Flowering Plants	birch, Virginia round-leaf	Betula uber	T		
Flowering Plants	bird's beak, palmate-bracted	Cordylanthus palmatus	E		
Flowering Plants	bird's-beak, Pennell's	Cordylanthus tenuis capillaris	E		
Flowering Plants	bird's-beak, salt marsh	Cordylanthus maritimus maritimus	E		
Flowering Plants	bird's-beak, soft	Cordylanthus mollis mollis	E		
Flowering Plants	birds-in-a-nest, white	Macbridea alba	T		
Flowering Plants	bittercress, small-anthered	Cardamine micranthera	E		
Flowering Plants	bladderpod, Dudley Bluffs	Lesquerella congesta	T		
Flowering Plants	bladderpod, kodachrome	Lesquerella tumulosa	E		
Flowering Plants	bladderpod, lyrate	Lesquerella lyrata	T		
Flowering Plants	bladderpod, Missouri	Lesquerella filiformis	E		
Flowering Plants	bladderpod, San Bernardino Mountains	Lesquerella kingii bernardina	E		
Flowering Plants	bladderpod, Spring Creek	Lesquerella perforata	E		
Flowering Plants	bladderpod, white	Lesquerella pallida	E		
Flowering Plants	blazingstar, Ash Meadows	Mentzelia leucophylla	T		
Flowering Plants	blazingstar, Heller's	Liatris helleri	T		
Flowering Plants	blazingstar, scrub	Liatris ohlingerae	E		
Flowering Plants	blue-star, Kearney's	Amsonia kearneyana	E		

Federally Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	bluecurls, Hidden Lake	Trichostema austromontanum compactum	T		
Flowering Plants	bluegrass, Hawaiian	Poa sandvicensis	E		
Flowering Plants	bluegrass, Mann's	Poa mannii	E	\$1,242	
Flowering Plants	bluegrass, Napa	Poa napensis	E		
Flowering Plants	bluegrass, San Bernardino	Poa atropurpurea	E		
Flowering Plants	bluet, Roan Mountain	Hedyotis purpurea montana	E		
Flowering Plants	bonamia, Florida	Bonamia grandiflora	T		
Flowering Plants	boxwood, Vahl's	Buxus vahlii	E		
Flowering Plants	brodiaea, Chinese Camp	Brodiaea pallida	T		
Flowering Plants	brodiaea, thread-leaved	Brodiaea filifolia	T		
Flowering Plants	broom, San Clemente Island	Lotus dendroideus traskiae	E		
Flowering Plants	buckwheat, cushenbury	Eriogonum ovalifolium vineum	E		
Flowering Plants	buckwheat, lone	Eriogonum apricum	E		
Flowering Plants	buckwheat, scrub	Eriogonum longifolium gnaphalifolium	T		
Flowering Plants	buckwheat, steamboat	Eriogonum ovalifolium williamsiae	E		
Flowering Plants	bulrush, Northeastern	Scirpus ancistrochaetus	E		
Flowering Plants	bush-clover, prairie	Lespedeza leptostachya	T		
Flowering Plants	bush-mallow, San Clemente Island	Malacothamnus clementinus	E		
Flowering Plants	bush-mallow, Santa Cruz Island	Malacothamnus fasciculatus nesioticus	E		
Flowering Plants	buttercup, autumn	Ranunculus acrifolius aestivalis	E		
Flowering Plants	butterweed, Layne's	Senecio layneae	T		
Flowering Plants	butterwort, Godfrey's	Pinguicula ionantha	T		
Flowering Plants	button, Mohr's Barbara	Marshallia mohrii	T		
Flowering Plants	button-celery, San Diego	Eryngium aristulatum parishii	E		
Flowering Plants	cactus, Arizona hedgehog	Echinocereus triglochidiatus arizonicus	E	\$250	
Flowering Plants	cactus, Bakersfield	Opuntia treleasei	E		
Flowering Plants	cactus, black lace	Echinocereus reichenbachii albertii	E		
Flowering Plants	cactus, Brady pincushion	Pediocactus bradyi	E	\$100	
Flowering Plants	cactus, Chisos Mtn. hedgehog	Echinocereus chisoensis chisoensis	T		
Flowering Plants	cactus, Cochise pincushion	Coryphantha robbinsorum	T	\$100	
Flowering Plants	cactus, Key tree	Pilosocereus robinii	E		
Flowering Plants	cactus, Knowlton	Pediocactus knowltonii	E	\$45	
Flowering Plants	cactus, Kuenzler hedgehog	Echinocereus fendleri kuenzleri	E	\$45	
Flowering Plants	cactus, Lee pincushion	Coryphantha sneedii leei	T		
Flowering Plants	cactus, Lloyd's hedgehog	Echinocereus lloydii	DR		
Flowering Plants	cactus, Lloyd's Mariposa	Echinomastus mariposensis	T		
Flowering Plants	cactus, Mesa Verde	Sclerocactus mesae-verdae	T		
Flowering Plants	cactus, Nellie cory	Coryphantha minima	E		
Flowering Plants	cactus, Nichol's Turk's head	Echinocactus horizontalonius nicholii	E		
Flowering Plants	cactus, Peebles Navajo	Pediocactus peeblesianus peeblesianus	E		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	cactus, Pima pineapple	<i>Coryphantha scheeri robustispina</i>	E	\$2,500	
Flowering Plants	cactus, San Rafael	<i>Pediocactus despainii</i>	E		
Flowering Plants	cactus, Siler pincushion	<i>Pediocactus sileri</i>	T		
Flowering Plants	cactus, Sneed pincushion	<i>Coryphantha sneedii sneedii</i>	E	\$45	
Flowering Plants	cactus, star	<i>Astrophytum asterias</i>	E		
Flowering Plants	cactus, Tobusch fishhook	<i>Ancistrocactus tobuschii</i>	E		
Flowering Plants	cactus, Unita Basin hookless	<i>Sclerocactus glaucus</i>	T		
Flowering Plants	cactus, Winkler	<i>Pediocactus winkleri</i>	T		
Flowering Plants	cactus, Wright fishhook	<i>Sclerocactus wrightiae</i>	E		
Flowering Plants	campion, fringed	<i>Silene polypetala</i>	E		
Flowering Plants	capa rosa	<i>Callicarpa ampla</i>	E		
Flowering Plants	cat's-eye, Terlingua Creek	<i>Cryptantha crassipes</i>	E		
Flowering Plants	ceanothus, coyote	<i>Ceanothus ferrisae</i>	E		
Flowering Plants	ceanothus, Pine Hill	<i>Ceanothus roderickii</i>	E		
Flowering Plants	ceanothus, Vail Lake	<i>Ceanothus ophiochilus</i>	T		
Flowering Plants	centaury, spring-loving	<i>Centaurium namophilum</i>	T		
Flowering Plants	chaff-flower, round-leaved	<i>Achyranthes splendens rotundata</i>	E		
Flowering Plants	chaffseed, American	<i>Schwalbea americana</i>	E		
Flowering Plants	checker-mallow, Kenwood Marsh	<i>Sidalcea oregana valida</i>	E		
Flowering Plants	checker-mallow, Nelson's	<i>Sidalcea nelsoniana</i>	T		
Flowering Plants	checker-mallow, pedate	<i>Sidalcea pedata</i>	E		
Flowering Plants	chupacallos	<i>Pleodendron macranthum</i>	E		
Flowering Plants	cinquefoil, Robbins'	<i>Potentilla robbinsiana</i>	E		
Flowering Plants	clarkia, Pismo	<i>Clarkia speciosa immaculata</i>	E		
Flowering Plants	clarkia, Presidio	<i>Clarkia franciscana</i>	E		
Flowering Plants	clarkia, Springville	<i>Clarkia springvillensis</i>	T		
Flowering Plants	clarkia, Vine Hill	<i>Clarkia imbricata</i>	E		
Flowering Plants	cliff-rose, Arizona	<i>Purshia subintegra</i>	E	\$150	
Flowering Plants	clover, Monterey	<i>Trifolium trichocalyx</i>	E		
Flowering Plants	clover, running buffalo	<i>Trifolium stoloniferum</i>	E		
Flowering Plants	clover, showy Indian	<i>Trifolium amoenum</i>	E		
Flowering Plants	cobana negra	<i>Stahlia monosperma</i>	T		
Flowering Plants	coneflower, smooth	<i>Echinacea laevigata</i>	E		
Flowering Plants	coneflower, Tennessee purple	<i>Echinacea tennesseensis</i>	E		
Flowering Plants	cory cactus, bunched	<i>Coryphantha ramillosa</i>	T		
Flowering Plants	cress, toad-flax	<i>Schoenocrambe suffrutescens</i>	E		
Flowering Plants	crownbeard, big-leaved	<i>Verbesina dissita</i>	T		
Flowering Plants	crownscale, San Jacinto Valley	<i>Atriplex coronata notatior</i>	E		
Flowering Plants	cycladenia, Jones	<i>Cycladenia humilis jonesii</i>	T		
Flowering Plants	daisy, lakeside	<i>Hymenoxys herbacea</i>	T		



Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	daisy, Maguire	Erigeron maguirei	T		
Flowering Plants	daisy, Parish's	Erigeron parishii	T		
Flowering Plants	dawn-flower, Texas prairie	Hymenoxys texana	E		
Flowering Plants	dogweed, ashy	Thymophylla tephroleuca	E		
Flowering Plants	dropwort, Canby's	Oxypolis canbyi	E		
Flowering Plants	dudleya, Conejo	Dudleya abramsii parva	T		
Flowering Plants	dudleya, marcescent	Dudleya cymosa marcescens	T		
Flowering Plants	dudleya, Santa Clara Valley	Dudleya setchellii	E		
Flowering Plants	dudleya, Santa Cruz Island	Dudleya nesiotica	T		
Flowering Plants	dudleya, Verity's	Dudleya verityi	T		
Flowering Plants	dudleyea, Santa Monica Mountains	Dudleya cymosa ovatifolia	T		
Flowering Plants	dwarf-flax, Marin	Hesperolinon congestum	T		
Flowering Plants	erubia	Solanum drymophilum	E		
Flowering Plants	evening-primrose, Antioch Dunes	Oenothera deltoides howellii	E		
Flowering Plants	evening-primrose, Eureka Valley	Oenothera avita eurekaensis	E		
Flowering Plants	evening-primrose, San Benito	Camissonia benitensis	T		
Flowering Plants	fiddleneck, large-flowered	Amsinckia grandiflora	E		
Flowering Plants	flannelbush, Mexican	Fremontodendron mexicanum	E		
Flowering Plants	flannelbush, Pine Hill	Fremontodendron californicum decumbens	E		
Flowering Plants	fleabane, Zuni	Erigeron rhizomatus	T		
Flowering Plants	four-o'clock, MacFarlane's	Mirabilis macfarlanei	T		
Flowering Plants	frankenian, Johnston's	Frankenia johnstonii	E	\$4,000	
Flowering Plants	fringe-tree, pygmy	Chionanthus pygmaeus	E		
Flowering Plants	fringe-pod, Santa Cruz Island	Thysanocarpus conchuliferus	E		
Flowering Plants	gardenia, Hawaiian	Gardenia brighamii	E	\$1,668	
Flowering Plants	geranium, Hawaiian red-flowered	Geranium arboreum	E		
Flowering Plants	gerardia, sandplain	Agalinis acuta	E	\$10,000	
Flowering Plants	gilia, Hoffmann's slender-flowered	Gilia tenuiflora hoffmannii	E		
Flowering Plants	gilia, Monterey	Gilia tenuiflora arenaria	E		
Flowering Plants	goetzea, beautiful	Goetzea elegans	E		
Flowering Plants	goldenrod, Blue Ridge	Solidago spithamaea	T		
Flowering Plants	goldenrod, Houghton's	Solidago houghtonii	T	\$1,000	
Flowering Plants	goldenrod, Short's	Solidago shortii	E		
Flowering Plants	goldenrod, white-haired	Solidago albopilosa	T		
Flowering Plants	goldfields, Burke's	Lasthenia burkei	E		
Flowering Plants	goldfields, Contra Costa	Lasthenia conjugens	E		
Flowering Plants	gooseberry, Miccosukee	Ribes echinellum	T		
Flowering Plants	gourd, Okeechobee	Cucurbita okeechobeensis okeechobeensis	E		
Flowering Plants	grass, California Orcutt	Orcuttia californica	E		
Flowering Plants	grass, Colusa	Neostaphia colusana	T		

Federally Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	grass, Eureka Dune	Swallenia alexandrae	E		
Flowering Plants	grass, Solano	Tuctoria mucronata	E		
Flowering Plants	grass, Tennessee yellow-eyed	Xyris tennesseensis	E		
Flowering Plants	ground-plum, Pyne's	Astragalus bibullatus	E		
Flowering Plants	groundsel, San Francisco Peaks	Senecio franciscanus	T		
Flowering Plants	gumplant, Ash Meadows	Grindelia fraxino-pratensis	T		
Flowering Plants	haha	Cyanea humboldtiana	E		
Flowering Plants	haha	Cyanea grimesiana grimesiana	E		
Flowering Plants	haha	Cyanea pinnatifida	E		
Flowering Plants	haha	Cyanea hamatiflora hamatiflora	E		
Flowering Plants	haha	Cyanea manni	E	\$2,379	
Flowering Plants	haha	Cyanea glabra	E		
Flowering Plants	haha	Cyanea dunbarii	E		
Flowering Plants	haha	Cyanea copelandii copelandii	E		
Flowering Plants	haha	Cyanea asarifolia	E		
Flowering Plants	haha	Cyanea macrostegia gibsonii	E		
Flowering Plants	haha	Cyanea lobata	E		
Flowering Plants	haha	Cyanea hamatiflora carlsonii	E		
Flowering Plants	haha	Cyanea grimesiana obatae	E		
Flowering Plants	haha	Cyanea copelandii haleakalaensis	E		
Flowering Plants	haha	Cyanea longiflora	E		
Flowering Plants	haha	Cyanea koolauensis	E		
Flowering Plants	haha	Cyanea remyi	E		
Flowering Plants	haha	Cyanea acuminata	E		
Flowering Plants	haha	Cyanea undulata	E		
Flowering Plants	haha	Cyanea truncata	E		
Flowering Plants	haha	Cyanea recta	T		
Flowering Plants	haha	Cyanea procera	E	\$2,379	
Flowering Plants	haha	Cyanea stictophylla	E		
Flowering Plants	haha	Cyanea platyphylla	E		
Flowering Plants	haha	Cyanea shipmannii	E		
Flowering Plants	haha	Cyanea st-johnii	E		
Flowering Plants	haha	Cyanea superba	E		
Flowering Plants	haha	Cyanea mceldowneyi	E		
Flowering Plants	haha	Cyanea crispa	E		
Flowering Plants	ha'iwale	Cyrtandra dentata	E		
Flowering Plants	ha'iwale	Cyrtandra viridiflora	E		
Flowering Plants	ha'iwale	Cyrtandra tintinnabula	E		
Flowering Plants	ha'iwale	Cyrtandra limahuliensis	T		
Flowering Plants	ha'iwale	Cyrtandra munroi	E		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	ha'iwale	Cyrtandra giffardii	E		
Flowering Plants	ha'iwale	Cyrtandra crenata	E		
Flowering Plants	ha'iwale	Cyrtandra subumbellata	E		
Flowering Plants	ha'iwale	Cyrtandra polyantha	E		
Flowering Plants	hala pepe	Pleomele hawaiiensis	E		
Flowering Plants	harebells, Avon Park	Crotalaria avonensis	E		
Flowering Plants	harperella	Ptilimnium nodosum	E		
Flowering Plants	hau kuahiwi	Hibiscadelphus giffardianus	E		
Flowering Plants	hau kuahiwi	Hibiscadelphus hualalaiensis	E		
Flowering Plants	hau kuahiwi	Hibiscadelphus woodii	E		
Flowering Plants	heartleaf, dwarf-flowered	Hexastylis naniflora	T		
Flowering Plants	heather, mountain golden	Hudsonia montana	T		
Flowering Plants	heau	Exocarpos luteolus	E		
Flowering Plants	hedyotis, Na Pali beach	Hedyotis st.-johnii	E		
Flowering Plants	hibiscus, Clay's	Hibiscus clayi	E		
Flowering Plants	higo, chumbo	Harrisia portoricensis	T		
Flowering Plants	higuero de sierra	Crescentia portoricensis	E		
Flowering Plants	holei	Ochrosia kilaueaensis	E		
Flowering Plants	holly, Cook's	Ilex cookii	E		
Flowering Plants	Honohono	Haplostachys haplostachya	E		
Flowering Plants	howellia, water	Howellia aquatilis	T		
Flowering Plants	hypericum, highlands scrub	Hypericum cumulicola	E		
Flowering Plants	iliau, dwarf	Wilkesia hobbdi	E		
Flowering Plants	indian paintbrush, San Clemente Island	Castilleja grisea	E		
Flowering Plants	ipomopsis, Holy Ghost	Ipomopsis sancti-spiritus	E		
Flowering Plants	iris, dwarf lake	Iris lacustris	T		
Flowering Plants	irisette, white	Sisyrinchium dichotomum	E		
Flowering Plants	ischaemum, Hilo	Ischaemum byrone	E		
Flowering Plants	ivesia, Ash Meadows	Ivesia kingii eremica	T		
Flowering Plants	jacquemontia, beach	Jacquemontia reclinata	E		
Flowering Plants	jewelflower, California	Caulanthus californicus	E		
Flowering Plants	jewelflower, Metcalf Canyon	Streptanthus albidus albidus	E		
Flowering Plants	jewelflower, Tiburon	Streptanthus niger	E		
Flowering Plants	joint-vetch, sensitive	Aeschynomene virginica	T		
Flowering Plants	kamakahala	Labordia triflora	E		
Flowering Plants	kamakahala	Labordia tinifolia lanaiensis	E		
Flowering Plants	kamakahala	Labordia cyrtandrae	E		
Flowering Plants	kamakahala	Labordia tinifolia wahiawaensis	E		
Flowering Plants	kamakahala	Labordia lydgatei	E		
Flowering Plants	kauai hau kuahiwi	Hibiscadelphus distans	E		

Federally Listed Endangered and Threatened Wildlife and Plants

As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	kaula	Colubrina oppositifolia	E		
Flowering Plants	kaulu	Pteralyxia kauaiensis	E		
Flowering Plants	kio'ele	Hedyotis coriacea	E		
Flowering Plants	kiponapona	Phyllostegia racemosa	E		
Flowering Plants	kohe malama malama o kanaloa	Kanaloa kahoolawensis	E		
Flowering Plants	koki'o	Kokia drynarioides	E		
Flowering Plants	koki'o ke'oke'o	Hibiscus waimeae hannerae	E		
Flowering Plants	koki'o ke'oke'o	Hibiscus arnottianus immaculatus	E		
Flowering Plants	koki'o, (=Cooke's koki'o)	Kokia cookei	E		
Flowering Plants	koki'o, (=Kaua'i koki'o)	Kokia kauaiensis	E		
Flowering Plants	kolea	Myrsine linearifolia	T		
Flowering Plants	kolea	Myrsine juddii	E		
Flowering Plants	ko'oko'olau	Bidens micrantha kalealaha	E	\$1,668	
Flowering Plants	ko'oko'olau	Bidens wiebkei	E		
Flowering Plants	ko'oloa'ula	Abutilon menziesii	E		
Flowering Plants	Kopa	Hedyotis schlechtendahlina remyi	E		
Flowering Plants	kuahiwi laukahi	Plantago princeps	E	\$2,379	
Flowering Plants	kuahiwi laukahi	Plantago hawaiiensis	E		
Flowering Plants	kuawawaenuhu	Alsiniidendron lychnoides	E	\$802	
Flowering Plants	kula wahine noho	Isodendron pyriformis	E		
Flowering Plants	kulu'i	Nototrichium humile	E		
Flowering Plants	ladies'-tresses, Canelo Hills	Spiranthes delitescens	E		
Flowering Plants	ladies'-tresses, Navasota	Spiranthes parksii	E		
Flowering Plants	ladies'-tresses, Ute	Spiranthes diluvialis	T	\$1,000	
Flowering Plants	Lagu, Hyan	Serianthes nelsonii	E		
Flowering Plants	larkspur, San Clemente Island	Delphinium variegatum kinkiense	E		
Flowering Plants	lau`ehu	Panicum niuhauense	E		
Flowering Plants	lauihilihi, (=Ma'oli'oli)	Schiedea stellarioides	E		
Flowering Plants	layia, beach	Layia carnosa	E		
Flowering Plants	lead-plant, Crenulate	Amorpha crenulata	E		
Flowering Plants	leather flower, Alabama	Clematis socialis	E		
Flowering Plants	leather flower, Morefield's	Clematis morefieldii	E		
Flowering Plants	lessingia, San Francisco	Lessingia germanorum	E		
Flowering Plants	liliwai	Acaena exigua	E		
Flowering Plants	lily, Minnesota dwarf trout	Erythronium propullans	E		
Flowering Plants	lily, Pitkin Marsh	Lilium pardalinum pitkinense	E		
Flowering Plants	lily, Western	Lilium occidentale	E		
Flowering Plants	liveforever, Laguna Beach	Dudleya stolonifera	T		
Flowering Plants	liveforever, Santa Barbara Island	Dudleya traskiae	E		
Flowering Plants	locoweed, Fassett's	Oxytropis campestris chartacea	T		

Federally Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	lomatium, Bradshaw's	Lomatium bradshawii	E		
Flowering Plants	loosestrife, rough-leaved	Lysimachia asperulaefolia	E		
Flowering Plants	lo'ulu	Pritchardia remota	E		
Flowering Plants	lo'ulu	Pritchardia viscosa	E		
Flowering Plants	lo'ulu	Pritchardia napaliensis	E		
Flowering Plants	lo'ulu	Pritchardia affinis	E		
Flowering Plants	lo'ulu	Pritchardia schattaueri	E		
Flowering Plants	lo'ulu	Pritchardia kaalae	E		
Flowering Plants	lo'ulu	Pritchardia munroi	E		
Flowering Plants	lo'ulu, (=wahane)	Pritchardia aylmer-robinsonii	E		
Flowering Plants	lousewort, Furbish	Pedicularis furbishiae	E		
Flowering Plants	love grass, Fosberg's	Eragrostis fosbergii	E		
Flowering Plants	lupine, clover	Lupinus tidestromii	E		
Flowering Plants	lupine, scrub	Lupinus aridorum	E		
Flowering Plants	mahoe	Alectryon macrococcus	E	\$2,379	
Flowering Plants	makou	Peucedanum sandwicense	T		
Flowering Plants	malacothrix, island	Malacothrix squalida	E		
Flowering Plants	Malacothrix, Santa Cruz Island	Malacothrix indecora	E		
Flowering Plants	mallow, Kern	Eremalche kernensis	E		
Flowering Plants	mallow, Peter's Mountain	Iliamna corei	E		
Flowering Plants	manaca, palma de	Calyptronoma rivalis	T		
Flowering Plants	manioc, Walker's	Manihot walkerae	E		
Flowering Plants	manzanita, Del Mar	Arctostaphylos glandulosa crassifolia	E		
Flowering Plants	manzanita, Ione	Arctostaphylos myrtifolia	T		
Flowering Plants	manzanita, Morro	Arctostaphylos morroensis	T		
Flowering Plants	manzanita, pallid	Arctostaphylos pallida	T		
Flowering Plants	Manzanita, Presidio	Arctostaphylos hookeri ravenii	E		
Flowering Plants	manzanita, Santa Rosa Island	Arctostaphylos confertiflora	E		
Flowering Plants	ma'o hau hele, (=native yellow hibiscus)	Hibiscus brackenridgei	E	\$1,667	
Flowering Plants	ma'oli'oli	Schiedea kealiae	E		
Flowering Plants	ma'oli'oli	Schiedea apokremnos	E		
Flowering Plants	mapele	Cyrtandra cyaneoides	E		
Flowering Plants	mariposa lily, Tiburon	Calochortus tiburonensis	T		
Flowering Plants	maua	Xylosma crenatum	E		
Flowering Plants	meadowfoam, Butte County	Limnanthes floccosa californica	E		
Flowering Plants	meadowfoam, Sebastopol	Limnanthes vinculans	E		
Flowering Plants	meadowrue, Cooley's	Thalictrum cooleyi	E		
Flowering Plants	mehamehame	Flueggea neowawraea	E		
Flowering Plants	mesa-mint, Otay	Pogogyne nudiuscula	E		
Flowering Plants	mesa-mint, San Diego	Pogogyne abramsii	E		

Federally Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	milk-vetch, Applegate's	<i>Astragalus applegatei</i>	E		
Flowering Plants	milk-vetch, Ash meadows	<i>Astragalus phoenix</i>	T		
Flowering Plants	milk-vetch, Braunton's	<i>Astragalus brauntonii</i>	E		
Flowering Plants	milk-vetch, Clara Hunt's	<i>Astragalus clarianus</i>	E		
Flowering Plants	milk-vetch, Coachella Valley	<i>Astragalus lentiginosus coachellae</i>	E		
Flowering Plants	milk-vetch, coastal dunes	<i>Astragalus tener titi</i>	E		
Flowering Plants	milk-vetch, Cushenbury	<i>Astragalus albens</i>	E		
Flowering Plants	milk-vetch, Fish Slough	<i>Astragalus lentiginosus piscinensis</i>	T		
Flowering Plants	milk-vetch, heliotrope	<i>Astragalus montii</i>	T		
Flowering Plants	milk-vetch, Jesup's	<i>Astragalus robbinsii jesupi</i>	E	\$500	
Flowering Plants	milk-vetch, Lane Mountain	<i>Astragalus jaegerianus</i>	E		
Flowering Plants	milk-vetch, Mancos	<i>Astragalus humillimus</i>	E		
Flowering Plants	milk-vetch, Osterhout	<i>Astragalus osterhoutii</i>	E		
Flowering Plants	milk-vetch, Peirson's	<i>Astragalus magdalenae peirsonii</i>	T		
Flowering Plants	milk-vetch, Sentry	<i>Astragalus cremnophylax cremnophylax</i>	E		
Flowering Plants	milk-vetch, triple-ribbed	<i>Astragalus tricarinatus</i>	E		
Flowering Plants	milkpea, Small's	<i>Galactia smallii</i>	E		
Flowering Plants	milkweed, Mead's	<i>Asclepias meadii</i>	T	\$3,000	
Flowering Plants	milkweed, Welsh's	<i>Asclepias welshii</i>	T		
Flowering Plants	mint, Garrett's	<i>Dicerandra christmanii</i>	E		
Flowering Plants	mint, Lakela's	<i>Dicerandra immaculata</i>	E		
Flowering Plants	mint, longspurred	<i>Dicerandra cornutissima</i>	E		
Flowering Plants	mint, scrub	<i>Dicerandra frutescens</i>	E		
Flowering Plants	monardella, willow	<i>Monardella linoides viminea</i>	E		
Flowering Plants	monkey-flower, Michigan	<i>Mimulus glabratus michiganensis</i>	E		
Flowering Plants	monkshood, northern wild	<i>Aconitum noveboracense</i>	T		
Flowering Plants	morning-glory, Stebbins'	<i>Calystegia stebbinsii</i>	E		
Flowering Plants	mountain balm, Indian Knob	<i>Eriodictyon altissimum</i>	E		
Flowering Plants	mountain-mahogany, Catalina Island	<i>Cercocarpus traskiae</i>	E		
Flowering Plants	mustard, Carter's	<i>Warea carteri</i>	E		
Flowering Plants	mustard, Penland alpine fen	<i>Eutrema penlandii</i>	T		
Flowering Plants	mustard, slender-petaled	<i>Thelypodium stenopetalum</i>	E		
Flowering Plants	na'ena'e	<i>Dubautia latifolia</i>	E	\$2,044	
Flowering Plants	na'ena'e	<i>Dubautia plantaginea humilis</i>	E		
Flowering Plants	na'ena'e	<i>Dubautia pauciflora</i>	E		
Flowering Plants	na'ena'e	<i>Dubautia herbstobatae</i>	E		
Flowering Plants	nani wai'ale'ale	<i>Viola kauaiensis wahiawaensis</i>	E		
Flowering Plants	nanu	<i>Gardenia mannii</i>	E		
Flowering Plants	naupaka, dwarf	<i>Scaevola coriacea</i>	E		
Flowering Plants	navarretia, few-flowered	<i>Navarretia leucocephala pauciflora</i>	E		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	navarretia, many-flowered	Navarretia leucocephala plieantha	E		
Flowering Plants	navarretia, spreading	Navarretia fossalis	T		
Flowering Plants	nehe	Lipochaeta fauriei	E		
Flowering Plants	nehe	Lipochaeta waimeaensis	E		
Flowering Plants	nehe	Lipochaeta tenuifolia	E		
Flowering Plants	nehe	Lipochaeta lobata leptophylla	E		
Flowering Plants	nehe	Lipochaeta kamolensis	E		
Flowering Plants	nehe	Lipochaeta micrantha	E		
Flowering Plants	nehe	Lipochaeta venosa	E		
Flowering Plants	nioi	Eugenia koolauensis	E		
Flowering Plants	niterwort, Amargosa	Nitrophila mohavensis	E		
Flowering Plants	No common name	Achyranthes mutica	E		
Flowering Plants	No common name	Bonamia menziesii	E	\$1,668	
Flowering Plants	No common name	Schiedea samentosa	E		
Flowering Plants	No common name	Schiedea membranacea	E		
Flowering Plants	No common name	Schiedea hookeri	E		
Flowering Plants	No common name	Sanicula purpurea	E		
Flowering Plants	No common name	Phyllostegia parviflora	E		
Flowering Plants	No common name	Phyllostegia knudsenii	E		
Flowering Plants	No common name	Phyllostegia hirsuta	E		
Flowering Plants	No common name	Lobelia gaudichaudii koolauensis	E		
Flowering Plants	No common name	Neraudia ovata	E		
Flowering Plants	No common name	Hesperomannia arbuscula	E		
Flowering Plants	No common name	Hesperomannia arborescens	E		
Flowering Plants	No common name	Hedyotis parvula	E		
Flowering Plants	No common name	Hedyotis degeneri	E		
Flowering Plants	No common name	Gouania vitifolia	E		
Flowering Plants	No common name	Gouania meyenii	E		
Flowering Plants	No common name	Gouania hillebrandii	E		
Flowering Plants	No common name	Geocarpon minimum	T		
Flowering Plants	No common name	Gahnia lanaiensis	E		
Flowering Plants	No common name	Phyllostegia kaalaensis	E		
Flowering Plants	No common name	Eugenia woodburyana	E		\$8,662
Flowering Plants	No common name	Phyllostegia mannii	E	\$2,379	
Flowering Plants	No common name	Ilex sintenisii	E		
Flowering Plants	No common name	Cranichis ricartii	E		
Flowering Plants	No common name	Vernonia proctorii	E		
Flowering Plants	No common name	Trematolobelia singularis	E		
Flowering Plants	No common name	Stenogyne campanulata	E		
Flowering Plants	No common name	Stenogyne bifida	E	\$2,379	

Federally Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	No common name	Spermolepis hawaiiensis	E		
Flowering Plants	No common name	Silene perlmanii	E		
Flowering Plants	No common name	Schiedea nuttallii	E	\$2,379	
Flowering Plants	No common name	Schiedea kauaiensis	E		
Flowering Plants	No common name	Sanicula mariversa	E		
Flowering Plants	No common name	Phyllostegia wawrana	E		
Flowering Plants	No common name	Phyllostegia warshaueri	E		
Flowering Plants	No common name	Phyllostegia velutina	E		
Flowering Plants	No common name	Phyllostegia waimeae	E	\$5,359	
Flowering Plants	No common name	Mariscus fauriei	E	\$2,379	
Flowering Plants	No common name	Lysimachia maxima	E		
Flowering Plants	No common name	Lysimachia lydgatei	E		
Flowering Plants	No common name	Lyonia truncata proctorii	E		
Flowering Plants	No common name	Leptocereus grantianus	E		\$8,662
Flowering Plants	No common name	Catesbaea melanocarpa	E		
Flowering Plants	No common name	Auerodendron pauciflorum	E		
Flowering Plants	No common name	Aristida chaseae	E		\$8,662
Flowering Plants	No common name	Remya montgomeryi	E		
Flowering Plants	No common name	Alsinidendron viscosum	E		
Flowering Plants	No common name	Schoepfia arenaria	T		
Flowering Plants	No common name	Schiedea spergulina spergulina	T		
Flowering Plants	No common name	Schiedea spergulina leiopoda	E		
Flowering Plants	No common name	Schiedea lydgatei	E		
Flowering Plants	No common name	Schiedea helleri	E		
Flowering Plants	No common name	Schiedea haleakalensis	E		
Flowering Plants	No common name	Gesneria pauciflora	T		
Flowering Plants	No common name	Myrcia paganii	E		
Flowering Plants	No common name	Mariscus pennatiformis	E		
Flowering Plants	No common name	Ternstroemia subsessilis	E		
Flowering Plants	No common name	Silene hawaiiensis	T		
Flowering Plants	No common name	Poa siphonoglossa	E		
Flowering Plants	No common name	Platanthera holochila	E	\$2,379	
Flowering Plants	No common name	Phyllostegia mollis	E	\$2,379	
Flowering Plants	No common name	Mitracarpus polycladus	E		
Flowering Plants	No common name	Mitracarpus maxwelliae	E		
Flowering Plants	No common name	Lysimachia filifolia	E		
Flowering Plants	No common name	Lobelia monostachya	E		
Flowering Plants	No common name	Lepanthes eltoroensis	E		
Flowering Plants	No common name	Daphnopsis hellerana	E		
Flowering Plants	No common name	Cordia bellonis	E		



Federally Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	No common name	Chamaecrista glandulosa mirabilis	E		
Flowering Plants	No common name	Calyptanthes thomasiana	E		
Flowering Plants	No common name	Viola oahuensis	E		
Flowering Plants	No common name	Viola lanaiensis	E		
Flowering Plants	No common name	Viola helenae	E		
Flowering Plants	No common name	Vigna o-wahuensis	E	\$4,046	
Flowering Plants	No common name	Tetramolopium rockii	T		
Flowering Plants	No common name	Tetramolopium remyi	E		
Flowering Plants	No common name	Tetramolopium lepidotum lepidotum	E		
Flowering Plants	No common name	Tetramolopium filiforme	E		
Flowering Plants	No common name	Tetramolopium arenarium	E		
Flowering Plants	No common name	Stenogyne kanehoana	E		
Flowering Plants	No common name	Stenogyne angustifolia angustifolia	E		
Flowering Plants	No common name	Silene lanceolata	E		
Flowering Plants	No common name	Silene alexandri	E		
Flowering Plants	No common name	Schiedea kaalae	E		
Flowering Plants	No common name	Remya kauaiensis	E		
Flowering Plants	No common name	Phyllostegia glabra lanaiensis	E		
Flowering Plants	No common name	Neraudia sericea	E		
Flowering Plants	No common name	Neraudia angulata	E		
Flowering Plants	No common name	Munroidendron racemosum	E		
Flowering Plants	No common name	Lobelia oahuensis	E		
Flowering Plants	No common name	Lobelia niihauensis	E		
Flowering Plants	No common name	Hesperomannia lydgatei	E		
Flowering Plants	No common name	Alsinidendron trinerve	E		
Flowering Plants	No common name	Alsinidendron obovatum	E		
Flowering Plants	No common name	Abutilon sandwicense	E		
Flowering Plants	No common name	Abutilon eremitopetalum	E		
Flowering Plants	No common name	Schiedea verticillata	E		
Flowering Plants	No common name	Amaranthus brownii	E		
Flowering Plants	nohoanu	Geranium multiflorum	E		
Flowering Plants	oak, Hinckley	Quercus hinckleyi	T		
Flowering Plants	oha	Delissea rivularis	E		
Flowering Plants	oha	Delissea undulata	E		
Flowering Plants	oha	Delissea subcordata	E		
Flowering Plants	oha	Delissea rhytidosperra	E		
Flowering Plants	oha wai	Clermontia drepanomorpha	E		
Flowering Plants	oha wai	Clermontia peleana	E		
Flowering Plants	oha wai	Clermontia oblongifolia brevipes	E	\$2,379	
Flowering Plants	oha wai	Clermontia samuelii	E		

Federally Listed Endangered and Threatened Wildlife and Plants

As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	`oha wai	Clemontia oblongifolia mauiensis	E		
Flowering Plants	`oha wai	Clemontia pyrularia	E	\$5,000	
Flowering Plants	`oha wai	Clemontia lindseyana	E		
Flowering Plants	ohai	Sesbania tomentosa	E		
Flowering Plants	`ohe`ohe	Tetraplasandra gymnocarpa	E		
Flowering Plants	olulu	Brighamia insignis	E		
Flowering Plants	onion, Munz's	Allium munzii	E		
Flowering Plants	opuhe	Urera kaalae	E		
Flowering Plants	orchid, eastern prairie fringed	Platanthera leucophaea	T		
Flowering Plants	orchid, western prairie fringed	Platanthera praeclara	T	\$1,000	
Flowering Plants	orcutt grass, Greene's	Tuctoria greenei	E		
Flowering Plants	orcutt grass, hairy	Orcuttia pilosa	E		
Flowering Plants	orcutt grass, Sacramento	Orcuttia viscida	E		
Flowering Plants	orcutt grass, San Joaquin	Orcuttia inaequalis	T		
Flowering Plants	orcutt grass, slender	Orcuttia tenuis	T		
Flowering Plants	owl's-clover, fleshy	Castilleja campestris succulenta	T		
Flowering Plants	oxytheca, cushenbury	Oxytheca parishii goodmaniana	E		
Flowering Plants	paintbrush, ash-grey	Castilleja cinerea	T		
Flowering Plants	paintbrush, golden	Castilleja levisecta	T		
Flowering Plants	paintbrush, soft-leaved	Castilleja mollis	E		
Flowering Plants	paintbrush, Tiburon	Castilleja affinis neglecta	E		
Flowering Plants	palo colorado	Ternstroemia luquillensis	E		
Flowering Plants	palo de jazmin	Styrax portoricensis	E		
Flowering Plants	palo de nigua	Cornutia obovata	E		
Flowering Plants	palo de ramon	Banara vanderbiltii	E		
Flowering Plants	palo de rosa	Ottoschulzia rhodoxylon	E		
Flowering Plants	pamakani	Tetramolopium capillare	E		
Flowering Plants	pamakani	Viola chamissoniana chamissoniana	E		
Flowering Plants	panicgrass, Carter's	Panicum fauriei carteri	E		
Flowering Plants	pau'ala, (=alulu)	Brighamia rockii	E		
Flowering Plants	pawpaw, beautiful	Deeringothamnus pulchellus	E		
Flowering Plants	pawpaw, four-petal	Asimina tetramera	E		
Flowering Plants	pawpaw, Rugel's	Deeringothamnus rugelii	E		
Flowering Plants	pelos del diablo	Aristida portoricensis	E		
Flowering Plants	pennyroyal, Todsens's	Hedeoma todsenii	E		
Flowering Plants	penstemon, blowout	Penstemon haydenii	E		
Flowering Plants	pentachaeta, Lyon's	Pentachaeta lyonii	E		
Flowering Plants	pentachaeta, white-rayed	Pentachaeta bellidiflora	E		
Flowering Plants	peperomia, Wheeler's	Peperomia wheeleri	E		
Flowering Plants	phacelia, clay	Phacelia argillacea	E		

Federally Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	phacelia, island	Phacelia insularis insularis	E		
Flowering Plants	phacelia, North Park	Phacelia formosula	E		
Flowering Plants	phlox, Texas trailing	Phlox nivalis texensis	E		
Flowering Plants	pigeon wings	Clitoria fragrans	T		
Flowering Plants	pilo	Hedyotis mannii	E	\$2,379	
Flowering Plants	pink, swamp	Helonias bullata	T		
Flowering Plants	pinkroot, gentian	Spigelia gentianoides	E		
Flowering Plants	piperia, Yadon's	Piperia yadonii	E		
Flowering Plants	pitaya, Davis' green	Echinocereus viridiflorus davisii	E		
Flowering Plants	pitcher-plant, Alabama canebrake	Sarracenia rubra alabamensis	E		
Flowering Plants	pitcher-plant, green	Sarracenia oreophila	E		
Flowering Plants	pitcher-plant, mountain sweet	Sarracenia rubra jonesii	E		
Flowering Plants	plum, scrub	Prunus geniculata	E		
Flowering Plants	po'e	Portulaca sclerocarpa	E		
Flowering Plants	pogonia, small whorled	Isotria medeoloides	T	\$200	
Flowering Plants	polygala, Lewton's	Polygala lewtonii	E		
Flowering Plants	polygala, tiny	Polygala smallii	E		
Flowering Plants	pondberry	Lindera melissifolia	E		
Flowering Plants	pondweed, Little Aguja Creek	Potamogeton clystocarpus	E		
Flowering Plants	popolo `aiakeakua	Solanum sandwicense	E		
Flowering Plants	popolo ku mai	Solanum incompletum	E		
Flowering Plants	poppy, Sacramento prickly	Argemone pleiacantha pinnatisecta	E		
Flowering Plants	poppy-mallow, Texas	Callirhoe scabriuscula	E		
Flowering Plants	potato-bean, Price's	Apios priceana	T		
Flowering Plants	potentilla, Hickman's	Potentilla hickmanii	E		
Flowering Plants	prairie-clover, leafy	Dalea foliosa	E		
Flowering Plants	prickly-apple, fragrant	Cereus eriophorus fragrans	E		
Flowering Plants	prickly-ash, St. Thomas	Zanthoxylum thomasianum	E		
Flowering Plants	primrose, Maguire	Primula maguirei	T		
Flowering Plants	pussypaws, Mariposa	Calyptidium pulchellum	T		
Flowering Plants	pu'uka'a	Cyperus trachysanthos	E		
Flowering Plants	rattleweed, hairy	Baptisia arachnifera	E		
Flowering Plants	reed-mustard, Barneby	Schoenocrambe barnebyi	E		
Flowering Plants	reed-mustard, clay	Schoenocrambe argillacea	T		
Flowering Plants	remya, Maui	Remya mauiensis	E		
Flowering Plants	rhododendron, Chapman	Rhododendron chapmanii	E		
Flowering Plants	ridge-cress, Barneby	Lepidium barnebyanum	E		
Flowering Plants	rock-cress, Braun's	Arabis perstellata	E		
Flowering Plants	rock-cress, Hoffmann's	Arabis hoffmannii	E		
Flowering Plants	rock-cress, McDonald's	Arabis mcdonaldiana	E		

Federally Listed Endangered and Threatened Wildlife and Plants

As of Fiscal Year 1999 (September 30, 1999)

3/27/02

Page 28 of 31

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	rock-cress, shale barren	Arabis serotina	E		
Flowering Plants	rock-cress, Santa Cruz Island	Sibara filifolia	E		
Flowering Plants	rosemary, Apalachicola	Conradina glabra	E		
Flowering Plants	rosemary, Cumberland	Conradina verticillata	T		
Flowering Plants	rosemary, Etonia	Conradina etonia	E		
Flowering Plants	rosemary, short-leaved	Conradina brevifolia	E		
Flowering Plants	roseroot, Leedy's	Sedum integrifolium leedyi	T		
Flowering Plants	rush-pea, slender	Hoffmannseggia tenella	E		
Flowering Plants	rush-rose, island	Helianthemum greenei	T		
Flowering Plants	sand-verbena, large-fruited	Abronia macrocarpa	E		
Flowering Plants	sandalwood, Lanai or 'iiiahi	Santalum freycinetianum lanaiense	E	\$1,667	
Flowering Plants	sandbur, agrimony or Kamanomano	Cenchrus agrimonioides	E		
Flowering Plants	sandlace	Polygonella myriophylla	E		
Flowering Plants	sandwort, Bear Valley	Arenaria ursina	T		
Flowering Plants	sandwort, Cumberland	Arenaria cumberlandensis	E		
Flowering Plants	sandwort, Marsh	Arenaria paludicola	E		
Flowering Plants	schiedea, Diamond Head	Schiedea adamantis	E		
Flowering Plants	seablite, California	Suaeda californica	E		
Flowering Plants	seagrass, Johnson's	Halophila johnsonii	T		
Flowering Plants	sedge, Navajo	Carex specuicola	T	\$250	
Flowering Plants	sedge, white	Carex albida	E		
Flowering Plants	silversword, Haleakala	Argyroxiphium sandwicense macrocephalum	T		
Flowering Plants	silversword, Mauna Kea	Argyroxiphium sandwicense sandwicense	E		
Flowering Plants	silversword, Mauna Loa	Argyroxiphium kauense	E		
Flowering Plants	skullcap, Florida	Scutellaria floridana	T		
Flowering Plants	skullcap, large-flowered	Scutellaria montana	E		
Flowering Plants	snakeroot	Eryngium cuneifolium	E		
Flowering Plants	sneezeweed, Virginia	Helenium virginicum	T		
Flowering Plants	snowbells, Texas	Styrax texanus	E		
Flowering Plants	spineflower, Ben Lomond	Chorizanthe pungens hartwegiana	E		
Flowering Plants	spineflower, Howell's	Chorizanthe howellii	E		
Flowering Plants	spineflower, Monterey	Chorizanthe pungens pungens	T		
Flowering Plants	spineflower, Orcutt's	Chorizanthe orcuttiana	E		
Flowering Plants	spineflower, Robust	Chorizanthe robusta	E		
Flowering Plants	spineflower, slender-horned	Dodecahema leptoceras	E		
Flowering Plants	spineflower, Sonoma	Chorizanthe valida	E		
Flowering Plants	spiraee, Virginia	Spiraea virginiana	T		
Flowering Plants	spurge, deltoid	Chamaesyce deltoidea deltoidea	E		
Flowering Plants	spurge, Garber's	Chamaesyce garberi	T		
Flowering Plants	spurge, Hoover's	Chamaesyce hooveri	T		

Federally Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	spurge, telephus	Euphorbia telephioides	T		
Flowering Plants	stonecrop, Lake County	Parvisedum leiocarpum	E		
Flowering Plants	sumac, Michaux's	Rhus michauxii	E		
Flowering Plants	sunburst, Hartweg's golden	Pseudobahia bahiifolia	E		
Flowering Plants	sunburst, San Joaquin adobe	Pseudobahia peirsonii	T		
Flowering Plants	sunflower, Eggert's	Helianthus eggertii	T		
Flowering Plants	sunflower, San Mateo woolly	Eriophyllum latilobum	E		
Flowering Plants	sunflower, Schweinitz's	Helianthus schweinitzii	E		
Flowering Plants	sunray, Ash Meadows	Enceliopsis nudicaulis corrugata	T		
Flowering Plants	sunshine, Sonoma	Blennosperma bakeri	E		
Flowering Plants	taraxacum, California	Taraxacum californicum	E		
Flowering Plants	tarplant, Otay	Hemizonia conjugens	T		
Flowering Plants	thelypody, Howell's spectacular	Thelypodium howellii spectabilis	T		
Flowering Plants	thistle, Chorro Creek bog	Cirsium fontinale obispoense	E		
Flowering Plants	thistle, fountain	Cirsium fontinale fontinale	E		
Flowering Plants	thistle, Loch Lomond coyote	Eryngium constancei	E		
Flowering Plants	thistle, Pitcher's	Cirsium pitcheri	T		
Flowering Plants	thistle, Sacramento Mountains	Cirsium vinaceum	T		
Flowering Plants	thistle, Suisun	Cirsium hydrophilum hydrophilum	E		
Flowering Plants	thornmint, San Diego	Acanthomintha ilicifolia	T		
Flowering Plants	thornmint, San Mateo	Acanthomintha obovata duttonii	E		
Flowering Plants	townsendia, Last Chance	Townsendia aprica	T		
Flowering Plants	trillium, persistent	Trillium persistens	E		
Flowering Plants	trillium, relict	Trillium reliquum	E		
Flowering Plants	twinpod, Dudley Bluffs	Physaria obcordata	T		
Flowering Plants	uhiuhi	Caesalpinia kavaiense	E		
Flowering Plants	uvillo	Eugenia haematocarpa	E		
Flowering Plants	vervain, Red Hills	Verbena californica	T		
Flowering Plants	vetch, Hawaiian	Vicia menziesii	E		
Flowering Plants	wallflower, Ben Lomond	Erysimum teretifolium	E		
Flowering Plants	wallflower, Contra Costa	Erysimum capitatum angustatum	E		
Flowering Plants	wallflower, Menzies'	Erysimum menziesii	E		
Flowering Plants	walnut, West Indian or nogal	Juglans jamaicensis	E		
Flowering Plants	warea, wide-leaf	Warea amplexifolia	E		
Flowering Plants	water-plantain, Kral's	Sagittaria secundifolia	T		
Flowering Plants	water-umbel, Huachuca	Lilaeopsis schaffneriana recurva	E		
Flowering Plants	water-willow, Cooley's	Justicia cooleyi	E		
Flowering Plants	watercress, Gambel's	Rorippa gambellii	E		
Flowering Plants	whitlow-wort, papery	Paronychia chartacea	T		
Flowering Plants	wild-buckwheat, clay-loving	Eriogonum pelinophilum	E		

Federally Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	wild-buckwheat, gypsum	Eriogonum gypsophilum	T		
Flowering Plants	wild-buckwheat, southern mountain	Eriogonum kennedyi austromontanum	T		
Flowering Plants	wild-rice, Texas	Zizania texana	E		
Flowering Plants	wire-lettuce, Malheur	Stephanomeria malheurensis	E		
Flowering Plants	wireweed	Polygonella basiramia	E		
Flowering Plants	woodland-star, San Clemente Island	Lithophragma maximum	E		
Flowering Plants	woolly-star, Hoover's	Eriastrum hooveri	T		
Flowering Plants	woolly-star, Santa Ana River	Eriastrum densifolium sanctorum	E		
Flowering Plants	wooly-threads, San Joaquin	Lembertia congdonii	E		
Flowering Plants	ziziphus, Florida	Ziziphus celata	E		
Conifers and Cycads	cypress, Gowen	Cupressus goveniana goveniana	T		
Conifers and Cycads	cypress, Santa Cruz	Cupressus abramsiana	E		
Conifers and Cycads	Torreya, Florida	Torreya taxifolia	E		
Ferns and Allies	diellia, asplenium-leaved	Diellia erecta	E	\$802	
Ferns and Allies	fern, Alabama streak-sorus	Thelypteris pilosa alabamensis	T		
Ferns and Allies	fern, Aleutian shield	Polystichum aleuticum	E		
Ferns and Allies	fern, American hart's-tongue	Asplenium scolopendrium americanum	T		
Ferns and Allies	fern, Elfin tree	Cyathea dryopteroides	E		
Ferns and Allies	fern, pendant kihi	Adenophorus periens	E	\$2,379	
Ferns and Allies	ih'i'ih'i	Marsilea villosa	E		
Ferns and Allies	No common name	Asplenium fragile insulare	E		
Ferns and Allies	No common name	Diellia falcata	E		
Ferns and Allies	No common name	Diellia pallida	E		
Ferns and Allies	No common name	Thelypteris yaucoensis	E		
Ferns and Allies	No common name	Thelypteris verecunda	E		
Ferns and Allies	No common name	Thelypteris inabonensis	E		
Ferns and Allies	No common name	Tectaria estremerana	E		
Ferns and Allies	No common name	Polystichum calderonense	E		
Ferns and Allies	No common name	Elaphoglossum serpens	E		
Ferns and Allies	No common name	Diellia unisora	E		
Ferns and Allies	No common name	Adiantum vivesii	E		
Ferns and Allies	No common name	Diplazium molokaiense	E		
Ferns and Allies	No common name	Pteris lidgatei	E		
Ferns and Allies	pauoa	Ctenitis squamigera	E		
Ferns and Allies	quillwort, black spored	Isoetes melanospora	E		
Ferns and Allies	quillwort, Louisiana	Isoetes louisianensis	E	\$63	
Ferns and Allies	quillwort, mat-forming	Isoetes tegetiformans	E		
Ferns and Allies	wawae'iole	Huperzia mannii	E		
Ferns and Allies	wawae'iole, (=ha'iwale)	Phlegmariurus nutans	E		
Lichens	cladonia, Florida perforate	Cladonia perforata	E		

Federally Listed Endangered and Threatened Wildlife and Plants  
 As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Lichens	lichen, rock gnome	Gymnoderma lineare	E	\$9,029,430	\$6,638,472



10-060  
UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
Silver Spring, MD 20910

DEC 20 2001

Mr. Marshall Jones, Jr.  
Acting Director  
U.S. Fish and Wildlife Service  
United States Department of the Interior  
Washington, D.C. 20240

Dear MyY es:

This responds to your September 19, 2001, request for a species-by-species accounting of expenditures made for in fiscal years 1999 and 2000 for species with funds appropriated under the Endangered Species Act. Based on discussions with your staff we are also providing a summary of expenditures for fiscal year 1998. And while were are compiling all these, we summarized expenditures for 2001.

Sincerely,

Donald R. Knovcfles  
Director  
Office of Protected Resources

Enclosure





<b>1998-2001 Endangered Species Act Expenditures - National Marine Fisheries Service (\$ x 1000)</b>					
<b>Common Name</b>	<b>Scientific Name</b>	<b>Spending FY 1998</b>	<b>Spending FY 1999</b>	<b>Spending FY 2000</b>	<b>Spending 'FY 2001</b>
<b>Fish</b>					
Salmon, Chinook	<i>Oncorhynchus tshawytscha</i>	3198	4390	6795	7631
Salmon, Chum	<i>Oncorhynchus keta</i>	3198	4390	6795	7631
Salmon, Coho	<i>Oncorhynchus kisutch</i>	3198	4390	6795	7631
Salmon, Sockeye	<i>Oncorhynchus nerka</i>	3198	4390	6795	7631
Trout, steelhead	<i>Oncorhynchus mykiss</i>	3198	4390	6795	7631
Sturgeon, Gulf	<i>Acipenser oxyrinchus desotoi</i>	73	32	50	136
Sturgeon shortnose	<i>Acipenser transmontanus</i>	127	125	100	350
Salmon, Atlantic	<i>Salmo salar</i>	1500	1690	2500	4517
Totoaba	<i>Cynoscion macdonaldi</i>	0	0	0	0
<b>Mammal</b>					
Dolphin, Chinese River	<i>Lipotes vexillifer</i>	0	0	0	0
Dolphin, Indus River	<i>Plantanista minor</i>	0	0	0	0
Sea lion, Steller	<i>Eumetopias jubatus</i>	3040	4879	5243	33312
Seal, Caribbean monk	<i>Monachus tropicalis</i>	0	0	0	0
Seal, Guadalupe fur	<i>Arctocephalus townsendi</i>	0	0	0	0
Seal, Hawaiian monk	<i>Monachus schauinslandi</i>	1504	1052	1210	2100
Seal, Mediterranean monk	<i>Monachus monachus</i>	0	0	0	0
Seal, Siamaa.	<i>Phoca hispida saimensis</i>	0	0	0	0
Whale, blue	<i>Balaenoptera musculus</i>	0	0	0	0
Whale bowhead	<i>Balaena mysticetus</i>	0	0	0	0
Whale finback	<i>Balaenoptera physalus</i>	0	0	0	0
Whale gray	<i>Eschrichtius robustus</i>	125	124	34	84

**1998-2001 Endangered Species Act Expenditures - National Marine Fisheries Service (S x 1000)**

<b>Common Name</b>	<b>Scientific Name</b>	<b>Spending FY 1998</b>	<b>Spending FY 1999</b>	<b>Spending FY 2000</b>	<b>Spending FY 2001</b>
Whale humpback	<i>Megaptera novaeangliae</i>	240	131	53	53
Whale right, northern	<i>Balaena glacialis</i>	0	142	268	270
Whale right, northern	<i>Balaena glacialis</i>	1100	1400	3900	5000
Whale sei	<i>Balaenoptera borealis</i>	0	0	0	0
Whale, sperm	<i>Phyoster macrocephalus</i>	0	0	0	0
<b>Reptile</b>					
Turtle, green	<i>Chelonia mydas</i>	647	647	747	1330
Turtle, hawksbill	<i>Eretmochelys imbricata</i>	647	647	747	1930
Turtle, Kemp's ridley	<i>Lepidochelys kempii</i>	647	647	747	1330
Turtle, leatherback	<i>Dermochelys coriacea</i>	647	647	747	1930
Turtle, loggerhead	<i>Caretta caretta</i>	647	647	747	1930
Turtle, olive ridley	<i>Lepidochelys olivacea</i>	647	647	747	1930
<b>Seagrass</b>					
Seagrass, Johnson's	<i>Halophila johnsonii</i>	111	112	148	200
<b>Candidate Species</b>					
<b>Fish</b>					
Grouper, Nassau	<i>Epinephelus striatus</i>	43	36	0	22
Grouper, warsaw	<i>Epinephelus nigritus</i>	0	0	0	22
Hind, speckled	<i>Epinephelus drummondhayi</i>		0	0	0
Goliath Grouper	<i>Epinephelus itajara</i>	104	225	133	48
Pipefish, opossum	<i>Alicia brachyurus lineatus</i>		21	0	0
Rivulus, mangrove	<i>Rivulus marmoratus</i>	0	0	0	0
Shad, Alabama	<i>Alosa alabamae</i>	0	0	0	0
Shark, dusky	<i>Carcharhinus obscurus</i>	0	0	30	0

1998-2001 Endangered Species Act Expenditures - National Marine Fisheries Service (\$ x 1000)					
Common Name	Scientific Name	Spending FY 1998	Spending FY 1999	Spending FY 2000	Spending FY 2001
Shark, night	<i>Carcharhinus signatus</i>	0	0	0	0
Shark, sand tiger	<i>Odontaspis taurus</i>	0	0	0	0
Silverside, Key	<i>Menidia conchorum</i>	0	0	0	0
Sturgeon, Atlantic	<i>Acipenser oxyrinchus oxyrinchus</i>	105	14	100	0
Topminnow, saltmarsh	<i>Fundulus jenkinsi</i>	0	0	0	0
Barndoor skate	<i>Raja laevis</i>	0	0	64	59
Puget Sound groundfishes	<i>various species</i>	0	0	67	149
Smalltooth sawfish <sup>1</sup>	<i>Pristis pectinata</i>	0	0	50	56
California rockfishes	<i>mult-species</i>	6	0	49	61
<b>Mammal</b>					
Whale, beluga	<i>Delphinapterus leucas</i>	109	145	284	670
Porpoise, harbor	<i>Phocoenaphocoena</i>	0	150	0	0
<b>Invertebrates</b>					
Abalone, white <sup>2</sup>	<i>Haliotis sorenseni</i>	0	0	174	135
Coral spp.	<i>Acroporapalmata</i>	92	85	115	100
<b>Total expenditure by species</b>		<b>28,151</b>	<b>36,195</b>	53,029	<b>95,879</b>
<b>Total annual ESA appropriation</b>		29,779	<b>38,699</b>	55,470	<b>102,476</b>

---

<sup>1</sup>Listed as endangered 2001

<sup>2</sup>Listed as endangered 2001



ACQUISITION AND  
TECHNOLOGY

OFFICE OF THE UNDER SECRETARY OF DEFENSE

3000 DEFENSE PENTAGON  
WASHINGTON DC 20301-3000

11 May 2000

Mr. Richard M. Smith  
Deputy Director  
U.S. Fish and Wildlife Service  
Department of the Interior  
Washington, DC 20240

Dear Mr. Smith:

The Department of Defense's report on FY 1999 investments for the conservation of threatened and endangered species is enclosed. This summary report does not include activities of the Army Corps of Engineers (Civil Works), who are reporting to you separately.

In FY 1999, the Military Components invested \$27,642,940 on the conservation and management of federally-listed threatened and endangered species. The Department of the Army invested \$12,085,000; the Department of the Navy invested \$10,021,200, including \$5,682,200 by the Marine Corps; the Department of the Air Force invested \$5,486,740; and the Defense Logistics Agency invested \$50,000. Summary tables of each Component's efforts by species are enclosed. We have no land acquisition costs to report.

Threatened and endangered species protection continues to be a major goal of DoD's conservation program. If we can be of further assistance, please contact Mr. Peter Boice at (703) 604-0524.

Bruce C. deGrazia  
Assistant Deputy Under Secretary of Defense  
(Environmental Quality)

Enclosures



Peter Bone

ANS



DEPARTMENT OF THE ARMY  
ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT  
600 ARMY PENTAGON  
WASHINGTON DC 20310-0600



REPLY TO  
ATTENTION OF

07 JAN 2000

SW 6  
6 DV  
EB

DAIM-ED-N

MEMORANDUM FOR ASSISTANT DEPUTY UNDER SECRETARY OF DEFENSE  
(ENVIRONMENTAL QUALITY)

SUBJECT: FY 99 Report of Army Threatened and Endangered Species Expenditures

1. Reference: Memorandum, ADUSD(EQ), 18 Nov 99, Subject: Annual Reporting of Threatened and Endangered Species Expenditures.
2. The requested report is enclosed.
3. The Army staff contact is Mr. Bill Woodson, (703) 693-0680.

FOR THE ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT:

STACEY HIRATA  
Colonel, GS  
Director, Environmental Programs

End

CF (w/encl):  
SAIE-ESOH

**DEPARTMENT OF THE ARMY  
FY 99 ESTIMATED EXPENDITURES FOR  
THREATENED AND ENDANGERED SPECIES**

<b>SPECIES NAME</b>	<b>ARMY EXPENDITURES \$K</b>
<b>1. Mammals</b>	
Bat, gray	449.8
Bat, Indiana	479.4
Bat, lesser	86.8
Fox, San Joaquin kit	289.1
Mouse, Preble's meadow jumping	25.8
Wolf, gray	15.0
Wolf, timber	1.0
<b>SUBTOTAL:</b>	<b>1346.9</b>
<b>2. Birds</b>	
Coot, Hawaiian	0.6
Creeper, Oahu	9.0
Duck, Hawaiian	0.6
Eagle, bald	358.8
Falcon, American peregrine	61.8
Falcon, northern aplomado	60.0
Falcon, peregrine	17.5

01/03/2000 - 2:08 PM

*ENCL*

**SPECIES NAME****ARMY EXPENDITURES****\$K****2. Birds (cont.)**

Flycatcher, southwestern willow	22.8
Moorhen, Hawaiian common	0.6
Owl, Mexican spotted	122.9
Owl, northern spotted	80.0
Plover, piping	2.0
Pygmy-owl, cactus ferruginous	3.0
Stilt, Hawaiian	0.6
Stork, wood	21.2
Tern, least	2.5
Vireo, black-capped	974.0
Vireo, least Bell's	6.3
Warbler, golden-cheeked	736.0
Woodpecker, red-cockaded	5068.9
<b>SUBTOTAL:</b>	<b>7548.9</b>

**3. Reptiles**

Alligator, American	0.6
Snake, eastern indigo	278.5
Snake, northern copperbelly water	15.9

<b>SPECIES NAME</b>	<b>ARMY EXPENDITURES \$K</b>
Tortoise, desert	769.0
Tortoise, gopher	61.3
<b>SUBTOTAL:</b>	<b>1125.4</b>
<b>4. Amphibians</b>	
Frog, California red-legged	78.7
Salamander, flatwoods	10.0
Salamander, Sonoran tiger	18.2
Toad, Arroyo	45.0
<b>SUBTOTAL:</b>	<b>151.9</b>
<b>5. Fish</b>	
Shiner, Topeka	10.0
Sturgeon, shortnose	14.6
Trout, greenback cutthroat	75.0
<b>SUBTOTAL:</b>	<b>99.6</b>
<b>6. Clams</b>	
Mussel, ring pink	15.9
Mussel, winged maple	15.9
Pearlymussel, dromedary	15.9
Pearlymussel, Higgin's eye	0.1



<b>SPECIES NAME</b>	<b>ARMY EXPENDITURES \$K</b>
<b>6. Clams (cont.)</b>	
Pearlymussel, orange-foot pimpleback	15.9
Pearlymussel, pink mucket	15.9
Pigtoe, rough	15.9
Riffleshell, tan	15.9
<b>SUBTOTAL:</b>	<b>111.4</b>
<b>7. Snails</b>	
Achatinella apexfulva	6.7
Achatinella byronii	13.4
Achatinella curta	6.7
Achatinella decipiens	13.4
Achatinella leucorraphe	13.4
Achatinella lila	6.7
Achatinella livida	6.7
Achatinella mustelina	160.4
Achatinella sowerbyana	20.1
<b>SUBTOTAL:</b>	<b>247.6</b>
<b>8. Insects</b>	
Beetle, American burying	96.7

<b>SPECIES NAME</b>	<b>ARMY EXPENDITURES \$K</b>
<b>9. Crustaceans</b>	
Butterfly, Karner blue	84.0
Butterfly, Oregon silverspot	11.5
<b>SUBTOTAL:</b>	<b>192.2</b>
Fairy shrimp, vernal pool	90.0
Shrimp, Alabama cave	29.5
<b>SUBTOTAL:</b>	<b>119.5</b>
<b>10. Plants</b>	
Alani	4.5
Alsinidendron obovatum	11.7
Alsinidendron trinerve	2.8
American chaffseed	100.0
Anaunau	14.5
Aupaka	2.8
Bonamia menziesii	11.7
Chamaesyce rockii	15.7
Chorro Creek bog thistle	20.0
Cyanea acuminata	7.3
Cyanea crispa	4.5

<b>SPECIES NAME</b>	<b>ARMY EXPENDITURES \$K</b>
<b>10. Plants (cont.)</b>	
Cyanea grimesiana ssp grimesiana	2.8
Cyanea koolauensis	15.7
Cyanea st. johnii	4.5
Cyanea superba	11.7
Cyrtandra dentata	11.7
Cyrtandra subumbellata	2.8
Cyrtandra viridiflora	4.5
Diella falcata	14.5
Eggert's sunflower	25.0
Euphorbia haeleeleana	11.7
Hedyotis parvula	11.7
Hesperomannia arborescens	15.7
Huachuca water umbel	2.7
Kamakahala	2.8
Kamanomano	11.7
Kolea	4.5
Kulu 'I	18.3
Large-flowered skullcap	1.0

<b>SPECIES NAME</b>	<b>ARMY EXPENDITURES \$K</b>
<b>10. Plants (cont.)</b>	
Lobelia gaudichaudii ssp koolauensis	2.8
Lobelia niihauensis	14.5
Lobelia oahuensis	14.5
Louisiana quillwort	14.1
Loulu	14.5
Mahoe	14.5
Ma 'oli 'oli	6.6
Ma 'o hau hele	6.6
Mehamehame	14.5
Michaux sumac	130.0
Na 'ena 'e	11.7
Nanu	15.7
Nehe	11.7
Neraudia angulata var angulata	11.7
Neraudia angulata var dentata	11.7
Nioi	8.4
Oha	11.7
Ohai	100.0

<b>SPECIES NAME</b>	<b>ARMY EXPENDITURES \$K</b>
<b>10. Plants (cont.)</b>	
Ohe 'ohe	15.7
Opuhe	2.8
Pamakani	14.5
Pauoa	11.7
Phyllostegia hirsuta	15.7
Phyllostegia mollis	2.8
Plantago princiceps var longibracteata	4.5
Plantago princiceps var princeps	14.5
Price's potato bean	30.9
Pteris lidgatei	7.3
Relict trillium	4.1
Rough-leaved loosestrife	53.0
Sanicula mariversa	11.7
Sanicula purpurea	7.3
Schiedea hookeri	11.7
Schiedea nuttalli	11.7
Silene lanceolata	11.7
Small-whorled pagonia	20.0

<b>SPECIES NAME</b>	<b>ARMY EXPENDITURES \$K</b>
<b>10. Plants (cont.)</b>	
Smooth coneflower	1.5
Snead pincushion cactus	25.0
Spermolepis hawaiiensis	11.7
Swamp pink	20.0
Tennessee yellow-eyed grass	3.0
Tetramolopium filiforme	11.7
Ute ladies'-tresses	13.3
Viola oahuensis	7.3
Water howellia	7.5
Wawae 'iole	4.5
<b>SUBTOTAL:</b>	<b>1141.7</b>
<b>ARMY TOTAL EXPENDITURES:</b>	<b>12085.0</b>



DEPARTMENT OF THE NAVY  
OFFICE OF THE ASSISTANT SECRETARY  
(INSTALLATIONS AND ENVIRONMENT)  
1000 NAVY PENTAGON  
WASHINGTON, D.C. 20350-1000

JAN 14 2000

MEMORANDUM FOR THE ASSISTANT DEPUTY UNDER SECRETARY OF DEFENSE  
(ENVIRONMENTAL QUALITY )

SUBJECT: ANNUAL REPORTING OF THREATENED AND ENDANGERED SPECIES  
EXPENDITURES

As requested by your memo of 18 November 1999, the enclosed report represents expenditures by the Department of the Navy on threatened and endangered species during FY99. Expenditures in the amount of \$10M are associated with 52 different species.

My point of contact for this matter is Mr. Thomas Egeland, Director for Natural Resources Management Policy, at (703) 588-6671.

*Elsie L. Munsell*

ELSIE L. MUNSELL  
Deputy Assistant Secretary  
(Environment and Safety)

Enclosure: Department of the Navy Expenditures on Threatened and Endangered Species during FY99

Copy to:  
CNO N45  
CMC LFL

**DEPARTMENT OF THE NAVY  
EXPENDITURES ON THREATENED AND ENDANGERED SPECIES  
DURING FISCAL YEAR 1999**

<u>COMMON NAME</u>	<u>SCIENTIFIC NAME</u>	<u>(\$000)</u>
<b><u>Amphibians</u></b>		
Salamander, Flatwoods	<i>Ambystoma cingulatum</i>	.5
Toad, Arroyo Southwestern	<i>Bufo microscaphus californicus</i>	309.9
	<b>SUBTOTAL: 310.4</b>	
<b><u>Birds</u></b>		
Coot, Hawaiian	<i>Fulica americana alai</i>	9.4
Duck, Hawaiian	<i>Anas wyvilliana</i>	1.5
Eagle, Bald	<i>Haliaeetus leucocephalus</i>	11.5
Flycatcher, Southwestern Willow	<i>Empidonax traillii extimus</i>	135.0
Gnatcatcher, California	<i>Polioptila californica</i>	2,285.3
Megapode, Micronesian	<i>Megapodius laperouse</i>	117.9
Monarch, Tinian	<i>Monarcha takatsukasae</i>	1.3
Moorhen, Hawaiian (Gallinule)	<i>Gallinula chloropus sandvicensis</i>	9.4
Moorhen, Mariana Common	<i>Gallinula chloropus guami</i>	265.0
Owl, Mexican Spotted	<i>Strix occidentalis lucida</i>	8.4
Plover, Western Snowy	<i>Charadrius alexandrinus nivosus</i>	178.9
Rail, California Clapper	<i>Rallus longirostris obsoletus</i>	11.4
Rail, Light-footed Clapper	<i>Rallus longirostris levipes</i>	22.3
Scrub-jay, Florida	<i>Aphelocoma coerulescens</i>	2.0
Shrike, San Clemente Loggerhead	<i>Lanius ludovicianus mearnsi</i>	2,400.0
Sparrow, San Clemente Sage	<i>Amphispiza belli clementeae</i>	41.1
Stilt, Hawaiian	<i>Himantopus mexicanus knudseni</i>	546.0
Stork, Wood	<i>Mycteria americana</i>	5.0
Swiftlet, Mariana Gray	<i>Aerodramus vanikorensis bartschi</i>	110.0
Tern, California Least	<i>Sterna antillarum browni</i>	518.5
Vireo, Least Bell's	<i>Vireo bellii pusillus</i>	159.5
Woodpecker, Red-Cockaded	<i>Picoides borealis</i>	262.2
	<b>SUBTOTAL: 7,101.6</b>	
<b><u>Crustaceans</u></b>		
Shrimp, Riverside Fairy	<i>Stretocephalus woottoni</i>	51.1
Shrimp, San Diego Fairy	<i>Branchinecta sandiegoensis</i>	376.6
	<b>SUBTOTAL: 427.7</b>	
<b><u>Fish</u></b>		
Goby, Tidewater	<i>Eucyclogobius newberryi</i>	100.0
	<b>SUBTOTAL: 100.0</b>	

(continued on next page)



Mammals

Bat, Indiana	<i>Myotis sodalis</i>	9.0
Bat, Mariana Fruit	<i>Pteropus mariannus mariannus</i>	100.0
Kangaroo Rat, Fresno	<i>Dipodomys nitratoides exilis</i>	18.7
Kangaroo Rat, Stephens'	<i>Dipodomys stephensi</i>	38.6
Manatee, West Indian	<i>Trichechus manatus</i>	15.0
Mouse, Pacific Pocket	<i>Perognathus longimembris pacificus</i>	38.6
Mouse, Salt Marsh Harvest	<i>Reithrodontomys raviventris</i>	11.4
Pronghorn, Sonoran	<i>Antilocapra americana sonoriensis</i>	16.0
Whale, Right	<i>Balaena glacialis</i>	422.0

**SUBTOTAL: 669.3**

Plants (sorted by scientific name)

Thread-leaved Brodiaea	<i>Brodiaea filifolia</i>	113.6
San Clemente Mesa Mint	<i>Pogogyne abramsii</i>	348.7
San Diego Button-celery	<i>Eryngium aristulatum var parishii</i>	369.8
Del Mar Manzanita	<i>Arctostaphylos glandulosa ssp. crassifolia</i>	.9
Rough-leaved Loosestrife	<i>Lysimachia asperulaefolia</i>	73.0
Willow Monardella	<i>Monardella linoides ssp viminea</i>	1.8
Spreading Navarretia	<i>Navarretia fossalis</i>	51.3
Small Whorled Pogonia	<i>Isotria medeoloides</i>	3.0
Pondberry	<i>Lindera melissifolia</i>	8.0

**SUBTOTAL: 970.1**

Reptiles

Snake, Eastern Indigo	<i>Drymarchon corais couperi</i>	4.0
Tortoise, Desert	<i>Gopherus agassizii</i>	174.0
Tortoise, Gopher	<i>Gopherus polyphemus</i>	3.5
Turtle, Green Sea	<i>Chelonia mydas</i>	134.0
Turtle, Hawksbill Sea	<i>Eretmochelys imbricata</i>	38.0
Turtle, Leatherback Sea	<i>Dermochelys coriacea</i>	6.0
Turtle, Loggerhead Sea	<i>Caretta caretta</i>	82.6

**SUBTOTAL: 442.1**

**TOTAL (for 52 threatened and endangered species)**

**\$10,021.2**



DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS UNITED STATES AIR FORCE  
WASHINGTON DC

7 JAN 2000

MEMORANDUM FOR ASSISTANT DEPUTY UNDER SECRETARY OF DEFENSE  
(ENVIRONMENTAL QUALITY)

FROM: HQ USAF/ILE  
1260 Air Force Pentagon  
Washington, DC 20330-1260

SUBJECT: Annual Report of Threatened and Endangered Species Expenditures

We are providing the attached FY99 Air Force Threatened and Endangered Species Expenditure Report, as you requested. We report a total of \$5,486.74K of expenses for the conservation and protection of federally listed threatened and endangered species on Air Force lands. If you or members of your staff have questions, please contact Dr. Douglas Ripley, HQ USAF/ILEVQ, phone 604-0632, e-mail: [Douglas.Ripley@pentagon.af.mil](mailto:Douglas.Ripley@pentagon.af.mil).

A handwritten signature in black ink, reading "Michael A. Aimone".

**MICHAEL A. AIMONE, P.E.**  
**The Deputy Civil Engineer**  
**DCS/Installations & Logistics**

Attachment:  
FY 98 T&E Species Expenditure Report

cc:  
SAF/MIQ  
HQ AFCEE/ECC

## Threatened/Endangered Species Expenditures on Air Force Installations FY99

Installation	State	Species Account#	Species	Purpose	Programmed Amount (\$K)	Non-Programmed Amount (\$K)
Andersen AFB	GU		Crow, Mariana	Staff salary for Sec 7, field work		\$18.00
Andrews AFB	MD	71	Eagle, Bald	Information Brochure	\$1.00	
Andrews AFB	MD		Gerardia, Sand Plain	Habitat survey/management	\$50.00	\$5.00
Andrews AFB	MD		Gerardia, Sand Plain	Protection, expansion	\$5.00	\$1.00
Arnold AFB	TN		Bat, Gray	Population monitoring		\$3.00
Arnold AFB	TN		Bat, Indiana	Survey		\$2.50
Arnold AFB	TN	71	Eagle, Bald	Population monitoring		\$0.50
Arnold AFB	TN		Sunflower, Eggert's	Population monitoring		\$25.00
Arnold AFB	TN		Sunflower, Eggert's	Habitat management		\$16.00
Avon Park Range	FL	71	Eagle, Bald	Habitat management		\$5.00
Avon Park Range	FL	83	Jay, Florida Scrub	Annual census	\$65.00	
Avon Park Range	FL	83	Jay, Florida Scrub	Habitat management	\$20.00	\$10.00
Avon Park Range	FL	116	Sparrow, Florida Grasshopper	Annual census	\$33.00	
Avon Park Range	FL	116	Sparrow, Florida Grasshopper	Impact from fire ants	\$8.00	
Avon Park Range	FL	136	Woodpecker, Red-cockaded	Translocation	\$6.00	
Avon Park Range	FL	136	Woodpecker, Red-cockaded	Annual census	\$96.00	
Avon Park Range	FL	136	Woodpecker, Red-cockaded	Habitat management	\$14.00	
Cannon AFB	NM		Eagle, Bald	Section 7 Consultation	\$0.08	
Cannon AFB	NM		Falcon, American Peregrine	Section 7 Consultation	\$0.08	
Cannon AFB	NM		Owl, Mexican Spotted	Section 7 Consultation	\$0.08	
Cape Canaveral AS	FL		All species	Section 7 consultation	\$8.00	
Cape Canaveral AS	FL		All species	Document launch effects	\$60.00	
Cape Canaveral AS	FL		Jay, Florida Scrub	Scrub restoration work	\$125.00	
Cape Canaveral AS	FL		Juvenile greens	Survey	\$75.00	
Cape Canaveral AS	FL		Sea Turtle	Monitoring	\$120.00	
Cape Canaveral AS	FL		Tortoise, Gopher	relocation	\$50.00	
Cape Canaveral AS	FL			TNC Census	\$121.00	

## Threatened/Endangered Species Expenditures on Air Force Installations FY99

Installation	State	Species Account#	Species	Purpose	Programmed Amount (\$K)	Non-Programmed Amount (\$K)
Cape Canaveral AS	FL			Recovery Team	\$3.00	
Cape Canaveral AS	FL			FWS burn assistance program	\$25.00	
Dyess AFB	TX		Cactus, Lloyd's Hedgehog	Damage Avoidance, TDY for Study	\$0.50	
Dyess AFB	TX		Falcon, American Peregrine	Survey, Habitat Security	\$1.00	
Dyess AFB	TX		Snake, Concho Water	Travel/Study for Damage Avoidance	\$0.50	
Edwards AFB	CA	156	Tortoise, Desert	Project mitigation	\$940.00	
Edwards AFB	CA	156	Tortoise, Desert	Projects to support Section 7 consultation	\$810.00	
Edwards AFB	CA	156	Tortoise, Desert	Section 7 Consultation	\$136.00	\$37.00
Eglin AFB	FL	211	Darter, Okaloosa	Habitat protection	\$912.00	\$51.00
Eglin AFB	FL	212	Darter, Okaloosa	Section 7 Consultation	\$21.00	
Eglin AFB	FL	160	Turtle, Green Sea & Loggerhead	Habitat protection	\$17.00	
Eglin AFB	FL	160	Turtle, Green Sea & Loggerhead	Section 7 Consultation	\$56.00	
Eglin AFB	FL	136	Woodpecker, Red-cockaded	Habitat protection & enhancement	\$222.00	\$30.00
Eglin AFB	FL	137	Woodpecker, Red-cockaded	Section 7 Consultation	\$63.00	
Eielson AFB	AK		Falcon, American Peregrine	Study as training Mitigation	\$36.00	
Elmendorf AFB	AK		Falcon, American Peregrine	Study as training Mitigation	\$100.00	
F. E. Warren AFB	WY		Ferret, Black-footed	Propagation; research		\$2.00
F. E. Warren AFB	WY		Mouse, Preble's Meadow Jumping	Pop. Survey; habitat mgmt.; DNA research	\$20.00	\$14.00
F. E. Warren AFB	WY		Plant, Colorado Butterfly	Pop. Census; habitat mgmt.; DNA research	\$10.00	\$5.00
George AFB	CA		Tortoise, Desert		\$0.50	
Goldwater Range	AZ	71	Eagle, Bald	MTR Nest Watch	\$50.00	
Goldwater Range	AZ		Multiple Species	MTR Consultation GIS	\$90.00	
Goldwater Range	AZ	8	Owl, Cactus Ferruginous Pygmy	Survey		\$2.00
Goldwater Range	AZ	8	Owl, Cactus Ferruginous Pygmy	Recovery Team Participation		\$5.00
Goldwater Range	AZ		Owl, Mexican Spotted	Monitoring	\$18.00	
Goldwater Range	AZ	32	Pronghorn, Sonoran	Monitoring Personnel	\$290.00	
Goldwater Range	AZ	32	Pronghorn, Sonoran	Habitat Use Study	\$175.00	
Goldwater Range	AZ	32	Pronghorn, Sonoran	Night Mission Effects Study	\$100.00	
Goldwater Range	AZ	32	Pronghorn, Sonoran	Effects on Spawning	\$50.00	

## Threatened/Endangered Species Expenditures on Air Force Installations FY99

Installation	State	Account#	Species	Purpose	Programmed Amount (\$K)	Non-Programmed Amount (\$K)
Goldwater Range	AZ	32	Pronghorn, Sonoran	Noise Effects Study	\$200.00	
Goldwater Range	AZ	32	Pronghorn, Sonoran	Pronghorn Staff Biologist		\$41.00
Holloman AFB	NM		Eagle, Bald	Implementation, Biol Opinion		\$1.60
Holloman AFB	NM		Eagle, Bald	Travel/Biol Opinion		\$0.40
Holloman AFB	NM		Falcon, American Peregrine	Implementation, Biol Opinion		\$1.60
Holloman AFB	NM		Falcon, American Peregrine	Travel/Biol Opinion		\$0.40
Holloman AFB	NM		Falcon, Northern Aplomado	Implementation, Biol Opinion		\$1.60
Holloman AFB	NM		Falcon, Northern Aplomado	Travel/Biol Opinion		\$0.40
Holloman AFB	NM		Flycatcher, Southwest Willow	Implementation, Biol Opinion		\$1.60
Holloman AFB	NM		Flycatcher, Southwest Willow	Travel/Biol Opinion		\$0.40
Holloman AFB	NM		Owl, Mexican Spotted	Implementation, Biol Opinion		\$1.60
Holloman AFB	NM		Owl, Mexican Spotted	Travel/Biol Opinion		\$0.40
Holloman AFB	NM			Salary/ Rep on SW Strategy Section 7 Group		\$4.00
Holloman AFB	NM			Southwest Strategy Section 7/Travel		\$2.00
HQ ANGRC	MD			Monitoring VR 176	\$110.00	
HQ ANGRC	MD			T&E Survey, Colorado, Peregrine	\$50.00	
MacDill AFB	FL	157	Tortoise, Gopher	Tracking Equipment	\$4.00	\$10.00
March AFB	CA		Rat, Stephen's Kangaroo		\$2.50	
March AFB	CA		Vireo, least Bell's		\$2.50	
McChord AFB	WA		Howellia, Water	Habitat management	\$10.00	\$20.00
McClellan AFB	CA		Grass, Solano	Habitat Protection	\$30.00	
McClellan AFB	CA		Snake, Giant Garter	Habitat Mitigation, Section 7 Consultation	\$204.00	\$296.00
McClellan AFB	CA		Snake, Giant Garter	Projects & plans/Support Section 7 consultation	\$68.00	
Moody AFB	GA		Eagle, Bald	Habitat Management	\$10.00	
Moody AFB	GA		Snake, Eastern Indigo	Create Habitat Management Zones	\$9.70	
Moody AFB	GA		Snake, Eastern Indigo	Habitat Management	\$14.90	

**Threatened/Endangered Species Expenditures on Air Force Installations FY99**

Installation	State	Species Account#	Species	Purpose	Programmed Amount (\$K)	Non-Programmed Amount (\$K)
Moody AFB	GA		Snake, Eastern Indigo	Survey Equipment	\$7.40	
Nellis AFB	NV		Tortoise, Desert	Mitigation, Biol Opinion	\$60.00	
Norton AFB	CA		Rat, Stephen's Kangaroo		\$2.50	
Norton AFB	CA		Woolly-star, Santa Ana River		\$2.50	
Patrick AFB	FL		Osprey	Habitat Management	\$23.00	
Patrick AFB	FL		Plover, Snowy	Population monitoring	\$1.00	
Patrick AFB	FL		SeaTurtles, Loggerhead, Green, Leatherback, Ridley	Population monitoring	\$20.00	
Patrick AFB	FL		Tern, Least	Population monitoring	\$1.00	
RAF Croughton	UK			Salaries only	\$0.20	
RAF Lakenheath	UK		Scleranthus perennis	Management of Site of Special Scientific Interest	\$50.00	
Ramstein AB	GE			Biotope Survey to identify initial T&E species	\$100.00	
Seymour Johnson AFB	NC	os-005456	Woodpecker, Red-cockaded	Manage t & e	\$130.00	
Seymour Johnson AFB	NC	os-005449	Woodpecker, Red-cockaded	Monitor	\$50.00	
Seymour Johnson AFB	NC	os-005735	Woodpecker, Red-cockaded	Continue fire study	\$75.00	
Seymour Johnson AFB	NC		Woodpecker, Red-cockaded	Supplies	\$1.00	
Seymour Johnson AFB	NC		Woodpecker, Red-cockaded	Training & travel	\$7.00	
Shaw AFB	SC	53475	Woodpecker, Red-cockaded	Controlled Burns	\$32.00	
Shaw AFB	SC	53475	Woodpecker, Red-cockaded	Mid-Story Control	\$40.00	
Shaw AFB	SC	53475	Woodpecker, Red-cockaded	Habitat Management Research	\$55.00	
Shaw AFB	SC	53475	Woodpecker, Red-cockaded	ES Manager Salary Towards Woodpecker, Red-cockaded	\$35.00	
Spangdahlem AB	GE	42	Toad, Orchid	INRMP, T&E Survey GSUs	\$52.10	\$5.00

## Threatened/Endangered Species Expenditures on Air Force Installations FY99

Installation	State	Species Account#	Species	Purpose	Programmed Amount (\$K)	Non-Programmed Amount (\$K)
Travis AFB	CA		Goldfields, Contra Costa	Habitat Expansion	\$10.00	\$10.00
Travis AFB	CA		Shrimp, Vernal Pool Fairy	Habitat Expansion	\$70.00	\$10.00
Travis AFB	CA		Shrimp, Vernal Pool Fairy	Audio-visual show, & signs	\$10.00	\$2.00
Travis AFB	CA		Shrimp, Vernal Pool Fairy	Habitat Survey	\$45.00	\$7.00
Tyndall AFB	FL	27	Mouse, Southern Beach	Habitat Restoration	\$19.00	
Tyndall AFB	FL		Plover, Snowy	Law Enforcement	\$5.00	
Tyndall AFB	FL	160	Turtle, Loggerhead	Law Enforcement	\$6.20	
Tyndall AFB	FL	160	Turtle, Loggerhead	Nest Monitoring	\$48.80	
Tyndall AFB	FL	160	Turtle, Loggerhead	Habitat Restoration	\$10.00	
U. S. A. F. Academy	CO		Mouse, Preble's Meadow Jumping	Research	\$32.00	
U. S. A. F. Academy	CO		Mouse, Preble's Meadow Jumping	Willow purchased for habitat restoration	\$4.00	
U. S. A. F. Academy	CO		Mouse, Preble's Meadow Jumping	Planting, man hours	\$3.00	
Vandenberg AFB	CA		Flycatcher, Southwest Willow	Surveys/monitoring	\$23.00	
Vandenberg AFB	CA		Frog, California Red-legged	Habitat studies/surveys	\$11.00	
Vandenberg AFB	CA		Pelican, California Brown	Population monitoring	\$66.00	
Vandenberg AFB	CA		Plover, Western Snowy	Population monitoring	\$99.00	
Vandenberg AFB	CA		Plover, Western Snowy	Enforcement	\$6.00	
Vandenberg AFB	CA		Steelhead, Southern	Habitat studies/surveys	\$95.00	
Vandenberg AFB	CA		Tern, California Least	Population monitoring/protection	\$69.00	
<b>AIR FORCE EXPENDITURES FOR THREATENED AND ENDANGERED SPECIES FY99:</b>					<b>\$5,203.74</b>	<b>\$283.00</b>
<b>TOTAL AIR FORCE EXPENDITURES FOR THREATENED AND ENDANGERED SPECIES FY99:</b>					<b>\$5,486.74</b>	



DEFENSE LOGISTICS AGENCY  
HEADQUARTERS  
8725 JOHN J. KINGMAN ROAD, SUITE 2533  
FT. BELVOIR, VIRGINIA 22060-6221

DEC 7 1999

REPLY  
REFER TO

CAAE


MEMORANDUM FOR ASSISTANT DEPUTY UNDER SECRETARY OF DEFENSE  
(ENVIRONMENTAL QUALITY)

SUBJECT: Annual reporting of Threatened and Endangered Species  
Expenditures

This is in response to the DUSD (ES)/EQ memorandum of November 18, 1999, subject as above, requesting information on our FY99 expenditures toward threatened and endangered species.

During FY 99, we spent \$50,000 on population recovery and habitat enhancement for the Palos Verdes blue butterfly (*Glaucopsyche lygdamus palosverdesensis*) at Defense Fuel Support point San Pedro, California.

LTC Nelson R. Powers, USA, Staff Entomologist, may be contacted concerning this issue. He can be contacted at (703) 767-6277.

  
JAN B. REITMAN  
Staff Director  
Environmental and Safety Policy



**Federally Listed Endangered and Threatened Wildlife and Plants**  
 As of Fiscal Year 1999 (September 30, 1999)

1999 Data Request For Federal Agencies

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Mammals	manatee, West Indian	Trichechus manatus	E	\$619,200.00	
Mammals	otter, southern sea	Enhydra lutris nereis	T		
Mammals	sea-lion, Steller	Eumetopias jubatus *Note 1	E, T	\$2,291,213.00	
Mammals	seal, Caribbean monk	Monachus tropicalis	E		
Mammals	seal, Guadalupe fur	Arctocephalus townsendi	T		
Mammals	seal, Hawaiian monk	Monachus schauinslandi	E	\$48,434.00	
Mammals	whale, blue	Balaenoptera musculus	E		
Mammals	whale, bowhead	Balaena mysticetus	E		
Mammals	whale, finback	Balaenoptera physalus	E	\$8,916.00	
Mammals	whale, humpback	Megaptera novaeangliae	E	\$277,000.00	
Mammals	whale, right	Balaena glacialis *Note 2	E	\$892,000.00	
Mammals	whale, Sei	Balaenoptera borealis	E		
Mammals	whale, sperm	Physeter catodon	E	\$6,000.00	
Fishes	salmon, chinook	Oncorhynchus tshawytscha	E, T		
Fishes	salmon, chum	Oncorhynchus keta	T		
Fishes	salmon, coho	Oncorhynchus kisutch	T	\$28,000.00	
Fishes	salmon, sockeye	Oncorhynchus nerka	E, T		
Fishes	steelhead	Oncorhynchus mykiss	E, T		
Reptiles	sea turtle, green	Chelonia mydass *Note 3	E, T	\$3,308,176.00	
Reptiles	sea turtle, hawksbill	Eretmochelys imbricata *Note 3	E	\$3,261,000.00	
Reptiles	sea turtle, Kemp's ridley	Lepidochelys kempii *Note 3	E	\$3,224,000.00	
Reptiles	sea turtle, leatherback	Dermochelys coriacea *Note 3	E	\$3,261,000.00	
Reptiles	sea turtle, loggerhead	Caretta caretta *Note 3	T	\$3,261,000.00	
Reptiles	sea turtle, olive ridley	Lepidochelys olivacea *Note 3	E, T	\$3,216,000.00	
Birds	Albatross, short-tailed	Phoebastria albatrus	E	\$38,000.00	

\*Note 1: Assets used in this mission C-130 aircraft, and WHEC cutter ships, have an extraordinarily high "standard rate" of operation compared to other CG resources. The primary mission of these assets is to conduct Maritime Boundary Line enforcement patrols, on long transits to and from their patrol areas they conduct (and report) patrol efforts within all designated Steller Sea Lion critical habitat areas. Increases are attributed to changes & refinements to our data collections (not necessarily increased effort).

\*Note 2 : Right Whale costs are attributed primarily to funding flights for the Early Warning System and the Mandatory Ship Reporting System.

\*Note 3 : In many instances, the effort dedicated to MPS operations is done in conjunction with other missions and either (a) could not be reported out or (b) did not meet the criteria provided by F&WS. Certain patrol efforts benefit multiple endangered species - and cannot be reported by individual species. The actual efforts/costs expended on some species are higher, however we do not have the means to report/sort the data.



DEPARTMENT OF THE ARMY  
U.S. Army Corps of Engineers  
WASHINGTON, D.C. 20314-1000

To: OPO

DEC 17 2001

REPLY TO  
ATTENTION OF:

Program Formulation and  
Evaluation Branch

Mr. Marshall P. Jones, Jr.  
Acting Director  
Fish and Wildlife Service  
U. S. Department of the Interior  
Washington, D. C. 20240

Dear Mr. Jones:

This is in response to your letter dated of September 19, 2001, there are two spreadsheets enclosed providing estimates of the U. S. Army Corps of Engineers expenditures in Fiscal Years 1999 and 2000 to implement the Endangered Species Act. The spreadsheets retain the organization and structure of the spreadsheets which you furnished. For Fiscal Year 1999 we have added an additional species listing at the end of your listings for the Alabama Sturgeon.

Please direct any questions about the spreadsheets to Tim Hiltz, (202) 761-1817.

Sincerely,

Robert F. Vining  
Chief, Programs Management Division  
Directorate of Civil Works

Enclosures

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

1999 Data Request For Federal Agencies

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Mammals	bat, gray	Myotis grisescens	E	46,000	0
Mammals	bat, Hawaiian hoary	Lasiurus cinereus semotus	E	0	0
Mammals	bat, Indiana	Myotis sodalis	E	37,000	0
Mammals	bat, lesser long-nosed	Leptonycteris curasoae yerbabuenae	E	0	0
Mammals	bat, little Mariana fruit	Pteropus tokudae	E	0	0
Mammals	bat, Mariana fruit	Pteropus mariannus mariannus	E	0	0
Mammals	bat, Mexican long-nosed	Leptonycteris nivalis	E	0	0
Mammals	bat, Ozark big-eared	Corynorhinus townsendii ingens	E	15,000	0
Mammals	bat, Virginia big-eared	Corynorhinus townsendii virginianus	E	1,000	0
Mammals	bear, grizzly	Ursus arctos horribilis	T	3,000	0
Mammals	bear, Louisiana black	Ursus americanus luteolus	T	8,400	0
Mammals	caribou, woodland	Rangifer tarandus caribou	E	500	0
Mammals	deer, Columbian white-tailed	Odocoileus virginianus leucurus	E	15,000	0
Mammals	deer, Key	Odocoileus virginianus clavium	E	0	0
Mammals	ferret, black-footed	Mustela nigripes	E	500	0
Mammals	fox, San Joaquin kit	Vulpes macrotis mutica	E	0	0
Mammals	jaguar	Panthera onca	E	0	0
Mammals	jaguarundi, Gulf Coast	Herpailurus yagouaroundi cacomitli	E	400	0
Mammals	jaguarundi, Sinaloa	Herpailurus yagouaroundi tolteca	E	0	0
Mammals	kangaroo rat, Fresno	Dipodomys nitratoides exilis	E	0	0
Mammals	kangaroo rat, giant	Dipodomys ingens	E	0	0
Mammals	kangaroo rat, Morro Bay	Dipodomys heermanni morroensis	E	0	0
Mammals	kangaroo rat, San Bernardino Merriam's	Dipodomys merriami parvus	E	107,000	0
Mammals	kangaroo rat, Stephens'	Dipodomys stephensi	E	0	0
Mammals	kangaroo rat, Tipton	Dipodomys nitratoides nitratoides	E	0	0
Mammals	manatee, West Indian	Trichechus manatus	E	83,400	0
Mammals	mountain beaver, Point Arena	Aplodontia rufa nigra	E	0	0
Mammals	Mouse, Alabama beach	Peromyscus polionotus ammobates	E	0	0
Mammals	Mouse, Anastasia Island beach	Peromyscus polionotus phasma	E	0	0
Mammals	Mouse, Choctawhatchee beach	Peromyscus polionotus allophrys	E	0	0
Mammals	Mouse, Key Largo cotton	Peromyscus gossypinus allapaticola	E	0	0
Mammals	mouse, Pacific pocket	Perognathus longimembris pacificus	E	0	0
Mammals	Mouse, Perdido Key beach	Peromyscus polionotus trissyllepsis	E	0	0
Mammals	mouse, Preble's meadow jumping	Zapus hudsonius preblei	T	0	0
Mammals	mouse, salt marsh harvest	Reithrodontomys raviventris	E	2,100	0
Mammals	Mouse, southeastern beach	Peromyscus polionotus niveiventris	T	0	0
Mammals	mouse, St. Andrew beach	Peromyscus polionotus peninsularis	E	0	0
Mammals	ocelot	Leopardus pardalis	E	400	0

Source: U.S. Fish and Wildlife Service's Threatened and Endangered Species System

Aggregate USACE View for 1999.xls

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Mammals	otter, southern sea	Enhydra lutris nereis	T	42,000	0
Mammals	panther, Florida	Puma concolor coryi	E	0	0
Mammals	prairie dog, Utah	Cynomys parvidens	T	0	0
Mammals	pronghorn, Sonoran	Antilocapra americana sonoriensis	E	0	0
Mammals	puma, eastern	Puma concolor cougar	E	0	0
Mammals	rabbit, Lower Keys marsh	Sylvilagus palustris hefneri	E	0	0
Mammals	rice rat	Oryzomys palustris natator	E	0	0
Mammals	sea-lion, Steller	Eumetopias jubatus	E, T	44,600	0
Mammals	seal, Caribbean monk	Monachus tropicalis	E	0	0
Mammals	seal, Guadalupe fur	Arctocephalus townsendi	T	2,100	0
Mammals	seal, Hawaiian monk	Monachus schauinslandi	E	0	0
Mammals	sheep, bighorn	Ovis canadensis	E	0	0
Mammals	sheep, bighorn	Ovis canadensis californiana	E	0	0
Mammals	squirrel, Carolina northern flying	Glaucomys sabrinus coloratus	E	0	0
Mammals	squirrel, Delmarva Peninsula fox	Sciurus niger cinereus	E	0	5,000
Mammals	squirrel, Mount Graham red	Tamiasciurus hudsonicus grahamensis	E	0	0
Mammals	squirrel, Virginia northern flying	Glaucomys sabrinus fuscus	E	0	0
Mammals	vole, Amargosa	Microtus californicus scirpensis	E	0	0
Mammals	vole, Florida salt marsh	Microtus pennsylvanicus dukecampbelli	E	0	0
Mammals	vole, Hualapai Mexican	Microtus mexicanus hualpaiensis	E	0	0
Mammals	whale, blue	Balaenoptera musculus	E	5,400	0
Mammals	whale, bowhead	Balaena mysticetus	E	0	0
Mammals	whale, finback	Balaenoptera physalus	E	3,600	0
Mammals	whale, humpback	Megaptera novaeangliae	E	5,700	0
Mammals	whale, right	Balaena glacialis	E	126,800	0
Mammals	whale, Sei	Balaenoptera borealis	E	3,600	0
Mammals	whale, sperm	Physeter catodon	E	600	0
Mammals	wolf, gray	Canis lupus	E, T	2,500	0
Mammals	wolf, red	Canis rufus	E	0	0
Mammals	woodrat, Key Largo	Neotoma floridana smalli	E	0	0
Birds	akepa, Hawaii	Loxops coccineus coccineus	E	0	0
Birds	akepa, Maui	Loxops coccineus ochraceus	E	0	0
Birds	akialoa, Kauai	Hemignathus procerus	E	0	0
Birds	akiapola'au	Hemignathus munroi	E	0	0
Birds	Albatross, short-tailed	Phoebastria albatrus	E	2,100	0
Birds	blackbird, yellow-shouldered	Agelaius xanthomus	E	0	0
Birds	bobwhite, masked	Colinus virginianus ridgwayi	E	0	0
Birds	broadbill, Guam	Myiagra freycineti	E	0	0
Birds	cahow	Pterodroma cahow	E	0	0
Birds	caracara, Audubon's crested	Polyborus plancus audubonii	T	0	0

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Birds	condor, California	Gymnogyps californianus	E	0	0
Birds	coot, Hawaiian	Fulica americana alai	E	0	0
Birds	crane, Mississippi sandhill	Grus canadensis pulla	E	0	0
Birds	crane, whooping	Grus americana	E	4,550,600	0
Birds	creeper, Hawaii	Oreomystis mana	E	0	0
Birds	creeper, Molokai	Paroreomyza flammea	E	0	0
Birds	creeper, Oahu	Paroreomyza maculata	E	0	0
Birds	crow, Hawaiian	Corvus hawaiiensis	E	0	0
Birds	crow, Mariana	Corvus kubaryi	E	0	0
Birds	crow, white-necked	Corvus leucognaphalus	E	0	0
Birds	curlew, Eskimo	Numenius borealis	E	500	0
Birds	duck, Hawaiian	Anas wyvilliana	E	0	0
Birds	duck, Laysan	Anas laysanensis	E	0	0
Birds	eagle, bald	Haliaeetus leucocephalus	T	333,400	14,800
Birds	eider, spectacled	Somateria fischeri	T	0	0
Birds	eider, Steller's	Polysticta stelleri	T	0	0
Birds	falcon, American peregrine	Falco peregrinus anatum	DM	143,700	0
Birds	falcon, northern aplomado	Falco femoralis septentrionalis	E	1,200	0
Birds	finch, Laysan	Telespyza cantans	E	0	0
Birds	finch, Nihoa	Telespyza ultima	E	0	0
Birds	flycatcher, southwestern willow	Empidonax traillii extimus	E	1,014,000	0
Birds	gnatcatcher, coastal California	Polioptila californica californica	T	25,000	0
Birds	goose, Hawaiian	Branta sandvicensis	E	2,000	0
Birds	hawk, Hawaiian	Buteo solitarius	E	0	0
Birds	hawk, Puerto Rican broad-winged	Buteo platypterus brunnescens	E	0	0
Birds	hawk, Puerto Rican sharp-shinned	Accipiter striatus venator	E	0	0
Birds	honeycreeper, crested	Palmeria dolei	E	0	0
Birds	jay, Florida scrub	Aphelocoma coerulescens	T	2,000	0
Birds	kingfisher, Guam Micronesian	Halcyon cinnamomina cinnamomina	E	0	0
Birds	kite, Everglade snail	Rostrhamus sociabilis plumbeus	E	0	0
Birds	mallard, Mariana	Anas oustaleti	E	0	0
Birds	megapode, Micronesian	Megapodius laperouse	E	0	0
Birds	millerbird, Nihoa	Acrocephalus familiaris kingi	E	0	0
Birds	monarch, Tinian	Monarcha takatsukasae	T	0	0
Birds	moorhen, Hawaiian common	Gallinula chloropus sandvicensis	E	0	0
Birds	moorhen, Mariana common	Gallinula chloropus guami	E	0	0
Birds	murrelet, marbled	Brachyramphus marmoratus marmoratus	T	0	0
Birds	nightjar, Puerto Rican	Caprimulgus noctitherus	E	6,000	0
Birds	nukupu'u	Hemignathus lucidus	E	0	0
Birds	'o'o, Kauai	Moho braccatus	E	0	0

Fede Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Birds	o'u	Psittirostra psittacea	E	0	0
Birds	owl, Mexican spotted	Strix occidentalis lucida	T	0	0
Birds	owl, northern spotted	Strix occidentalis caurina	T	2,500	0
Birds	palila	Loxioides bailleui	E	3,000	0
Birds	parrot, Puerto Rican	Amazona vittata	E	0	0
Birds	parrotbill, Maui	Pseudonestor xanthophrys	E	0	0
Birds	pelican, brown	Pelecanus occidentalis	E	6,000	0
Birds	petrel, Hawaiian dark-rumped	Pterodroma phaeopygia sandwichensis	E	0	0
Birds	pigeon, Puerto Rican plain	Columba inornata wetmorei	E	0	0
Birds	Plover, piping	Charadrius melodus	E, T	208,600	257,500
Birds	plover, western snowy	Charadrius alexandrinus nivosus	T	4,500	0
Birds	po'ouli	Melamprosops phaeosoma	E	2,000	0
Birds	prairie-chicken, Attwater's greater	Tympanuchus cupido attwateri	E	0	0
Birds	pygmy-owl, cactus ferruginous	Glaucidium brasilianum cactorum	E	11,500	0
Birds	rail, California clapper	Rallus longirostris obsoletus	E	2,300	0
Birds	rail, Guam	Rallus owstoni	E	0	0
Birds	rail, light-footed clapper	Rallus longirostris levipes	E	0	0
Birds	rail, Yuma clapper	Rallus longirostris yumanensis	E	0	0
Birds	shearwater, Newell's Townsend's	Puffinus auricularis newelli	T	0	0
Birds	shrike, San Clemente loggerhead	Lanius ludovicianus mearnsi	E	0	0
Birds	sparrow, Cape Sable seaside	Ammodramus maritimus mirabilis	E	0	0
Birds	sparrow, Florida grasshopper	Ammodramus savannarum floridanus	E	0	0
Birds	sparrow, San Clemente sage	Amphispiza belli clementeae	T	0	0
Birds	stilt, Hawaiian	Himantopus mexicanus knudseni	E	0	0
Birds	stork, wood	Mycteria americana	E	3,000	0
Birds	swiftlet, Mariana gray	Aerodramus vanikorensis bartschi	E	0	0
Birds	tern, California least	Sterna antillarum browni	E	93,300	0
Birds	tern, least	Sterna antillarum	E	133,100	12,500
Birds	tern, roseate	Sterna dougallii dougallii	E, T	3,000	0
Birds	thrush, large Kauai	Myadestes myadestinus	E	0	0
Birds	thrush, Molokai	Myadestes lanaiensis rutha	E	0	0
Birds	thrush, small Kauai	Myadestes palmeri	E	0	0
Birds	towhee, Inyo California	Pipilo crissalis eremophilus	T	0	0
Birds	vireo, black-capped	Vireo atricapillus	E	5,100	0
Birds	vireo, least Bell's	Vireo bellii pusillus	E	405,000	0
Birds	warbler, Bachman's	Vermivora bachmanii	E	0	0
Birds	warbler, golden-cheeked	Dendroica chrysoparia	E	9,300	0
Birds	warbler, Kirtland's	Dendroica kirtlandii	E	0	0
Birds	warbler, nightingale reed	Acrocephalus luscini	E	0	0
Birds	white-eye, bridled	Zosterops conspicillatus conspicillatus	E	0	0

Fede Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Birds	woodpecker, ivory-billed	Campephilus principalis	E	0	0
Birds	woodpecker, red-cockaded	Picoides borealis	E	19,900	0
Reptiles	anole, Culebra Island giant	Anolis roosevelti	E	0	0
Reptiles	boa, Mona	Epicrates monensis monensis	T	0	0
Reptiles	boa, Puerto Rican	Epicrates inornatus	E	0	0
Reptiles	boa, Virgin Islands tree	Epicrates monensis granti	E	0	0
Reptiles	crocodile, American	Crocodylus acutus	E	1,000	0
Reptiles	gecko, Monito	Sphaerodactylus micropithecus	E	0	0
Reptiles	iguana, Mona ground	Cyclura stejnegeri	T	0	0
Reptiles	lizard, blunt-nosed leopard	Gambelia silus	E	0	0
Reptiles	lizard, Coachella Valley fringe-toed	Uma inornata	T	0	0
Reptiles	lizard, Island night	Xantusia riversiana	T	0	0
Reptiles	lizard, St. Croix ground	Ameiva polops	E	0	0
Reptiles	rattlesnake, New Mexican ridge-nosed	Crotalus willardi obscurus	T	0	0
Reptiles	sea turtle, green	Chelonia mydas	E, T	114,600	0
Reptiles	sea turtle, hawksbill	Eretmochelys imbricata	E	69,000	0
Reptiles	sea turtle, Kemp's ridley	Lepidochelys kempii	E	68,500	35,000
Reptiles	sea turtle, leatherback	Dermochelys coriacea	E	12,300	0
Reptiles	sea turtle, loggerhead	Caretta caretta	T	231,000	60,000
Reptiles	sea turtle, olive ridley	Lepidochelys olivacea	E, T	3,600	0
Reptiles	skink, bluetail mole	Eumeces egregius lividus	T	1,500	0
Reptiles	skink, sand	Neoseps reynoldsi	T	0	0
Reptiles	snake, Atlantic salt marsh	Nerodia clarkii taeniata	T	0	0
Reptiles	snake, Concho water	Nerodia paucimaculata	T	100	0
Reptiles	snake, copperbelly water	Nerodia erythrogaster neglecta	T	0	0
Reptiles	snake, eastern indigo	Drymarchon corais couperi	T	1,000	0
Reptiles	snake, giant garter	Thamnophis gigas	T	2,700	0
Reptiles	snake, Lake Erie water	Nerodia sipedon insularum	T	0	0
Reptiles	snake, San Francisco garter	Thamnophis sirtalis tetrataenia	E	0	0
Reptiles	tortoise, desert	Gopherus agassizii	T	5,000	0
Reptiles	tortoise, gopher	Gopherus polyphemus	T	4,000	0
Reptiles	turtle, Alabama red-belly	Pseudemys alabamensis	E	7,000	0
Reptiles	turtle, bog	Clemmys muhlenbergii	T	0	21,000
Reptiles	turtle, flattened musk	Sternotherus depressus	T	0	0
Reptiles	turtle, Plymouth redbelly	Pseudemys rubriventris bangsi	E	0	0
Reptiles	turtle, ringed map	Graptemys oculifera	T	0	0
Reptiles	turtle, yellow-blotched map	Graptemys flavimaculata	T	3,000	0
Reptiles	whipsnake, Alameda	Masticophis lateralis euryxanthus	T	0	0
Amphibians	coqui, golden	Eleutherodactylus jasperii	T	0	0
Amphibians	frog, California red-legged	Rana aurora draytonii	T	2,100	0

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Amphibians	guajon	Eleutherodactylus cooki	T	0	0
Amphibians	salamander, Barton Springs	Eurycea sosorum	E	1,400	0
Amphibians	salamander, Cheat Mountain	Plethodon nettingi	T	0	0
Amphibians	salamander, desert slender	Batrachoseps aridus	E	2,100	0
Amphibians	salamander, flatwoods	Ambystoma cingulatum	T	0	0
Amphibians	salamander, Red Hills	Phaeognathus hubrichti	T	3,000	0
Amphibians	salamander, San Marcos	Eurycea nana	T	900	0
Amphibians	salamander, Santa Cruz long-toed	Ambystoma macrodactylum croceum	E	2,100	0
Amphibians	salamander, Shenandoah	Plethodon shenandoah	E	0	0
Amphibians	salamander, Sonoran tiger	Ambystoma tigrinum stebbinsi	E	0	0
Amphibians	salamander, Texas blind	Typhlomolge rathbuni	E	900	0
Amphibians	toad, arroyo	Bufo microscaphus californicus	E	0	0
Amphibians	toad, Houston	Bufo houstonensis	E	3,500	0
Amphibians	toad, Puerto Rican crested	Peltophryne lemur	T	0	0
Amphibians	toad, Wyoming	Bufo hemiophrys baxteri	E	0	0
Fishes	catfish, Yaqui	Ictalurus pricei	T	0	0
Fishes	cavefish, Alabama	Speoplatyrhinus poulsoni	E	0	0
Fishes	cavefish, Ozark	Amblyopsis rosae	T	8,000	0
Fishes	chub, bonytail	Gila elegans	E	2,100	0
Fishes	chub, Borax Lake	Gila boraxobius	E	0	0
Fishes	chub, Chihuahua	Gila nigrescens	T	0	0
Fishes	chub, humpback	Gila cypha	E	2,100	0
Fishes	chub, Hutton tui	Gila bicolor ssp.	T	0	0
Fishes	chub, Mohave tui	Gila bicolor mohavensis	E	2,100	0
Fishes	chub, Oregon	Oregonichthys crameri	E	4,000	0
Fishes	chub, Owens tui	Gila bicolor snyderi	E	2,100	0
Fishes	chub, Pahrnagat roundtail	Gila robusta jordani	E	2,100	0
Fishes	chub, slender	Erimystax cahni	T	0	0
Fishes	chub, Sonora	Gila ditaenia	T	0	0
Fishes	chub, spotfin	Cyprinella monacha	T	0	0
Fishes	chub, Virgin River	Gila robusta seminuda	E	2,100	0
Fishes	chub, Yaqui	Gila purpurea	E	0	0
Fishes	cui-ui	Chasmistes cujus	E	2,100	0
Fishes	dace, Ash Meadows speckled	Rhinichthys osculus nevadensis	E	2,100	0
Fishes	dace, blackside	Phoxinus cumberlandensis	T	0	0
Fishes	dace, Clover Valley speckled	Rhinichthys osculus oligoporus	E	2,100	0
Fishes	dace, desert	Eremichthys acros	T	2,100	0
Fishes	dace, Foscett speckled	Rhinichthys osculus ssp.	T	0	0
Fishes	dace, Independence Valley speckled	Rhinichthys osculus lethoporus	E	2,100	0
Fishes	dace, Kendall Warm Springs	Rhinichthys osculus thermalis	E	0	0



Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Fishes	dace, Moapa	Moapa coriacea	E	2,100	0
Fishes	darer, amber	Percina antesella	E	2,000	0
Fishes	darer, bayou	Etheostoma rubrum	T	0	0
Fishes	darer, bluemask	Etheostoma sp.	E	0	0
Fishes	darer, boulder	Etheostoma wapiti	E	0	0
Fishes	darer, Cherokee	Etheostoma scotti	T	2,000	0
Fishes	darer, duskytail	Etheostoma percnum	E	0	0
Fishes	darer, Etowah	Etheostoma etowahae	E	2,000	0
Fishes	darer, fountain	Etheostoma fonticola	E	2,800	0
Fishes	darer, goldline	Percina aurolineata	T	2,000	0
Fishes	darer, leopard	Percina pantherina	T	0	0
Fishes	darer, Maryland	Etheostoma sellare	E	0	0
Fishes	darer, Niangua	Etheostoma nianguae	T	5,000	0
Fishes	darer, Okaloosa	Etheostoma okaloosae	E	0	0
Fishes	darer, relict	Etheostoma chienense	E	0	0
Fishes	darer, slackwater	Etheostoma boschungii	T	0	0
Fishes	darer, snail	Percina tanasi	T	0	0
Fishes	darer, watercress	Etheostoma nuchale	E	0	0
Fishes	gambusia, Big Bend	Gambusia gaigei	E	0	0
Fishes	gambusia, Clear Creek	Gambusia heterochir	E	0	0
Fishes	gambusia, Pecos	Gambusia nobilis	E	0	0
Fishes	gambusia, San Marcos	Gambusia georgei	E	0	0
Fishes	goby, tidewater	Eucyclogobius newberryi	E	35,000	0
Fishes	logperch, Conasauga	Percina jenkinsi	E	1,000	0
Fishes	logperch, Roanoke	Percina rex	E	112,000	0
Fishes	madtom, Neosho	Noturus placidus	T	25,000	0
Fishes	madtom, pygmy	Noturus stanauli	E	0	0
Fishes	madtom, Scioto	Noturus trautmani	E	0	0
Fishes	madtom, smoky	Noturus baileyi	E	0	0
Fishes	madtom, yellowfin	Noturus flavipinnis	T	0	0
Fishes	minnow, loach	Tiaroga cobitis	T	0	0
Fishes	minnow, Rio Grande silvery	Hybognathus amarus	E	0	0
Fishes	pikeminnow, Colorado	Ptychocheilus lucius	E	0	0
Fishes	poolfish, Pahrump	Empetrichthys latos	E	0	0
Fishes	pupfish, Ash Meadows Amargosa	Cyprinodon nevadensis mionectes	E	0	0
Fishes	pupfish, Comanche Springs	Cyprinodon elegans	E	0	0
Fishes	pupfish, desert	Cyprinodon macularius	E	0	0
Fishes	pupfish, Devils Hole	Cyprinodon diabolis	E	0	0
Fishes	pupfish, Leon Springs	Cyprinodon bovinus	E	0	0
Fishes	pupfish, Owens	Cyprinodon radiosus	E	0	0

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Fishes	pupfish, Warm Springs	Cyprinodon nevadensis pectoralis	E	0	0
Fishes	salmon, chinook	Oncorhynchus tshawytscha	E, T	14,000	0
Fishes	salmon, chum	Oncorhynchus keta	T	22,115,000	0
Fishes	salmon, coho	Oncorhynchus kisutch	T	5,301,200	0
Fishes	salmon, sockeye	Oncorhynchus nerka	E, T	5,276,000	0
Fishes	sculpin, pygmy	Cottus pygmaeus	T	5,291,000	0
Fishes	shiner, Arkansas River	Notropis girardi	T	0	0
Fishes	shiner, beautiful	Cyprinella formosa	T	0	0
Fishes	shiner, blue	Cyprinella caerulea	T	1,000	0
Fishes	shiner, Cahaba	Notropis cahabae	E	1,000	0
Fishes	shiner, Cape Fear	Notropis mekistocholas	E	0	0
Fishes	shiner, palezone	Notropis albizonatus	E	0	0
Fishes	shiner, Pecos bluntnose	Notropis simus pecosensis	T	0	0
Fishes	shiner, Topeka	Notropis topeka	E	5,000	0
Fishes	silverside, Waccamaw	Menidia extensa	T	0	0
Fishes	smelt, delta	Hypomesus transpacificus	T	3,800	0
Fishes	spikedace	Meda fulgida	T	0	0
Fishes	spinedace, Big Spring	Lepidomeda mollispinis pratensis	T	2,100	0
Fishes	spinedace, Little Colorado	Lepidomeda vittata	T	0	0
Fishes	spinedace, White River	Lepidomeda albivallis	E	2,100	0
Fishes	splittail, Sacramento	Pogonichthys macrolepidotus	T	2,100	0
Fishes	springfish, Hiko White River	Crenichthys baileyi grandis	E	2,100	0
Fishes	springfish, Railroad Valley	Crenichthys nevadae	T	2,100	0
Fishes	springfish, White River	Crenichthys baileyi baileyi	E	2,100	0
Fishes	steelhead	Oncorhynchus mykiss	E, T	97,100	0
Fishes	stickleback, unarmored threespine	Gasterosteus aculeatus williamsoni	E	5,362,100	0
Fishes	sturgeon, Gulf	Acipenser oxyrinchus desotoi	T	14,000	0
Fishes	sturgeon, pallid	Scaphirhynchus albus	E	368,000	0
Fishes	sturgeon, shortnose	Acipenser brevirostrum	E	19,500	192,900
Fishes	sturgeon, white	Acipenser transmontanus	E	0	0
Fishes	sucker, June	Chasmistes liorus	E	10,000	0
Fishes	sucker, Lost River	Deltistes luxatus	E	2,100	0
Fishes	Sucker, Modoc	Catostomus microps	E	2,100	0
Fishes	sucker, razorback	Xyrauchen texanus	E	2,100	0
Fishes	Sucker, shortnose	Chasmistes brevirostris	E	2,100	0
Fishes	sucker, Warner	Catostomus warnerensis	T	0	0
Fishes	topminnow, Gila	Poeciliopsis occidentalis	E	0	0
Fishes	trout, Apache	Oncorhynchus apache	T	0	0
Fishes	trout, bull	Salvelinus confluentus	T	6,100	0
Fishes	trout, Gila	Oncorhynchus gilae	E	284,000	0

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Fishes	trout, greenback cutthroat	Oncorhynchus clarki stomias	T	0	0
Fishes	trout, Lahontan cutthroat	Oncorhynchus clarki henshawi	T	27,100	0
Fishes	trout, Little Kern golden	Oncorhynchus aguabonita whitei	T	2,100	0
Fishes	trout, Paiute cutthroat	Oncorhynchus clarki seleniris	T	2,100	0
Fishes	woundfin	Plagopterus argentissimus	E	0	0
Clams	acornshell, southern	Epioblasma othcaloogensis	E	1,000	0
Clams	bankclimber, purple	Elliptoideus sloatianus	T	54,000	0
Clams	bean, Cumberland	Villosa trabalis	E	0	0
Clams	bean, purple	Villosa perpurpurea	E	0	0
Clams	blossom, green	Epioblasma torulosa gubernaculum	E	0	0
Clams	blossom, tubercled	Epioblasma torulosa torulosa	E	0	0
Clams	blossom, turgid	Epioblasma turgidula	E	0	0
Clams	blossom, yellow	Epioblasma florentina florentina	E	0	0
Clams	catpaw	Epioblasma obliquata obliquata	E	0	0
Clams	catpaw, white	Epioblasma obliquata perobliqua	E	0	0
Clams	clubshell	Pleurobema clava	E	22,500	0
Clams	clubshell, black	Pleurobema curtum	E	0	0
Clams	clubshell, ovate	Pleurobema perovatum	E	27,000	0
Clams	clubshell, southern	Pleurobema decium	E	46,000	0
Clams	combshell, Cumberlandian	Epioblasma brevidens	E	0	0
Clams	combshell, southern	Epioblasma penita	E	0	0
Clams	combshell, upland	Epioblasma metastrata	E	1,000	0
Clams	elktoe, Appalachian	Alasmidonta raveneliana	E	0	0
Clams	elktoe, Cumberland	Alasmidonta atropurpurea	E	0	0
Clams	fanshell	Cyprogenia stegaria	E	2,000	0
Clams	fatmucket, Arkansas	Lampsilis powelli	T	0	0
Clams	heelsplitter, Alabama	Potamilus inflatus	T	26,000	0
Clams	heelsplitter, Carolina	Lasmigona decorata	E	0	0
Clams	higgins eye	Lampsilis higginsii	E	101,500	0
Clams	kidneyshell, triangular	Ptychobranchus greeni	E	1,000	0
Clams	lampmussel, Alabama	Lampsilis virescens	E	0	0
Clams	lilliput, pale	Toxolasma cylindrellus	E	0	0
Clams	mapleleaf, winged	Quadrula fragosa	E	8,000	0
Clams	moccasinshell, Alabama	Medionidus acutissimus	T	27,000	0
Clams	moccasinshell, Coosa	Medionidus parvulus	E	1,000	0
Clams	moccasinshell, Gulf	Medionidus penicillatus	E	1,000	0
Clams	moccasinshell, Ochlockonee	Medionidus simpsonianus	E	1,000	0
Clams	monkeyface, Appalachian	Quadrula sparsa	E	0	0
Clams	monkeyface, Cumberland	Quadrula intermedia	E	0	0
Clams	mucket, orangenacre	Lampsilis perovalis	T	27,000	0

Federal Listed Endangered and Threatened Wildlife and Plants  
 As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Clams	mucket, pink	Lampsilis abrupta	E	12,400	0
Clams	mussel, oyster	Epioblasma capsaeformis	E	0	0
Clams	pearlshell, Louisiana	Margaritifera hembeli	T	0	0
Clams	pearlymussel, birdwing	Conradilla caelata	E	400	0
Clams	pearlymussel, cracking	Hemistena lata	E	2,400	0
Clams	pearlymussel, Curtis	Epioblasma florentina curtisii	E	0	0
Clams	pearlymussel, dromedary	Dromus dromas	E	0	0
Clams	pearlymussel, littlewing	Pegias fabula	E	0	0
Clams	pearlymussel, white wartyback	Plethobasus cicatricosus	E	3,000	0
Clams	pigtoe, Cumberland	Pleurobema gibberum	E	0	0
Clams	pigtoe, dark	Pleurobema furvum	E	0	0
Clams	pigtoe, finerayed	Fusconaia cuneolus	E	400	0
Clams	pigtoe, flat	Pleurobema marshalli	E	20,000	0
Clams	pigtoe, heavy	Pleurobema taitianum	E	0	0
Clams	pigtoe, oval	Pleurobema pyriforme	E	1,000	0
Clams	pigtoe, rough	Pleurobema plenum	E	2,000	0
Clams	pigtoe, shiny	Fusconaia cor	E	0	0
Clams	pigtoe, southern	Pleurobema georgianum	E	1,000	0
Clams	pimpleback, orangefoot	Plethobasus cooperianus	E	14,000	0
Clams	pocketbook, fat	Potamilus capax	E	41,000	0
Clams	pocketbook, finelined	Lampsilis altilis	T	20,000	0
Clams	pocketbook, Ouachita rock	Arkansia wheeleri	E	0	0
Clams	pocketbook, shinyrayed	Lampsilis subangulata	E	1,000	0
Clams	pocketbook, speckled	Lampsilis streckeri	E	1,000	0
Clams	rabbitsfoot, rough	Quadrula cylindrica strigillata	E	0	0
Clams	riffleshell, northern	Epioblasma torulosa rangiana	E	2,500	0
Clams	riffleshell, tan	Epioblasma florentina walkeri	E	400	0
Clams	ring pink	Obovaria retusa	E	2,000	0
Clams	slabshell, Chipola	Elliptio chipolaensis	T	1,000	0
Clams	spiny mussel, James	Pleurobema collina	E	0	9,800
Clams	spiny mussel, Tar River	Elliptio steinstansana	E	0	0
Clams	stirrupshell	Quadrula stapes	E	0	0
Clams	three-ridge, fat	Amblema neislerii	E	54,000	0
Clams	wedgemussel, dwarf	Alasmidonta heterodon	E	20,000	0
Snails	ambersnail, Kanab	Oxyloma haydeni kanabensis	E	0	0
Snails	elimia, lacy	Elimia crenatella	T	0	0
Snails	limpet, Banbury Springs	Lanx sp.	E	0	0
Snails	lioplax, cylindrical	Lioplax cyclostomaformis	E	0	0
Snails	marstonia, royal	Pyrgulopsis ogmorhaphe	E	0	0
Snails	pebblesnail, flat	Lepyrium showalteri	E	0	0

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Snails	riversnail, Anthony's	Athearnia anthonyi	E	0	0
Snails	rocksnail, painted	Leptoxis taeniata	T	0	0
Snails	rocksnail, plicate	Leptoxis plicata	E	0	0
Snails	rocksnail, round	Leptoxis ampla	T	0	0
Snails	shagreen, Magazine Mountain	Mesodon magazinensis	T	0	0
Snails	snail, Bliss Rapids	Taylorconcha serpenticola	T	0	0
Snails	snail, Chittenango ovate amber	Succinea chittenangoensis	T	0	0
Snails	snail, flat-spined three-toothed	Triodopsis platysayoides	T	0	0
Snails	snail, Iowa Pleistocene	Discus macclintocki	E	0	0
Snails	snail, Morro shoulderband	Helminthoglypta walkeriana	E	0	0
Snails	snail, noonday	Mesodon clarki nantahala	T	0	0
Snails	snail, painted snake coiled forest	Anguispira picta	T	0	0
Snails	snail, Snake River physa	Physa natricina	E	0	0
Snails	snail, Stock Island tree	Orthalicus reses	T	0	0
Snails	snail, tulotoma	Tulotoma magnifica	E	1,000	0
Snails	snail, Utah valvata	Valvata utahensis	E	0	0
Snails	snail, Virginia fringed mountain	Polygyriscus virginianus	E	0	0
Snails	snails, Oahu tree	Achatinella spp.	E	0	0
Snails	springsnail, Alamosa	Tryonia alamosae	E	0	0
Snails	springsnail, Bruneau Hot	Pyrgulopsis bruneauensis	E	0	0
Snails	springsnail, Idaho	Fonticella idahoensis	E	0	0
Snails	springsnail, Socorro	Pyrgulopsis neomexicana	E	0	0
Insects	beetle, American burying	Nicrophorus americanus	E	26,000	0
Insects	beetle, Coffin Cave mold	Batrisodes texanus	E	0	0
Insects	beetle, Comal Springs dryopid	Stygoparnus comalensis	E	400	0
Insects	beetle, Comal Springs riffle	Heterelmis comalensis	E	400	0
Insects	beetle, delta green ground	Elaphrus viridis	T	0	0
Insects	beetle, Hungerford's crawling water	Brychius hungerfordi	E	0	0
Insects	beetle, Kretschmarr Cave mold	Texamaurops reddelli	E	400	0
Insects	beetle, Mount Hermon June	Polyphylla barbata	E	0	0
Insects	beetle, Tooth Cave ground	Rhadine persephone	E	400	0
Insects	beetle, valley elderberry longhorn	Desmocerus californicus dimorphus	T	37,100	0
Insects	butterfly, bay checkerspot	Euphydryas editha bayensis	T	0	0
Insects	butterfly, Behren's silverspot	Speyeria zerene behrensii	E	0	0
Insects	butterfly, callippe silverspot	Speyeria callippe callippe	E	0	0
Insects	butterfly, El Segundo blue	Euphilotes battoides allyni	E	0	0
Insects	butterfly, Karner blue	Lycaeides melissa samuelis	E	120,000	0
Insects	butterfly, Lange's metalmark	Apodemia mormo langei	E	0	0
Insects	butterfly, lotis blue	Lycaeides argyrognomon lotis	E	0	0
Insects	butterfly, mission blue	Icaricia icarioides missionensis	E	0	0

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Insects	butterfly, Mitchell's satyr	Neonympha mitchellii mitchellii	E	0	0
Insects	butterfly, Myrtle's silverspot	Speyeria zerene myrtleae	E	0	0
Insects	butterfly, Oregon silverspot	Speyeria zerene hippolyta	T	4,000	0
Insects	butterfly, Palos Verdes blue	Glaucopsyche lygdamus palosverdesensis	E	0	0
Insects	butterfly, Quino checkerspot	Euphydryas editha quino	E	60,500	0
Insects	butterfly, Saint Francis' satyr	Neonympha mitchellii francisci	E	0	0
Insects	butterfly, San Bruno elfin	Callophrys mossii bayensis	E	0	0
Insects	butterfly, Schaus swallowtail	Heraclides aristodemus ponceanus	E	0	0
Insects	butterfly, Smith's blue	Euphilotes enoptes smithi	E	0	0
Insects	butterfly, Uncompahgre fritillary	Boloria acrocneuma	E	0	0
Insects	dragonfly, Hine's emerald	Somatochlora hineana	E	0	0
Insects	fly, Delhi Sands flower-loving	Rhaphiomidas terminatus abdominalis	E	0	0
Insects	grasshopper, Zayante band-winged	Trimerotropis infantilis	E	0	0
Insects	moth, Kern primrose sphinx	Euproserpinus euterpe	T	0	0
Insects	naucorid, Ash Meadows	Ambrysus amargosus	T	0	0
Insects	skipper, Laguna Mountains	Pyrgus ruralis lagunae	E	0	0
Insects	skipper, Pawnee montane	Hesperia leonardus montana	T	0	0
Insects	tiger beetle, northeastern beach	Cicindela dorsalis dorsalis	T	0	20,800
Insects	tiger beetle, Puritan	Cicindela puritana	T	0	0
Arachnids	harvestman, Bee Creek Cave	Texella reddelli	E	400	0
Arachnids	harvestman, Bone Cave	Texella reyesi	E	400	0
Arachnids	pseudoscorpion, Tooth Cave	Tartarocreagris texana	E	400	0
Arachnids	spider, spruce-fir moss	Microhexura montivaga	E	0	0
Arachnids	spider, Tooth Cave	Neoleptoneta myopica	E	0	0
Crustaceans	amphipod, Hay's Spring	Stygobromus hayi	E	0	0
Crustaceans	amphipod, Illinois cave	Gammarus acherondytes	E	0	0
Crustaceans	amphipod, Peck's cave	Stygobromus pecki	E	400	0
Crustaceans	crayfish, cave	Cambarus zophonastes	E	0	0
Crustaceans	crayfish, cave	Cambarus aculabrum	E	0	0
Crustaceans	crayfish, Nashville	Orconectes shoupi	E	0	0
Crustaceans	crayfish, Shasta	Pacifastacus fortis	E	2,100	0
Crustaceans	fairy shrimp, Conservancy	Branchinecta conservatio	E	2,100	0
Crustaceans	fairy shrimp, longhorn	Branchinecta longiantenna	E	2,100	0
Crustaceans	fairy shrimp, Riverside	Streptocephalus woottoni	E	0	0
Crustaceans	fairy shrimp, San Diego	Branchinecta sandiegonensis	E	29,000	0
Crustaceans	fairy shrimp, vernal pool	Branchinecta lynchi	T	2,100	0
Crustaceans	isopod, Lee County cave	Lirceus usdagalun	E	0	0
Crustaceans	isopod, Madison Cave	Antrolana lira	T	0	0
Crustaceans	isopod, Socorro	Thermosphaeroma thermophilus	E	0	0
Crustaceans	shrimp, Alabama cave	Palaemonias alabamiae	E	0	0

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Crustaceans	shrimp, California freshwater	<i>Syncaris pacifica</i>	E	2,100	0
Crustaceans	shrimp, Kentucky cave	<i>Palaemonias ganteri</i>	E	2,000	0
Crustaceans	shrimp, Squirrel Chimney Cave	<i>Palaemonetes cummingi</i>	T	0	0
Crustaceans	tadpole shrimp, vernal pool	<i>Lepidurus packardii</i>	E	2,100	0
Flowering Plants	'a'e	<i>Zanthoxylum hawaiiense</i>	E	0	0
Flowering Plants	'a'e	<i>Zanthoxylum dipetalum tomentosum</i>	E	0	0
Flowering Plants	agave, Arizona	<i>Agave arizonica</i>	E	0	0
Flowering Plants	'aiea	<i>Nothocestrum breviflorum</i>	E	0	0
Flowering Plants	'aiea	<i>Nothocestrum peltatum</i>	E	0	0
Flowering Plants	'akoko	<i>Euphorbia haelealeana</i>	E	0	0
Flowering Plants	'akoko	<i>Chamaesyce rockii</i>	E	0	0
Flowering Plants	'akoko	<i>Chamaesyce herbstii</i>	E	0	0
Flowering Plants	'akoko	<i>Chamaesyce kuwaleana</i>	E	0	0
Flowering Plants	'akoko	<i>Chamaesyce celastroides kaenana</i>	E	0	0
Flowering Plants	'akoko	<i>Chamaesyce halemanui</i>	E	0	0
Flowering Plants	'akoko	<i>Chamaesyce deppeana</i>	E	0	0
Flowering Plants	'akoko, Ewa Plains	<i>Chamaesyce skottsbergii kalaeloana</i>	E	0	0
Flowering Plants	alani	<i>Melicope saint-johnii</i>	E	0	0
Flowering Plants	alani	<i>Melicope ovalis</i>	E	0	0
Flowering Plants	alani	<i>Melicope adscendens</i>	E	0	0
Flowering Plants	alani	<i>Melicope zahlbruckneri</i>	E	0	0
Flowering Plants	alani	<i>Melicope reflexa</i>	E	0	0
Flowering Plants	alani	<i>Melicope quadrangularis</i>	E	0	0
Flowering Plants	alani	<i>Melicope pallida</i>	E	0	0
Flowering Plants	alani	<i>Melicope munroi</i>	E	0	0
Flowering Plants	alani	<i>Melicope balloui</i>	E	0	0
Flowering Plants	alani	<i>Melicope knudsenii</i>	E	0	0
Flowering Plants	alani	<i>Melicope lydgatei</i>	E	0	0
Flowering Plants	alani	<i>Melicope mucronulata</i>	E	0	0
Flowering Plants	alani	<i>Melicope haupuensis</i>	E	0	0
Flowering Plants	allocarya, Calistoga	<i>Plagiobothrys strictus</i>	E	0	0
Flowering Plants	alopecurus, Sonoma	<i>Alopecurus aequalis sonomensis</i>	E	0	0
Flowering Plants	amaranth, seabeach	<i>Amaranthus pumilus</i>	T	21,000	56,000
Flowering Plants	ambrosia, south Texas	<i>Ambrosia cheiranthifolia</i>	E	200	0
Flowering Plants	amphanthus, little	<i>Amphanthus pusillus</i>	T	0	0
Flowering Plants	'anaunau	<i>Lepidium arbuscula</i>	E	0	0
Flowering Plants	'anunu	<i>Sicyos alba</i>	E	0	0
Flowering Plants	arrowhead, bunched	<i>Sagittaria fasciculata</i>	E	0	0
Flowering Plants	aster, decurrent false	<i>Boltonia decurrens</i>	T	0	0
Flowering Plants	aster, Florida golden	<i>Chrysopsis floridana</i>	E	0	0

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	aster, Ruth's golden	<i>Pityopsis ruthii</i>	E	0	0
Flowering Plants	aupaka	<i>Isodendron laurifolium</i>	E	0	0
Flowering Plants	aupaka	<i>Isodendron hosakae</i>	E	0	0
Flowering Plants	aupaka	<i>Isodendron longifolium</i>	T	0	0
Flowering Plants	avens, spreading	<i>Geum radiatum</i>	E	0	0
Flowering Plants	'awikiwiki	<i>Canavalia molokaiensis</i>	E	0	0
Flowering Plants	awiwi	<i>Hedyotis cookiana</i>	E	0	0
Flowering Plants	awiwi	<i>Centaurium sebaeoides</i>	E	0	0
Flowering Plants	ayenia, Texas	<i>Ayenia limitaris</i>	E	200	0
Flowering Plants	Baccharis, Encinitas	<i>Baccharis vanessae</i>	T	0	0
Flowering Plants	barberry, island	<i>Berberis pinnata insularis</i>	E	0	0
Flowering Plants	barberry, Nevin's	<i>Berberis nevinii</i>	E	0	0
Flowering Plants	barberry, Truckee	<i>Berberis sonnei</i>	E	0	0
Flowering Plants	bariaco	<i>Trichilia triacantha</i>	E	0	0
Flowering Plants	beaked-rush, Knieskern's	<i>Rhynchospora knieskernii</i>	T	0	0
Flowering Plants	bear-poppy, dwarf	<i>Arctomecon humilis</i>	E	0	0
Flowering Plants	beardtongue, Penland	<i>Penstemon penlandii</i>	E	0	0
Flowering Plants	beargrass, Britton's	<i>Nolina brittoniana</i>	E	0	0
Flowering Plants	beauty, Harper's	<i>Harperocalis flava</i>	E	0	0
Flowering Plants	bedstraw, El Dorado	<i>Galium californicum sierrae</i>	E	0	0
Flowering Plants	bedstraw, island	<i>Galium buxifolium</i>	E	0	0
Flowering Plants	bellflower, Brooksville	<i>Campanula robinsiae</i>	E	0	0
Flowering Plants	birch, Virginia round-leaf	<i>Betula uber</i>	T	0	0
Flowering Plants	bird's beak, palmate-bracted	<i>Cordylanthus palmatus</i>	E	0	0
Flowering Plants	bird's-beak, Pennell's	<i>Cordylanthus tenuis capillaris</i>	E	0	0
Flowering Plants	bird's-beak, salt marsh	<i>Cordylanthus maritimus maritimus</i>	E	0	0
Flowering Plants	bird's-beak, soft	<i>Cordylanthus mollis mollis</i>	E	0	0
Flowering Plants	birds-in-a-nest, white	<i>Macbridea alba</i>	T	0	0
Flowering Plants	bittercress, small-anthered	<i>Cardamine micranthera</i>	E	1,500	0
Flowering Plants	bladderpod, Dudley Bluffs	<i>Lesquerella congesta</i>	T	0	0
Flowering Plants	bladderpod, kodachrome	<i>Lesquerella tumulosa</i>	E	0	0
Flowering Plants	bladderpod, lyrate	<i>Lesquerella lyrata</i>	T	0	0
Flowering Plants	bladderpod, Missouri	<i>Lesquerella filiformis</i>	E	10,000	0
Flowering Plants	bladderpod, San Bernardino Mountains	<i>Lesquerella kingii bernardina</i>	E	0	0
Flowering Plants	bladderpod, Spring Creek	<i>Lesquerella perforata</i>	E	0	0
Flowering Plants	bladderpod, white	<i>Lesquerella pallida</i>	E	500	0
Flowering Plants	blazingstar, Ash Meadows	<i>Mentzelia leucophylla</i>	T	0	0
Flowering Plants	blazingstar, Heller's	<i>Liatris helleri</i>	T	0	0
Flowering Plants	blazingstar, scrub	<i>Liatris ohlingeriae</i>	E	0	0
Flowering Plants	blue-star, Kearney's	<i>Amsonia kearneyana</i>	E	0	0



Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	bluecurls, Hidden Lake	Trichostema austromontanum compactum	T	0	0
Flowering Plants	bluegrass, Hawaiian	Poa sandvicensis	E	0	0
Flowering Plants	bluegrass, Mann's	Poa mannii	E	0	0
Flowering Plants	bluegrass, Napa	Poa napensis	E	0	0
Flowering Plants	bluegrass, San Bernardino	Poa atropurpurea	E	0	0
Flowering Plants	bluet, Roan Mountain	Hedyotis purpurea montana	E	0	0
Flowering Plants	bonamia, Florida	Bonamia grandiflora	T	0	0
Flowering Plants	boxwood, Vahl's	Buxus vahlii	E	0	0
Flowering Plants	brodiaea, Chinese Camp	Brodiaea pallida	T	0	0
Flowering Plants	brodiaea, thread-leaved	Brodiaea filifolia	T	0	0
Flowering Plants	broom, San Clemente Island	Lotus dendroideus traskiae	E	0	0
Flowering Plants	buckwheat, cushenbury	Eriogonum ovalifolium vineum	E	0	0
Flowering Plants	buckwheat, lone	Eriogonum apricum	E	0	0
Flowering Plants	buckwheat, scrub	Eriogonum longifolium gnaphalifolium	T	0	0
Flowering Plants	buckwheat, steamboat	Eriogonum ovalifolium williamsiae	E	0	0
Flowering Plants	bulrush, Northeastern	Scirpus ancistrochaetus	E	0	0
Flowering Plants	bush-clover, prairie	Lespedeza leptostachya	T	0	0
Flowering Plants	bush-mallow, San Clemente Island	Malacothamnus clementinus	E	0	0
Flowering Plants	bush-mallow, Santa Cruz Island	Malacothamnus fasciculatus nesioticus	E	0	0
Flowering Plants	buttercup, autumn	Ranunculus acriformis aestivalis	E	0	0
Flowering Plants	butterweed, Layne's	Senecio layneae	T	0	0
Flowering Plants	butterwort, Godfrey's	Pinguicula ionantha	T	0	0
Flowering Plants	button, Mohr's Barbara	Marshallia mohrii	T	1,000	0
Flowering Plants	button-celery, San Diego	Eryngium aristulatum parishii	E	12,100	0
Flowering Plants	cactus, Arizona hedgehog	Echinocereus triglochidiatus arizonicus	E	0	0
Flowering Plants	cactus, Bakersfield	Opuntia treleasei	E	0	0
Flowering Plants	cactus, black lace	Echinocereus reichenbachii albertii	E	0	0
Flowering Plants	cactus, Brady pincushion	Pediocactus bradyi	E	0	0
Flowering Plants	cactus, Chisos Mtn. hedgehog	Echinocereus chisoensis chisoensis	T	0	0
Flowering Plants	cactus, Cochise pincushion	Coryphantha robbinsorum	T	0	0
Flowering Plants	cactus, Key tree	Pilosocereus robinii	E	0	0
Flowering Plants	cactus, Knowlton	Pediocactus knowltonii	E	0	0
Flowering Plants	cactus, Kuenzler hedgehog	Echinocereus fendleri kuenzleri	E	0	0
Flowering Plants	cactus, Lee pincushion	Coryphantha sneedii leei	T	0	0
Flowering Plants	cactus, Lloyd's hedgehog	Echinocereus lloydii	DR	0	0
Flowering Plants	cactus, Lloyd's Mariposa	Echinomastus mariposensis	T	0	0
Flowering Plants	cactus, Mesa Verde	Sclerocactus mesae-verdae	T	0	0
Flowering Plants	cactus, Nellie cory	Coryphantha minima	E	0	0
Flowering Plants	cactus, Nichol's Turk's head	Echinocactus horizonthalonius nicholii	E	0	0
Flowering Plants	cactus, Peebles Navajo	Pediocactus peeblesianus peeblesianus	E	0	0

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	cactus, Pima pineapple	<i>Coryphantha scheeri robustispina</i>	E	0	0
Flowering Plants	cactus, San Rafael	<i>Pediocactus despainii</i>	E	0	0
Flowering Plants	cactus, Siler pincushion	<i>Pediocactus sileri</i>	T	0	0
Flowering Plants	cactus, Sneed pincushion	<i>Coryphantha sneedii sneedii</i>	E	0	0
Flowering Plants	cactus, star	<i>Astrophytum asterias</i>	E	200	0
Flowering Plants	cactus, Tobusch fishhook	<i>Ancistrocactus tobuschii</i>	E	0	0
Flowering Plants	cactus, Unita Basin hookless	<i>Sclerocactus glaucus</i>	T	0	0
Flowering Plants	cactus, Winkler	<i>Pediocactus winkleri</i>	T	0	0
Flowering Plants	cactus, Wright fishhook	<i>Sclerocactus wrightiae</i>	E	0	0
Flowering Plants	campion, fringed	<i>Silene polypetala</i>	E	0	0
Flowering Plants	capa rosa	<i>Callicarpa ampla</i>	E	0	0
Flowering Plants	cat's-eye, Terlingua Creek	<i>Cryptantha crassipes</i>	E	0	0
Flowering Plants	ceanothus, coyote	<i>Ceanothus ferrisae</i>	E	0	0
Flowering Plants	ceanothus, Pine Hill	<i>Ceanothus roderickii</i>	E	0	0
Flowering Plants	ceanothus, Vail Lake	<i>Ceanothus ophiochilus</i>	T	0	0
Flowering Plants	centaury, spring-loving	<i>Centaurium namophilum</i>	T	0	0
Flowering Plants	chaff-flower, round-leaved	<i>Achyranthes splendens rotundata</i>	E	0	0
Flowering Plants	chaffseed, American	<i>Schwalbea americana</i>	E	0	0
Flowering Plants	checker-mallow, Kenwood Marsh	<i>Sidalcea oregana valida</i>	E	0	0
Flowering Plants	checker-mallow, Nelson's	<i>Sidalcea nelsoniana</i>	T	2,000	0
Flowering Plants	checker-mallow, pedate	<i>Sidalcea pedata</i>	E	0	0
Flowering Plants	chupacallos	<i>Pleodendron macranthum</i>	E	500	0
Flowering Plants	cinquefoil, Robbins'	<i>Potentilla robbinsiana</i>	E	0	0
Flowering Plants	clarkia, Pismo	<i>Clarkia speciosa immaculata</i>	E	0	0
Flowering Plants	clarkia, Presidio	<i>Clarkia franciscana</i>	E	0	0
Flowering Plants	clarkia, Springville	<i>Clarkia springvillensis</i>	T	0	0
Flowering Plants	clarkia, Vine Hill	<i>Clarkia imbricata</i>	E	0	0
Flowering Plants	cliff-rose, Arizona	<i>Purshia subintegra</i>	E	0	0
Flowering Plants	clover, Monterey	<i>Trifolium trichocalyx</i>	E	0	0
Flowering Plants	clover, running buffalo	<i>Trifolium stoloniferum</i>	E	2,000	0
Flowering Plants	clover, showy Indian	<i>Trifolium amoenum</i>	E	0	0
Flowering Plants	cobana negra	<i>Stahlia monosperma</i>	T	0	0
Flowering Plants	coneflower, smooth	<i>Echinacea laevigata</i>	E	1,500	0
Flowering Plants	coneflower, Tennessee purple	<i>Echinacea tennesseensis</i>	E	0	0
Flowering Plants	cory cactus, bunched	<i>Coryphantha ramillosa</i>	T	0	0
Flowering Plants	cross, toad-flax	<i>Schoenocrambe suffrutescens</i>	E	0	0
Flowering Plants	crownbeard, big-leaved	<i>Verbesina dissita</i>	T	0	0
Flowering Plants	crownscale, San Jacinto Valley	<i>Atriplex coronata notatior</i>	E	0	0
Flowering Plants	cycladenia, Jones	<i>Cycladenia humilis jonesii</i>	T	0	0
Flowering Plants	daisy, lakeside	<i>Hymenoxys herbacea</i>	T	0	0

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	daisy, Maguire	Erigeron maguirei	T	0	0
Flowering Plants	daisy, Parish's	Erigeron parishii	T	0	0
Flowering Plants	dawn-flower, Texas prairie	Hymenoxys texana	E	5,500	0
Flowering Plants	dogweed, ashy	Thymophylla tephroleuca	E	0	0
Flowering Plants	dropwort, Canby's	Oxypolis canbyi	E	0	0
Flowering Plants	dudleya, Conejo	Dudleya abramsii parva	T	0	0
Flowering Plants	dudleya, marcescent	Dudleya cymosa marcescens	T	0	0
Flowering Plants	dudleya, Santa Clara Valley	Dudleya setchellii	E	0	0
Flowering Plants	dudleya, Santa Cruz Island	Dudleya nesiotica	T	0	0
Flowering Plants	dudleya, Verity's	Dudleya verityi	T	0	0
Flowering Plants	dudleyea, Santa Monica Mountains	Dudleya cymosa ovatifolia	T	0	0
Flowering Plants	dwarf-flax, Marin	Hesperolinon congestum	T	0	0
Flowering Plants	erubia	Solanum drymophilum	E	0	0
Flowering Plants	evening-primrose, Antioch Dunes	Oenothera deltoides howellii	E	0	0
Flowering Plants	evening-primrose, Eureka Valley	Oenothera avita eurekaensis	E	0	0
Flowering Plants	evening-primrose, San Benito	Camissonia benitensis	T	0	0
Flowering Plants	fiddleneck, large-flowered	Amsinckia grandiflora	E	0	0
Flowering Plants	flannelbush, Mexican	Fremontodendron mexicanum	E	0	0
Flowering Plants	flannelbush, Pine Hill	Fremontodendron californicum decumbens	E	0	0
Flowering Plants	fleabane, Zuni	Erigeron rhizomatus	T	0	0
Flowering Plants	four-o'clock, MacFarlane's	Mirabilis macfarlanei	T	0	0
Flowering Plants	frankenian, Johnston's	Frankenia johnstonii	E	0	0
Flowering Plants	fringe-tree, pygmy	Chionanthus pygmaeus	E	0	0
Flowering Plants	fringe-pod, Santa Cruz Island	Thysanocarpus conchuliferus	E	0	0
Flowering Plants	gardenia, Hawaiian	Gardenia brighamii	E	0	0
Flowering Plants	geranium, Hawaiian red-flowered	Geranium arboreum	E	0	0
Flowering Plants	gerardia, sandplain	Agalinis acuta	E	1,100	0
Flowering Plants	gilia, Hoffmann's slender-flowered	Gilia tenuiflora hoffmannii	E	0	0
Flowering Plants	gilia, Monterey	Gilia tenuiflora arenaria	E	0	0
Flowering Plants	goetzea, beautiful	Goetzea elegans	E	0	0
Flowering Plants	goldenrod, Blue Ridge	Solidago spithamaea	T	0	0
Flowering Plants	goldenrod, Houghton's	Solidago houghtonii	T	0	0
Flowering Plants	goldenrod, Short's	Solidago shortii	E	0	0
Flowering Plants	goldenrod, white-haired	Solidago albopilosa	T	0	0
Flowering Plants	goldfields, Burke's	Lasthenia burkei	E	0	0
Flowering Plants	goldfields, Contra Costa	Lasthenia conjugens	E	0	0
Flowering Plants	gooseberry, Miccosukee	Ribes echinellum	T	0	0
Flowering Plants	gourd, Okeechobee	Cucurbita okeechobeensis okeechobeensis	E	0	0
Flowering Plants	grass, California Orcutt	Orcuttia californica	E	0	0
Flowering Plants	grass, Colusa	Neostapfia colusana	T	0	0

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	grass, Eureka Dune	Swallenia alexandrae	E	0	0
Flowering Plants	grass, Solano	Tuctoria mucronata	E	0	0
Flowering Plants	grass, Tennessee yellow-eyed	Xyris tennesseensis	E	1,000	0
Flowering Plants	ground-plum, Pyne's	Astragalus bibullatus	E	0	0
Flowering Plants	groundsel, San Francisco Peaks	Senecio franciscanus	T	0	0
Flowering Plants	gumplant, Ash Meadows	Grindelia fraxino-pratensis	T	0	0
Flowering Plants	haha	Cyanea humboldtiana	E	0	0
Flowering Plants	haha	Cyanea grimesiana grimesiana	E	0	0
Flowering Plants	haha	Cyanea pinnatifida	E	0	0
Flowering Plants	haha	Cyanea hamatiflora hamatiflora	E	0	0
Flowering Plants	haha	Cyanea mannii	E	0	0
Flowering Plants	haha	Cyanea glabra	E	0	0
Flowering Plants	haha	Cyanea dunbarii	E	0	0
Flowering Plants	haha	Cyanea copelandii copelandii	E	0	0
Flowering Plants	haha	Cyanea asarifolia	E	0	0
Flowering Plants	haha	Cyanea macrostegia gibsonii	E	0	0
Flowering Plants	haha	Cyanea lobata	E	0	0
Flowering Plants	haha	Cyanea hamatiflora carlsonii	E	0	0
Flowering Plants	haha	Cyanea grimesiana obatae	E	0	0
Flowering Plants	haha	Cyanea copelandii haleakalaensis	E	0	0
Flowering Plants	haha	Cyanea longiflora	E	0	0
Flowering Plants	haha	Cyanea koolauensis	E	0	0
Flowering Plants	haha	Cyanea remyi	E	0	0
Flowering Plants	haha	Cyanea acuminata	E	0	0
Flowering Plants	haha	Cyanea undulata	E	0	0
Flowering Plants	haha	Cyanea truncata	E	0	0
Flowering Plants	haha	Cyanea recta	T	0	0
Flowering Plants	haha	Cyanea procera	E	0	0
Flowering Plants	haha	Cyanea stictophylla	E	0	0
Flowering Plants	haha	Cyanea platyphylla	E	0	0
Flowering Plants	haha	Cyanea shipmannii	E	0	0
Flowering Plants	haha	Cyanea st-johnii	E	0	0
Flowering Plants	haha	Cyanea superba	E	0	0
Flowering Plants	haha	Cyanea mceldowneyi	E	0	0
Flowering Plants	haha	Cyanea crispa	E	0	0
Flowering Plants	ha'iwale	Cyrtandra dentata	E	0	0
Flowering Plants	ha'iwale	Cyrtandra viridiflora	E	0	0
Flowering Plants	ha'iwale	Cyrtandra tintinnabula	E	0	0
Flowering Plants	ha'iwale	Cyrtandra limahuliensis	T	0	0
Flowering Plants	ha'iwale	Cyrtandra munroi	E	0	0

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	ha'iwale	Cyrtandra giffardii	E	0	0
Flowering Plants	ha'iwale	Cyrtandra crenata	E	0	0
Flowering Plants	ha'iwale	Cyrtandra subumbellata	E	0	0
Flowering Plants	ha'iwale	Cyrtandra polyantha	E	0	0
Flowering Plants	hala pepe	Pleomele hawaiiensis	E	0	0
Flowering Plants	harebells, Avon Park	Crotalaria avonensis	E	0	0
Flowering Plants	harperella	Ptilimnium nodosum	E	1,000	0
Flowering Plants	hau kuahiwi	Hibiscadelphus giffardianus	E	0	0
Flowering Plants	hau kuahiwi	Hibiscadelphus hualalaiensis	E	0	0
Flowering Plants	hau kuahiwi	Hibiscadelphus woodii	E	0	0
Flowering Plants	heartleaf, dwarf-flowered	Hexastylis naniflora	T	0	0
Flowering Plants	heather, mountain golden	Hudsonia montana	T	0	0
Flowering Plants	heau	Exocarpos luteolus	E	0	0
Flowering Plants	hedyotis, Na Pali beach	Hedyotis st.-johnii	E	0	0
Flowering Plants	hibiscus, Clay's	Hibiscus clayi	E	0	0
Flowering Plants	higo, chumbo	Harrisia portoricensis	T	0	0
Flowering Plants	higuero de sierra	Crescentia portoricensis	E	0	0
Flowering Plants	holei	Ochrosia kilaeuensis	E	0	0
Flowering Plants	holly, Cook's	Ilex cookii	E	0	0
Flowering Plants	Honohono	Haplostachys haplostachya	E	0	0
Flowering Plants	howellia, water	Howellia aquatilis	T	0	0
Flowering Plants	hypericum, highlands scrub	Hypericum cumulicola	E	0	0
Flowering Plants	iliau, dwarf	Wilkesia hobydi	E	500	0
Flowering Plants	indian paintbrush, San Clemente Island	Castilleja grisea	E	0	0
Flowering Plants	ipomopsis, Holy Ghost	Ipomopsis sancti-spiritus	E	0	0
Flowering Plants	iris, dwarf lake	Iris lacustris	T	0	0
Flowering Plants	irisette, white	Sisyrinchium dichotomum	E	0	0
Flowering Plants	ischaemum, Hilo	Ischaemum byrone	E	0	0
Flowering Plants	ivesia, Ash Meadows	Ivesia kingii eremica	T	0	0
Flowering Plants	jacquemontia, beach	Jacquemontia reclinata	E	0	0
Flowering Plants	jewelflower, California	Caulanthus californicus	E	0	0
Flowering Plants	jewelflower, Metcalf Canyon	Streptanthus albidus albidus	E	0	0
Flowering Plants	jewelflower, Tiburon	Streptanthus niger	E	0	0
Flowering Plants	joint-vetch, sensitive	Aeschynomene virginica	T	0	0
Flowering Plants	kamakahala	Labordia triflora	E	0	0
Flowering Plants	kamakahala	Labordia tinifolia lanaiensis	E	0	0
Flowering Plants	kamakahala	Labordia cyrtandrae	E	0	0
Flowering Plants	kamakahala	Labordia tinifolia wahiawaensis	E	0	0
Flowering Plants	kamakahala	Labordia lydgatei	E	0	0
Flowering Plants	kauai hau kuahiwi	Hibiscadelphus distans	E	0	0

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	kauila	Colubrina oppositifolia	E	0	0
Flowering Plants	kaulu	Pteralyxia kauaiensis	E	0	0
Flowering Plants	kio'ele	Hedyotis coriacea	E	0	0
Flowering Plants	kiponapona	Phyllostegia racemosa	E	0	0
Flowering Plants	kohe malama malama o kanaloa	Kanaloa kahoolawensis	E	0	0
Flowering Plants	koki'o	Kokia drynarioides	E	0	0
Flowering Plants	koki'o ke'oke'o	Hibiscus waimeae hannerae	E	0	0
Flowering Plants	koki'o ke'oke'o	Hibiscus arnotianus immaculatus	E	0	0
Flowering Plants	koki'o, (=Cooke's koki'o)	Kokia cookei	E	0	0
Flowering Plants	koki'o, (=Kaua'i koki'o)	Kokia kauaiensis	E	0	0
Flowering Plants	kolea	Myrsine linearifolia	T	0	0
Flowering Plants	kolea	Myrsine juddii	E	0	0
Flowering Plants	ko'oko'olau	Bidens micrantha kalealaha	E	0	0
Flowering Plants	ko'oko'olau	Bidens wiebkei	E	0	0
Flowering Plants	ko'oloa'ula	Abutilon menziesii	E	0	0
Flowering Plants	Kopa	Hedyotis schlechtendahiana remyi	E	0	0
Flowering Plants	kuahiwi laukahi	Plantago princeps	E	0	0
Flowering Plants	kuahiwi laukahi	Plantago hawaiiensis	E	0	0
Flowering Plants	kuawawaenohu	Alsinidendron lychnoides	E	0	0
Flowering Plants	kula wahine noho	Isodendron pyrifolium	E	0	0
Flowering Plants	kulu'i	Nototrichium humile	E	0	0
Flowering Plants	ladies'-tresses, Canelo Hills	Spiranthes delitescens	E	0	0
Flowering Plants	ladies'-tresses, Navasota	Spiranthes parksii	E	3,500	0
Flowering Plants	ladies'-tresses, Ute	Spiranthes diluvialis	T	9,200	0
Flowering Plants	Lagu, Hyan	Serianthes nelsonii	E	0	0
Flowering Plants	larkspur, San Clemente Island	Delphinium variegatum kinkiense	E	11,000	0
Flowering Plants	lau'ehu	Panicum niihauense	E	0	0
Flowering Plants	laulihilihi, (=Ma'oli'oli)	Schiedea stellarioides	E	0	0
Flowering Plants	layia, beach	Layia carnosa	E	0	0
Flowering Plants	lead-plant, Crenulate	Amorpha crenulata	E	0	0
Flowering Plants	leather flower, Alabama	Clematis socialis	E	0	0
Flowering Plants	leather flower, Morefield's	Clematis morefieldii	E	0	0
Flowering Plants	lessingia, San Francisco	Lessingia germanorum	E	0	0
Flowering Plants	liliwai	Acaena exigua	E	0	0
Flowering Plants	lily, Minnesota dwarf trout	Erythronium propullans	E	0	0
Flowering Plants	lily, Pitkin Marsh	Lilium pardalinum pitkinense	E	0	0
Flowering Plants	lily, Western	Lilium occidentale	E	1,000	0
Flowering Plants	liveforever, Laguna Beach	Dudleya stolonifera	T	0	0
Flowering Plants	liveforever, Santa Barbara Island	Dudleya traskiae	E	0	0
Flowering Plants	locoweed, Fassett's	Oxytropis campestris chartacea	T	0	0

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	lomatum, Bradshaw's	Lomatium bradshawii	E	2,500	0
Flowering Plants	loosestrife, rough-leaved	Lysimachia asperulaefolia	E	1,000	0
Flowering Plants	lo'ulu	Pritchardia remota	E	1,000	0
Flowering Plants	lo'ulu	Pritchardia viscosa	E	0	0
Flowering Plants	lo'ulu	Pritchardia napaliensis	E	0	0
Flowering Plants	lo'ulu	Pritchardia affinis	E	0	0
Flowering Plants	lo'ulu	Pritchardia schattaueri	E	0	0
Flowering Plants	lo'ulu	Pritchardia kaalae	E	0	0
Flowering Plants	lo'ulu	Pritchardia munroi	E	0	0
Flowering Plants	lo'ulu, (=wahane)	Pritchardia aylmer-robinsonii	E	0	0
Flowering Plants	loosewort, Furbish	Pedicularis furbishiae	E	0	0
Flowering Plants	love grass, Fosberg's	Eragrostis fosbergii	E	0	0
Flowering Plants	lupine, clover	Lupinus tidestromii	E	0	0
Flowering Plants	lupine, scrub	Lupinus aridorum	E	0	0
Flowering Plants	mahoe	Alectryon macrococcus	E	0	0
Flowering Plants	makou	Peucedanum sandwicense	T	0	0
Flowering Plants	malacothrix, island	Malacothrix squalida	E	0	0
Flowering Plants	Malacothrix, Santa Cruz Island	Malacothrix indecora	E	0	0
Flowering Plants	mallow, Kern	Eremalche kernensis	E	0	0
Flowering Plants	mallow, Peter's Mountain	Iliamna corei	E	0	0
Flowering Plants	manaca, palma de	Calyptronoma rivalis	T	0	0
Flowering Plants	manioc, Walker's	Manihot walkerae	E	0	0
Flowering Plants	manzanita, Del Mar	Arctostaphylos glandulosa crassifolia	E	0	0
Flowering Plants	manzanita, lone	Arctostaphylos myrtifolia	T	0	0
Flowering Plants	manzanita, Morro	Arctostaphylos morroensis	T	0	0
Flowering Plants	manzanita, pallid	Arctostaphylos pallida	T	0	0
Flowering Plants	Manzanita, Presidio	Arctostaphylos hookeri ravenii	E	0	0
Flowering Plants	manzanita, Santa Rosa Island	Arctostaphylos confertiflora	E	0	0
Flowering Plants	ma'o hau hele, (=native yellow hibiscus)	Hibiscus brackenridgei	E	0	0
Flowering Plants	ma'oli'oli	Schiedea kealiae	E	0	0
Flowering Plants	ma'oli'oli	Schiedea apokremnos	E	0	0
Flowering Plants	mapele	Cyrtandra cyaneoides	E	0	0
Flowering Plants	mariposa lily, Tiburon	Calochortus tiburonensis	T	0	0
Flowering Plants	maua	Xylosma crenatum	E	0	0
Flowering Plants	meadowfoam, Butte County	Limnanthes floccosa californica	E	0	0
Flowering Plants	meadowfoam, Sebastopol	Limnanthes vincularis	E	0	0
Flowering Plants	meadowrue, Cooley's	Thalictrum cooleyi	E	0	0
Flowering Plants	mehamehame	Flueggea neowawraea	E	0	0
Flowering Plants	mesa-mint, Otay	Pogogyne nudiuscula	E	0	0
Flowering Plants	mesa-mint, San Diego	Pogogyne abramsii	E	0	0

Federal Listed Endangered and Threatened Wildlife and Plants  
 As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	milk-vetch, Applegate's	<i>Astragalus applegatei</i>	E	0	0
Flowering Plants	milk-vetch, Ash meadows	<i>Astragalus phoenix</i>	T	0	0
Flowering Plants	milk-vetch, Braunton's	<i>Astragalus brauntonii</i>	E	0	0
Flowering Plants	milk-vetch, Clara Hunt's	<i>Astragalus clarianus</i>	E	0	0
Flowering Plants	milk-vetch, Coachella Valley	<i>Astragalus lentiginosus coachellae</i>	E	0	0
Flowering Plants	milk-vetch, coastal dunes	<i>Astragalus tener titi</i>	E	0	0
Flowering Plants	milk-vetch, Cushenbury	<i>Astragalus albens</i>	E	0	0
Flowering Plants	milk-vetch, Fish Slough	<i>Astragalus lentiginosus piscinensis</i>	T	0	0
Flowering Plants	milk-vetch, heliotrope	<i>Astragalus montii</i>	T	0	0
Flowering Plants	milk-vetch, Jesup's	<i>Astragalus robbinsii jesupi</i>	E	0	0
Flowering Plants	milk-vetch, Lane Mountain	<i>Astragalus jaegerianus</i>	E	0	0
Flowering Plants	milk-vetch, Mancos	<i>Astragalus humillimus</i>	E	0	0
Flowering Plants	milk-vetch, Osterhout	<i>Astragalus osterhoutii</i>	E	0	0
Flowering Plants	milk-vetch, Peirson's	<i>Astragalus magdalenae peirsonii</i>	T	0	0
Flowering Plants	milk-vetch, Sentry	<i>Astragalus cremnophylax cremnophylax</i>	E	0	0
Flowering Plants	milk-vetch, triple-ribbed	<i>Astragalus tricarinatus</i>	E	0	0
Flowering Plants	milkpea, Small's	<i>Galactia smallii</i>	E	0	0
Flowering Plants	milkweed, Mead's	<i>Asclepias meadii</i>	T	0	0
Flowering Plants	milkweed, Welsh's	<i>Asclepias welshii</i>	T	0	0
Flowering Plants	mint, Garrett's	<i>Dicerandra christmanii</i>	E	0	0
Flowering Plants	mint, Lakela's	<i>Dicerandra immaculata</i>	E	0	0
Flowering Plants	mint, longspurred	<i>Dicerandra cornutissima</i>	E	0	0
Flowering Plants	mint, scrub	<i>Dicerandra frutescens</i>	E	0	0
Flowering Plants	monardella, willow	<i>Monardella linoides viminea</i>	E	0	0
Flowering Plants	monkey-flower, Michigan	<i>Mimulus glabratus michiganensis</i>	E	0	0
Flowering Plants	monkshood, northern wild	<i>Aconitum noveboracense</i>	T	0	0
Flowering Plants	morning-glory, Stebbins'	<i>Calystegia stebbinsii</i>	E	0	0
Flowering Plants	mountain balm, Indian Knob	<i>Eriodictyon altissimum</i>	E	0	0
Flowering Plants	mountain-mahogany, Catalina Island	<i>Cercocarpus traskiae</i>	E	0	0
Flowering Plants	mustard, Carter's	<i>Warea carteri</i>	E	7,000	0
Flowering Plants	mustard, Penland alpine fen	<i>Eutrema penlandii</i>	T	0	0
Flowering Plants	mustard, slender-petaled	<i>Thelypodium stenopetalum</i>	E	0	0
Flowering Plants	na'ena'e	<i>Dubautia latifolia</i>	E	0	0
Flowering Plants	na'ena'e	<i>Dubautia plantaginea humilis</i>	E	0	0
Flowering Plants	na'ena'e	<i>Dubautia pauciflora</i>	E	0	0
Flowering Plants	na'ena'e	<i>Dubautia herbstobatae</i>	E	0	0
Flowering Plants	nani wai'ale'ale	<i>Viola kauaiensis wahiiwaensis</i>	E	0	0
Flowering Plants	nanu	<i>Gardenia manni</i>	E	0	0
Flowering Plants	naupaka, dwarf	<i>Scaevola coriacea</i>	E	0	0
Flowering Plants	navarretia, few-flowered	<i>Navarretia leucocephala pauciflora</i>	E	0	0



Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	navarretia, many-flowered	Navarretia leucocephala plieantha	E	0	0
Flowering Plants	navarretia, spreading	Navarretia fossalis	T	0	0
Flowering Plants	nehe	Lipochaeta fauriei	E	0	0
Flowering Plants	nehe	Lipochaeta waimeaensis	E	0	0
Flowering Plants	nehe	Lipochaeta tenuifolia	E	0	0
Flowering Plants	nehe	Lipochaeta lobata leptophylla	E	0	0
Flowering Plants	nehe	Lipochaeta kamolensis	E	0	0
Flowering Plants	nehe	Lipochaeta micrantha	E	0	0
Flowering Plants	nehe	Lipochaeta venosa	E	0	0
Flowering Plants	nioi	Eugenia koolauensis	E	0	0
Flowering Plants	niterwort, Amargosa	Nitrophila mohavensis	E	0	0
Flowering Plants	No common name	Achyranthes mutica	E	0	0
Flowering Plants	No common name	Bonamia menziesii	E	0	0
Flowering Plants	No common name	Schiedea sarmentosa	E	0	0
Flowering Plants	No common name	Schiedea membranacea	E	0	0
Flowering Plants	No common name	Schiedea hookeri	E	0	0
Flowering Plants	No common name	Sanicula purpurea	E	0	0
Flowering Plants	No common name	Phyllostegia parviflora	E	0	0
Flowering Plants	No common name	Phyllostegia knudsenii	E	0	0
Flowering Plants	No common name	Phyllostegia hirsuta	E	0	0
Flowering Plants	No common name	Lobelia gaudichaudii koolauensis	E	0	0
Flowering Plants	No common name	Neraudia ovata	E	0	0
Flowering Plants	No common name	Hesperomannia arbuscula	E	0	0
Flowering Plants	No common name	Hesperomannia arborescens	E	0	0
Flowering Plants	No common name	Hedyotis parvula	E	0	0
Flowering Plants	No common name	Hedyotis degeneri	E	0	0
Flowering Plants	No common name	Gouania vitifolia	E	0	0
Flowering Plants	No common name	Gouania meyenii	E	0	0
Flowering Plants	No common name	Gouania hillebrandii	E	0	0
Flowering Plants	No common name	Geocarpon minimum	T	0	0
Flowering Plants	No common name	Gahnia lanaiensis	E	0	0
Flowering Plants	No common name	Phyllostegia kaalaensis	E	0	0
Flowering Plants	No common name	Eugenia woodburyana	E	0	0
Flowering Plants	No common name	Phyllostegia mannii	E	0	0
Flowering Plants	No common name	Ilex sintenisii	E	0	0
Flowering Plants	No common name	Cranichis ricartii	E	0	0
Flowering Plants	No common name	Vernonia proctorii	E	0	0
Flowering Plants	No common name	Trematolobelia singularis	E	0	0
Flowering Plants	No common name	Stenogyne campanulata	E	0	0
Flowering Plants	No common name	Stenogyne bifida	E	0	0

Fede Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	No common name	Spermolepis hawaiiensis	E	0	0
Flowering Plants	No common name	Silene perlmanni	E	0	0
Flowering Plants	No common name	Schiedea nuttallii	E	0	0
Flowering Plants	No common name	Schiedea kauaiensis	E	0	0
Flowering Plants	No common name	Sanicula mariversa	E	0	0
Flowering Plants	No common name	Phyllostegia wawrana	E	0	0
Flowering Plants	No common name	Phyllostegia warshaueri	E	0	0
Flowering Plants	No common name	Phyllostegia velutina	E	0	0
Flowering Plants	No common name	Phyllostegia waimeae	E	0	0
Flowering Plants	No common name	Mariscus fauriei	E	0	0
Flowering Plants	No common name	Lysimachia maxima	E	0	0
Flowering Plants	No common name	Lysimachia lydgatei	E	0	0
Flowering Plants	No common name	Lyonia truncata proctorii	E	0	0
Flowering Plants	No common name	Leptocereus grantianus	E	0	0
Flowering Plants	No common name	Catesbaea melanocarpa	E	0	0
Flowering Plants	No common name	Auerodendron pauciflorum	E	0	0
Flowering Plants	No common name	Aristida chaseae	E	0	0
Flowering Plants	No common name	Remya montgomeryi	E	0	0
Flowering Plants	No common name	Alsinidendron viscosum	E	0	0
Flowering Plants	No common name	Schoepfia arenaria	T	0	0
Flowering Plants	No common name	Schiedea spergulina spergulina	T	0	0
Flowering Plants	No common name	Schiedea spergulina leiopoda	E	0	0
Flowering Plants	No common name	Schiedea lydgatei	E	0	0
Flowering Plants	No common name	Schiedea helleri	E	0	0
Flowering Plants	No common name	Schiedea haleakalensis	E	0	0
Flowering Plants	No common name	Gesneria pauciflora	T	0	0
Flowering Plants	No common name	Myrcia paganii	E	0	0
Flowering Plants	No common name	Mariscus pennatiflorus	E	0	0
Flowering Plants	No common name	Ternstroemia subsessilis	E	0	0
Flowering Plants	No common name	Silene hawaiiensis	T	0	0
Flowering Plants	No common name	Poa siphonoglossa	E	0	0
Flowering Plants	No common name	Platanthera holochila	E	0	0
Flowering Plants	No common name	Phyllostegia mollis	E	0	0
Flowering Plants	No common name	Mitracarpus polycladus	E	0	0
Flowering Plants	No common name	Mitracarpus maxwelliae	E	0	0
Flowering Plants	No common name	Lysimachia filifolia	E	0	0
Flowering Plants	No common name	Lobelia monostachya	E	0	0
Flowering Plants	No common name	Lepanthes eltoensis	E	0	0
Flowering Plants	No common name	Daphnopsis hellerana	E	0	0
Flowering Plants	No common name	Cordia bellonis	E	0	0

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	No common name	Chamaecrista glandulosa mirabilis	E	0	0
Flowering Plants	No common name	Calyptanthus thomasiana	E	0	0
Flowering Plants	No common name	Viola oahuensis	E	0	0
Flowering Plants	No common name	Viola lanaiensis	E	0	0
Flowering Plants	No common name	Viola helenae	E	0	0
Flowering Plants	No common name	Vigna o-wahuensis	E	0	0
Flowering Plants	No common name	Tetramolopium rockii	T	0	0
Flowering Plants	No common name	Tetramolopium remyi	E	0	0
Flowering Plants	No common name	Tetramolopium lepidotum lepidotum	E	0	0
Flowering Plants	No common name	Tetramolopium filiforme	E	0	0
Flowering Plants	No common name	Tetramolopium arenarium	E	0	0
Flowering Plants	No common name	Stenogyne kanehoana	E	0	0
Flowering Plants	No common name	Stenogyne angustifolia angustifolia	E	0	0
Flowering Plants	No common name	Silene lanceolata	E	0	0
Flowering Plants	No common name	Silene alexandri	E	0	0
Flowering Plants	No common name	Schiedea kaalae	E	0	0
Flowering Plants	No common name	Remya kauaiensis	E	0	0
Flowering Plants	No common name	Phyllostegia glabra lanaiensis	E	0	0
Flowering Plants	No common name	Neraudia sericea	E	0	0
Flowering Plants	No common name	Neraudia angulata	E	0	0
Flowering Plants	No common name	Munroidendron racemosum	E	0	0
Flowering Plants	No common name	Lobelia oahuensis	E	0	0
Flowering Plants	No common name	Lobelia niihauensis	E	0	0
Flowering Plants	No common name	Hesperomannia lydgatei	E	0	0
Flowering Plants	No common name	Alsinidendron trinerve	E	0	0
Flowering Plants	No common name	Alsinidendron obovatum	E	0	0
Flowering Plants	No common name	Abutilon sandwicense	E	0	0
Flowering Plants	No common name	Abutilon eremitopetalum	E	0	0
Flowering Plants	No common name	Schiedea verticillata	E	0	0
Flowering Plants	No common name	Amaranthus brownii	E	0	0
Flowering Plants	nohoanu	Geranium multiflorum	E	0	0
Flowering Plants	oak, Hinckley	Quercus hinckleyi	T	0	0
Flowering Plants	oha	Delissea rivularis	E	0	0
Flowering Plants	oha	Delissea undulata	E	0	0
Flowering Plants	oha	Delissea subcordata	E	0	0
Flowering Plants	oha	Delissea rhytidosperra	E	0	0
Flowering Plants	oha wai	Clermontia drepanomorpha	E	0	0
Flowering Plants	oha wai	Clermontia peleana	E	0	0
Flowering Plants	oha wai	Clermontia oblongifolia brevipes	E	0	0
Flowering Plants	oha wai	Clermontia samuelii	E	0	0

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	'oha wai	Clermontia oblongifolia mauiensis	E	0	0
Flowering Plants	'oha wai	Clermontia pyralaria	E	0	0
Flowering Plants	'oha wai	Clermontia lindseyana	E	0	0
Flowering Plants	ohai	Sesbania tomentosa	E	0	0
Flowering Plants	'ohe'ohe	Tetraplasandra gymnocarpa	E	0	0
Flowering Plants	olulu	Brighamia insignis	E	0	0
Flowering Plants	onion, Munz's	Allium munzii	E	0	0
Flowering Plants	opuhe	Urera kaalae	E	0	0
Flowering Plants	orchid, eastern prairie fringed	Platanthera leucophaea	T	120,000	0
Flowering Plants	orchid, western prairie fringed	Platanthera praecleara	T	500	0
Flowering Plants	orcutt grass, Greene's	Tuctoria greenei	E	0	0
Flowering Plants	orcutt grass, hairy	Orcuttia pilosa	E	2,100	0
Flowering Plants	orcutt grass, Sacramento	Orcuttia viscida	E	2,100	0
Flowering Plants	orcutt grass, San Joaquin	Orcuttia inaequalis	T	2,100	0
Flowering Plants	orcutt grass, slender	Orcuttia tenuis	T	2,100	0
Flowering Plants	owl's-clover, fleshy	Castilleja campestris succulenta	T	0	0
Flowering Plants	oxytheca, cushenbury	Oxytheca parishii goodmaniana	E	0	0
Flowering Plants	paintbrush, ash-grey	Castilleja cinerea	T	0	0
Flowering Plants	paintbrush, golden	Castilleja levisecta	T	1,200	0
Flowering Plants	paintbrush, soft-leaved	Castilleja mollis	E	0	0
Flowering Plants	paintbrush, Tiburon	Castilleja affinis neglecta	E	0	0
Flowering Plants	palo colorado	Ternstroemia luquillensis	E	0	0
Flowering Plants	palo de jazmin	Styrax portoricensis	E	0	0
Flowering Plants	palo de nigua	Cornutia obovata	E	0	0
Flowering Plants	palo de ramon	Banara vanderbiltii	E	0	0
Flowering Plants	palo de rosa	Ottoschulzia rhodoxylon	E	0	0
Flowering Plants	pamakani	Tetramolopium capillare	E	0	0
Flowering Plants	pamakani	Viola chamissoniana chamissoniana	E	0	0
Flowering Plants	panicgrass, Carter's	Panicum fauriei carteri	E	0	0
Flowering Plants	pau'ala, (=alulu)	Brighamia rockii	E	0	0
Flowering Plants	pawpaw, beautiful	Deeringothamnus pulchellus	E	0	0
Flowering Plants	pawpaw, four-petal	Asimina tetramera	E	0	0
Flowering Plants	pawpaw, Rugel's	Deeringothamnus rugelii	E	0	0
Flowering Plants	pelos del diablo	Aristida portoricensis	E	0	0
Flowering Plants	pennyroyal, Todsen's	Hedeoma todsenii	E	0	0
Flowering Plants	penstemon, blowout	Penstemon haydenii	E	0	0
Flowering Plants	pentachaeta, Lyon's	Pentachaeta lyonii	E	0	0
Flowering Plants	pentachaeta, white-rayed	Pentachaeta bellidiflora	E	0	0
Flowering Plants	peperomia, Wheeler's	Peperomia wheeleri	E	0	0
Flowering Plants	phacelia, clay	Phacelia argillacea	E	0	0

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	phacelia, island	Phacelia insularis insularis	E	0	0
Flowering Plants	phacelia, North Park	Phacelia formosula	E	0	0
Flowering Plants	phlox, Texas trailing	Phlox nivalis texensis	E	0	0
Flowering Plants	pigeon wings	Cliitoria fragrans	T	0	0
Flowering Plants	pilo	Hedyotis mannii	E	0	0
Flowering Plants	pink, swamp	Helonias bullata	T	0	0
Flowering Plants	pinkroot, gentian	Spigelia gentianoides	E	0	0
Flowering Plants	piperia, Yadon's	Piperia yadonii	E	0	0
Flowering Plants	pitaya, Davis' green	Echinocereus viridiflorus davisii	E	0	0
Flowering Plants	pitcher-plant, Alabama canebrake	Sarracenia rubra alabamensis	E	1,000	0
Flowering Plants	pitcher-plant, green	Sarracenia oreophila	E	0	0
Flowering Plants	pitcher-plant, mountain sweet	Sarracenia rubra jonesii	E	0	0
Flowering Plants	plum, scrub	Prunus geniculata	E	0	0
Flowering Plants	po'e	Portulaca sclerocarpa	E	0	0
Flowering Plants	pogonia, small whorled	Isotria medeoloides	T	0	9,800
Flowering Plants	polygala, Lewton's	Polygala lewtonii	E	0	0
Flowering Plants	polygala, tiny	Polygala smallii	E	0	0
Flowering Plants	pondberry	Lindera melissifolia	E	2,000	0
Flowering Plants	pondweed, Little Aguja Creek	Potamogeton clystocarpus	E	0	0
Flowering Plants	popolo 'aiakeakua	Solanum sandwicense	E	0	0
Flowering Plants	popolo ku mai	Solanum incompletum	E	0	0
Flowering Plants	poppy, Sacramento prickly	Argemone pleiacantha pinnatisecta	E	0	0
Flowering Plants	poppy-mallow, Texas	Callirhoe scabriuscula	E	0	0
Flowering Plants	potato-bean, Price's	Apios priceana	T	0	0
Flowering Plants	potentilla, Hickman's	Potentilla hickmanii	E	0	0
Flowering Plants	prairie-clover, leafy	Dalea foliosa	E	0	0
Flowering Plants	prickly-apple, fragrant	Cereus eriophorus fragrans	E	0	0
Flowering Plants	prickly-ash, St. Thomas	Zanthoxylum thomasianum	E	0	0
Flowering Plants	primrose, Maguire	Primula maguirei	T	0	0
Flowering Plants	pussypaws, Mariposa	Calyptridium pulchellum	T	0	0
Flowering Plants	pu'uka'a	Cyperus trachysanthos	E	0	0
Flowering Plants	rattleweed, hairy	Baptisia arachnifera	E	0	0
Flowering Plants	reed-mustard, Barneby	Schoenocrambe barnebyi	E	2,100	0
Flowering Plants	reed-mustard, clay	Schoenocrambe argillacea	T	2,100	0
Flowering Plants	remya, Maui	Remya mauiensis	E	0	0
Flowering Plants	rhododendron, Chapman	Rhododendron chapmanii	E	0	0
Flowering Plants	ridge-cress, Barneby	Lepidium barnebyanum	E	0	0
Flowering Plants	rock-cress, Braun's	Arabis perstellata	E	0	0
Flowering Plants	rock-cress, Hoffmann's	Arabis hoffmannii	E	0	0
Flowering Plants	rock-cress, McDonald's	Arabis mcdonaldiana	E	0	0

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	rock-cress, shale barren	Arabis serotina	E	0	0
Flowering Plants	rockcress, Santa Cruz Island	Sibara filifolia	E	0	0
Flowering Plants	rosemary, Apalachicola	Conradina glabra	E	0	0
Flowering Plants	rosemary, Cumberland	Conradina verticillata	T	0	0
Flowering Plants	rosemary, Etonia	Conradina etonia	E	0	0
Flowering Plants	rosemary, short-leaved	Conradina brevifolia	E	0	0
Flowering Plants	roseroot, Leedy's	Sedum integrifolium leedyi	T	0	0
Flowering Plants	rush-pea, slender	Hoffmannseggia tenella	E	0	0
Flowering Plants	rush-rose, island	Helianthemum greenei	T	0	0
Flowering Plants	sand-verbena, large-fruited	Abronia macrocarpa	E	0	0
Flowering Plants	sandalwood, Lanai or 'iliahi	Santalum freycinetianum lanaiense	E	0	0
Flowering Plants	sandbur, agrimony or Kamanomano	Cenchrus agrimonioides	E	0	0
Flowering Plants	sandlace	Polygonella myriophylla	E	0	0
Flowering Plants	sandwort, Bear Valley	Arenaria ursina	T	0	0
Flowering Plants	sandwort, Cumberland	Arenaria cumberlandensis	E	0	0
Flowering Plants	sandwort, Marsh	Arenaria paludicola	E	0	0
Flowering Plants	schiedea, Diamond Head	Schiedea adamantis	E	0	0
Flowering Plants	seablite, California	Suaeda californica	E	2,200	0
Flowering Plants	seagrass, Johnson's	Halophila johnsonii	T	50,000	0
Flowering Plants	sedge, Navajo	Carex specuicola	T	0	0
Flowering Plants	sedge, white	Carex albida	E	0	0
Flowering Plants	silversword, Haleakala	Argyroxiphium sandwicense macrocephalum	T	0	0
Flowering Plants	silversword, Mauna Kea	Argyroxiphium sandwicense sandwicense	E	0	0
Flowering Plants	silversword, Mauna Loa	Argyroxiphium kauense	E	0	0
Flowering Plants	skullcap, Florida	Scutellaria floridana	T	0	0
Flowering Plants	skullcap, large-flowered	Scutellaria montana	E	0	0
Flowering Plants	snakeroot	Eryngium cuneifolium	E	0	0
Flowering Plants	sneezeweed, Virginia	Helenium virginicum	T	0	0
Flowering Plants	snowbells, Texas	Styrax texanus	E	0	0
Flowering Plants	spineflower, Ben Lomond	Chorizanthe pungens hartwegiana	E	0	0
Flowering Plants	spineflower, Howell's	Chorizanthe howellii	E	0	0
Flowering Plants	spineflower, Monterey	Chorizanthe pungens pungens	T	0	0
Flowering Plants	spineflower, Orcutt's	Chorizanthe orcuttiana	E	0	0
Flowering Plants	spineflower, Robust	Chorizanthe robusta	E	0	0
Flowering Plants	spineflower, slender-horned	Dodecahema leptoceras	E	40,000	0
Flowering Plants	spineflower, Sonoma	Chorizanthe valida	E	0	0
Flowering Plants	spiraea, Virginia	Spiraea virginiana	T	0	0
Flowering Plants	spurge, deltoid	Chamaesyce deltoidea deltoidea	E	0	0
Flowering Plants	spurge, Garber's	Chamaesyce garberi	T	0	0
Flowering Plants	spurge, Hoover's	Chamaesyce hooveri	T	0	0

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

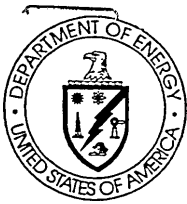
Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	spurge, telephus	Euphorbia telephioides	T	0	0
Flowering Plants	stonecrop, Lake County	Parvisedum leiocarpum	E	0	0
Flowering Plants	sumac, Michaux's	Rhus michauxii	E	0	0
Flowering Plants	sunburst, Hartweg's golden	Pseudobahia bahiifolia	E	0	0
Flowering Plants	sunburst, San Joaquin adobe	Pseudobahia peirsonii	T	0	0
Flowering Plants	sunflower, Eggert's	Helianthus eggertii	T	2,000	0
Flowering Plants	sunflower, San Mateo woolly	Eriophyllum latilobum	E	0	0
Flowering Plants	sunflower, Schweinitz's	Helianthus schweinitzii	E	0	0
Flowering Plants	sunray, Ash Meadows	Enceliopsis nudicaulis corrugata	T	0	0
Flowering Plants	sunshine, Sonoma	Blennosperma bakeri	E	0	0
Flowering Plants	taraxacum, California	Taraxacum californicum	E	0	0
Flowering Plants	tarplant, Otay	Hemizonia conjugens	T	57,000	0
Flowering Plants	thelypody, Howell's spectacular	Thelypodium howellii spectabilis	T	0	0
Flowering Plants	thistle, Chorro Creek bog	Cirsium fontinale obispoense	E	0	0
Flowering Plants	thistle, fountain	Cirsium fontinale fontinale	E	0	0
Flowering Plants	thistle, Loch Lomond coyote	Eryngium constancei	E	0	0
Flowering Plants	thistle, Pitcher's	Cirsium pitcheri	T	120,000	0
Flowering Plants	thistle, Sacramento Mountains	Cirsium vinaceum	T	0	0
Flowering Plants	thistle, Suisun	Cirsium hydrophilum hydrophilum	E	0	0
Flowering Plants	thornmint, San Diego	Acanthomintha ilicifolia	T	0	0
Flowering Plants	thornmint, San Mateo	Acanthomintha obovata duttonii	E	0	0
Flowering Plants	townsendia, Last Chance	Townsendia aprica	T	0	0
Flowering Plants	trillium, persistent	Trillium persistens	E	0	0
Flowering Plants	trillium, relict	Trillium reliquum	E	0	0
Flowering Plants	twinpod, Dudley Bluffs	Physaria obcordata	T	0	0
Flowering Plants	uhiuhi	Caesalpinia kavaieense	E	0	0
Flowering Plants	uvillo	Eugenia haematocarpa	E	0	0
Flowering Plants	vervain, Red Hills	Verbena californica	T	0	0
Flowering Plants	vetch, Hawaiian	Vicia menziesii	E	0	0
Flowering Plants	wallflower, Ben Lomond	Erysimum teretifolium	E	0	0
Flowering Plants	wallflower, Contra Costa	Erysimum capitatum angustatum	E	0	0
Flowering Plants	wallflower, Menzies'	Erysimum menziesii	E	0	0
Flowering Plants	walnut, West Indian or nogal	Juglans jamaicensis	E	0	0
Flowering Plants	warea, wide-leaf	Warea amplexifolia	E	0	0
Flowering Plants	water-plantain, Kral's	Sagittaria secundifolia	T	1,000	0
Flowering Plants	water-umbel, Huachuca	Lilaeopsis schaffneriana recurva	E	0	0
Flowering Plants	water-willow, Cooley's	Justicia cooleyi	E	0	0
Flowering Plants	watercress, Gambel's	Rorippa gambellii	E	0	0
Flowering Plants	whitlow-wort, papery	Paronychia chartacea	T	0	0
Flowering Plants	wild-buckwheat, clay-loving	Eriogonum pelinophilum	E	0	0

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	wild-buckwheat, gypsum	Eriogonum gypsophilum	T	0	0
Flowering Plants	wild-buckwheat, southern mountain	Eriogonum kennedyi austromontanum	T	0	0
Flowering Plants	wild-rice, Texas	Zizania texana	E	1,300	0
Flowering Plants	wire-lettuce, Malheur	Stephanomeria malheurensis	E	0	0
Flowering Plants	wireweed	Polygonella basiramia	E	0	0
Flowering Plants	woodland-star, San Clemente Island	Lithophragma maximum	E	0	0
Flowering Plants	woolly-star, Hoover's	Eriastrum hooveri	T	0	0
Flowering Plants	woolly-star, Santa Ana River	Eriastrum densifolium sanctorum	E	0	0
Flowering Plants	wooly-threads, San Joaquin	Lembertia congdonii	E	0	0
Flowering Plants	ziziphus, Florida	Ziziphus celata	E	0	0
Conifers and Cycads	cypress, Gowen	Cupressus goveniana goveniana	T	0	0
Conifers and Cycads	cypress, Santa Cruz	Cupressus abramsiana	E	0	0
Conifers and Cycads	Torreya, Florida	Torreya taxifolia	E	0	0
Ferns and Allies	diellia, asplenium-leaved	Diellia erecta	E	0	0
Ferns and Allies	fern, Alabama streak-sorus	Thelypteris pilosa alabamensis	T	0	0
Ferns and Allies	fern, Aleutian shield	Polystichum aleuticum	E	0	0
Ferns and Allies	fern, American hart's-tongue	Asplenium scolopendrium americanum	T	0	0
Ferns and Allies	fern, Elfin tree	Cyathea dryopteroides	E	0	0
Ferns and Allies	fern, pendant kihi	Adenophorus periens	E	0	0
Ferns and Allies	ihi`ihi	Marsilea villosa	E	0	0
Ferns and Allies	No common name	Asplenium fragile insulare	E	0	0
Ferns and Allies	No common name	Diellia falcata	E	0	0
Ferns and Allies	No common name	Diellia pallida	E	0	0
Ferns and Allies	No common name	Thelypteris yaucoensis	E	0	0
Ferns and Allies	No common name	Thelypteris verecunda	E	0	0
Ferns and Allies	No common name	Thelypteris inabonensis	E	0	0
Ferns and Allies	No common name	Tectaria estremerana	E	0	0
Ferns and Allies	No common name	Polystichum calderonense	E	0	0
Ferns and Allies	No common name	Elaphoglossum serpens	E	0	0
Ferns and Allies	No common name	Diellia unisora	E	0	0
Ferns and Allies	No common name	Adiantum vivesii	E	0	0
Ferns and Allies	No common name	Diplazium molokaiense	E	0	0
Ferns and Allies	No common name	Pteris lidgatei	E	0	0
Ferns and Allies	pauoa	Ctenitis squamigera	E	0	0
Ferns and Allies	quillwort, black spored	Isoetes melanospora	E	0	0
Ferns and Allies	quillwort, Louisiana	Isoetes louisianensis	E	0	0
Ferns and Allies	quillwort, mat-forming	Isoetes tegetiformans	E	0	0
Ferns and Allies	wawae`iole	Huperzia mannii	E	0	0
Ferns and Allies	wawae`iole, (=ha`iwale)	Phlegmariurus nutans	E	0	0
Lichens	cladonia, Florida perforate	Cladonia perforata	E	0	0



Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Lichens	lichen, rock gnome	Gymnoderma lineare	E	0	0
USACE Additions to Listing					
Fishes	sturgeon, Alabama	Scaphirhynchus suttkusi	E	32,000	0
<b>USACE TOTALS</b>				53,919,300	695,100



## Department of Energy

Bonneville Power Administration  
P.O. Box 3621  
Portland, Oregon 97208-3621

ENVIRONMENT, FISH AND WILDLIFE

November 29, 2001

In reply refer to: KEW-4

Ms. Martha Balis-Larsen  
United States Department of the Interior  
Fish and Wildlife Service  
Division of Endangered Species  
4401 N. Fairfax Drive, Room 420  
Arlington, VA 22203

Dear Ms. Balis-Larsen:

As requested by your office and outlined in the Endangered Species Act (ESA) Amendments of 1988, the Bonneville Power Administration (BPA) is providing to you a list of expenditures relating to the ESA listed species for Fiscal Year (FY) 1999. The ESA expenditures for FY 1999 include eight (8) listed species. These species are the Bull Trout, Chinook Salmon, Chum Salmon, Coho Salmon, Cutthroat Trout, Sockeye Salmon, Steelhead, and White Sturgeon. Where possible, these expenses are shown by species and in many cases benefit all of the species listed below. These costs include both those expenditures specifically required for ESA compliance and also those expenditures that, while not specifically required, are intended to assist in the recovery of ESA listed species.

**ESA Related Direct Fish and Wildlife Funding**  
**(Dollars in. Millions — Budget Outlays)**  
**Fiscal Year 1999**

Bull Trout	\$0.6
Chinook Salmon	\$18.4
Chum Salmon	\$0.6
Coho Salmon	\$0.7
Cutthroat Trout	\$0.5
Sockeye Salmon	\$3.1
Steelhead	\$20.6
White Sturgeon	\$3.2
Law Enforcement	\$0.0*
Power Purchases/Foregone Revenues	\$0.0**

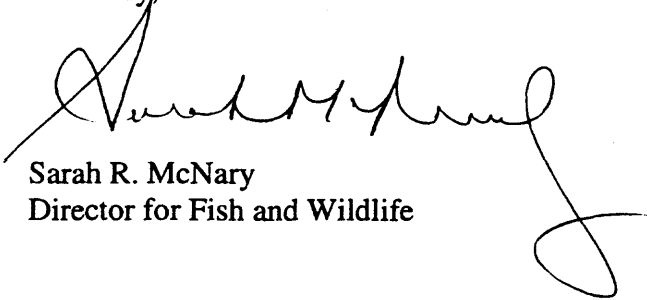
<b>GRAND TOTAL ESA Outlays for Fiscal Year 1999.</b>	<b>\$47.7</b>
--	---------------

\* For FY 1999, the Northwest Power Planning Commission recommended the suspension of the existing Fish and Wildlife Law Enforcement contracts. Fish and Wildlife Law Enforcement was restored in FY 2000.

\*\* The net power purchase/foregone revenues costs associated with hydro operations (spill, flow augmentation, water budget and reservoir levels) estimates are not available at this time because detailed analysis of these costs has not yet been completed.

If there is a need for further clarification or additional information, please contact Ms. Marty Affett of the Environment, Fish and Wildlife Group at (503) 230-4741.

Sincerely,

A handwritten signature in black ink, appearing to read "Sarah R. McNary". The signature is fluid and cursive, with a long, sweeping tail that loops back under the name.

Sarah R. McNary  
Director for Fish and Wildlife

**Federally Listed Endangered and Threatened Wildlife and Plants**  
*As of Fiscal Year 1999 (September 30, 1999)*

1999 Data Request For Federal Agencies - SUBMISSION FROM BUREAU OF INDIAN AFFAIRS

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Mammals	bat, gray	Myotis grisescens	E		
Mammals	bat, Hawaiian hoary	Lasiurus cinereus semotus	E		
Mammals	bat, Indiana	Myotis sodalis	E		
Mammals	bat, lesser long-nosed	Leptonycteris curasoae yerbabuenae	E		
Mammals	bat, little Mariana fruit	Pteropus tokudae	E		
Mammals	bat, Mariana fruit	Pteropus mariannus mariannus	E		
Mammals	bat, Mexican long-nosed	Leptonycteris nivalis	E		
Mammals	bat, Ozark big-eared	Corynorhinus townsendii ingens	E		
Mammals	bat, Virginia big-eared	Corynorhinus townsendii virginianus	E		
Mammals	bear, grizzly	Ursus arctos horribilis	T	105,000	
Mammals	bear, Louisiana black	Ursus americanus luteolus	T		
Mammals	caribou, woodland	Rangifer tarandus caribou	E		
Mammals	deer, Columbian white-tailed	Odocoileus virginianus leucurus	E		
Mammals	deer, Key	Odocoileus virginianus clavium	E		
Mammals	ferret, black-footed	Mustela nigripes	E	29,600	
Mammals	fox, San Joaquin kit	Vulpes macrotis mutica	E		
Mammals	jaguar	Panthera onca	E		
Mammals	jaguarundi, Gulf Coast	Herpailurus yagouaroundi cacomitli	E		
Mammals	jaguarundi, Sinaloan	Herpailurus yagouaroundi tolteca	E		
Mammals	kangaroo rat, Fresno	Dipodomys nitratoides exilis	E		
Mammals	kangaroo rat, giant	Dipodomys ingens	E		
Mammals	kangaroo rat, Morro Bay	Dipodomys heermanni morroensis	E		
Mammals	kangaroo rat, San Bernardino Merriam's	Dipodomys merriami parvus	E		
Mammals	kangaroo rat, Stephens'	Dipodomys stephensi	E		
Mammals	kangaroo rat, Tipton	Dipodomys nitratoides nitratoides	E		
Mammals	manatee, West Indian	Trichechus manatus	E		
Mammals	mountain beaver, Point Arena	Aplodontia rufa nigra	E		
Mammals	Mouse, Alabama beach	Peromyscus polionotus ammobates	E		
Mammals	Mouse, Anastasia Island beach	Peromyscus polionotus phasma	E		
Mammals	Mouse, Choctawhatchee beach	Peromyscus polionotus allophrys	E		
Mammals	Mouse, Key Largo cotton	Peromyscus gossypinus allapaticola	E		
Mammals	mouse, Pacific pocket	Perognathus longimembris pacificus	E		
Mammals	Mouse, Perdido Key beach	Peromyscus polionotus trissyllepsis	E		
Mammals	mouse, Preble's meadow jumping	Zapus hudsonius preblei	T		
Mammals	mouse, salt marsh harvest	Reithrodontomys raviventris	E		
Mammals	Mouse, southeastern beach	Peromyscus polionotus niveiventris	T		
Mammals	mouse, St. Andrew beach	Peromyscus polionotus peninsularis	E		
Mammals	ocelot	Leopardus pardalis	E		
Mammals	otter, southern sea	Enhydra lutris nereis	T		
Mammals	panther, Florida	Puma concolor coryi	E		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Mammals	prairie dog, Utah	Cynomys parvidens	T		
Mammals	pronghorn, Sonoran	Antilocapra americana sonoriensis	E		
Mammals	puma, eastern	Puma concolor cougar	E		
Mammals	rabbit, Lower Keys marsh	Sylvilagus palustris hefneri	E		
Mammals	rice rat	Oryzomys palustris natator	E		
Mammals	sea-lion, Steller	Eumetopias jubatus	E, T		
Mammals	seal, Caribbean monk	Monachus tropicalis	E		
Mammals	seal, Guadalupe fur	Arctocephalus townsendi	T		
Mammals	seal, Hawaiian monk	Monachus schauinslandi	E		
Mammals	sheep, bighorn	Ovis canadensis	E		
Mammals	sheep, bighorn	Ovis canadensis californiana	E		
Mammals	squirrel, Carolina northern flying	Glaucomys sabrinus coloratus	E		
Mammals	squirrel, Delmarva Peninsula fox	Sciurus niger cinereus	E		
Mammals	squirrel, Mount Graham red	Tamiasciurus hudsonicus grahamensis	E		
Mammals	squirrel, Virginia northern flying	Glaucomys sabrinus fuscus	E		
Mammals	vole, Amargosa	Microtus californicus scirpensis	E		
Mammals	vole, Florida salt marsh	Microtus pennsylvanicus dukecampbelli	E		
Mammals	vole, Hualapai Mexican	Microtus mexicanus hualpaiensis	E		
Mammals	whale, blue	Balaenoptera musculus	E		
Mammals	whale, bowhead	Balaena mysticetus	E		
Mammals	whale, finback	Balaenoptera physalus	E		
Mammals	whale, humpback	Megaptera novaeangliae	E		
Mammals	whale, right	Balaena glacialis	E		
Mammals	whale, Sei	Balaenoptera borealis	E		
Mammals	whale, sperm	Physeter catodon	E		
Mammals	wolf, gray	Canis lupus	E, T	14,000	
Mammals	wolf, red	Canis rufus	E		
Mammals	woodrat, Key Largo	Neotoma floridana smalli	E		
Birds	akepa, Hawaii	Loxops coccineus coccineus	E		
Birds	akepa, Maui	Loxops coccineus ochraceus	E		
Birds	akialoa, Kauai	Hemignathus procerus	E		
Birds	akiapola'au	Hemignathus munroi	E		
Birds	Albatross, short-tailed	Phoebastria albatrus	E		
Birds	blackbird, yellow-shouldered	Agelaius xanthomus	E		
Birds	bobwhite, masked	Colinus virginianus ridgwayi	E		
Birds	broadbill, Guam	Myiagra freycineti	E		
Birds	cahow	Pterodroma cahow	E		
Birds	caracara, Audubon's crested	Polyborus plancus audubonii	T		
Birds	condor, California	Gymnogyps californianus	E		
Birds	coot, Hawaiian	Fulica americana alai	E		
Birds	crane, Mississippi sandhill	Grus canadensis pulla	E		
Birds	crane, whooping	Grus americana	E		

Fede. Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Birds	creeper, Hawaii	Oreomystis mana	E		
Birds	creeper, Molokai	Paroreomyza flammea	E		
Birds	creeper, Oahu	Paroreomyza maculata	E		
Birds	crow, Hawaiian	Corvus hawaiiensis	E		
Birds	crow, Mariana	Corvus kubaryi	E		
Birds	crow, white-necked	Corvus leucognaphalus	E		
Birds	curlew, Eskimo	Numenius borealis	E		
Birds	duck, Hawaiian	Anas wyvilliana	E		
Birds	duck, Laysan	Anas laysanensis	E		
Birds	eagle, bald	Haliaeetus leucocephalus	T	2,000	
Birds	eider, spectacled	Somateria fischeri	T		
Birds	eider, Steller's	Polysticta stelleri	T		
Birds	falcon, American peregrine	Falco peregrinus anatum	DM		
Birds	falcon, northern aplomado	Falco femoralis septentrionalis	E		
Birds	finch, Laysan	Telespyza cantans	E		
Birds	finch, Nihoa	Telespyza ultima	E		
Birds	flycatcher, southwestern willow	Empidonax traillii extimus	E		
Birds	gnatcatcher, coastal California	Poliotila californica californica	T		
Birds	goose, Hawaiian	Branta sandvicensis	E		
Birds	hawk, Hawaiian	Buteo solitarius	E		
Birds	hawk, Puerto Rican broad-winged	Buteo platypterus brunescens	E		
Birds	hawk, Puerto Rican sharp-shinned	Accipiter striatus venator	E		
Birds	honeycreeper, crested	Palmeria dolei	E		
Birds	jay, Florida scrub	Aphelocoma coerulescens	T		
Birds	kingfisher, Guam Micronesian	Halcyon cinnamomina cinnamomina	E		
Birds	kite, Everglade snail	Rostrhamus sociabilis plumbeus	E		
Birds	mallard, Mariana	Anas oustaleti	E		
Birds	megapode, Micronesian	Megapodius laperouse	E		
Birds	millerbird, Nihoa	Acrocephalus familiaris kingi	E		
Birds	monarch, Tinian	Monarcha takatsukasae	T		
Birds	moorhen, Hawaiian common	Gallinula chloropus sandvicensis	E		
Birds	moorhen, Mariana common	Gallinula chloropus guami	E		
Birds	murrelet, marbled	Brachyramphus marmoratus marmoratus	T	744,355	
Birds	nightjar, Puerto Rican	Caprimulgus noctitherus	E		
Birds	nukupu 'u	Hemignathus lucidus	E		
Birds	'o'o, Kauai	Moho braccatus	E		
Birds	'o'u	Psittirostra psittacea	E		
Birds	owl, Mexican spotted	Strix occidentalis lucida	T	1,000	
Birds	owl, northern spotted	Strix occidentalis caurina	T	744,355	
Birds	paliia	Loxioides bailleui	E		
Birds	parrot, Puerto Rican	Amazona vittata	E		
Birds	parrotbill, Maui	Pseudonestor xanthophrys	E		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Birds	pelican, brown	<i>Pelecanus occidentalis</i>	E		
Birds	petrel, Hawaiian dark-rumped	<i>Pterodroma phaeopygia sandwichensis</i>	E		
Birds	pigeon, Puerto Rican plain	<i>Columba inornata wetmorei</i>	E		
Birds	Plover, piping	<i>Charadrius melodus</i>	E, T		
Birds	plover, western snowy	<i>Charadrius alexandrinus nivosus</i>	T		
Birds	po'ouli	<i>Melanprosope phaeosoma</i>	E		
Birds	prairie-chicken, Attwater's greater	<i>Tympanuchus cupido attwateri</i>	E		
Birds	pygmy-owl, cactus ferruginous	<i>Glaucidium brasilianum cactorum</i>	E		
Birds	rail, California clapper	<i>Rallus longirostris obsoletus</i>	E		
Birds	rail, Guam	<i>Rallus owstoni</i>	E		
Birds	rail, light-footed clapper	<i>Rallus longirostris levipes</i>	E		
Birds	rail, Yuma clapper	<i>Rallus longirostris yumanensis</i>	E		
Birds	shearwater, Newell's Townsend's	<i>Puffinus auricularis newelli</i>	T		
Birds	shrike, San Clemente loggerhead	<i>Lanius ludovicianus mearnsi</i>	E		
Birds	sparrow, Cape Sable seaside	<i>Ammodramus maritimus mirabilis</i>	E		
Birds	sparrow, Florida grasshopper	<i>Ammodramus savannarum floridanus</i>	E		
Birds	sparrow, San Clemente sage	<i>Amphispiza belli clementeae</i>	T		
Birds	stilt, Hawaiian	<i>Himantopus mexicanus knudseni</i>	E		
Birds	stork, wood	<i>Mycteria americana</i>	E		
Birds	swiftlet, Mariana gray	<i>Aerodramus vanikorensis bartschi</i>	E		
Birds	tern, California least	<i>Sterna antillarum browni</i>	E		
Birds	tern, least	<i>Sterna antillarum</i>	E		
Birds	tern, roseate	<i>Sterna dougallii dougallii</i>	E, T		
Birds	thrush, large Kauai	<i>Myadestes myadestinus</i>	E		
Birds	thrush, Molokai	<i>Myadestes lanaiensis rutha</i>	E		
Birds	thrush, small Kauai	<i>Myadestes palmeri</i>	E		
Birds	towhee, Inyo California	<i>Pipilo crissalis eremophilus</i>	T		
Birds	vireo, black-capped	<i>Vireo atricapillus</i>	E		
Birds	vireo, least Bell's	<i>Vireo bellii pusillus</i>	E		
Birds	warbler, Bachman's	<i>Vermivora bachmanii</i>	E		
Birds	warbler, golden-cheeked	<i>Dendroica chrysoparia</i>	E		
Birds	warbler, Kirtland's	<i>Dendroica kirtlandii</i>	E		
Birds	warbler, nightingale reed	<i>Acrocephalus luscini</i>	E		
Birds	white-eye, bridled	<i>Zosterops conspicillatus conspicillatus</i>	E		
Birds	woodpecker, ivory-billed	<i>Campephilus principalis</i>	E		
Birds	woodpecker, red-cockaded	<i>Picoides borealis</i>	E		
Reptiles	anole, Culebra Island giant	<i>Anolis roosevelti</i>	E		
Reptiles	boa, Mona	<i>Epicrates monensis monensis</i>	T		
Reptiles	boa, Puerto Rican	<i>Epicrates inornatus</i>	E		
Reptiles	boa, Virgin Islands tree	<i>Epicrates monensis granti</i>	E		
Reptiles	crocodile, American	<i>Crocodylus acutus</i>	E		
Reptiles	gecko, Monito	<i>Sphaerodactylus micropithecus</i>	E		

**Fede Listed Endangered and Threatened Wildlife and Plants**  
*As of Fiscal Year 1999 (September 30, 1999)*

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Reptiles	iguana, Mona ground	Cyclura stejnegeri	T		
Reptiles	lizard, blunt-nosed leopard	Gambelia silus	E		
Reptiles	lizard, Coachella Valley fringe-toed	Uma inornata	T		
Reptiles	lizard, Island night	Xantusia riversiana	T		
Reptiles	lizard, St. Croix ground	Ameiva polops	E		
Reptiles	rattlesnake, New Mexican ridge-nosed	Crotalus willardi obscurus	T		
Reptiles	sea turtle, green	Chelonia mydas	E, T		
Reptiles	sea turtle, hawksbill	Eretmochelys imbricata	E		
Reptiles	sea turtle, Kemp's ridley	Lepidochelys kempii	E		
Reptiles	sea turtle, leatherback	Dermochelys coriacea	E		
Reptiles	sea turtle, loggerhead	Caretta caretta	T		
Reptiles	sea turtle, olive ridley	Lepidochelys olivacea	E, T		
Reptiles	skink, bluetail mole	Eumeces egregius lividus	T		
Reptiles	skink, sand	Neoseps reynoldsi	T		
Reptiles	snake, Atlantic salt marsh	Nerodia clarkii taeniata	T		
Reptiles	snake, Concho water	Nerodia paucimaculata	T		
Reptiles	snake, copperbelly water	Nerodia erythrogaster neglecta	T		
Reptiles	snake, eastern indigo	Drymarchon corais couperi	T		
Reptiles	snake, giant garter	Thamnophis gigas	T		
Reptiles	snake, Lake Erie water	Nerodia sipedon insularum	T		
Reptiles	snake, San Francisco garter	Thamnophis sirtalis tetrataenia	E		
Reptiles	tortoise, desert	Gopherus agassizii	T		
Reptiles	tortoise, gopher	Gopherus polyphemus	T		
Reptiles	turtle, Alabama red-belly	Pseudemys alabamensis	E		
Reptiles	turtle, bog	Clemmys muhlenbergii	T		
Reptiles	turtle, flattened musk	Sternotherus depressus	T		
Reptiles	turtle, Plymouth redbelly	Pseudemys rubriventris bangsi	E		
Reptiles	turtle, ringed map	Graptemys oculifera	T		
Reptiles	turtle, yellow-blotched map	Graptemys flavimaculata	T		
Reptiles	whipsnake, Alameda	Masticophis lateralis euryxanthus	T		
Amphibians	coqui, golden	Eleutherodactylus jasperi	T		
Amphibians	frog, California red-legged	Rana aurora draytonii	T		
Amphibians	guajon	Eleutherodactylus cooki	T		
Amphibians	salamander, Barton Springs	Eurycea sosorum	E		
Amphibians	salamander, Cheat Mountain	Plethodon nettingi	T		
Amphibians	salamander, desert slender	Batrachoseps aridus	E		
Amphibians	salamander, flatwoods	Ambystoma cingulatum	T		
Amphibians	salamander, Red Hills	Phaeognathus hubrichti	T		
Amphibians	salamander, San Marcos	Eurycea nana	T		
Amphibians	salamander, Santa Cruz long-toed	Ambystoma macrodactylum croceum	E		
Amphibians	salamander, Shenandoah	Plethodon shenandoah	E		
Amphibians	salamander, Sonoran tiger	Ambystoma tigrinum stebbinsi	E		



Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Amphibians	salamander, Texas blind	Typhlomolge rathbuni	E		
Amphibians	toad, arroyo	Bufo microscaphus californicus	E		
Amphibians	toad, Houston	Bufo houstonensis	E		
Amphibians	toad, Puerto Rican crested	Peltophryne lemur	T		
Amphibians	toad, Wyoming	Bufo hemiophrys baxteri	E		
Fishes	catfish, Yaqui	Ictalurus pricei	T		
Fishes	cavefish, Alabama	Speoplatyrhinus poulsoni	E		
Fishes	cavefish, Ozark	Amblyopsis rosae	T		
Fishes	chub, bonytail	Gila elegans	E		
Fishes	chub, Borax Lake	Gila boraxobius	E		
Fishes	chub, Chihuahua	Gila nigrescens	T		
Fishes	chub, humpback	Gila cypha	E		
Fishes	chub, Hutton tui	Gila bicolor ssp.	T		
Fishes	chub, Mohave tui	Gila bicolor mohavensis	E		
Fishes	chub, Oregon	Oregonichthys crameri	E		
Fishes	chub, Owens tui	Gila bicolor snyderi	E		
Fishes	chub, Pahrnagat roundtail	Gila robusta jordani	E		
Fishes	chub, slender	Erimystax cahni	T		
Fishes	chub, Sonora	Gila ditaenia	T		
Fishes	chub, spotfin	Cyprinella monacha	T		
Fishes	chub, Virgin River	Gila robusta seminuda	E		
Fishes	chub, Yaqui	Gila purpurea	E		
Fishes	cui-ui	Chasmistes cujus	E		
Fishes	dace, Ash Meadows speckled	Rhinichthys osculus nevadensis	E		
Fishes	dace, blackside	Phoxinus cumberlandensis	T		
Fishes	dace, Clover Valley speckled	Rhinichthys osculus oligoporus	E		
Fishes	dace, desert	Eremichthys acros	T		
Fishes	dace, Foskett speckled	Rhinichthys osculus ssp.	T		
Fishes	dace, Independence Valley speckled	Rhinichthys osculus lethoporus	E		
Fishes	dace, Kendall Warm Springs	Rhinichthys osculus thermalis	E		
Fishes	dace, Moapa	Moapa coriacea	E		
Fishes	darer, amber	Percina antesella	E		
Fishes	darer, bayou	Etheostoma rubrum	T		
Fishes	darer, bluemask	Etheostoma sp.	E		
Fishes	darer, boulder	Etheostoma wapiti	E		
Fishes	darer, Cherokee	Etheostoma scotti	T		
Fishes	darer, duskytail	Etheostoma percnum	E		
Fishes	darer, Etowah	Etheostoma etowahae	E		
Fishes	darer, fountain	Etheostoma fonticola	E		
Fishes	darer, goldline	Percina aurolineata	T		
Fishes	darer, leopard	Percina pantherina	T		
Fishes	darer, Maryland	Etheostoma sellare	E		

**Federal Listed Endangered and Threatened Wildlife and Plants**  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Fishes	darer, Niangua	Etheostoma nianguae	T		
Fishes	darer, Okaloosa	Etheostoma okaloosae	E		
Fishes	darer, relict	Etheostoma chienense	E		
Fishes	darer, slackwater	Etheostoma boschungii	T		
Fishes	darer, snail	Percina tanasi	T		
Fishes	darer, watercress	Etheostoma nuchale	E		
Fishes	gambusia, Big Bend	Gambusia gaigei	E		
Fishes	gambusia, Clear Creek	Gambusia heterochir	E		
Fishes	gambusia, Pecos	Gambusia nobilis	E		
Fishes	gambusia, San Marcos	Gambusia georgei	E		
Fishes	goby, tidewater	Eucyclogobius newberryi	E		
Fishes	logperch, Conasauga	Percina jenkinsi	E		
Fishes	logperch, Roanoke	Percina rex	E		
Fishes	madtom, Neosho	Noturus placidus	T		
Fishes	madtom, pygmy	Noturus stanauli	E		
Fishes	madtom, Scioto	Noturus trautmani	E		
Fishes	madtom, smoky	Noturus baileyi	E		
Fishes	madtom, yellowfin	Noturus flavipinnis	T		
Fishes	minnow, loach	Tiaroga cobitis	T		
Fishes	minnow, Rio Grande silvery	Hybognathus amarus	E		
Fishes	pikeminnow, Colorado	Ptychocheilus lucius	E		
Fishes	poolfish, Pahrump	Empetrichthys latos	E		
Fishes	pupfish, Ash Meadows Amargosa	Cyprinodon nevadensis mionectes	E		
Fishes	pupfish, Comanche Springs	Cyprinodon elegans	E		
Fishes	pupfish, desert	Cyprinodon macularius	E		
Fishes	pupfish, Devils Hole	Cyprinodon diabolis	E		
Fishes	pupfish, Leon Springs	Cyprinodon bovinus	E		
Fishes	pupfish, Owens	Cyprinodon radiosus	E		
Fishes	pupfish, Warm Springs	Cyprinodon nevadensis pectoralis	E		
Fishes	salmon, chinook	Oncorhynchus tshawytscha	E, T		
Fishes	salmon, chum	Oncorhynchus keta	T		
Fishes	salmon, coho	Oncorhynchus kisutch	T		
Fishes	salmon, sockeye	Oncorhynchus nerka	E, T		
Fishes	sculpin, pygmy	Cottus pygmaeus	T		
Fishes	shiner, Arkansas River	Notropis girardi	T		
Fishes	shiner, beautiful	Cyprinella formosa	T		
Fishes	shiner, blue	Cyprinella caerulea	T		
Fishes	shiner, Cahaba	Notropis cahabae	E		
Fishes	shiner, Cape Fear	Notropis mekistocholas	E		
Fishes	shiner, palezone	Notropis albizonatus	E		
Fishes	shiner, Pecos bluntnose	Notropis simus pecosensis	T		
Fishes	shiner, Topeka	Notropis topeka	E		

Fede. Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Fishes	silverside, Waccamaw	Menidia extensa	T		
Fishes	smelt, delta	Hypomesus transpacificus	T		
Fishes	spikedace	Meda fulgida	T		
Fishes	spinedace, Big Spring	Lepidomeda mollispinis pratensis	T		
Fishes	spinedace, Little Colorado	Lepidomeda vittata	T		
Fishes	spinedace, White River	Lepidomeda albivallis	E		
Fishes	splittail, Sacramento	Pogonichthys macrolepidotus	T		
Fishes	springfish, Hiko White River	Crenichthys baileyi grandis	E		
Fishes	springfish, Railroad Valley	Crenichthys nevadae	T		
Fishes	springfish, White River	Crenichthys baileyi baileyi	E		
Fishes	steelhead	Oncorhynchus mykiss	E, T		
Fishes	stickleback, unarmored threespine	Gasterosteus aculeatus williamsoni	E		
Fishes	sturgeon, Gulf	Acipenser oxyrinchus desotoi	T		
Fishes	sturgeon, pallid	Scaphirhynchus albus	E		
Fishes	sturgeon, shortnose	Acipenser brevirostrum	E		
Fishes	sturgeon, white	Acipenser transmontanus	E		
Fishes	sucker, June	Chasmistes liorus	E		
Fishes	sucker, Lost River	Deltistes luxatus	E		
Fishes	Sucker, Modoc	Catostomus microps	E		
Fishes	sucker, razorback	Xyrauchen texanus	E		
Fishes	Sucker, shortnose	Chasmistes brevirostris	E		
Fishes	sucker, Warner	Catostomus warnerensis	T		
Fishes	topminnow, Gila	Poeciliopsis occidentalis	E		
Fishes	trout, Apache	Oncorhynchus apache	T		
Fishes	trout, bull	Salvelinus confluentus	T		
Fishes	trout, Gila	Oncorhynchus gilae	E		
Fishes	trout, greenback cutthroat	Oncorhynchus clarki stomias	T		
Fishes	trout, Lahontan cutthroat	Oncorhynchus clarki henshawi	T		
Fishes	trout, Little Kern golden	Oncorhynchus aguabonita whitei	T		
Fishes	trout, Paiute cutthroat	Oncorhynchus clarki seleniris	T		
Fishes	woundfin	Plagopterus argentissimus	E		
Clams	acornshell, southern	Epioblasma othcaloogensis	E		
Clams	bankclimber, purple	Elliptoideus sloatianus	T		
Clams	bean, Cumberland	Villosa trabalis	E		
Clams	bean, purple	Villosa perpurpurea	E		
Clams	blossom, green	Epioblasma torulosa gubernaculum	E		
Clams	blossom, tubercled	Epioblasma torulosa torulosa	E		
Clams	blossom, turgid	Epioblasma turgidula	E		
Clams	blossom, yellow	Epioblasma florentina florentina	E		
Clams	catpaw	Epioblasma obliquata obliquata	E		
Clams	catpaw, white	Epioblasma obliquata perobliqua	E		
Clams	clubshell	Pleurobema clava	E		

Feder. Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Clams	clubshell, black	Pleurobema curtum	E		
Clams	clubshell, ovate	Pleurobema perovatum	E		
Clams	clubshell, southern	Pleurobema decisum	E		
Clams	combshell, Cumberlandian	Epioblasma brevidens	E		
Clams	combshell, southern	Epioblasma penita	E		
Clams	combshell, upland	Epioblasma metastrata	E		
Clams	elktoe, Appalachian	Alasmidonta raveneliana	E		
Clams	elktoe, Cumberland	Alasmidonta atropurpurea	E		
Clams	fanshell	Cyprogenia stegaria	E		
Clams	fatmucket, Arkansas	Lampsilis powelli	T		
Clams	heelsplitter, Alabama	Potamilus inflatus	T		
Clams	heelsplitter, Carolina	Lasmigona decorata	E		
Clams	higgins eye	Lampsilis higginsii	E		
Clams	kidneyshell, triangular	Ptychobranthus greeni	E		
Clams	lampmussel, Alabama	Lampsilis virescens	E		
Clams	lilliput, pale	Toxolasma cylindrellus	E		
Clams	mapleleaf, winged	Quadrula fragosa	E		
Clams	moccasinshell, Alabama	Medionidus acutissimus	T		
Clams	moccasinshell, Coosa	Medionidus parvulus	E		
Clams	moccasinshell, Gulf	Medionidus penicillatus	E		
Clams	moccasinshell, Ochlockonee	Medionidus simpsonianus	E		
Clams	monkeyface, Appalachian	Quadrula sparsa	E		
Clams	monkeyface, Cumberland	Quadrula intermedia	E		
Clams	mucket, orangenacre	Lampsilis perovalis	T		
Clams	mucket, pink	Lampsilis abrupta	E		
Clams	mussel, oyster	Epioblasma capsaeformis	E		
Clams	pearlshell, Louisiana	Margaritifera hembeli	T		
Clams	pearlymussel, birdwing	Conradilla caelata	E		
Clams	pearlymussel, cracking	Hemistena lata	E		
Clams	pearlymussel, Curtis	Epioblasma florentina curtisii	E		
Clams	pearlymussel, dromedary	Dromus dromas	E		
Clams	pearlymussel, littlewing	Pegias fabula	E		
Clams	pearlymussel, white wartyback	Plethobasus cicatricosus	E		
Clams	pigtoe, Cumberland	Pleurobema gibberum	E		
Clams	pigtoe, dark	Pleurobema furvum	E		
Clams	pigtoe, finerayed	Fusconaia cuneolus	E		
Clams	pigtoe, flat	Pleurobema marshalli	E		
Clams	pigtoe, heavy	Pleurobema taitianum	E		
Clams	pigtoe, oval	Pleurobema pyriforme	E		
Clams	pigtoe, rough	Pleurobema plenum	E		
Clams	pigtoe, shiny	Fusconaia cor	E		
Clams	pigtoe, southern	Pleurobema georgianum	E		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Clams	pimpleback, orangefoot	Plethobasus cooperianus	E		
Clams	pocketbook, fat	Potamilus capax	E		
Clams	pocketbook, finelined	Lampsilis altilis	T		
Clams	pocketbook, Ouachita rock	Arkansia wheeleri	E		
Clams	pocketbook, shinyrayed	Lampsilis subangulata	E		
Clams	pocketbook, speckled	Lampsilis streckeri	E		
Clams	rabbitsfoot, rough	Quadrula cylindrica strigillata	E		
Clams	riffleshell, northern	Epioblasma torulosa rangiana	E		
Clams	riffleshell, tan	Epioblasma florentina walkeri	E		
Clams	ring pink	Obovaria retusa	E		
Clams	slabshell, Chipola	Elliptio chipolaensis	T		
Clams	spinymussel, James	Pleurobema collina	E		
Clams	spinymussel, Tar River	Elliptio steinstansana	E		
Clams	stirrupshell	Quadrula stapes	E		
Clams	three-ridge, fat	Amblema neislerii	E		
Clams	wedgemussel, dwarf	Alasmidonta heterodon	E		
Snails	ambersnail, Kanab	Oxyloma haydeni kanabensis	E	900	
Snails	elimia, lacy	Elimia crenatella	T		
Snails	limpet, Banbury Springs	Lanx sp.	E		
Snails	lioplax, cylindrical	Lioplax cyclostomaformis	E		
Snails	marstonia, royal	Pyrgulopsis ogmorhaphe	E		
Snails	pebblesnail, flat	Lepyrium showalteri	E		
Snails	riversnail, Anthony's	Athearnia anthonyi	E		
Snails	rocksnail, painted	Leptoxis taeniata	T		
Snails	rocksnail, plicate	Leptoxis plicata	E		
Snails	rocksnail, round	Leptoxis ampla	T		
Snails	shagreen, Magazine Mountain	Mesodon magazinensis	T		
Snails	snail, Bliss Rapids	Taylorconcha serpenticola	T		
Snails	snail, Chittenango ovate amber	Succinea chittenangoensis	T		
Snails	snail, flat-spined three-toothed	Triodopsis platysayoides	T		
Snails	snail, Iowa Pleistocene	Discus macclintocki	E		
Snails	snail, Morro shoulderband	Helminthoglypta walkeriana	E		
Snails	snail, nooday	Mesodon clarki nantahala	T		
Snails	snail, painted snake coiled forest	Anguispira picta	T		
Snails	snail, Snake River physa	Physa natricina	E		
Snails	snail, Stock Island tree	Orthalicus reses	T		
Snails	snail, tulotoma	Tulotoma magnifica	E		
Snails	snail, Utah valvata	Valvata utahensis	E		
Snails	snail, Virginia fringed mountain	Polygyriscus virginianus	E		
Snails	snails, Oahu tree	Achatinella spp.	E		
Snails	springsnail, Alamosa	Tryonia alamosae	E		
Snails	springsnail, Bruneau Hot	Pyrgulopsis bruneauensis	E		

**Fede. Listed Endangered and Threatened Wildlife and Plants**  
*As of Fiscal Year 1999 (September 30, 1999)*

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Snails	springsnail, Idaho	Fontelicella idahoensis	E		
Snails	springsnail, Socorro	Pyrgulopsis neomexicana	E		
Insects	beetle, American burying	Nicrophorus americanus	E		
Insects	beetle, Coffin Cave mold	Batrisodes texanus	E		
Insects	beetle, Comal Springs dryopid	Stygoparnus comalensis	E		
Insects	beetle, Comal Springs riffle	Heterelmis comalensis	E		
Insects	beetle, delta green ground	Elaphrus viridis	T		
Insects	beetle, Hungerford's crawling water	Brychius hungerfordi	E		
Insects	beetle, Kretschmarr Cave mold	Texamaurops reddelli	E		
Insects	beetle, Mount Hermon June	Polyphylla barbata	E		
Insects	beetle, Tooth Cave ground	Rhadine persephone	E		
Insects	beetle, valley elderberry longhorn	Desmocerus californicus dimorphus	T		
Insects	butterfly, bay checkerspot	Euphydryas editha bayensis	T		
Insects	butterfly, Behren's silverspot	Speyeria zerene behrensii	E		
Insects	butterfly, callippe silverspot	Speyeria callippe callippe	E		
Insects	butterfly, El Segundo blue	Euphilotes battoides allyni	E		
Insects	butterfly, Karner blue	Lycaeides melissa samuelis	E		
Insects	butterfly, Lange's metalmark	Apodemia mormo langei	E		
Insects	butterfly, lotis blue	Lycaeides argyrognomon lotis	E		
Insects	butterfly, mission blue	Icaricia icarioides missionensis	E		
Insects	butterfly, Mitchell's satyr	Neonympha mitchellii mitchellii	E		
Insects	butterfly, Myrtle's silverspot	Speyeria zerene myrtleae	E		
Insects	butterfly, Oregon silverspot	Speyeria zerene hippolyta	T		
Insects	butterfly, Palos Verdes blue	Glaucopsyche lygdamus palosverdesensis	E		
Insects	butterfly, Quino checkerspot	Euphydryas editha quino	E		
Insects	butterfly, Saint Francis' satyr	Neonympha mitchellii francisci	E		
Insects	butterfly, San Bruno elfin	Callophrys mossii bayensis	E		
Insects	butterfly, Schaus swallowtail	Heraclides aristodemus ponceanus	E		
Insects	butterfly, Smith's blue	Euphilotes enoptes smithi	E		
Insects	butterfly, Uncompahgre fritillary	Boloria acrocneuma	E		
Insects	dragonfly, Hine's emerald	Somatochlora hineana	E		
Insects	fly, Delhi Sands flower-loving	Rhaphiomidas terminatus abdominalis	E		
Insects	grasshopper, Zayante band-winged	Trimerotropis infantilis	E		
Insects	moth, Kern primrose sphinx	Euproserpinus euterpe	T		
Insects	naucorid, Ash Meadows	Ambrysus amargosus	T		
Insects	skipper, Laguna Mountains	Pyrgus ruralis lagunae	E		
Insects	skipper, Pawnee montane	Hesperia leonardus montana	T		
Insects	tiger beetle, northeastern beach	Cicindela dorsalis dorsalis	T		
Insects	tiger beetle, Puritan	Cicindela puritana	T		
Arachnids	harvestman, Bee Creek Cave	Texella reddelli	E		
Arachnids	harvestman, Bone Cave	Texella reyesi	E		
Arachnids	pseudoscorpion, Tooth Cave	Tartarocreagris texana	E		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Arachnids	spider, spruce-fir moss	Microhexura montivaga	E		
Arachnids	spider, Tooth Cave	Neoleptoneta myopica	E		
Crustaceans	amphipod, Hay's Spring	Stygobromus hayi	E		
Crustaceans	amphipod, Illinois cave	Gammarus acherondytes	E		
Crustaceans	amphipod, Peck's cave	Stygobromus pecki	E		
Crustaceans	crayfish, cave	Cambarus zophonastes	E		
Crustaceans	crayfish, cave	Cambarus aculabrum	E		
Crustaceans	crayfish, Nashville	Orconectes shoupi	E		
Crustaceans	crayfish, Shasta	Pacifastacus fortis	E		
Crustaceans	fairy shrimp, Conservancy	Branchinecta conservatio	E		
Crustaceans	fairy shrimp, longhorn	Branchinecta longiantenna	E		
Crustaceans	fairy shrimp, Riverside	Streptocephalus woottoni	E		
Crustaceans	fairy shrimp, San Diego	Branchinecta sandiegonensis	E		
Crustaceans	fairy shrimp, vernal pool	Branchinecta lynchi	T		
Crustaceans	isopod, Lee County cave	Lirceus usdagalun	E		
Crustaceans	isopod, Madison Cave	Antrolana lira	T		
Crustaceans	isopod, Socorro	Thermosphaeroma thermophilus	E		
Crustaceans	shrimp, Alabama cave	Palaemonias alabamae	E		
Crustaceans	shrimp, California freshwater	Syncaris pacifica	E		
Crustaceans	shrimp, Kentucky cave	Palaemonias ganteri	E		
Crustaceans	shrimp, Squirrel Chimney Cave	Palaemonetes cummingi	T		
Crustaceans	tadpole shrimp, vernal pool	Lepidurus packardii	E		
Flowering Plants	a'e	Zanthoxylum hawaiiense	E		
Flowering Plants	a'e	Zanthoxylum dipetalum tomentosum	E		
Flowering Plants	agave, Arizona	Agave arizonica	E		
Flowering Plants	'aiea	Nothocestrum breviflorum	E		
Flowering Plants	'aiea	Nothocestrum peltatum	E		
Flowering Plants	'akoko	Euphorbia haeleleana	E		
Flowering Plants	'akoko	Chamaesyce rockii	E		
Flowering Plants	'akoko	Chamaesyce herbstii	E		
Flowering Plants	'akoko	Chamaesyce kuwaleana	E		
Flowering Plants	'akoko	Chamaesyce celastroides kaenana	E		
Flowering Plants	'akoko	Chamaesyce halemanui	E		
Flowering Plants	'akoko	Chamaesyce deppeana	E		
Flowering Plants	'akoko, Ewa Plains	Chamaesyce skottsbergii kalaeloana	E		
Flowering Plants	alani	Melicope saint-johnii	E		
Flowering Plants	alani	Melicope ovalis	E		
Flowering Plants	alani	Melicope adscendens	E		
Flowering Plants	alani	Melicope zahlbruckneri	E		
Flowering Plants	alani	Melicope reflexa	E		
Flowering Plants	alani	Melicope quadrangularis	E		
Flowering Plants	alani	Melicope pallida	E		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	alani	Melicope munroi	E		
Flowering Plants	alani	Melicope balloui	E		
Flowering Plants	alani	Melicope knudsenii	E		
Flowering Plants	alani	Melicope lydgatei	E		
Flowering Plants	alani	Melicope mucronulata	E		
Flowering Plants	alani	Melicope haupeusis	E		
Flowering Plants	allocarya, Calistoga	Plagiobothrys strictus	E		
Flowering Plants	alopecurus, Sonoma	Alopecurus aequalis sonomensis	E		
Flowering Plants	amaranth, seabeach	Amaranthus pumilus	T		
Flowering Plants	ambrosia, south Texas	Ambrosia cheiranthifolia	E		
Flowering Plants	amphanthus, little	Amphanthus pusillus	T		
Flowering Plants	'anaunau	Lepidium arbuscula	E		
Flowering Plants	'anunu	Sicyos alba	E		
Flowering Plants	arrowhead, bunched	Sagittaria fasciculata	E		
Flowering Plants	aster, decurrent false	Boltonia decurrens	T		
Flowering Plants	aster, Florida golden	Chrysopsis floridana	E		
Flowering Plants	aster, Ruth's golden	Pityopsis ruthii	E		
Flowering Plants	aupaka	Isodendron laurifolium	E		
Flowering Plants	aupaka	Isodendron hosakae	E		
Flowering Plants	aupaka	Isodendron longifolium	T		
Flowering Plants	avens, spreading	Geum radiatum	E		
Flowering Plants	'awikiwiki	Canavalia molokaiensis	E		
Flowering Plants	awiwi	Hedyotis cookiana	E		
Flowering Plants	awiwi	Centaurium sebaeoides	E		
Flowering Plants	ayenia, Texas	Ayenia limitaris	E		
Flowering Plants	Baccharis, Encinitas	Baccharis vanessae	T		
Flowering Plants	barberry, island	Berberis pinnata insularis	E		
Flowering Plants	barberry, Nevin's	Berberis nevinii	E		
Flowering Plants	barberry, Truckee	Berberis sonnei	E		
Flowering Plants	bariaco	Trichilia triacantha	E		
Flowering Plants	beaked-rush, Knieskern's	Rhynchospora knieskernii	T		
Flowering Plants	bear-poppy, dwarf	Arctomecon humilis	E		
Flowering Plants	beardtongue, Penland	Penstemon penlandii	E		
Flowering Plants	beargrass, Britton's	Nolina brittoniana	E		
Flowering Plants	beauty, Harper's	Harperocallis flava	E		
Flowering Plants	bedstraw, El Dorado	Galium californicum sierrae	E		
Flowering Plants	bedstraw, island	Galium buxifolium	E		
Flowering Plants	bellflower, Brooksville	Campanula robinsiae	E		
Flowering Plants	birch, Virginia round-leaf	Betula uber	T		
Flowering Plants	bird's beak, palmate-bracted	Cordylanthus palmatus	E		
Flowering Plants	bird's-beak, Pennell's	Cordylanthus tenuis capillaris	E		
Flowering Plants	bird's-beak, salt marsh	Cordylanthus maritimus maritimus	E		



Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	bird's-beak, soft	<i>Cordylanthus mollis mollis</i>	E		
Flowering Plants	birds-in-a-nest, white	<i>Macbridea alba</i>	T		
Flowering Plants	bittercress, small-anthered	<i>Cardamine micranthera</i>	E		
Flowering Plants	bladderpod, Dudley Bluffs	<i>Lesquerella congesta</i>	T		
Flowering Plants	bladderpod, kodachrome	<i>Lesquerella tumulosa</i>	E		
Flowering Plants	bladderpod, lyrate	<i>Lesquerella lyrata</i>	T		
Flowering Plants	bladderpod, Missouri	<i>Lesquerella filiformis</i>	E		
Flowering Plants	bladderpod, San Bernardino Mountains	<i>Lesquerella kingii bernardina</i>	E		
Flowering Plants	bladderpod, Spring Creek	<i>Lesquerella perforata</i>	E		
Flowering Plants	bladderpod, white	<i>Lesquerella pallida</i>	E		
Flowering Plants	blazingstar, Ash Meadows	<i>Mentzelia leucophylla</i>	T		
Flowering Plants	blazingstar, Heller's	<i>Liatris helleri</i>	T		
Flowering Plants	blazingstar, scrub	<i>Liatris ohlingerae</i>	E		
Flowering Plants	blue-star, Kearney's	<i>Amsonia kearneyana</i>	E		
Flowering Plants	bluecurls, Hidden Lake	<i>Trichostema austromontanum compactum</i>	T		
Flowering Plants	bluegrass, Hawaiian	<i>Poa sandvicensis</i>	E		
Flowering Plants	bluegrass, Mann's	<i>Poa mannii</i>	E		
Flowering Plants	bluegrass, Napa	<i>Poa napensis</i>	E		
Flowering Plants	bluegrass, San Bernardino	<i>Poa atropurpurea</i>	E		
Flowering Plants	bluet, Roan Mountain	<i>Hedyotis purpurea montana</i>	E		
Flowering Plants	bonamia, Florida	<i>Bonamia grandiflora</i>	T		
Flowering Plants	boxwood, Vahl's	<i>Buxus vahlia</i>	E		
Flowering Plants	brodiaea, Chinese Camp	<i>Brodiaea pallida</i>	T		
Flowering Plants	brodiaea, thread-leaved	<i>Brodiaea filifolia</i>	T		
Flowering Plants	broom, San Clemente Island	<i>Lotus dendroideus traskiae</i>	E		
Flowering Plants	buckwheat, cushenbury	<i>Eriogonum ovalifolium vineum</i>	E		
Flowering Plants	buckwheat, lone	<i>Eriogonum apricum</i>	E		
Flowering Plants	buckwheat, scrub	<i>Eriogonum longifolium gnaphalifolium</i>	T		
Flowering Plants	buckwheat, steamboat	<i>Eriogonum ovalifolium williamsiae</i>	E		
Flowering Plants	bulrush, Northeastern	<i>Scirpus ancistrochaetus</i>	E		
Flowering Plants	bush-clover, prairie	<i>Lespedeza leptostachya</i>	T		
Flowering Plants	bush-mallow, San Clemente Island	<i>Malacothamnus clementinus</i>	E		
Flowering Plants	bush-mallow, Santa Cruz Island	<i>Malacothamnus fasciculatus nesioticus</i>	E		
Flowering Plants	buttercup, autumn	<i>Ranunculus acrifolius aestivalis</i>	E		
Flowering Plants	butterweed, Layne's	<i>Senecio layneae</i>	T		
Flowering Plants	butterwort, Godfrey's	<i>Pinguicula ionantha</i>	T		
Flowering Plants	button, Mohr's Barbara	<i>Marshallia mohrii</i>	T		
Flowering Plants	button-celery, San Diego	<i>Eryngium aristulatum parishii</i>	E		
Flowering Plants	cactus, Arizona hedgehog	<i>Echinocereus triglochidiatus arizonicus</i>	E		
Flowering Plants	cactus, Bakersfield	<i>Opuntia treleasei</i>	E		
Flowering Plants	cactus, black lace	<i>Echinocereus reichenbachii albertii</i>	E		
Flowering Plants	cactus, Brady pincushion	<i>Pediocactus bradyi</i>	E		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	cactus, Chisos Mtn. hedgehog	Echinocereus chisoensis chisoensis	T		
Flowering Plants	cactus, Cochise pincushion	Coryphantha robbinsorum	T		
Flowering Plants	cactus, Key tree	Pilosocereus robinii	E		
Flowering Plants	cactus, Knowlton	Pediocactus knowltonii	E		
Flowering Plants	cactus, Kuenzler hedgehog	Echinocereus fendleri kuenzleri	E		
Flowering Plants	cactus, Lee pincushion	Coryphantha sneedii leei	T		
Flowering Plants	cactus, Lloyd's hedgehog	Echinocereus lloydii	DR		
Flowering Plants	cactus, Lloyd's Mariposa	Echinomastus mariposensis	T		
Flowering Plants	cactus, Mesa Verde	Sclerocactus mesae-verdae	T		
Flowering Plants	cactus, Nellie cory	Coryphantha minima	E		
Flowering Plants	cactus, Nichol's Turk's head	Echinocactus horizonthalonius nicholii	E		
Flowering Plants	cactus, Peebles Navajo	Pediocactus peeblesianus peeblesianus	E		
Flowering Plants	cactus, Pima pineapple	Coryphantha scheeri robustispina	E		
Flowering Plants	cactus, San Rafael	Pediocactus despainii	E		
Flowering Plants	cactus, Siler pincushion	Pediocactus sileri	T		
Flowering Plants	cactus, Sneed pincushion	Coryphantha sneedii sneedii	E		
Flowering Plants	cactus, star	Astrophytum asterias	E		
Flowering Plants	cactus, Tobusch fishhook	Ancistrocactus tobuschii	E		
Flowering Plants	cactus, Unita Basin hookless	Sclerocactus glaucus	T		
Flowering Plants	cactus, Winkler	Pediocactus winkleri	T		
Flowering Plants	cactus, Wright fishhook	Sclerocactus wrightiae	E		
Flowering Plants	campion, fringed	Silene polypetala	E		
Flowering Plants	capa rosa	Callicarpa ampla	E		
Flowering Plants	cat's-eye, Terlingua Creek	Cryptantha crassipes	E		
Flowering Plants	ceanothus, coyote	Ceanothus ferrisae	E		
Flowering Plants	ceanothus, Pine Hill	Ceanothus roderickii	E		
Flowering Plants	ceanothus, Vail Lake	Ceanothus ophiochilus	T		
Flowering Plants	centaury, spring-loving	Centaurium namophilum	T		
Flowering Plants	chaff-flower, round-leaved	Achyranthes splendens rotundata	E		
Flowering Plants	chaffseed, American	Schwalbea americana	E		
Flowering Plants	checker-mallow, Kenwood Marsh	Sidalcea oregana valida	E		
Flowering Plants	checker-mallow, Nelson's	Sidalcea nelsoniana	T		
Flowering Plants	checker-mallow, pedate	Sidalcea pedata	E		
Flowering Plants	chupacallos	Pleodendron macranthum	E		
Flowering Plants	cinquefoil, Robbins'	Potentilla robbinsiana	E		
Flowering Plants	clarkia, Pismo	Clarkia speciosa immaculata	E		
Flowering Plants	clarkia, Presidio	Clarkia franciscana	E		
Flowering Plants	clarkia, Springville	Clarkia springvillensis	T		
Flowering Plants	clarkia, Vine Hill	Clarkia imbricata	E		
Flowering Plants	cliff-rose, Arizona	Purshia subintegra	E		
Flowering Plants	clover, Monterey	Trifolium trichocalyx	E		
Flowering Plants	clover, running buffalo	Trifolium stoloniferum	E		

Fede Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	clover, showy Indian	Trifolium amoenum	E		
Flowering Plants	cobana negra	Stahlia monosperma	T		
Flowering Plants	coneflower, smooth	Echinacea laevigata	E		
Flowering Plants	coneflower, Tennessee purple	Echinacea tennesseensis	E		
Flowering Plants	cory cactus, bunched	Coryphantha ramillosa	T		
Flowering Plants	cross, toad-flax	Schoenocrambe suffrutescens	E		
Flowering Plants	crownbeard, big-leaved	Verbesina dissita	T		
Flowering Plants	crownscale, San Jacinto Valley	Atriplex coronata notatior	E		
Flowering Plants	cycladenia, Jones	Cycladenia humilis jonesii	T		
Flowering Plants	daisy, lakeside	Hymenoxys herbacea	T		
Flowering Plants	daisy, Maguire	Erigeron maguirei	T		
Flowering Plants	daisy, Parish's	Erigeron parishii	T		
Flowering Plants	dawn-flower, Texas prairie	Hymenoxys texana	E		
Flowering Plants	dogweed, ashy	Thymophylla tephroleuca	E		
Flowering Plants	dropwort, Canby's	Oxypolis canbyi	E		
Flowering Plants	dudleya, Conejo	Dudleya abramsii parva	T		
Flowering Plants	dudleya, marcescent	Dudleya cymosa marcescens	T		
Flowering Plants	dudleya, Santa Clara Valley	Dudleya setchellii	E		
Flowering Plants	dudleya, Santa Cruz Island	Dudleya nesiotica	T		
Flowering Plants	dudleya, Verity's	Dudleya verityi	T		
Flowering Plants	dudleyea, Santa Monica Mountains	Dudleya cymosa ovatifolia	T		
Flowering Plants	dwarf-flax, Marin	Hesperolinon congestum	T		
Flowering Plants	erubia	Solanum drymophilum	E		
Flowering Plants	evening-primrose, Antioch Dunes	Oenothera deltoides howellii	E		
Flowering Plants	evening-primrose, Eureka Valley	Oenothera avita eurekaensis	E		
Flowering Plants	evening-primrose, San Benito	Camissonia benitensis	T		
Flowering Plants	fiddleneck, large-flowered	Amsinckia grandiflora	E		
Flowering Plants	flannelbush, Mexican	Fremontodendron mexicanum	E		
Flowering Plants	flannelbush, Pine Hill	Fremontodendron californicum decumbens	E		
Flowering Plants	feabane, Zuni	Erigeron rhizomatus	T		
Flowering Plants	four-o'clock, MacFarlane's	Mirabilis macfarlanei	T		
Flowering Plants	frankenian, Johnston's	Frankenia johnstonii	E		
Flowering Plants	fringe-tree, pygmy	Chionanthus pygmaeus	E		
Flowering Plants	fringe-pod, Santa Cruz Island	Thysanocarpus conchuliferus	E		
Flowering Plants	gardenia, Hawaiian	Gardenia brighamii	E		
Flowering Plants	geranium, Hawaiian red-flowered	Geranium arboreum	E		
Flowering Plants	gerardia, sandplain	Agalinis acuta	E		
Flowering Plants	gilia, Hoffmann's slender-flowered	Gilia tenuiflora hoffmannii	E		
Flowering Plants	gilia, Monterey	Gilia tenuiflora arenaria	E		
Flowering Plants	goetzea, beautiful	Goetzea elegans	E		
Flowering Plants	goldenrod, Blue Ridge	Solidago spithamea	T		
Flowering Plants	goldenrod, Houghton's	Solidago houghtonii	T		

Fede Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	goldenrod, Short's	<i>Solidago shortii</i>	E		
Flowering Plants	goldenrod, white-haired	<i>Solidago albopilosa</i>	T		
Flowering Plants	goldfields, Burke's	<i>Lasthenia burkei</i>	E		
Flowering Plants	goldfields, Contra Costa	<i>Lasthenia conjugens</i>	E		
Flowering Plants	gooseberry, Miccosukee	<i>Ribes echinellum</i>	T		
Flowering Plants	gourd, Okeechobee	<i>Cucurbita okeechobeensis okeechobeensis</i>	E		
Flowering Plants	grass, California Orcutt	<i>Orcuttia californica</i>	E		
Flowering Plants	grass, Colusa	<i>Neostapfia colusana</i>	T		
Flowering Plants	grass, Eureka Dune	<i>Swallenia alexandrae</i>	E		
Flowering Plants	grass, Solano	<i>Tuctoria mucronata</i>	E		
Flowering Plants	grass, Tennessee yellow-eyed	<i>Xyris tennesseensis</i>	E		
Flowering Plants	ground-plum, Pyne's	<i>Astragalus bibullatus</i>	E		
Flowering Plants	groundsel, San Francisco Peaks	<i>Senecio franciscanus</i>	T		
Flowering Plants	gumplant, Ash Meadows	<i>Grindelia fraxino-pratensis</i>	T		
Flowering Plants	haha	<i>Cyanea humboldtiana</i>	E		
Flowering Plants	haha	<i>Cyanea grimesiana grimesiana</i>	E		
Flowering Plants	haha	<i>Cyanea pinnatifida</i>	E		
Flowering Plants	haha	<i>Cyanea hamatiflora hamatiflora</i>	E		
Flowering Plants	haha	<i>Cyanea mannii</i>	E		
Flowering Plants	haha	<i>Cyanea glabra</i>	E		
Flowering Plants	haha	<i>Cyanea dunbarii</i>	E		
Flowering Plants	haha	<i>Cyanea copelandii copelandii</i>	E		
Flowering Plants	haha	<i>Cyanea asarifolia</i>	E		
Flowering Plants	haha	<i>Cyanea macrostegia gibsonii</i>	E		
Flowering Plants	haha	<i>Cyanea lobata</i>	E		
Flowering Plants	haha	<i>Cyanea hamatiflora carlsonii</i>	E		
Flowering Plants	haha	<i>Cyanea grimesiana obatae</i>	E		
Flowering Plants	haha	<i>Cyanea copelandii haleakalaensis</i>	E		
Flowering Plants	haha	<i>Cyanea longiflora</i>	E		
Flowering Plants	haha	<i>Cyanea koolauensis</i>	E		
Flowering Plants	haha	<i>Cyanea remyi</i>	E		
Flowering Plants	haha	<i>Cyanea acuminata</i>	E		
Flowering Plants	haha	<i>Cyanea undulata</i>	E		
Flowering Plants	haha	<i>Cyanea truncata</i>	E		
Flowering Plants	haha	<i>Cyanea recta</i>	T		
Flowering Plants	haha	<i>Cyanea procera</i>	E		
Flowering Plants	haha	<i>Cyanea stictophylla</i>	E		
Flowering Plants	haha	<i>Cyanea platyphylla</i>	E		
Flowering Plants	haha	<i>Cyanea shipmannii</i>	E		
Flowering Plants	haha	<i>Cyanea st-johnii</i>	E		
Flowering Plants	haha	<i>Cyanea superba</i>	E		
Flowering Plants	haha	<i>Cyanea mcelandowneyi</i>	E		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	haha	Cyanea crispa	E		
Flowering Plants	ha'iwale	Cyrtandra dentata	E		
Flowering Plants	ha'iwale	Cyrtandra viridiflora	E		
Flowering Plants	ha'iwale	Cyrtandra tintinnabula	E		
Flowering Plants	ha'iwale	Cyrtandra limahuliensis	T		
Flowering Plants	ha'iwale	Cyrtandra munroi	E		
Flowering Plants	ha'iwale	Cyrtandra giffardii	E		
Flowering Plants	ha'iwale	Cyrtandra crenata	E		
Flowering Plants	ha'iwale	Cyrtandra subumbellata	E		
Flowering Plants	ha'iwale	Cyrtandra polyantha	E		
Flowering Plants	hala pepe	Pleomele hawaiiensis	E		
Flowering Plants	harebells, Avon Park	Crotalaria avonensis	E		
Flowering Plants	harperella	Ptilimnium nodosum	E		
Flowering Plants	hau kuahiwi	Hibiscadelphus giffardianus	E		
Flowering Plants	hau kuahiwi	Hibiscadelphus hualalaiensis	E		
Flowering Plants	hau kuahiwi	Hibiscadelphus woodii	E		
Flowering Plants	heartleaf, dwarf-flowered	Hexastylis naniflora	T		
Flowering Plants	heather, mountain golden	Hudsonia montana	T		
Flowering Plants	heau	Exocarpos luteolus	E		
Flowering Plants	hedyotis, Na Pali beach	Hedyotis st.-johnii	E		
Flowering Plants	hibiscus, Clay's	Hibiscus clayi	E		
Flowering Plants	higo, chumbo	Harrisia portoricensis	T		
Flowering Plants	higuero de sierra	Crescentia portoricensis	E		
Flowering Plants	holei	Ochrosia kilaeuaensis	E		
Flowering Plants	holly, Cook's	Ilex cookii	E		
Flowering Plants	Honohono	Haplostachys haplostachya	E		
Flowering Plants	howellia, water	Howellia aquatilis	T		
Flowering Plants	hypericum, highlands scrub	Hypericum cumulicola	E		
Flowering Plants	iliau, dwarf	Wilkesia hobbyi	E		
Flowering Plants	indian paintbrush, San Clemente Island	Castilleja grisea	E		
Flowering Plants	ipomopsis, Holy Ghost	Ipomopsis sancti-spiritus	E		
Flowering Plants	iris, dwarf lake	Iris lacustris	T		
Flowering Plants	irisette, white	Sisyrinchium dichotomum	E		
Flowering Plants	ischaemum, Hilo	Ischaemum byrone	E		
Flowering Plants	ivesia, Ash Meadows	Ivesia kingii eremica	T		
Flowering Plants	jacquemontia, beach	Jacquemontia reclinata	E		
Flowering Plants	jewelflower, California	Caulanthus californicus	E		
Flowering Plants	jewelflower, Metcalf Canyon	Streptanthus albidus albidus	E		
Flowering Plants	jewelflower, Tiburon	Streptanthus niger	E		
Flowering Plants	joint-vetch, sensitive	Aeschynomene virginica	T		
Flowering Plants	kamakahala	Labordia triflora	E		
Flowering Plants	kamakahala	Labordia tinifolia lanaiensis	E		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	kamakahala	Labordia cyrtandrae	E		
Flowering Plants	kamakahala	Labordia tinifolia wahiawaensis	E		
Flowering Plants	kamakahala	Labordia lydgatei	E		
Flowering Plants	kauai hau kuahiwi	Hibiscadelphus distans	E		
Flowering Plants	kauila	Colubrina oppositifolia	E		
Flowering Plants	kaulu	Pteralyxia kauaiensis	E		
Flowering Plants	kio'ele	Hedyotis coriacea	E		
Flowering Plants	kiponapona	Phyllostegia racemosa	E		
Flowering Plants	kohe malama malama o kanaloa	Kanaloa kahoolawensis	E		
Flowering Plants	koki'o	Kokia drynarioides	E		
Flowering Plants	koki'o ke'oke'o	Hibiscus waimeae hannerae	E		
Flowering Plants	koki'o ke'oke'o	Hibiscus arnottianus immaculatus	E		
Flowering Plants	koki'o, (=Cooke's koki'o)	Kokia cookei	E		
Flowering Plants	koki'o, (=Kaua'i koki'o)	Kokia kauaiensis	E		
Flowering Plants	kolea	Myrsine linearifolia	T		
Flowering Plants	kolea	Myrsine juddii	E		
Flowering Plants	ko'oko'olau	Bidens micrantha kalealaha	E		
Flowering Plants	ko'oko'olau	Bidens wiebkei	E		
Flowering Plants	ko'oloa'ula	Abutilon menziesii	E		
Flowering Plants	Kopa	Hedyotis schlechtendahliana remyi	E		
Flowering Plants	kuahiwi laukahi	Plantago princeps	E		
Flowering Plants	kuahiwi laukahi	Plantago hawaiiensis	E		
Flowering Plants	kuawawaenuhu	Alsinidendron lychnoides	E		
Flowering Plants	kula wahine noho	Isodendron pyriform	E		
Flowering Plants	kulu'i	Nototrichium humile	E		
Flowering Plants	ladies'-tresses, Canelo Hills	Spiranthes delitescens	E		
Flowering Plants	ladies'-tresses, Navasota	Spiranthes parksii	E		
Flowering Plants	ladies'-tresses, Ute	Spiranthes diluvialis	T		
Flowering Plants	Lagu, Hyan	Serianthes nelsonii	E		
Flowering Plants	larkspur, San Clemente Island	Delphinium variegatum kinkiense	E		
Flowering Plants	lau'ehu	Panicum niihauense	E		
Flowering Plants	lauhilihi, (=Ma'oli'oli)	Schiedea stellarioides	E		
Flowering Plants	layia, beach	Layia carnosa	E		
Flowering Plants	lead-plant, Crenulate	Amorpha crenulata	E		
Flowering Plants	leather flower, Alabama	Clematis socialis	E		
Flowering Plants	leather flower, Morefield's	Clematis morefieldii	E		
Flowering Plants	lessingia, San Francisco	Lessingia germanorum	E		
Flowering Plants	liliwai	Acaena exigua	E		
Flowering Plants	lily, Minnesota dwarf trout	Erythronium propullans	E		
Flowering Plants	lily, Pitkin Marsh	Lilium pardalinum pitkinense	E		
Flowering Plants	lily, Western	Lilium occidentale	E		
Flowering Plants	liveforever, Laguna Beach	Dudleya stolonifera	T		

Fede Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	liveforever, Santa Barbara Island	<i>Dudleya traskiae</i>	E		
Flowering Plants	locoweed, Fassett's	<i>Oxytropis campestris chartacea</i>	T		
Flowering Plants	lomatium, Bradshaw's	<i>Lomatium bradshawii</i>	E		
Flowering Plants	loosestrife, rough-leaved	<i>Lysimachia asperulaefolia</i>	E		
Flowering Plants	lo'ulu	<i>Pritchardia remota</i>	E		
Flowering Plants	lo'ulu	<i>Pritchardia viscosa</i>	E		
Flowering Plants	lo'ulu	<i>Pritchardia napaliensis</i>	E		
Flowering Plants	lo'ulu	<i>Pritchardia affinis</i>	E		
Flowering Plants	lo'ulu	<i>Pritchardia schattaueri</i>	E		
Flowering Plants	lo'ulu	<i>Pritchardia kaalae</i>	E		
Flowering Plants	lo'ulu	<i>Pritchardia munroi</i>	E		
Flowering Plants	lo'ulu, (=wahane)	<i>Pritchardia aylmer-robinsonii</i>	E		
Flowering Plants	lousewort, Furbish	<i>Pedicularis furbishiae</i>	E		
Flowering Plants	love grass, Fosberg's	<i>Eragrostis fosbergii</i>	E		
Flowering Plants	lupine, clover	<i>Lupinus tidestromii</i>	E		
Flowering Plants	lupine, scrub	<i>Lupinus aridorum</i>	E		
Flowering Plants	mahoe	<i>Alectryon macrococcus</i>	E		
Flowering Plants	makou	<i>Peucedanum sandwicense</i>	T		
Flowering Plants	malacothrix, island	<i>Malacothrix squalida</i>	E		
Flowering Plants	Malacothrix, Santa Cruz Island	<i>Malacothrix indecora</i>	E		
Flowering Plants	mallow, Kern	<i>Eremalche kernensis</i>	E		
Flowering Plants	mallow, Peter's Mountain	<i>Iliamna corei</i>	E		
Flowering Plants	manaca, palma de	<i>Calyptronoma rivalis</i>	T		
Flowering Plants	manioc, Walker's	<i>Manihot walkerae</i>	E		
Flowering Plants	manzanita, Del Mar	<i>Arctostaphylos glandulosa crassifolia</i>	E		
Flowering Plants	manzanita, lone	<i>Arctostaphylos myrtifolia</i>	T		
Flowering Plants	manzanita, Morro	<i>Arctostaphylos morroensis</i>	T		
Flowering Plants	manzanita, pallid	<i>Arctostaphylos pallida</i>	T		
Flowering Plants	Manzanita, Presidio	<i>Arctostaphylos hookeri ravenii</i>	E		
Flowering Plants	manzanita, Santa Rosa Island	<i>Arctostaphylos confertiflora</i>	E		
Flowering Plants	ma' o hau hele, (=native yellow hibiscus)	<i>Hibiscus brackenridgei</i>	E		
Flowering Plants	ma' oli' oli	<i>Schiedea kealiae</i>	E		
Flowering Plants	ma' oli' oli	<i>Schiedea apokremnos</i>	E		
Flowering Plants	mapele	<i>Cyrtandra cyaneoides</i>	E		
Flowering Plants	mariposa lily, Tiburon	<i>Calochortus tiburonensis</i>	T		
Flowering Plants	maua	<i>Xylosma crenatum</i>	E		
Flowering Plants	meadowfoam, Butte County	<i>Limnanthes floccosa californica</i>	E		
Flowering Plants	meadowfoam, Sebastopol	<i>Limnanthes vinculans</i>	E		
Flowering Plants	meadowrue, Cooley's	<i>Thalictrum cooleyi</i>	E		
Flowering Plants	mehamehame	<i>Flueggea neowawraea</i>	E		
Flowering Plants	mesa-mint, Otay	<i>Pogogyne nudiuscula</i>	E		
Flowering Plants	mesa-mint, San Diego	<i>Pogogyne abramsii</i>	E		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	milk-vetch, Applegate's	<i>Astragalus applegatei</i>	E		
Flowering Plants	milk-vetch, Ash meadows	<i>Astragalus phoenix</i>	T		
Flowering Plants	milk-vetch, Braunton's	<i>Astragalus brauntonii</i>	E		
Flowering Plants	milk-vetch, Clara Hunt's	<i>Astragalus clarianus</i>	E		
Flowering Plants	milk-vetch, Coachella Valley	<i>Astragalus lentiginosus coachellae</i>	E		
Flowering Plants	milk-vetch, coastal dunes	<i>Astragalus tener titi</i>	E		
Flowering Plants	milk-vetch, Cushenbury	<i>Astragalus albens</i>	E		
Flowering Plants	milk-vetch, Fish Slough	<i>Astragalus lentiginosus piscinensis</i>	T		
Flowering Plants	milk-vetch, heliotrope	<i>Astragalus montii</i>	T		
Flowering Plants	milk-vetch, Jesup's	<i>Astragalus robbinsii jesupi</i>	E		
Flowering Plants	milk-vetch, Lane Mountain	<i>Astragalus jaegerianus</i>	E		
Flowering Plants	milk-vetch, Mancos	<i>Astragalus humillimus</i>	E		
Flowering Plants	milk-vetch, Osterhout	<i>Astragalus osterhoutii</i>	E		
Flowering Plants	milk-vetch, Peirson's	<i>Astragalus magdalenae peirsonii</i>	T		
Flowering Plants	milk-vetch, Sentry	<i>Astragalus cremnophylax cremnophylax</i>	E		
Flowering Plants	milk-vetch, triple-ribbed	<i>Astragalus tricarinatus</i>	E		
Flowering Plants	milkpea, Small's	<i>Galactia smallii</i>	E		
Flowering Plants	milkweed, Mead's	<i>Asclepias meadii</i>	T		
Flowering Plants	milkweed, Welsh's	<i>Asclepias welshii</i>	T		
Flowering Plants	mint, Garrett's	<i>Dicerandra christmanii</i>	E		
Flowering Plants	mint, Lakela's	<i>Dicerandra immaculata</i>	E		
Flowering Plants	mint, longspurred	<i>Dicerandra cornutissima</i>	E		
Flowering Plants	mint, scrub	<i>Dicerandra frutescens</i>	E		
Flowering Plants	monardella, willow	<i>Monardella linoidea viminea</i>	E		
Flowering Plants	monkey-flower, Michigan	<i>Mimulus glabratus michiganensis</i>	E		
Flowering Plants	monkshood, northern wild	<i>Aconitum noveboracense</i>	T		
Flowering Plants	morning-glory, Stebbins'	<i>Calystegia stebbinsii</i>	E		
Flowering Plants	mountain balm, Indian Knob	<i>Eriodictyon altissimum</i>	E		
Flowering Plants	mountain-mahogany, Catalina Island	<i>Cercocarpus traskiae</i>	E		
Flowering Plants	mustard, Carter's	<i>Warea carteri</i>	E		
Flowering Plants	mustard, Penland alpine fen	<i>Eutrema penlandii</i>	T		
Flowering Plants	mustard, slender-petaled	<i>Thelypodium stenopetalum</i>	E		
Flowering Plants	na'ena'e	<i>Dubautia latifolia</i>	E		
Flowering Plants	na'ena'e	<i>Dubautia plantaginea humilis</i>	E		
Flowering Plants	na'ena'e	<i>Dubautia pauciflora</i>	E		
Flowering Plants	na'ena'e	<i>Dubautia herbstobatae</i>	E		
Flowering Plants	nani wai'ale'ale	<i>Viola kauaiensis wahiawaensis</i>	E		
Flowering Plants	nanu	<i>Gardenia manii</i>	E		
Flowering Plants	naupaka, dwarf	<i>Scaevola coriacea</i>	E		
Flowering Plants	navarretia, few-flowered	<i>Navarretia leucocephala pauciflora</i>	E		
Flowering Plants	navarretia, many-flowered	<i>Navarretia leucocephala plieantha</i>	E		
Flowering Plants	navarretia, spreading	<i>Navarretia fossalis</i>	T		



Fede. Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	nehe	Lipochaeta fauriei	E		
Flowering Plants	nehe	Lipochaeta waimeaensis	E		
Flowering Plants	nehe	Lipochaeta tenuifolia	E		
Flowering Plants	nehe	Lipochaeta lobata leptophylla	E		
Flowering Plants	nehe	Lipochaeta kamolensis	E		
Flowering Plants	nehe	Lipochaeta micrantha	E		
Flowering Plants	nehe	Lipochaeta venosa	E		
Flowering Plants	nioi	Eugenia koolauensis	E		
Flowering Plants	niterwort, Amargosa	Nitrophila mohavensis	E		
Flowering Plants	No common name	Achyranthes mutica	E		
Flowering Plants	No common name	Bonamia menziesii	E		
Flowering Plants	No common name	Schiedea sarmentosa	E		
Flowering Plants	No common name	Schiedea membranacea	E		
Flowering Plants	No common name	Schiedea hookeri	E		
Flowering Plants	No common name	Sanicula purpurea	E		
Flowering Plants	No common name	Phyllostegia parviflora	E		
Flowering Plants	No common name	Phyllostegia knudsenii	E		
Flowering Plants	No common name	Phyllostegia hirsuta	E		
Flowering Plants	No common name	Lobelia gaudichaudii koolauensis	E		
Flowering Plants	No common name	Neraudia ovata	E		
Flowering Plants	No common name	Hesperomannia arbuscula	E		
Flowering Plants	No common name	Hesperomannia arborescens	E		
Flowering Plants	No common name	Hedyotis parvula	E		
Flowering Plants	No common name	Hedyotis degeneri	E		
Flowering Plants	No common name	Gouania vitifolia	E		
Flowering Plants	No common name	Gouania meyenii	E		
Flowering Plants	No common name	Gouania hillebrandii	E		
Flowering Plants	No common name	Geocarpon minimum	T		
Flowering Plants	No common name	Gahnia lanaiensis	E		
Flowering Plants	No common name	Phyllostegia kaalaensis	E		
Flowering Plants	No common name	Eugenia woodburyana	E		
Flowering Plants	No common name	Phyllostegia mannii	E		
Flowering Plants	No common name	Ilex sintenisii	E		
Flowering Plants	No common name	Cranichis ricartii	E		
Flowering Plants	No common name	Vernonia proctorii	E		
Flowering Plants	No common name	Trematolobelia singularis	E		
Flowering Plants	No common name	Stenogyne campanulata	E		
Flowering Plants	No common name	Stenogyne bifida	E		
Flowering Plants	No common name	Spermolepis hawaiiensis	E		
Flowering Plants	No common name	Silene perلمانii	E		
Flowering Plants	No common name	Schiedea nuttallii	E		
Flowering Plants	No common name	Schiedea kauaiensis	E		

Feder Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	No common name	Sanicula mariversa	E		
Flowering Plants	No common name	Phyllostegia wawrana	E		
Flowering Plants	No common name	Phyllostegia warshaueri	E		
Flowering Plants	No common name	Phyllostegia velutina	E		
Flowering Plants	No common name	Phyllostegia waimeae	E		
Flowering Plants	No common name	Mariscus fauriei	E		
Flowering Plants	No common name	Lysimachia maxima	E		
Flowering Plants	No common name	Lysimachia lydgatei	E		
Flowering Plants	No common name	Lyonia truncata proctorii	E		
Flowering Plants	No common name	Leptocereus grantianus	E		
Flowering Plants	No common name	Catesbaea melanocarpa	E		
Flowering Plants	No common name	Auerodendron pauciflorum	E		
Flowering Plants	No common name	Aristida chaseae	E		
Flowering Plants	No common name	Remya montgomeryi	E		
Flowering Plants	No common name	Alsinidendron viscosum	E		
Flowering Plants	No common name	Schoepfia arenaria	T		
Flowering Plants	No common name	Schiedea spergulina spergulina	T		
Flowering Plants	No common name	Schiedea spergulina leiopoda	E		
Flowering Plants	No common name	Schiedea lydgatei	E		
Flowering Plants	No common name	Schiedea helleri	E		
Flowering Plants	No common name	Schiedea haleakalensis	E		
Flowering Plants	No common name	Gesneria pauciflora	T		
Flowering Plants	No common name	Myrcia paganii	E		
Flowering Plants	No common name	Mariscus pennatiformis	E		
Flowering Plants	No common name	Ternstroemia subsessilis	E		
Flowering Plants	No common name	Silene hawaiiensis	T		
Flowering Plants	No common name	Poa siphonoglossa	E		
Flowering Plants	No common name	Platanthera holochila	E		
Flowering Plants	No common name	Phyllostegia mollis	E		
Flowering Plants	No common name	Mitracarpus polycladus	E		
Flowering Plants	No common name	Mitracarpus maxwelliae	E		
Flowering Plants	No common name	Lysimachia filifolia	E		
Flowering Plants	No common name	Lobelia monostachya	E		
Flowering Plants	No common name	Lepanthes eltoroensis	E		
Flowering Plants	No common name	Daphnopsis hellerana	E		
Flowering Plants	No common name	Cordia bellonis	E		
Flowering Plants	No common name	Chamaecrista glandulosa mirabilis	E		
Flowering Plants	No common name	Calyptanthes thomasiana	E		
Flowering Plants	No common name	Viola oahuensis	E		
Flowering Plants	No common name	Viola lanaiensis	E		
Flowering Plants	No common name	Viola helenae	E		
Flowering Plants	No common name	Vigna o-wahuensis	E		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	No common name	Tetramolopium rockii	T		
Flowering Plants	No common name	Tetramolopium remyi	E		
Flowering Plants	No common name	Tetramolopium lepidotum lepidotum	E		
Flowering Plants	No common name	Tetramolopium filiforme	E		
Flowering Plants	No common name	Tetramolopium arenarium	E		
Flowering Plants	No common name	Stenogyne kanehoana	E		
Flowering Plants	No common name	Stenogyne angustifolia angustifolia	E		
Flowering Plants	No common name	Silene lanceolata	E		
Flowering Plants	No common name	Silene alexandri	E		
Flowering Plants	No common name	Schiedea kaalae	E		
Flowering Plants	No common name	Remya kauaiensis	E		
Flowering Plants	No common name	Phyllostegia glabra lanaiensis	E		
Flowering Plants	No common name	Neraudia sericea	E		
Flowering Plants	No common name	Neraudia angulata	E		
Flowering Plants	No common name	Munroidendron racemosum	E		
Flowering Plants	No common name	Lobelia oahuensis	E		
Flowering Plants	No common name	Lobelia niihauensis	E		
Flowering Plants	No common name	Hesperomannia lydgatei	E		
Flowering Plants	No common name	Alsinidendron trinerve	E		
Flowering Plants	No common name	Alsinidendron obovatum	E		
Flowering Plants	No common name	Abutilon sandwicense	E		
Flowering Plants	No common name	Abutilon eremitopetalum	E		
Flowering Plants	No common name	Schiedea verticillata	E		
Flowering Plants	No common name	Amaranthus brownii	E		
Flowering Plants	nohoanu	Geranium multiflorum	E		
Flowering Plants	oak, Hinckley	Quercus hinckleyi	T		
Flowering Plants	oha	Delissea rivularis	E		
Flowering Plants	oha	Delissea undulata	E		
Flowering Plants	oha	Delissea subcordata	E		
Flowering Plants	oha	Delissea rhytidosperra	E		
Flowering Plants	oha wai	Clermontia drepanomorpha	E		
Flowering Plants	oha wai	Clermontia peleana	E		
Flowering Plants	oha wai	Clermontia oblongifolia brevipes	E		
Flowering Plants	oha wai	Clermontia samuelii	E		
Flowering Plants	oha wai	Clermontia oblongifolia mauiensis	E		
Flowering Plants	oha wai	Clermontia pyralaria	E		
Flowering Plants	oha wai	Clermontia lindseyana	E		
Flowering Plants	ohai	Sesbania tomentosa	E		
Flowering Plants	ohe'ohe	Tetraplasandra gymnocarpa	E		
Flowering Plants	olulu	Brighamia insignis	E		
Flowering Plants	onion, Munz's	Allium munzii	E		
Flowering Plants	opuhe	Urera kaalae	E		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	orchid, eastern prairie fringed	Platanthera leucophaea	T		
Flowering Plants	orchid, western prairie fringed	Platanthera praeclara	T		
Flowering Plants	orcutt grass, Greene's	Tuctoria greenei	E		
Flowering Plants	orcutt grass, hairy	Orcuttia pilosa	E		
Flowering Plants	orcutt grass, Sacramento	Orcuttia viscida	E		
Flowering Plants	orcutt grass, San Joaquin	Orcuttia inaequalis	T		
Flowering Plants	orcutt grass, slender	Orcuttia tenuis	T		
Flowering Plants	owl's-clover, fleshy	Castilleja campestris succulenta	T		
Flowering Plants	oxytheca, cushenbury	Oxytheca parishii goodmaniana	E		
Flowering Plants	paintbrush, ash-grey	Castilleja cinerea	T		
Flowering Plants	paintbrush, golden	Castilleja levisecta	T		
Flowering Plants	paintbrush, soft-leaved	Castilleja mollis	E		
Flowering Plants	paintbrush, Tiburon	Castilleja affinis neglecta	E		
Flowering Plants	palo colorado	Ternstroemia luquillensis	E		
Flowering Plants	palo de jazmin	Styrax portoricensis	E		
Flowering Plants	palo de nigua	Cornutia obovata	E		
Flowering Plants	palo de ramon	Banara vanderbiltii	E		
Flowering Plants	palo de rosa	Ottoschulzia rhodoxylon	E		
Flowering Plants	pamakani	Tetramolopium capillare	E		
Flowering Plants	pamakani	Viola chamissoniana chamissoniana	E		
Flowering Plants	panicgrass, Carter's	Panicum fauriei carteri	E		
Flowering Plants	pau'ala, (=alulu)	Brighamia rockii	E		
Flowering Plants	pawpaw, beautiful	Deeringothamnus pulchellus	E		
Flowering Plants	pawpaw, four-petal	Asimina tetramera	E		
Flowering Plants	pawpaw, Rugel's	Deeringothamnus rugelii	E		
Flowering Plants	pelos del diablo	Aristida portoricensis	E		
Flowering Plants	pennyroyal, Todsens	Hedeoma todsenii	E		
Flowering Plants	penstemon, blowout	Penstemon haydenii	E		
Flowering Plants	pentachaeta, Lyon's	Pentachaeta lyonii	E		
Flowering Plants	pentachaeta, white-rayed	Pentachaeta bellidiflora	E		
Flowering Plants	peperomia, Wheeler's	Peperomia wheeleri	E		
Flowering Plants	phacelia, clay	Phacelia argillacea	E		
Flowering Plants	phacelia, island	Phacelia insularis insularis	E		
Flowering Plants	phacelia, North Park	Phacelia formosula	E		
Flowering Plants	phlox, Texas trailing	Phlox nivalis texensis	E		
Flowering Plants	pigeon wings	Clitoria fragrans	T		
Flowering Plants	pilo	Hedyotis mannii	E		
Flowering Plants	pink, swamp	Helonias bullata	T		
Flowering Plants	pinkroot, gentian	Spigelia gentianoides	E		
Flowering Plants	piperia, Yadon's	Piperia yadonii	E		
Flowering Plants	pitaya, Davis' green	Echinocereus viridiflorus davisii	E		
Flowering Plants	pitcher-plant, Alabama canebrake	Sarracenia rubra alabamensis	E		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	pitcher-plant, green	Sarracenia oreophila	E		
Flowering Plants	pitcher-plant, mountain sweet	Sarracenia rubra jonesii	E		
Flowering Plants	plum, scrub	Prunus geniculata	E		
Flowering Plants	po'e	Portulaca sclerocarpa	E		
Flowering Plants	pogonia, small whorled	Isotria medeoloides	T		
Flowering Plants	polygala, Lewton's	Polygala lewtonii	E		
Flowering Plants	polygala, tiny	Polygala smallii	E		
Flowering Plants	pondberry	Lindera melissifolia	E		
Flowering Plants	pondweed, Little Aguja Creek	Potamogeton clystocarpus	E		
Flowering Plants	popolo 'aiakeakua	Solanum sandwicense	E		
Flowering Plants	popolo ku mai	Solanum incompletum	E		
Flowering Plants	poppy, Sacramento prickly	Argemone pleiacantha pinnatisecta	E		
Flowering Plants	poppy-mallow, Texas	Callirhoe scabriuscula	E		
Flowering Plants	potato-bean, Price's	Apios priceana	T		
Flowering Plants	potentilla, Hickman's	Potentilla hickmanii	E		
Flowering Plants	prairie-clover, leafy	Dalea foliosa	E		
Flowering Plants	prickly-apple, fragrant	Cereus eriophorus fragrans	E		
Flowering Plants	prickly-ash, St. Thomas	Zanthoxylum thomasianum	E		
Flowering Plants	primrose, Maguire	Primula maguirei	T		
Flowering Plants	pussypaws, Mariposa	Calyptidium pulchellum	T		
Flowering Plants	pu'uka'a	Cyperus trachysanthos	E		
Flowering Plants	rattleweed, hairy	Baptisia arachnifera	E		
Flowering Plants	reed-mustard, Barneby	Schoenocrambe barnebyi	E		
Flowering Plants	reed-mustard, clay	Schoenocrambe argillacea	T		
Flowering Plants	remya, Maui	Remya mauiensis	E		
Flowering Plants	rhododendron, Chapman	Rhododendron chapmanii	E		
Flowering Plants	ridge-cress, Barneby	Lepidium barnebyanum	E		
Flowering Plants	rock-cress, Braun's	Arabis perstellata	E		
Flowering Plants	rock-cress, Hoffmann's	Arabis hoffmannii	E		
Flowering Plants	rock-cress, McDonald's	Arabis mcdonaldiana	E		
Flowering Plants	rock-cress, shale barren	Arabis serotina	E		
Flowering Plants	rockcress, Santa Cruz Island	Sibara filifolia	E		
Flowering Plants	rosemary, Apalachicola	Conradina glabra	E		
Flowering Plants	rosemary, Cumberland	Conradina verticillata	T		
Flowering Plants	rosemary, Etonia	Conradina etonia	E		
Flowering Plants	rosemary, short-leaved	Conradina brevifolia	E		
Flowering Plants	roseroot, Leedy's	Sedum integrifolium leedyi	T		
Flowering Plants	rush-pea, slender	Hoffmannseggia tenella	E		
Flowering Plants	rush-rose, island	Helianthemum greenei	T		
Flowering Plants	sand-verbena, large-fruited	Abronia macrocarpa	E		
Flowering Plants	sandalwood, Lanai or 'ilihi	Santalum freycinetianum lanaiense	E		
Flowering Plants	sandbur, agrimony or Kamanomano	Cenchrus agrimonioides	E		

Fede. Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	sandlace	<i>Polygonella myriophylla</i>	E		
Flowering Plants	sandwort, Bear Valley	<i>Arenaria ursina</i>	T		
Flowering Plants	sandwort, Cumberland	<i>Arenaria cumberlandensis</i>	E		
Flowering Plants	sandwort, Marsh	<i>Arenaria paludicola</i>	E		
Flowering Plants	schiedea, Diamond Head	<i>Schiedea adamantis</i>	E		
Flowering Plants	seablite, California	<i>Suaeda californica</i>	E		
Flowering Plants	seagrass, Johnson's	<i>Halophila johnsonii</i>	T		
Flowering Plants	sedge, Navajo	<i>Carex specuicola</i>	T		
Flowering Plants	sedge, white	<i>Carex albid</i>	E		
Flowering Plants	silversword, Haleakala	<i>Argyroxiphium sandwicense macrocephalum</i>	T		
Flowering Plants	silversword, Mauna Kea	<i>Argyroxiphium sandwicense sandwicense</i>	E		
Flowering Plants	silversword, Mauna Loa	<i>Argyroxiphium kauense</i>	E		
Flowering Plants	skullcap, Florida	<i>Scutellaria floridana</i>	T		
Flowering Plants	skullcap, large-flowered	<i>Scutellaria montana</i>	E		
Flowering Plants	snakeroot	<i>Eryngium cuneifolium</i>	E		
Flowering Plants	sneezeweed, Virginia	<i>Helenium virginicum</i>	T		
Flowering Plants	snowbells, Texas	<i>Styrax texanus</i>	E		
Flowering Plants	spineflower, Ben Lomond	<i>Chorizanthe pungens hartwegiana</i>	E		
Flowering Plants	spineflower, Howell's	<i>Chorizanthe howellii</i>	E		
Flowering Plants	spineflower, Monterey	<i>Chorizanthe pungens pungens</i>	T		
Flowering Plants	spineflower, Orcutt's	<i>Chorizanthe orcuttiana</i>	E		
Flowering Plants	spineflower, Robust	<i>Chorizanthe robusta</i>	E		
Flowering Plants	spineflower, slender-horned	<i>Dodecahema leptoceras</i>	E		
Flowering Plants	spineflower, Sonoma	<i>Chorizanthe valida</i>	E		
Flowering Plants	spiraea, Virginia	<i>Spiraea virginiana</i>	T		
Flowering Plants	spurge, deltoid	<i>Chamaesyce deltoidea deltoidea</i>	E		
Flowering Plants	spurge, Garber's	<i>Chamaesyce garberi</i>	T		
Flowering Plants	spurge, Hoover's	<i>Chamaesyce hooveri</i>	T		
Flowering Plants	spurge, telephus	<i>Euphorbia telephioides</i>	T		
Flowering Plants	stonecrop, Lake County	<i>Parvisedum leiocarpum</i>	E		
Flowering Plants	sumac, Michaux's	<i>Rhus michauxii</i>	E		
Flowering Plants	sunburst, Hartweg's golden	<i>Pseudobahia bahiifolia</i>	E		
Flowering Plants	sunburst, San Joaquin adobe	<i>Pseudobahia peirsonii</i>	T		
Flowering Plants	sunflower, Eggert's	<i>Helianthus eggertii</i>	T		
Flowering Plants	sunflower, San Mateo woolly	<i>Eriophyllum latilobum</i>	E		
Flowering Plants	sunflower, Schweinitz's	<i>Helianthus schweinitzii</i>	E		
Flowering Plants	sunray, Ash Meadows	<i>Enceliopsis nudicaulis corrugata</i>	T		
Flowering Plants	sunshine, Sonoma	<i>Blennosperma bakeri</i>	E		
Flowering Plants	taraxacum, California	<i>Taraxacum californicum</i>	E		
Flowering Plants	tarplant, Otay	<i>Hemizonia conjugens</i>	T		
Flowering Plants	thelypody, Howell's spectacular	<i>Thelypodium howellii spectabilis</i>	T		
Flowering Plants	thistle, Chorro Creek bog	<i>Cirsium fontinale obispoense</i>	E		

Feder. Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	thistle, fountain	Cirsium fontinale fontinale	E		
Flowering Plants	thistle, Loch Lomond coyote	Eryngium constancei	E		
Flowering Plants	thistle, Pitcher's	Cirsium pitcheri	T		
Flowering Plants	thistle, Sacramento Mountains	Cirsium vinaceum	T		
Flowering Plants	thistle, Suisun	Cirsium hydrophilum hydrophilum	E		
Flowering Plants	thornmint, San Diego	Acanthomintha ilicifolia	T		
Flowering Plants	thornmint, San Mateo	Acanthomintha obovata duttonii	E		
Flowering Plants	townsendia, Last Chance	Townsendia aprica	T		
Flowering Plants	trillium, persistent	Trillium persistens	E		
Flowering Plants	trillium, relict	Trillium reliquum	E		
Flowering Plants	twinpod, Dudley Bluffs	Physaria obcordata	T		
Flowering Plants	uhiuhi	Caesalpinia kavaense	E		
Flowering Plants	uvillo	Eugenia haematocarpa	E		
Flowering Plants	vervain, Red Hills	Verbena californica	T		
Flowering Plants	vetch, Hawaiian	Vicia menziesii	E		
Flowering Plants	wallflower, Ben Lomond	Erysimum teretifolium	E		
Flowering Plants	wallflower, Contra Costa	Erysimum capitatum angustatum	E		
Flowering Plants	wallflower, Menzies'	Erysimum menziesii	E		
Flowering Plants	walnut, West Indian or nogal	Juglans jamaicensis	E		
Flowering Plants	warea, wide-leaf	Warea amplexifolia	E		
Flowering Plants	water-plantain, Kral's	Sagittaria secundifolia	T		
Flowering Plants	water-umbel, Huachuca	Lilaeopsis schaffneriana recurva	E		
Flowering Plants	water-willow, Cooley's	Justicia cooleyi	E		
Flowering Plants	watercress, Gambel's	Rorippa gambellii	E		
Flowering Plants	whittow-wort, papery	Paronychia chartacea	T		
Flowering Plants	wild-buckwheat, clay-loving	Eriogonum pelinophilum	E		
Flowering Plants	wild-buckwheat, gypsum	Eriogonum gypsophilum	T		
Flowering Plants	wild-buckwheat, southern mountain	Eriogonum kennedyi austromontanum	T		
Flowering Plants	wild-rice, Texas	Zizania texana	E		
Flowering Plants	wire-lettuce, Malheur	Stephanomeria malheurensis	E		
Flowering Plants	wireweed	Polygonella basiramaia	E		
Flowering Plants	woodland-star, San Clemente Island	Lithophragma maximum	E		
Flowering Plants	woolly-star, Hoover's	Eriastrum hooveri	T		
Flowering Plants	woolly-star, Santa Ana River	Eriastrum densifolium sanctorum	E		
Flowering Plants	wooly-threads, San Joaquin	Lembertia congdonii	E		
Flowering Plants	ziziphus, Florida	Ziziphus celata	E		
Conifers and Cycads	cypress, Gowen	Cupressus goveniana goveniana	T		
Conifers and Cycads	cypress, Santa Cruz	Cupressus abramsiana	E		
Conifers and Cycads	Torreya, Florida	Torreya taxifolia	E		
Ferns and Allies	diellia, asplenium-leaved	Diellia erecta	E		
Ferns and Allies	fern, Alabama streak-sorus	Thelypteris pilosa alabamensis	T		
Ferns and Allies	fern, Aleutian shield	Polystichum aleuticum	E		

Feder. Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Ferns and Allies	fern, American hart's-tongue	<i>Asplenium scolopendrium americanum</i>	T		
Ferns and Allies	fern, Elfin tree	<i>Cyathea dryopteroides</i>	E		
Ferns and Allies	fern, pendant kihi	<i>Adenophorus periens</i>	E		
Ferns and Allies	ihi' ihi	<i>Marsilea villosa</i>	E		
Ferns and Allies	No common name	<i>Asplenium fragile insulare</i>	E		
Ferns and Allies	No common name	<i>Diellia falcata</i>	E		
Ferns and Allies	No common name	<i>Diellia pallida</i>	E		
Ferns and Allies	No common name	<i>Thelypteris yaucoensis</i>	E		
Ferns and Allies	No common name	<i>Thelypteris verecunda</i>	E		
Ferns and Allies	No common name	<i>Thelypteris inabonensis</i>	E		
Ferns and Allies	No common name	<i>Tectaria estremerana</i>	E		
Ferns and Allies	No common name	<i>Polystichum calderonense</i>	E		
Ferns and Allies	No common name	<i>Elaphoglossum serpens</i>	E		
Ferns and Allies	No common name	<i>Diellia unisora</i>	E		
Ferns and Allies	No common name	<i>Adiantum vivesii</i>	E		
Ferns and Allies	No common name	<i>Diplazium molokaiense</i>	E		
Ferns and Allies	No common name	<i>Pteris lidgatei</i>	E		
Ferns and Allies	pauoa	<i>Ctenitis squamigera</i>	E		
Ferns and Allies	quillwort, black spored	<i>Isoetes melanospora</i>	E		
Ferns and Allies	quillwort, Louisiana	<i>Isoetes louisianensis</i>	E		
Ferns and Allies	quillwort, mat-forming	<i>Isoetes tegetiformans</i>	E		
Ferns and Allies	wawae'iole	<i>Huperzia manni</i>	E		
Ferns and Allies	wawae'iole, (=ha'iwale)	<i>Phlegmariurus nutans</i>	E		
Lichens	cladonia, Florida perforate	<i>Cladonia perforata</i>	E		
Lichens	lichen, rock gnome	<i>Gymnoderma lineare</i>	E		





# United States Department of the Interior


U.S. GEOLOGICAL SURVEY  
Office of the Director  
Reston, Virginia 20192

In Reply Refer To:  
Mail Stop 300  
#20010586

## MEMORANDUM

DEC - 7 2001

To: Director, U.S. Fish and Wildlife Service

From: Charles G. Groat   
Director, U.S. Geological Survey

Subject: Fiscal Year 1999 and 2000 Endangered Species Expenditures Report to Congress

We are responding to your letter of September 17, 2001, requesting a report for fiscal years (FY) 1999 and 2000 expenditures of the U.S. Geological Survey (USGS) related to the conservation of endangered and threatened species.

In accordance with the guidance provided with your letter on the scope of activities that should be reported, we have reported funding that was reasonably identifiable for individual species and funding for studies and investigations involving multiple endangered or threatened species for which identifiable per species funding was not otherwise accounted for. For FY 1999 and 2000, the USGS has no land acquisition costs to report.

We hope that this information will be useful for your annual report to Congress. If you have questions concerning this matter, please contact Dr. Albert Sherk, on 703-648-4076.

Attachment

U.S. GEOLOGICAL SURVEY  
FY 1999 Endangered Species Expenditures

<u>Species</u>	<u>Expenditures (\$)</u>
Bear, grizzly (=brown) ( <i>Ursus arctos</i> )	\$ 646,800
Bear, Louisiana black ( <i>Ursus americanus luteolus</i> )	64,800
Chub, bonytail ( <i>Gila elegans</i> )	89,300
Crane, Mississippi sandhill ( <i>Grus canadensis pulla</i> )	24,000
Crane, whooping ( <i>Grus americana</i> )	693,200
Darter, Okaloosa ( <i>Etheostoma okaloosae</i> )	17,000
Eagle, bald ( <i>Haliaeetus leucocephalus</i> )	2,400
Eider, spectacled ( <i>Somateria</i> (=Arctonetta, =Lampronetta) <i>fischeri</i> )	103,500
Eider, Steller's ( <i>Polysticta stelleri</i> )	103,500
Ferret, black-footed ( <i>Mustela nigripes</i> )	283,600
Flycatcher, southwest willow ( <i>Empidonax traillii extimus</i> )	63,800
Fox, swift ( <i>Vulpes velox hebes</i> )	64,300
Frog, California red-legged ( <i>Rana aurora draytonii</i> )	21,800
Kingfisher, Guam Micronesian ( <i>Halcyon cinnamomina cinnamomina</i> )	18,500
Lizard, Island night ( <i>Xantusia</i> (=Klauberina) <i>reversiana</i> )	5,000
Madtom, Neosho ( <i>Noturus placidus</i> )	14,500
Manatee, West Indian ( <i>Trichechus manatus</i> )	526,100
Mouse, Preble's meadow jumping ( <i>Zapus hudsonius prelei</i> )	30,500
Murrelet, marbled ( <i>Brachyramphus marmoratus marmoratus</i> )	9,000
Orchid, western prairie fringed ( <i>Platanthera praeclara</i> )	11,100
Otter, southern sea ( <i>Enhydra lutris nereis</i> )	317,400
Owl, northern spotted ( <i>Strix occidentalis caurina</i> )	355,500
Panther, Florida ( <i>Felis concolor coryi</i> )	31,200
Plover, piping ( <i>Charadrius melodus</i> )	13,000
Plover, western snowy ( <i>Charadrius alexandrinus nivosus</i> )	9,200
Salmon, chinook ( <i>Oncorhynchus</i> (=Salmo) <i>tshawytscha</i> )	96,000
Sheep, bighorn ( <i>Ovis canadensis</i> )	22,000
Shiner, Topeka ( <i>Notropis topeka</i> (=tristis))	19,000
Snake, giant garter ( <i>Thamnophis gigas</i> )	45,000
Squirrel, Delmarva Peninsula fox ( <i>Sciurus niger cinereus</i> )	130,300
Sturgeon, Gulf ( <i>Acipenser oxyrinchus desotoi</i> )	26,000
Sturgeon, pallid ( <i>Scaphirhynchus albus</i> )	81,000
Sturgeon, shortnose ( <i>Acipenser brevirostrum</i> )	167,000
Sucker, Lost River ( <i>Deltistes luxatus</i> )	147,000
Sucker, razorback ( <i>Xyrauchen texanus</i> )	89,300
Sucker, shortnose ( <i>Chasmistes brevirostris</i> )	147,000
Thistle, Pitcher's ( <i>Cirsium pitcheri</i> )	8,000
Tortoise, desert ( <i>Gopherus</i> (=Xerobates, =Scaptochelys) <i>agassizii</i> )	541,380
Trout, bull ( <i>Salvelinus confluentus</i> )	19,000
Turtle, Kemp's (=Atlantic) ridley sea ( <i>Lepidochelys kempii</i> )	78,500
Wolf, gray ( <i>Canis lupus</i> )	<u>292,500</u>
<b>Reasonably Identifiable Expenditures (Species by Species)</b>	<b>\$5,427,980</b>
<b>Expenditures Not Otherwise Accounted For (Multiple Species)</b>	<b>\$6,077,700</b>
<b>TOTAL Endangered and At Risk Species Expenditures (FY 1999)</b>	<b>\$11,505,680</b>

**U.S. GEOLOGICAL SURVEY**  
**FY 2000 Endangered Species Expenditures**

<u>Species</u>	<u>Expenditures (\$)</u>
Bear, grizzly (=brown) ( <i>Ursus arctos</i> )	\$ 471,300
Bear, Louisiana black ( <i>Ursus americanus luteolus</i> )	31,200
Bladderpod, Missouri ( <i>Lesquerella filiformis</i> )	9,500
Butterfly, Karner blue ( <i>Lycaeides melissa samuelis</i> )	100,000
Cactus, Chisos Mtn. hedgehog ( <i>Echinocereus chisoensis</i> (=reichenbachii)var.chisoensis)	33,000
Chub, bonytail ( <i>Gila elegans</i> )	141,800
Crane, whooping ( <i>Grus americana</i> )	879,220
Darter, Okaloosa ( <i>Etheostoma okaloosae</i> )	17,000
Duck, Laysan ( <i>Anas laysanensis</i> )	35,000
Eagle, bald ( <i>Haliaeetus leucocephalus</i> )	7,300
Eider, spectacled ( <i>Somateria</i> (=Arctonetta, =Lampronetta) fischeri)	103,000
Eider, Steller's ( <i>Polysticta stelleri</i> )	103,000
Ferret, black-footed ( <i>Mustela nigripes</i> )	424,500
Flycatcher, southwest willow ( <i>Empidonax traillii extimus</i> )	241,200
Fox, swift ( <i>Vulpes velox hebes</i> )	70,600
Frog, California red-legged ( <i>Rana aurora draytonii</i> )	21,800
Goby, tidewater ( <i>Eucyclogobius newberryi</i> )	7,000
Kingfisher, Guam Micronesian ( <i>Halcyon cinnamomina cinnamomina</i> )	10,700
Madtom, Neosho ( <i>Noturus placidus</i> )	68,000
Manatee, West Indian ( <i>Trichechus manatus</i> )	466,100
Moorhen, Mariana ( <i>Gallinula chloropus guami</i> )	29,300
Mouse, Preble's meadow jumping ( <i>Zapus hudsonius prelei</i> )	30,500
Orchid, western prairie fringed ( <i>Platanthera praeclara</i> )	25,000
Otter, southern sea ( <i>Enhydra lutris nereis</i> )	403,200
Owl, Mexican spotted ( <i>Strix occidentalis lucida</i> )	9,800
Owl, northern spotted ( <i>Strix occidentalis caurina</i> )	496,800
Plover, piping ( <i>Charadrius melodus</i> )	8,400
Plover, western snowy ( <i>Charadrius alexandrinus nivosus</i> )	14,100
Pupfish, desert ( <i>Cyprinodon macularius</i> )	40,000
Snake, giant garter ( <i>Thamnophis gigas</i> )	60,000
Squirrel, Delmarva Peninsula fox ( <i>Sciurus niger cinereus</i> )	170,700
Sturgeon, Gulf ( <i>Acipenser oxyrinchus desotoi</i> )	26,000
Sturgeon, pallid ( <i>Scaphirhynchus albus</i> )	81,000
Sturgeon, shortnose ( <i>Acipenser brevirostrum</i> )	167,000
Sucker, Lost River ( <i>Deltistes luxatus</i> )	147,000
Sucker, razorback ( <i>Xyrauchen texanus</i> )	141,800
Sucker, shortnose ( <i>Chasmistes brevirostris</i> )	147,000
Tern roseate ( <i>Sterna dougallii dougallii</i> )	36,700
Thistle, Pitcher's ( <i>Cirsium pitcheri</i> )	17,000
Tortoise, desert ( <i>Gopherus</i> (=Xerobates, =Scaptochelys) agassizii)	321,300
Turtle, Kemp's 1=Atlantic) ridley sea ( <i>Lepidochelys kempii</i> )	78,500
Wolf, gray ( <i>Canis lupus</i> )	<u>328,400</u>
<b>Reasonably Identifiable Expenditures (Species by Species)</b>	<b>\$6,020,720</b>
<b>Expenditures Not Otherwise Accounted For (Multiple Species)</b>	<b>\$5,862,700</b>
<b>TOTAL Endangered and At Risk Species Expenditures (FY 2000)</b>	<b>\$11,883,420</b>

1999 Data Request For Federal Agencies - Total Expenditures from the Bureau of Reclamation

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs /Acquisition Cost
Mammals	bat, gray	Myotis grisescens	E	0	0
Mammals	bat, Hawaiian hoary	Lasiurus cinereus semotus	E	0	0
Mammals	bat, Indiana	Myotis sodalis	E	0	0
Mammals	bat, lesser long-nosed	Leptonycteris curasoae yerbabuena	E	0	0
Mammals	bat, little Mariana fruit	Pteropus tokudae	E	0	0
Mammals	bat, Mariana fruit	Pteropus mariannus mariannus	E	0	0
Mammals	bat, Mexican long-nosed	Leptonycteris nivalis	E	0	0
Mammals	bat, Ozark big-eared	Corynorhinus townsendii ingens	E	0	0
Mammals	bat, Virginia big-eared	Corynorhinus townsendii virginianus	E	0	0
Mammals	bear, grizzly	Ursus arctos horribilis	T	0	0
Mammals	bear, Louisiana black	Ursus americanus luteolus	T	0	0
Mammals	caribou, woodland	Rangifer tarandus caribou	E	0	0
Mammals	deer, Columbian white-tailed	Odocoileus virginianus leucurus	E	0	0
Mammals	deer, Key	Odocoileus virginianus clavium	E	0	0
Mammals	ferret, black-footed	Mustela nigripes	E	0	0
Mammals	fox, San Joaquin kit	Vulpes macrotis mutica	E	248,837	320,200
Mammals	jaguar	Panthera onca	E	0	0
Mammals	jaguarundi, Gulf Coast	Herpailurus yagouaroundi cacomitli	E	0	0
Mammals	jaguarundi, Sinaloa	Herpailurus yagouaroundi tolteca	E	0	0
Mammals	kangaroo rat, Fresno	Dipodomys nitratoides exilis	E	0	0
Mammals	kangaroo rat, giant	Dipodomys ingens	E	0	0
Mammals	kangaroo rat, Morro Bay	Dipodomys heermanni morroensis	E	0	0
Mammals	kangaroo rat, San Bernardino Merriam's	Dipodomys merriami parvus	E	0	0
Mammals	kangaroo rat, Stephens'	Dipodomys stephensi	E	0	0
Mammals	kangaroo rat, Tipton	Dipodomys nitratoides nitratoides	E	0	70,200
Mammals	manatee, West Indian	Trichechus manatus	E	0	0
Mammals	mountain beaver, Point Arena	Aplodontia rufa nigra	E	0	0
Mammals	Mouse, Alabama beach	Peromyscus polionotus ammobates	E	0	0
Mammals	Mouse, Anastasia Island beach	Peromyscus polionotus phasma	E	0	0
Mammals	Mouse, Choctawhatchee beach	Peromyscus polionotus allophrys	E	0	0
Mammals	Mouse, Key Largo cotton	Peromyscus gossypinus allapaticola	E	0	0
Mammals	mouse, Pacific pocket	Perognathus longimembris pacificus	E	0	0
Mammals	Mouse, Perdido Key beach	Peromyscus polionotus trissyllepsis	E	0	0
Mammals	mouse, Preble's meadow jumping	Zapus hudsonius preblei	T	0	0
Mammals	mouse, salt marsh harvest	Reithrodontomys raviventris	E	1,000	0
Mammals	Mouse, southeastern beach	Peromyscus polionotus niveiventris	T	0	0
Mammals	mouse, St. Andrew beach	Peromyscus polionotus peninsularis	E	0	0
Mammals	ocelot	Leopardus pardalis	E	0	0
Mammals	otter, southern sea	Enhydra lutris nereis	T	0	0
Mammals	panther, Florida	Puma concolor coryi	E	0	0
Mammals	prairie dog, Utah	Cynomys parvidens	T	0	0
Mammals	pronghorn, Sonoran	Antilocapra americana sonoriensis	E	0	0
Mammals	puma, eastern	Puma concolor cougar	E	0	0
Mammals	rabbit, Lower Keys marsh	Sylvilagus palustris hefneri	E	0	0
Mammals	rice rat	Oryzomys palustris natator	E	0	0
Mammals	sea-lion, Steller	Eumetopias jubatus	E, T	0	0
Mammals	seal, Caribbean monk	Monachus tropicalis	E	0	0
Mammals	seal, Guadalupe fur	Arctocephalus townsendi	T	0	0
Mammals	seal, Hawaiian monk	Monachus schauinslandi	E	0	0
Mammals	sheep, bighorn	Ovis canadensis	E	0	0
Mammals	sheep, bighorn	Ovis canadensis californiana	E	0	0
Mammals	squirrel, Carolina northern flying	Glaucomys sabrinus coloratus	E	0	0
Mammals	squirrel, Delmarva Peninsula fox	Sciurus niger cinereus	E	0	0
Mammals	squirrel, Mount Graham red	Tamiasciurus hudsonicus grahamensis	E	0	0

1999 Data Request For Federal Agencies - Total Expenditures from the Bureau of Reclamation

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs /Acquisition Cost
Mammals	squirrel, Virginia northern flying	Glaucomys sabrinus fuscus	E	0	0
Mammals	vole, Amargosa	Microtus californicus scirpensis	E	0	0
Mammals	vole, Florida salt marsh	Microtus pennsylvanicus dukecampbelli	E	0	0
Mammals	vole, Hualapai Mexican	Microtus mexicanus hualpaiensis	E	0	0
Mammals	whale, blue	Balaenoptera musculus	E	0	0
Mammals	whale, bowhead	Balaena mysticetus	E	0	0
Mammals	whale, finback	Balaenoptera physalus	E	0	0
Mammals	whale, humpback	Megaptera novaeangliae	E	0	0
Mammals	whale, right	Balaena glacialis	E	0	0
Mammals	whale, Sei	Balaenoptera borealis	E	0	0
Mammals	whale, sperm	Physeter catodon	E	0	0
Mammals	wolf, gray	Canis lupus	E, T	0	0
Mammals	wolf, red	Canis rufus	E	0	0
Mammals	woodrat, Key Largo	Neotoma floridana smalli	E	0	0
Birds	akepa, Hawaii	Loxops coccineus coccineus	E	0	0
Birds	akepa, Maui	Loxops coccineus ochraceus	E	0	0
Birds	akialoa, Kauai	Hemignathus procerus	E	0	0
Birds	akiapola'au	Hemignathus munroi	E	0	0
Birds	Albatross, short-tailed	Phoebastria albatrus	E	0	0
Birds	blackbird, yellow-shouldered	Agelaius xanthomus	E	0	0
Birds	bobwhite, masked	Colinus virginianus ridgwayi	E	0	0
Birds	broadbill, Guam	Myiagra freycineti	E	0	0
Birds	cahow	Pterodroma cahow	E	0	0
Birds	caracara, Audubon's crested	Polyborus plancus audubonii	T	0	0
Birds	condor, California	Gymnogyps californianus	E	5,000	0
Birds	coot, Hawaiian	Fulica americana alai	E	0	0
Birds	crane, Mississippi sandhill	Grus canadensis pulla	E	0	0
Birds	crane, whooping	Grus americana	E	1,246,500	0
Birds	creeper, Hawaii	Oreomystis mana	E	0	0
Birds	creeper, Molokai	Paroreomyza flammea	E	0	0
Birds	creeper, Oahu	Paroreomyza maculata	E	0	0
Birds	crow, Hawaiian	Corvus hawaiiensis	E	0	0
Birds	crow, Mariana	Corvus kubaryi	E	0	0
Birds	crow, white-necked	Corvus leucognaphalus	E	0	0
Birds	curlew, Eskimo	Numenius borealis	E	0	0
Birds	duck, Hawaiian	Anas wyvilliana	E	0	0
Birds	duck, Laysan	Anas laysanensis	E	0	0
Birds	eagle, bald	Haliaeetus leucocephalus	T	120,000	0
Birds	eider, spectacled	Somateria fischeri	T	0	0
Birds	eider, Steller's	Polysticta stelleri	T	0	0
Birds	falcon, American peregrine	Falco peregrinus anatum	DM	0	0
Birds	falcon, northern aplomado	Falco femoralis septentrionalis	E	0	0
Birds	finch, Laysan	Telespyza cantans	E	0	0
Birds	finch, Nihoa	Telespyza ultima	E	0	0
Birds	flycatcher, southwestern willow	Empidonax traillii extimus	E	2,334,048	0
Birds	gnatcatcher, coastal California	Polioptila californica californica	T	0	0
Birds	goose, Hawaiian	Branta sandvicensis	E	0	0
Birds	hawk, Hawaiian	Buteo solitarius	E	0	0
Birds	hawk, Puerto Rican broad-winged	Buteo platypterus brunnescens	E	0	0
Birds	hawk, Puerto Rican sharp-shinned	Accipiter striatus venator	E	0	0
Birds	honeycreeper, crested	Palmeria dolei	E	0	0
Birds	jay, Florida scrub	Aphelocoma coerulescens	T	0	0
Birds	kingfisher, Guam Micronesian	Halcyon cinnamomina cinnamomina	E	0	0
Birds	kite, Everglade snail	Rostrhamus sociabilis plumbeus	E	0	0

1999 Data Request For Federal Agencies - Total Expenditures from the Bureau of Reclamation

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs /Acquisition Cost
Birds	mallard, Mariana	Anas oustaleti	E	0	0
Birds	megapode, Micronesian	Megapodius laperouse	E	0	0
Birds	millerbird, Nihoa	Acrocephalus familiaris kingi	E	0	0
Birds	monarch, Tinian	Monarcha takatsukasae	T	0	0
Birds	moorhen, Hawaiian common	Gallinula chloropus sandvicensis	E	0	0
Birds	moorhen, Mariana common	Gallinula chloropus guami	E	0	0
Birds	murrelet, marbled	Brachyramphus marmoratus marmoratus	T	0	0
Birds	nightjar, Puerto Rican	Caprimulgus noctitherus	E	0	0
Birds	nukupu`u	Hemignathus lucidus	E	0	0
Birds	`o`o, Kauai	Moho braccatus	E	0	0
Birds	`o`u	Psittirostra psittacea	E	0	0
Birds	owl, Mexican spotted	Strix occidentalis lucida	T	0	0
Birds	owl, northern spotted	Strix occidentalis caurina	T	0	0
Birds	palila	Loxioides bailleui	E	0	0
Birds	parrot, Puerto Rican	Amazona vittata	E	0	0
Birds	parrotbill, Maui	Pseudonestor xanthophrys	E	0	0
Birds	pelican, brown	Pelecanus occidentalis	E	0	0
Birds	petrel, Hawaiian dark-rumped	Pterodroma phaeopygia sandwichensis	E	0	0
Birds	pigeon, Puerto Rican plain	Columba inornata wetmorei	E	0	0
Birds	Plover, piping	Charadrius melodus	E, T	1,310,500	0
Birds	plover, western snowy	Charadrius alexandrinus nivosus	T	0	0
Birds	po`ouli	Melamprosops phaeosoma	E	0	0
Birds	prairie-chicken, Attwater's greater	Tympanuchus cupido attwateri	E	0	0
Birds	pygmy-owl, cactus ferruginous	Glaucidium brasilianum cactorum	E	0	0
Birds	rail, California clapper	Rallus longirostris obsoletus	E	1,000	0
Birds	rail, Guam	Rallus owstoni	E	0	0
Birds	rail, light-footed clapper	Rallus longirostris levipes	E	0	0
Birds	rail, Yuma clapper	Rallus longirostris yumanensis	E	185,000	0
Birds	shearwater, Newell's Townsend's	Puffinus auricularis newelli	T	0	0
Birds	shrike, San Clemente loggerhead	Lanius ludovicianus mearnsi	E	0	0
Birds	sparrow, Cape Sable seaside	Ammodramus maritimus mirabilis	E	0	0
Birds	sparrow, Florida grasshopper	Ammodramus savannarum floridanus	E	0	0
Birds	sparrow, San Clemente sage	Amphispiza belli clementeae	T	0	0
Birds	stilt, Hawaiian	Himantopus mexicanus knudseni	E	0	0
Birds	stork, wood	Mycteria americana	E	0	0
Birds	swiftlet, Mariana gray	Aerodramus vanikorensis bartschi	E	0	0
Birds	tern, California least	Sterna antillarum browni	E	0	0
Birds	tern, least	Sterna antillarum	E	1,246,500	0
Birds	tern, roseate	Sterna dougallii dougallii	E, T	0	0
Birds	thrush, large Kauai	Myadestes myadestinus	E	0	0
Birds	thrush, Molokai	Myadestes lanaiensis rutha	E	0	0
Birds	thrush, small Kauai	Myadestes palmeri	E	0	0
Birds	towhee, Inyo California	Pipilo crissalis eremophilus	T	0	0
Birds	vireo, black-capped	Vireo atricapillus	E	0	0
Birds	vireo, least Bell's	Vireo bellii pusillus	E	0	0
Birds	warbler, Bachman's	Vermivora bachmanii	E	0	0
Birds	warbler, golden-cheeked	Dendroica chrysoparia	E	0	0
Birds	warbler, Kirtland's	Dendroica kirtlandii	E	0	0
Birds	warbler, nightingale reed	Acrocephalus luscini	E	0	0
Birds	white-eye, bridled	Zosterops conspicillatus conspicillatus	E	0	0
Birds	woodpecker, ivory-billed	Campephilus principalis	E	0	0
Birds	woodpecker, red-cockaded	Picoides borealis	E	0	0
Reptiles	anole, Culebra Island giant	Anolis roosevelti	E	0	0
Reptiles	boa, Mona	Epicrates monensis monensis	T	0	0

1999 Data Request For Federal Agencies - Total Expenditures from the Bureau of Reclamation

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs /Acquisition Cost
Reptiles	boa, Puerto Rican	Epicrates inornatus	E	0	0
Reptiles	boa, Virgin Islands tree	Epicrates monensis granti	E	0	0
Reptiles	crocodile, American	Crocodylus acutus	E	0	0
Reptiles	gecko, Monito	Sphaerodactylus micropithecus	E	0	0
Reptiles	iguana, Mona ground	Cyclura stejnegeri	T	0	0
Reptiles	lizard, blunt-nosed leopard	Gambelia silus	E	5,000	70,200
Reptiles	lizard, Coachella Valley fringe-toed	Uma inornata	T	0	0
Reptiles	lizard, Island night	Xantusia riversiana	T	0	0
Reptiles	lizard, St. Croix ground	Ameiva polops	E	0	0
Reptiles	rattlesnake, New Mexican ridge-nosed	Crotalus willardi obscurus	T	0	0
Reptiles	sea turtle, green	Chelonia mydas	E, T	0	0
Reptiles	sea turtle, hawksbill	Eretmochelys imbricata	E	0	0
Reptiles	sea turtle, Kemp's ridley	Lepidochelys kempii	E	0	0
Reptiles	sea turtle, leatherback	Dermodochelys coriacea	E	0	0
Reptiles	sea turtle, loggerhead	Caretta caretta	T	0	0
Reptiles	sea turtle, olive ridley	Lepidochelys olivacea	E, T	0	0
Reptiles	skink, bluetail mole	Eumeces egregius lividus	T	0	0
Reptiles	skink, sand	Neoseps reynoldsi	T	0	0
Reptiles	snake, Atlantic salt marsh	Nerodia clarkii taeniata	T	0	0
Reptiles	snake, Concho water	Nerodia paucimaculata	T	0	0
Reptiles	snake, copperbelly water	Nerodia erythrogaster neglecta	T	0	0
Reptiles	snake, eastern indigo	Drymarchon corais couperi	T	0	0
Reptiles	snake, giant garter	Thamnophis gigas	T	22,000	0
Reptiles	snake, Lake Erie water	Nerodia sipedon insularum	T	0	0
Reptiles	snake, San Francisco garter	Thamnophis sirtalis tetrataenia	E	0	0
Reptiles	tortoise, desert	Gopherus agassizii	T	115,000	0
Reptiles	tortoise, gopher	Gopherus polyphemus	T	0	0
Reptiles	turtle, Alabama red-belly	Pseudemys alabamensis	E	0	0
Reptiles	turtle, bog	Clemmys muhlenbergii	T	0	0
Reptiles	turtle, flattened musk	Sternotherus depressus	T	0	0
Reptiles	turtle, Plymouth redbelly	Pseudemys rubriventris bangsi	E	0	0
Reptiles	turtle, ringed map	Graptemys oculifera	T	0	0
Reptiles	turtle, yellow-blotched map	Graptemys flavimaculata	T	0	0
Reptiles	whipsnake, Alameda	Masticophis lateralis euryxanthus	T	0	0
Amphibians	coqui, golden	Eleutherodactylus jasperii	T	0	0
Amphibians	frog, California red-legged	Rana aurora draytonii	T	45,472	250,000
Amphibians	guajon	Eleutherodactylus cooki	T	0	0
Amphibians	salamander, Barton Springs	Eurycea sosorum	E	0	0
Amphibians	salamander, Cheat Mountain	Plethodon nettingi	T	0	0
Amphibians	salamander, desert slender	Batrachoseps aridus	E	0	0
Amphibians	salamander, flatwoods	Ambystoma cingulatum	T	0	0
Amphibians	salamander, Red Hills	Phacognathus hubrichti	T	0	0
Amphibians	salamander, San Marcos	Eurycea nana	T	0	0
Amphibians	salamander, Santa Cruz long-toed	Ambystoma macrodactylum croceum	E	0	0
Amphibians	salamander, Shenandoah	Plethodon shenandoah	E	0	0
Amphibians	salamander, Sonoran tiger	Ambystoma tigrinum stebbinsi	E	0	0
Amphibians	salamander, Texas blind	Typhlomolge rathbuni	E	0	0
Amphibians	toad, arroyo	Bufo microscaphus californicus	E	0	0
Amphibians	toad, Houston	Bufo houstonensis	E	0	0
Amphibians	toad, Puerto Rican crested	Peltophryne lemur	T	0	0
Amphibians	toad, Wyoming	Bufo hemiophrys baxteri	E	0	0
Fishes	catfish, Yaqui	Ictalurus pricei	T	0	0
Fishes	cavefish, Alabama	Speoplatyrhinus poulsoni	E	0	0
Fishes	cavefish, Ozark	Amblyopsis rosae	T	0	0

1999 Data Request For Federal Agencies - Total Expenditures from the Bureau of Reclamation

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs /Acquisition Cost
Fishes	chub, bonytail	Gila elegans	E	1,089,700	0
Fishes	chub, Borax Lake	Gila boraxobius	E	0	0
Fishes	chub, Chihuahua	Gila nigrescens	T	0	0
Fishes	chub, humpback	Gila cypha	E	1,498,450	0
Fishes	chub, Hutton tui	Gila bicolor ssp.	T	0	0
Fishes	chub, Mohave tui	Gila bicolor mohavensis	E	0	0
Fishes	chub, Oregon	Oregonichthys crameri	E	0	0
Fishes	chub, Owens tui	Gila bicolor snyderi	E	0	0
Fishes	chub, Pahranaagat roundtail	Gila robusta jordani	E	0	0
Fishes	chub, slender	Erimystax cahni	T	0	0
Fishes	chub, Sonora	Gila ditaenia	T	0	0
Fishes	chub, spotfin	Cyprinella monacha	T	0	0
Fishes	chub, Virgin River	Gila robusta seminuda	E	30,000	0
Fishes	chub, Yaqui	Gila purpurea	E	0	0
Fishes	cui-ui	Chasmistes cujus	E	830,492	0
Fishes	dace, Ash Meadows speckled	Rhinichthys osculus nevadensis	E	0	0
Fishes	dace, blackside	Phoxinus cumberlandensis	T	0	0
Fishes	dace, Clover Valley speckled	Rhinichthys osculus oligoporus	E	0	0
Fishes	dace, desert	Eremichthys acros	T	0	0
Fishes	dace, Foskett speckled	Rhinichthys osculus ssp.	T	0	0
Fishes	dace, Independence Valley speckled	Rhinichthys osculus lethoporus	E	0	0
Fishes	dace, Kendall Warm Springs	Rhinichthys osculus thermalis	E	0	0
Fishes	dace, Moapa	Moapa coriacea	E	5,000	0
Fishes	darler, amber	Percina antesella	E	0	0
Fishes	darler, bayou	Etheostoma rubrum	T	0	0
Fishes	darler, bluemask	Etheostoma sp.	E	0	0
Fishes	darler, boulder	Etheostoma wapiti	E	0	0
Fishes	darler, Cherokee	Etheostoma scotti	T	0	0
Fishes	darler, duskytail	Etheostoma percnum	E	0	0
Fishes	darler, Etowah	Etheostoma etowahae	E	0	0
Fishes	darler, fountain	Etheostoma fonticola	E	0	0
Fishes	darler, goldline	Percina aurolincata	T	0	0
Fishes	darler, leopard	Percina pantherina	T	0	0
Fishes	darler, Maryland	Etheostoma sellare	E	0	0
Fishes	darler, Niangua	Etheostoma nianguae	T	0	0
Fishes	darler, Okaloosa	Etheostoma okaloosae	E	0	0
Fishes	darler, relict	Etheostoma chienense	E	0	0
Fishes	darler, slackwater	Etheostoma boschungii	T	0	0
Fishes	darler, snail	Percina tanasi	T	0	0
Fishes	darler, watercross	Etheostoma nuchale	E	0	0
Fishes	gambusia, Big Bend	Gambusia gaigei	E	0	0
Fishes	gambusia, Clear Creek	Gambusia heterochir	E	0	0
Fishes	gambusia, Pecos	Gambusia nobilis	E	17,500	0
Fishes	gambusia, San Marcos	Gambusia georgei	E	0	0
Fishes	goby, tidewater	Eucyclogobius newberryi	E	0	0
Fishes	logperch, Conasauga	Percina jenkinsi	E	0	0
Fishes	logperch, Roanoke	Percina rex	E	0	0
Fishes	madtom, Neosho	Noturus placidus	T	0	0
Fishes	madtom, pygmy	Noturus stanuli	E	0	0
Fishes	madtom, Scioto	Noturus trautmani	E	0	0
Fishes	madtom, smoky	Noturus baileyi	E	0	0
Fishes	madtom, yellowfin	Noturus flavipinnis	T	0	0
Fishes	minnow, loach	Tiaroga cobitis	T	175,000	0
Fishes	minnow, Rio Grande silvery	Hybognathus amarus	E	794,000	0



1999 Data Request For Federal Agencies - Total Expenditures from the Bureau of Reclamation

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs /Acquisition Cost
Fishes	pikeminnow, Colorado	Ptychocheilus lucius	E	4,248,474	0
Fishes	poolfish, Pahrump	Empetrichthys latos	E	0	0
Fishes	pupfish, Ash Meadows Amargosa	Cyprinodon nevadensis mionectes	E	0	0
Fishes	pupfish, Comanche Springs	Cyprinodon elegans	E	17,500	0
Fishes	pupfish, desert	Cyprinodon macularius	E	4,200	0
Fishes	pupfish, Devils Hole	Cyprinodon diabolis	E	1,450	0
Fishes	pupfish, Leon Springs	Cyprinodon bovinus	E	0	0
Fishes	pupfish, Owens	Cyprinodon radiosus	E	0	0
Fishes	pupfish, Warm Springs	Cyprinodon nevadensis pectoralis	E	0	0
Fishes	salmon, chinook	Oncorhynchus tshawytscha	E, T	4,181,000	240,000
Fishes	salmon, chum	Oncorhynchus keta	T	0	0
Fishes	salmon, coho	Oncorhynchus kisutch	T	2,220,176	0
Fishes	salmon, sockeye	Oncorhynchus nerka	E, T	26,000	0
Fishes	sculpin, pygmy	Cottus pygmaeus	T	0	0
Fishes	shiner, Arkansas River	Notropis girardi	T	0	0
Fishes	shiner, beautiful	Cyprinella formosa	T	0	0
Fishes	shiner, blue	Cyprinella caerulea	T	0	0
Fishes	shiner, Cahaba	Notropis cahabae	E	0	0
Fishes	shiner, Cape Fear	Notropis mekistocholas	E	0	0
Fishes	shiner, palezone	Notropis albizonatus	E	0	0
Fishes	shiner, Pecos bluntnose	Notropis simus pecosensis	T	537,000	0
Fishes	shiner, Topeka	Notropis topeka	E	0	0
Fishes	silverside, Waccamaw	Menidia extensa	T	0	0
Fishes	smelt, delta	Hypomesus transpacificus	T	31,000	0
Fishes	spikedace	Meda fulgida	T	175,000	0
Fishes	spinedace, Big Spring	Lepidomeda mollispinis pratensis	T	0	0
Fishes	spinedace, Little Colorado	Lepidomeda vittata	T	0	0
Fishes	spinedace, White River	Lepidomeda albivallis	E	0	0
Fishes	splittail, Sacramento	Pogonichthys macrolepidotus	T	120,000	0
Fishes	springfish, Hiko White River	Crenichthys baileyi grandis	E	0	0
Fishes	springfish, Railroad Valley	Crenichthys nevadae	T	0	0
Fishes	springfish, White River	Crenichthys baileyi baileyi	E	0	0
Fishes	steelhead	Oncorhynchus mykiss	E, T	4,694,000	0
Fishes	stickleback, unarmored threespine	Gasterosteus aculeatus williamsoni	E	0	0
Fishes	sturgeon, Gulf	Acipenser oxyrinchus desotoi	T	0	0
Fishes	sturgeon, pallid	Scaphirhynchus albus	E	546,300	0
Fishes	sturgeon, shortnose	Acipenser brevirostrum	E	0	0
Fishes	sturgeon, white	Acipenser transmontanus	E	0	0
Fishes	sucker, June	Chasmistes liorus	E	15,400	0
Fishes	sucker, Lost River	Deltistes luxatus	E	779,240	0
Fishes	Sucker, Modoc	Catostomus microps	E	0	0
Fishes	sucker, razorback	Xyrauchen texanus	E	5,348,474	600,000
Fishes	Sucker, shortnose	Chasmistes brevirostris	E	779,240	0
Fishes	sucker, Warner	Catostomus warnerensis	T	0	0
Fishes	topminnow, Gila	Poeciliopsis occidentalis	E	175,000	0
Fishes	trout, Apache	Oncorhynchus apache	T	0	0
Fishes	trout, bull	Salvelinus confluentus	T	776,000	0
Fishes	trout, Gila	Oncorhynchus gilae	E	0	0
Fishes	trout, greenback cutthroat	Oncorhynchus clarki stomias	T	0	0
Fishes	trout, Lahontan cutthroat	Oncorhynchus clarki henshawi	T	900,492	0
Fishes	trout, Little Kern golden	Oncorhynchus aguabonita whitei	T	0	0
Fishes	trout, Paiute cutthroat	Oncorhynchus clarki seleniris	T	0	0
Fishes	woundfin	Plagopterus argentissimus	E	62,000	0
Clams	acomshell, southern	Epioblasma othcaloogensis	E	0	0

1999 Data Request For Federal Agencies - Total Expenditures from the Bureau of Reclamation

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs /Acquisition Cost
Clams	bankclimber, purple	Elliptoideus sloatianus	T	0	0
Clams	bean, Cumberland	Villosa trabalis	E	0	0
Clams	bean, purple	Villosa perpurpurea	E	0	0
Clams	blossom, green	Epioblasma torulosa gubernaculum	E	0	0
Clams	blossom, tubercled	Epioblasma torulosa torulosa	E	0	0
Clams	blossom, turgid	Epioblasma turgidula	E	0	0
Clams	blossom, yellow	Epioblasma florentina florentina	E	0	0
Clams	catspaw	Epioblasma obliquata obliquata	E	0	0
Clams	catspaw, white	Epioblasma obliquata perobliqua	E	0	0
Clams	clubshell	Pleurobema clava	E	0	0
Clams	clubshell, black	Pleurobema curtum	E	0	0
Clams	clubshell, ovate	Pleurobema perovatum	E	0	0
Clams	clubshell, southern	Pleurobema decisum	E	0	0
Clams	combshell, Cumberlandian	Epioblasma brevidens	E	0	0
Clams	combshell, southern	Epioblasma penita	E	0	0
Clams	combshell, upland	Epioblasma metastriata	E	0	0
Clams	elktoe, Appalachian	Alasmidonta raveneliana	E	0	0
Clams	elktoe, Cumberland	Alasmidonta atropurpurea	E	0	0
Clams	fanshell	Cyrogenia stegaria	E	0	0
Clams	fatmucket, Arkansas	Lampsilis powelli	T	0	0
Clams	heelsplitter, Alabama	Potamilus inflatus	T	0	0
Clams	heelsplitter, Carolina	Lasmigona decorata	E	0	0
Clams	higgins eye	Lampsilis higginsii	E	0	0
Clams	kidneyshell, triangular	Ptychobranhus greeni	E	0	0
Clams	lampmussel, Alabama	Lampsilis virescens	E	0	0
Clams	lilliput, pale	Toxolasma cylindrellus	E	0	0
Clams	mapleleaf, winged	Quadrula fragosa	E	0	0
Clams	moccasinshell, Alabama	Medionidus acutissimus	T	0	0
Clams	moccasinshell, Coosa	Medionidus parvulus	E	0	0
Clams	moccasinshell, Gulf	Medionidus penicillatus	E	0	0
Clams	moccasinshell, Ochlockonee	Medionidus simpsonianus	E	0	0
Clams	monkeyface, Appalachian	Quadrula sparsa	E	0	0
Clams	monkeyface, Cumberland	Quadrula intermedia	E	0	0
Clams	mucket, orangenacre	Lampsilis perovalis	T	0	0
Clams	mucket, pink	Lampsilis abrupta	E	0	0
Clams	mussel, oyster	Epioblasma capsaeformis	E	0	0
Clams	pearlshell, Louisiana	Margaritifera hembeli	T	0	0
Clams	pearlymussel, birdwing	Conradilla caelata	E	0	0
Clams	pearlymussel, cracking	Hemistena lata	E	0	0
Clams	pearlymussel, Curtis	Epioblasma florentina curtisii	E	0	0
Clams	pearlymussel, dromedary	Dromus dromas	E	0	0
Clams	pearlymussel, littlewing	Pegias fabula	E	0	0
Clams	pearlymussel, white wartyback	Plethobasus cicatricosus	E	0	0
Clams	pigtoe, Cumberland	Pleurobema gibberum	E	0	0
Clams	pigtoe, dark	Pleurobema furvum	E	0	0
Clams	pigtoe, finerayed	Fusconaia cuneolus	E	0	0
Clams	pigtoe, flat	Pleurobema marshalli	E	0	0
Clams	pigtoe, heavy	Pleurobema taitianum	E	0	0
Clams	pigtoe, oval	Pleurobema pyriforme	E	0	0
Clams	pigtoe, rough	Pleurobema plenum	E	0	0
Clams	pigtoe, shiny	Fusconaia cor	E	0	0
Clams	pigtoe, southern	Pleurobema georgianum	E	0	0
Clams	pimpleback, orangefoot	Plethobasus cooperianus	E	0	0
Clams	pocketbook, fat	Potamilus capax	E	0	0

1999 Data Request For Federal Agencies - Total Expenditures from the Bureau of Reclamation

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs /Acquisition Cost
Clams	pocketbook, finelined	Lampsilis altilis	T	0	0
Clams	pocketbook, Ouachita rock	Arkansia wheeleri	E	0	0
Clams	pocketbook, shinyrayed	Lampsilis subangulata	E	0	0
Clams	pocketbook, speckled	Lampsilis streckeri	E	0	0
Clams	rabbitsfoot, rough	Quadrula cylindrica strigillata	E	0	0
Clams	riffleshell, northern	Epioblasma torulosa rangiana	E	0	0
Clams	riffleshell, tan	Epioblasma florentina walkeri	E	0	0
Clams	ring pink	Obovaria retusa	E	0	0
Clams	slabshell, Chipola	Elliptio chipolaensis	T	0	0
Clams	spiny mussel, James	Pleurobema collina	E	0	0
Clams	spiny mussel, Tar River	Elliptio steinstansana	E	0	0
Clams	stirrupshell	Quadrula stapes	E	0	0
Clams	three-ridge, fat	Amblema neislerii	E	0	0
Clams	wedgemussel, dwarf	Alasmidonta heterodon	E	0	0
Snails	ambersnail, Kanab	Oxyloma haydeni kanabensis	E	60,000	0
Snails	elimia, lacy	Elimia crenatella	T	0	0
Snails	limpet, Banbury Springs	Lanx sp.	E	0	0
Snails	lioplax, cylindrical	Lioplax cyclostomaformis	E	0	0
Snails	marstonia, royal	Pyrgulopsis ogmorhaphae	E	0	0
Snails	pebblesnail, flat	Lepyrium showalteri	E	0	0
Snails	riversnail, Anthony's	Athearnia anthonyi	E	0	0
Snails	rocksnail, painted	Leptoxis taeniata	T	0	0
Snails	rocksnail, plicate	Leptoxis plicata	E	0	0
Snails	rocksnail, round	Leptoxis ampla	T	0	0
Snails	shagreen, Magazine Mountain	Mesodon magazinensis	T	0	0
Snails	snail, Bliss Rapids	Taylorconcha serpenticola	T	0	0
Snails	snail, Chittanooga ovate amber	Succinea chittengoensis	T	0	0
Snails	snail, flat-spined three-toothed	Triodopsis platysayoides	T	0	0
Snails	snail, Iowa Pleistocene	Discus macclintocki	E	0	0
Snails	snail, Morro shoulderband	Helminthoglypta walkeriana	E	0	0
Snails	snail, noonday	Mesodon clarki nantahala	T	0	0
Snails	snail, painted snake coiled forest	Anguispira picta	T	0	0
Snails	snail, Snake River physa	Physa natricina	E	0	0
Snails	snail, Stock Island tree	Orthalicus reses	T	0	0
Snails	snail, tulotoma	Tulotoma magnifica	E	0	0
Snails	snail, Utah valvata	Valvata utahensis	E	185,000	0
Snails	snail, Virginia fringed mountain	Polygyriscus virginianus	E	0	0
Snails	snails, Oahu tree	Achatinella spp.	E	0	0
Snails	spring snail, Alamosa	Tryonia alamosae	E	0	0
Snails	spring snail, Bruneau Hot	Pyrgulopsis bruneauensis	E	0	0
Snails	spring snail, Idaho	Fontelicella idahoensis	E	0	0
Snails	spring snail, Socorro	Pyrgulopsis neomexicana	E	0	0
Insects	beetle, American burying	Nicrophorus americanus	E	0	0
Insects	beetle, Coffin Cave mold	Batrisodes texanus	E	0	0
Insects	beetle, Comal Springs dryopid	Stygoparnus comalensis	E	0	0
Insects	beetle, Comal Springs riffle	Heterelmis comalensis	E	0	0
Insects	beetle, delta green ground	Elaphrus viridis	T	1,670	0
Insects	beetle, Hungerford's crawling water	Brychius hungerfordi	E	0	0
Insects	beetle, Kretschmarr Cave mold	Texamaurops reddelli	E	0	0
Insects	beetle, Mount Hermon June	Polyphylla barbata	E	0	0
Insects	beetle, Tooth Cave ground	Rhadine persephone	E	0	0
Insects	beetle, valley elderberry longhorn	Desmocerus californicus dimorphus	T	0	0
Insects	butterfly, bay checkerspot	Euphydryas editha bayensis	T	0	0
Insects	butterfly, Behren's silverspot	Speyeria zerene behrensii	E	0	0

1999 Data Request For Federal Agencies - Total Expenditures from the Bureau of Reclamation

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs /Acquisition Cost
Insects	butterfly, callippe silverspot	Speyeria callippe callippe	E	0	0
Insects	butterfly, El Segundo blue	Euphilotes batoides allyni	E	0	0
Insects	butterfly, Kerner blue	Lycaeides melissa samuelis	E	0	0
Insects	butterfly, Lange's metalmark	Apodemia mormo langei	E	0	0
Insects	butterfly, lotis blue	Lycaeides argyrognomon lotis	E	0	0
Insects	butterfly, mission blue	Icaricia icarioides missionensis	E	0	0
Insects	butterfly, Mitchell's satyr	Neonympha mitchellii mitchellii	E	0	0
Insects	butterfly, Myrtle's silverspot	Speyeria zerene myrteae	E	0	0
Insects	butterfly, Oregon silverspot	Speyeria zerene hippolyta	T	0	0
Insects	butterfly, Palos Verdes blue	Glaucopteryx lydamus palosverdesensis	E	0	0
Insects	butterfly, Quino checkerspot	Euphydryas editha quino	E	0	0
Insects	butterfly, Saint Francis' satyr	Neonympha mitchellii francisci	E	0	0
Insects	butterfly, San Bruno elfin	Callophrys mossii bayensis	E	0	0
Insects	butterfly, Schaus swallowtail	Heraclides aristodemus ponceanus	E	0	0
Insects	butterfly, Smith's blue	Euphilotes enoptes smithi	E	0	0
Insects	butterfly, Uncompahgre fritillary	Boloria acrocneuma	E	0	0
Insects	dragonfly, Hine's emerald	Somatochlora hineana	E	0	0
Insects	fly, Delhi Sands flower-loving	Rhaphiomidas terminatus abdominalis	E	0	0
Insects	grasshopper, Zayante band-winged	Trimerotropis infantilis	E	0	0
Insects	moth, Kern primrose sphinx	Euproserpinus euterpe	T	0	0
Insects	naucorid, Ash Meadows	Ambrysus amargosus	T	0	0
Insects	skipper, Laguna Mountains	Pyrgus ruralis lagunae	E	0	0
Insects	skipper, Pawnee montane	Hesperia leonardus montana	T	0	0
Insects	tiger beetle, northeastern beach	Cicindela dorsalis dorsalis	T	0	0
Insects	tiger beetle, Puritan	Cicindela puritana	T	0	0
Arachnids	harvestman, Bee Creek Cave	Texella reddelli	E	0	0
Arachnids	harvestman, Bone Cave	Texella reyesi	E	0	0
Arachnids	pseudoscorpion, Tooth Cave	Tartarocreagriss texana	E	0	0
Arachnids	spider, spruce-fir moss	Microhexura montivaga	E	0	0
Arachnids	spider, Tooth Cave	Neoleptoneta myopica	E	0	0
Crustaceans	amphipod, Hay's Spring	Stygobromus hayi	E	0	0
Crustaceans	amphipod, Illinois cave	Gammarus acherondytes	E	0	0
Crustaceans	amphipod, Peck's cave	Stygobromus pecki	E	0	0
Crustaceans	crayfish, cave	Cambarus zophonastes	E	0	0
Crustaceans	crayfish, cave	Cambarus aculabrum	E	0	0
Crustaceans	crayfish, Nashville	Orconectes shoupi	E	0	0
Crustaceans	crayfish, Shasta	Pacifastacus fortis	E	0	0
Crustaceans	fairly shrimp, Conservancy	Branchinecta conservatio	E	0	0
Crustaceans	fairly shrimp, longhorn	Branchinecta longiantenna	E	0	0
Crustaceans	fairly shrimp, Riverside	Streptocephalus woottoni	E	0	0
Crustaceans	fairly shrimp, San Diego	Branchinecta sandiegonensis	E	0	0
Crustaceans	fairly shrimp, vernal pool	Branchinecta lynchi	T	1,670	444,000
Crustaceans	isopod, Lee County cave	Lirceus usdagalun	E	0	0
Crustaceans	isopod, Madison Cave	Antrolana lira	T	0	0
Crustaceans	isopod, Socorro	Thermosphaeroma thermophilus	E	0	0
Crustaceans	shrimp, Alabama cave	Palaemonias alabamae	E	0	0
Crustaceans	shrimp, California freshwater	Syncaris pacifica	E	0	0
Crustaceans	shrimp, Kentucky cave	Palaemonias ganteri	E	0	0
Crustaceans	shrimp, Squirrel Chimney Cave	Palaemonetes cummingsi	T	0	0
Crustaceans	tadpole shrimp, vernal pool	Lepidurus packardi	E	1,670	240,000
Flowering Plants	a'e	Zanthoxylum hawaiiense	E	0	0
Flowering Plants	a'e	Zanthoxylum dipetalum tomentosum	E	0	0
Flowering Plants	agave, Arizona	Agave arizonica	E	0	0
Flowering Plants	'aiea	Nothocestrum breviflorum	E	0	0

1999 Data Request For Federal Agencies - Total Expenditures from the Bureau of Reclamation

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs /Acquisition Cost
Flowering Plants	aiia	Nothoecstrum peltatum	E	0	0
Flowering Plants	akoko	Euphorbia haelecleana	E	0	0
Flowering Plants	akoko	Chamaesyce rockii	E	0	0
Flowering Plants	akoko	Chamaesyce herbstii	E	0	0
Flowering Plants	akoko	Chamaesyce kuwaleana	E	0	0
Flowering Plants	akoko	Chamaesyce celastroides kaenana	E	0	0
Flowering Plants	akoko	Chamaesyce halemanui	E	0	0
Flowering Plants	akoko	Chamaesyce deppeana	E	0	0
Flowering Plants	akoko, Ewa Plains	Chamaesyce skottsbergii kalaeloana	E	0	0
Flowering Plants	alani	Melicope saint-johnii	E	0	0
Flowering Plants	alani	Melicope ovalis	E	0	0
Flowering Plants	alani	Melicope adscendens	E	0	0
Flowering Plants	alani	Melicope zahlbruckneri	E	0	0
Flowering Plants	alani	Melicope reflexa	E	0	0
Flowering Plants	alani	Melicope quadrangularis	E	0	0
Flowering Plants	alani	Melicope pallida	E	0	0
Flowering Plants	alani	Melicope munroi	E	0	0
Flowering Plants	alani	Melicope balloui	E	0	0
Flowering Plants	alani	Melicope knudsenii	E	0	0
Flowering Plants	alani	Melicope lydgatei	E	0	0
Flowering Plants	alani	Melicope mucronulata	E	0	0
Flowering Plants	alani	Melicope haupeensis	E	0	0
Flowering Plants	allocarya, Calistoga	Plagiobothrys strictus	E	0	0
Flowering Plants	alopecurus, Sonoma	Alopecurus aequalis sonomensis	E	0	0
Flowering Plants	amaranth, seabeach	Amaranthus pumilus	T	0	0
Flowering Plants	ambrosia, south Texas	Ambrosia cheiranthifolia	E	0	0
Flowering Plants	amphianthus, little	Amphianthus pusillus	T	0	0
Flowering Plants	anaunau	Lepidium arbuscula	E	0	0
Flowering Plants	anunu	Sicyos alba	E	0	0
Flowering Plants	arrowhead, bunched	Sagittaria fasciculata	E	0	0
Flowering Plants	aster, decurrent false	Boltonia decurrens	T	0	0
Flowering Plants	aster, Florida golden	Chrysopsis floridana	E	0	0
Flowering Plants	aster, Ruth's golden	Pityopsis ruthii	E	0	0
Flowering Plants	aupaka	Isodendron laurifolium	E	0	0
Flowering Plants	aupaka	Isodendron hosakae	E	0	0
Flowering Plants	aupaka	Isodendron longifolium	T	0	0
Flowering Plants	avens, spreading	Geum radiatum	E	0	0
Flowering Plants	awikiwiki	Canavalia molokaiensis	E	0	0
Flowering Plants	awiwi	Hedyotis cookiana	E	0	0
Flowering Plants	awiwi	Centaurium sebaeoides	E	0	0
Flowering Plants	ayenia, Texas	Ayenia limitaris	E	0	0
Flowering Plants	Baccharis, Encinitas	Baccharis vanessae	T	0	0
Flowering Plants	barberry, island	Berberis pinnata insularis	E	0	0
Flowering Plants	barberry, Nevin's	Berberis nevinii	E	0	0
Flowering Plants	barberry, Truckee	Berberis sonnei	E	0	0
Flowering Plants	bariaco	Trichilia triacantha	E	0	0
Flowering Plants	beaked-rush, Knieskem's	Rhynchospora knieskernii	T	0	0
Flowering Plants	bear-poppy, dwarf	Arctomecon humilis	E	0	0
Flowering Plants	beardtongue, Penland	Penstemon penlandii	E	0	0
Flowering Plants	beargrass, Britton's	Nolina brittoniana	E	0	0
Flowering Plants	beauty, Harper's	Harperocallis flava	E	0	0
Flowering Plants	bedstraw, El Dorado	Galium californicum sierrae	E	0	0
Flowering Plants	bedstraw, island	Galium buxifolium	E	0	0
Flowering Plants	bellflower, Brooksville	Campanula robinsiae	E	0	0

1999 Data Request For Federal Agencies - Total Expenditures from the Bureau of Reclamation

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs /Acquisition Cost
Flowering Plants	birch, Virginia round-leaf	Betula uber	T	0	0
Flowering Plants	bird's beak, palmate-bracted	Cordylanthus palmatus	E	7,142	0
Flowering Plants	bird's-beak, Pennell's	Cordylanthus tenuis capillaris	E	0	0
Flowering Plants	bird's-beak, salt marsh	Cordylanthus maritimus maritimus	E	0	0
Flowering Plants	bird's-beak, soft	Cordylanthus mollis mollis	E	1,000	0
Flowering Plants	birds-in-a-nest, white	Macbridea alba	T	0	0
Flowering Plants	bittercress, small-anthered	Cardamine micranthera	E	0	0
Flowering Plants	bladderpod, Dudley Bluffs	Lesquerella congesta	T	0	0
Flowering Plants	bladderpod, kodachrome	Lesquerella tumulosa	E	0	0
Flowering Plants	bladderpod, lyrate	Lesquerella lyrata	T	0	0
Flowering Plants	bladderpod, Missouri	Lesquerella filiformis	E	0	0
Flowering Plants	bladderpod, San Bernardino Mountains	Lesquerella kingii bernardina	E	0	0
Flowering Plants	bladderpod, Spring Creek	Lesquerella perforata	E	0	0
Flowering Plants	bladderpod, white	Lesquerella pallida	E	0	0
Flowering Plants	blazingstar, Ash Meadows	Mentzelia leucophylla	T	0	0
Flowering Plants	blazingstar, Heller's	Liatris helleri	T	0	0
Flowering Plants	blazingstar, scrub	Liatris ohlingerac	E	0	0
Flowering Plants	bluc-star, Kearney's	Amsonia kearneyana	E	0	0
Flowering Plants	bluecurls, Hidden Lake	Trichostema austromontanum compactum	T	0	0
Flowering Plants	bluegrass, Hawaiian	Poa sandvicensis	E	0	0
Flowering Plants	bluegrass, Mann's	Poa mannii	E	0	0
Flowering Plants	bluegrass, Napa	Poa napensis	E	0	0
Flowering Plants	bluegrass, San Bernardino	Poa atropurpurea	E	0	0
Flowering Plants	bluet, Roan Mountain	Hedyotis purpurea montana	E	0	0
Flowering Plants	bonamia, Florida	Bonamia grandiflora	T	0	0
Flowering Plants	boxwood, Vahl's	Buxus vahlII	E	0	0
Flowering Plants	brodiaea, Chinese Camp	Brodiaea pallida	T	0	0
Flowering Plants	brodiaea, thread-leaved	Brodiaea filifolia	T	0	0
Flowering Plants	broom, San Clemente Island	Lotus dendroideus traskiae	E	0	0
Flowering Plants	buckwheat, cushenbury	Eriogonum ovalifolium vineum	E	0	0
Flowering Plants	buckwheat, Ione	Eriogonum apricum	E	0	0
Flowering Plants	buckwheat, scrub	Eriogonum longifolium gnaphalifolium	T	0	0
Flowering Plants	buckwheat, steamboat	Eriogonum ovalifolium williamsiae	E	0	0
Flowering Plants	bulrush, Northeastern	Scirpus ancistrochaetus	E	0	0
Flowering Plants	bush-clover, prairie	Lespedeza leptostachya	T	0	0
Flowering Plants	bush-mallow, San Clemente Island	Malacothamnus clementinus	E	0	0
Flowering Plants	bush-mallow, Santa Cruz Island	Malacothamnus fasciculatus nesioticus	E	0	0
Flowering Plants	buttercup, autumn	Ranunculus acriformis aestivalis	E	0	0
Flowering Plants	butterweed, Layne's	Senecio layneae	T	0	0
Flowering Plants	butterwort, Godfrey's	Pinguicula ionantha	T	0	0
Flowering Plants	button, Mohr's Barbara	Marshallia mohrii	T	0	0
Flowering Plants	button-celery, San Diego	Eryngium aristulatum parishii	E	0	0
Flowering Plants	cactus, Arizona hedgehog	Echinocereus triglochidiatus arizonicus	E	0	0
Flowering Plants	cactus, Bakersfield	Opuntia treleasei	E	7,142	0
Flowering Plants	cactus, black lace	Echinocereus reichenbachii albertii	E	0	0
Flowering Plants	cactus, Brady pincushion	Pediocactus bradyi	E	0	0
Flowering Plants	cactus, Chisos Mtn. hedgehog	Echinocereus chisoensis chisoensis	T	0	0
Flowering Plants	cactus, Cochise pincushion	Coryphantha robbinsorum	T	0	0
Flowering Plants	cactus, Key tree	Pilosocereus robinii	E	0	0
Flowering Plants	cactus, Knowlton	Pediocactus knowltonii	E	0	0
Flowering Plants	cactus, Kuenzler hedgehog	Echinocereus fendleri kuenzleri	E	0	0
Flowering Plants	cactus, Lee pincushion	Coryphantha sneedii leei	T	0	0
Flowering Plants	cactus, Lloyd's hedgehog	Echinocereus lloydii	DR	0	0
Flowering Plants	cactus, Lloyd's Mariposa	Echinomastus mariposensis	T	0	0

1999 Data Request For Federal Agencies - Total Expenditures from the Bureau of Reclamation

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs /Acquisition Cost
Flowering Plants	cactus, Mesa Verde	Sclerocactus mesae-verdae	T	0	0
Flowering Plants	cactus, Nellie cory	Coryphantha minima	E	0	0
Flowering Plants	cactus, Nichol's Turk's head	Echinocactus horizontalonius nicholii	E	0	0
Flowering Plants	cactus, Peebles Navajo	Pediocactus peeblesianus peeblesianus	E	0	0
Flowering Plants	cactus, Pima pineapple	Coryphantha scheeri robustispina	E	0	0
Flowering Plants	cactus, San Rafael	Pediocactus despainii	E	0	0
Flowering Plants	cactus, Siler pincushion	Pediocactus sileri	T	0	0
Flowering Plants	cactus, Sneed pincushion	Coryphantha sneedii sneedii	E	0	0
Flowering Plants	cactus, star	Astrophytum asterias	E	0	0
Flowering Plants	cactus, Tobusch fishhook	Ancistrocactus tobuschii	E	0	0
Flowering Plants	cactus, Unita Basin hookless	Sclerocactus glaucus	T	0	0
Flowering Plants	cactus, Winkler	Pediocactus winkleri	T	0	0
Flowering Plants	cactus, Wright fishhook	Sclerocactus wrightiae	E	0	0
Flowering Plants	campion, fringed	Silene polypetala	E	0	0
Flowering Plants	capa rosa	Callicarpa ampla	E	0	0
Flowering Plants	cat's-eye, Terlingua Creek	Cryptantha crassipes	E	0	0
Flowering Plants	ceanothus, coyote	Ceanothus ferrisae	E	0	0
Flowering Plants	ceanothus, Pine Hill	Ceanothus roderickii	E	0	0
Flowering Plants	ceanothus, Vail Lake	Ceanothus ophiophilus	T	0	0
Flowering Plants	centaury, spring-loving	Centaureum namophilum	T	0	0
Flowering Plants	chaff-flower, round-leaved	Achyranthes splendens rotundata	E	0	0
Flowering Plants	chaffseed, American	Schwalbea americana	E	0	0
Flowering Plants	checker-mallow, Kenwood Marsh	Sidalcea oregana valida	E	0	0
Flowering Plants	checker-mallow, Nelson's	Sidalcea nelsoniana	T	0	0
Flowering Plants	checker-mallow, pedate	Sidalcea pedata	E	0	0
Flowering Plants	chupacallos	Pleodendron macranthum	E	0	0
Flowering Plants	cinquefoil, Robbins'	Potentilla robbinsiana	E	0	0
Flowering Plants	clarkia, Pismo	Clarkia speciosa immaculata	E	0	0
Flowering Plants	clarkia, Presidio	Clarkia franciscana	E	0	0
Flowering Plants	clarkia, Springville	Clarkia springvillensis	T	0	0
Flowering Plants	clarkia, Vine Hill	Clarkia imbricata	E	0	0
Flowering Plants	cliff-rose, Arizona	Purshia subintegra	E	0	0
Flowering Plants	clover, Monterey	Trifolium trichocalyx	E	0	0
Flowering Plants	clover, running buffalo	Trifolium stoloniferum	E	0	0
Flowering Plants	clover, showy Indian	Trifolium amoenum	E	0	0
Flowering Plants	cobana negra	Stahlia monosperma	T	0	0
Flowering Plants	coneflower, smooth	Echinacea laevigata	E	0	0
Flowering Plants	coneflower, Tennessee purple	Echinacea tennesseensis	E	0	0
Flowering Plants	cory cactus, bunched	Coryphantha ramillosa	T	0	0
Flowering Plants	cress, toad-flax	Schoenocrambe suffrutescens	E	0	0
Flowering Plants	crownscale, big-leaved	Verbesina dissita	T	0	0
Flowering Plants	crownscale, San Jacinto Valley	Atriplex coronata notatior	E	0	0
Flowering Plants	cycladenia, Jones	Cycladenia humilis jonesii	T	0	0
Flowering Plants	daisy, lakeside	Hymenoxys herbacea	T	0	0
Flowering Plants	daisy, Maguire	Erigeron maguirei	T	0	0
Flowering Plants	daisy, Parish's	Erigeron parishii	T	0	0
Flowering Plants	dawn-flower, Texas prairie	Hymenoxys texana	E	0	0
Flowering Plants	dogweed, ashy	Thymophylla tephroleuca	E	0	0
Flowering Plants	dropwort, Canby's	Oxypolis canbyi	E	0	0
Flowering Plants	dudleya, Conejo	Dudleya abramsii parva	T	0	0
Flowering Plants	dudleya, marcescent	Dudleya cymosa marcescens	T	0	0
Flowering Plants	dudleya, Santa Clara Valley	Dudleya setchellii	E	0	0
Flowering Plants	dudleya, Santa Cruz Island	Dudleya nesiotica	T	0	0
Flowering Plants	dudleya, Verity's	Dudleya verityi	T	0	0

1999 Data Request For Federal Agencies - Total Expenditures from the Bureau of Reclamation

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs /Acquisition Cost
Flowering Plants	dudleyea, Santa Monica Mountains	Dudleya cymosa ovatifolia	T	0	0
Flowering Plants	dwarf-flax, Marin	Hesperolinon congestum	T	0	0
Flowering Plants	erubia	Solanum drymophilum	E	0	0
Flowering Plants	evening-primrose, Antioch Dunes	Oenothera deltoides howellii	E	0	0
Flowering Plants	evening-primrose, Eureka Valley	Oenothera avita eurekaensis	E	0	0
Flowering Plants	evening-primrose, San Benito	Camissonia benitensis	T	0	0
Flowering Plants	fiddleneck, large-flowered	Amsinckia grandiflora	E	25,000	0
Flowering Plants	flannelbush, Mexican	Fremontodendron mexicanum	E	0	0
Flowering Plants	flannelbush, Pine Hill	Fremontodendron californicum decumbens	E	0	0
Flowering Plants	fleabane, Zuni	Erigeron rhizomatus	T	0	0
Flowering Plants	four-o'clock, MacFarlane's	Mirabilis macfarlanei	T	0	0
Flowering Plants	frankenian, Johnston's	Frankenia johnstonii	E	0	0
Flowering Plants	fringe-tree, pygmy	Chionanthus pygmaeus	E	0	0
Flowering Plants	fringepod, Santa Cruz Island	Thysanocarpus conchuliferus	E	0	0
Flowering Plants	gardenia, Hawaiian	Gardenia brighamii	E	0	0
Flowering Plants	geranium, Hawaiian red-flowered	Geranium arboreum	E	0	0
Flowering Plants	gerardia, sandplain	Agalinis acuta	E	0	0
Flowering Plants	gilia, Hoffmann's slender-flowered	Gilia tenuiflora hoffmannii	E	0	0
Flowering Plants	gilia, Monterey	Gilia tenuiflora arenaria	E	0	0
Flowering Plants	goetzea, beautiful	Goetzea elegans	E	0	0
Flowering Plants	goldenrod, Blue Ridge	Solidago spithamea	T	0	0
Flowering Plants	goldenrod, Houghton's	Solidago houghtonii	T	0	0
Flowering Plants	goldenrod, Short's	Solidago shortii	E	0	0
Flowering Plants	goldenrod, white-haired	Solidago albopilosa	T	0	0
Flowering Plants	goldfields, Burke's	Lasthenia burkei	E	0	0
Flowering Plants	goldfields, Contra Costa	Lasthenia conjugens	E	0	0
Flowering Plants	gooseberry, Miccosukee	Ribes echinellum	T	0	0
Flowering Plants	gourd, Okeechobee	Cucurbita okeechobeensis okeechobeensis	E	0	0
Flowering Plants	grass, California Orcutt	Orcuttia californica	E	0	0
Flowering Plants	grass, Colusa	Neostapfia colusana	T	0	0
Flowering Plants	grass, Eureka Dune	Swallenia alexandrae	E	0	0
Flowering Plants	grass, Solano	Tuctoria mucronata	E	0	0
Flowering Plants	grass, Tennessee yellow-eyed	Xyris tennesseensis	E	0	0
Flowering Plants	ground-plum, Pyne's	Astragalus bibullatus	E	0	0
Flowering Plants	groundsel, San Francisco Peaks	Senecio franciscanus	T	0	0
Flowering Plants	gumplant, Ash Meadows	Grindelia fraxino-pratensis	T	0	0
Flowering Plants	haha	Cyanea humboldtiana	E	0	0
Flowering Plants	haha	Cyanea grimesiana grimesiana	E	0	0
Flowering Plants	haha	Cyanea pinnatifida	E	0	0
Flowering Plants	haha	Cyanea hamatiflora hamatiflora	E	0	0
Flowering Plants	haha	Cyanea mannii	E	0	0
Flowering Plants	haha	Cyanea glabra	E	0	0
Flowering Plants	haha	Cyanea dunbarii	E	0	0
Flowering Plants	haha	Cyanea copelandii copelandii	E	0	0
Flowering Plants	haha	Cyanea asarifolia	E	0	0
Flowering Plants	haha	Cyanea macrostegia gibsonii	E	0	0
Flowering Plants	haha	Cyanea lobata	E	0	0
Flowering Plants	haha	Cyanea hamatiflora carlsonii	E	0	0
Flowering Plants	haha	Cyanea grimesiana obatae	E	0	0
Flowering Plants	haha	Cyanea copelandii haleakalaensis	E	0	0
Flowering Plants	haha	Cyanea longiflora	E	0	0
Flowering Plants	haha	Cyanea koolauensis	E	0	0
Flowering Plants	haha	Cyanea remyi	E	0	0
Flowering Plants	haha	Cyanea acuminata	E	0	0



1999 Data Request For Federal Agencies - Total Expenditures from the Bureau of Reclamation

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs /Acquisition Cost
Flowering Plants	haha	Cyanea undulata	E	0	0
Flowering Plants	haha	Cyanea truncata	E	0	0
Flowering Plants	haha	Cyanea recta	T	0	0
Flowering Plants	haha	Cyanea procera	E	0	0
Flowering Plants	haha	Cyanea stictophylla	E	0	0
Flowering Plants	haha	Cyanea platyphylla	E	0	0
Flowering Plants	haha	Cyanea shipmannii	E	0	0
Flowering Plants	haha	Cyanea st-johnii	E	0	0
Flowering Plants	haha	Cyanea superba	E	0	0
Flowering Plants	haha	Cyanea mceldowneyi	E	0	0
Flowering Plants	haha	Cyanea crispa	E	0	0
Flowering Plants	ha'iwale	Cyrtandra dentata	E	0	0
Flowering Plants	ha'iwale	Cyrtandra viridiflora	E	0	0
Flowering Plants	ha'iwale	Cyrtandra tintinnabula	E	0	0
Flowering Plants	ha'iwale	Cyrtandra limahuliensis	T	0	0
Flowering Plants	ha'iwale	Cyrtandra munroi	E	0	0
Flowering Plants	ha'iwale	Cyrtandra giffardii	E	0	0
Flowering Plants	ha'iwale	Cyrtandra crenata	E	0	0
Flowering Plants	ha'iwale	Cyrtandra subumbellata	E	0	0
Flowering Plants	ha'iwale	Cyrtandra polyantha	E	0	0
Flowering Plants	hala pepe	Pleomele hawaiiensis	E	0	0
Flowering Plants	harebells, Avon Park	Crotalaria avonensis	E	0	0
Flowering Plants	harperella	Ptilimnium nodosum	E	0	0
Flowering Plants	hau kuahiwi	Hibiscadelphus giffardianus	E	0	0
Flowering Plants	hau kuahiwi	Hibiscadelphus hualalaiensis	E	0	0
Flowering Plants	hau kuahiwi	Hibiscadelphus woodii	E	0	0
Flowering Plants	heartleaf, dwarf-flowered	Hexastylis naniflora	T	0	0
Flowering Plants	heather, mountain golden	Hudsonia montana	T	0	0
Flowering Plants	heau	Exocarpos luteolus	E	0	0
Flowering Plants	hedyotis, Na Pali beach	Hedyotis st.-johnii	E	0	0
Flowering Plants	hibiscus, Clay's	Hibiscus clayi	E	0	0
Flowering Plants	higo, chumbo	Harrisia portoricensis	T	0	0
Flowering Plants	higuero de sierra	Crescentia portoricensis	E	0	0
Flowering Plants	holei	Ochrosia kilaueaensis	E	0	0
Flowering Plants	holly, Cook's	Ilex cookii	E	0	0
Flowering Plants	Honohono	Haplostachys haplostachya	E	0	0
Flowering Plants	howellia, water	Howellia aquatilis	T	0	0
Flowering Plants	hypericum, highlands scrub	Hypericum cumulicola	E	0	0
Flowering Plants	iliau, dwarf	Wilkesia hobydi	E	0	0
Flowering Plants	indian paintbrush, San Clemente Island	Castilleja grisea	E	0	0
Flowering Plants	ipomopsis, Holy Ghost	Ipomopsis sancti-spiritus	E	0	0
Flowering Plants	iris, dwarf lake	Iris lacustris	T	0	0
Flowering Plants	irisette, white	Sisyrinchium dichotomum	E	0	0
Flowering Plants	ischaemum, Hilo	Ischaemum byrone	E	0	0
Flowering Plants	ivesia, Ash Meadows	Ivesia kingii eremica	T	0	0
Flowering Plants	jacquemontia, beach	Jacquemontia reclinata	E	0	0
Flowering Plants	jewelflower, California	Caulanthus californicus	E	7,142	0
Flowering Plants	jewelflower, Metcalf Canyon	Streptanthus albidus albidus	E	0	0
Flowering Plants	jewelflower, Tiburon	Streptanthus niger	E	0	0
Flowering Plants	joint-vetch, sensitive	Aeschynomene virginica	T	0	0
Flowering Plants	kamakahala	Labordia triflora	E	0	0
Flowering Plants	kamakahala	Labordia tinifolia lanaiensis	E	0	0
Flowering Plants	kamakahala	Labordia cyrtandrae	E	0	0
Flowering Plants	kamakahala	Labordia tinifolia wahiawaensis	E	0	0

1999 Data Request For Federal Agencies - Total Expenditures from the Bureau of Reclamation

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs /Acquisition Cost
Flowering Plants	kamakahala	Labordia lydgatei	E	0	0
Flowering Plants	kauai hau kuahiwi	Hibiscadelphus distans	E	0	0
Flowering Plants	kauila	Colubrina oppositifolia	E	0	0
Flowering Plants	kaulu	Pteralyxia kauaiensis	E	0	0
Flowering Plants	kio'ele	Hedyotis coriacea	E	0	0
Flowering Plants	kiponapona	Phyllostegia racemosa	E	0	0
Flowering Plants	kohe malama malama o kanaloa	Kanaloa kahoolawensis	E	0	0
Flowering Plants	koki'o	Kokia drynarioides	E	0	0
Flowering Plants	koki'o ke'oke'o	Hibiscus waimeae hannerae	E	0	0
Flowering Plants	koki'o ke'oke'o	Hibiscus amottianus immaculatus	E	0	0
Flowering Plants	koki'o, (=Cooke's koki'o)	Kokia cookei	E	0	0
Flowering Plants	koki'o, (=Kaua'i koki'o)	Kokia kauaiensis	E	0	0
Flowering Plants	kolea	Myrsine linearifolia	T	0	0
Flowering Plants	kolea	Myrsine juddii	E	0	0
Flowering Plants	ko'oko'olau	Bidens micrantha kalealaha	E	0	0
Flowering Plants	ko'oko'olau	Bidens wiebkei	E	0	0
Flowering Plants	ko'oloa'ula	Abutilon menziesii	E	0	0
Flowering Plants	Kopa	Hedyotis schlechtendahliana remyi	E	0	0
Flowering Plants	kuahiwi laukahi	Plantago princeps	E	0	0
Flowering Plants	kuahiwi laukahi	Plantago hawaiiensis	E	0	0
Flowering Plants	kuawawaenuhu	Alsinidendron lychnoides	E	0	0
Flowering Plants	kula wahine noho	Isodendron pyrifolium	E	0	0
Flowering Plants	kulu'i	Nototrichium humile	E	0	0
Flowering Plants	ladies'-tresses, Canelo Hills	Spiranthes delitescens	E	0	0
Flowering Plants	ladies'-tresses, Navasota	Spiranthes parksii	E	0	0
Flowering Plants	ladies'-tresses, Ute	Spiranthes diluvialis	T	111,200	0
Flowering Plants	Lagu, Hyan	Serianthes nelsonii	E	0	0
Flowering Plants	larkspur, San Clemente Island	Delphinium variegatum kinkiense	E	0	0
Flowering Plants	lau'ehu	Panicum niihauense	E	0	0
Flowering Plants	lauhilihi, (=Ma'oli'oli)	Schiedea stellarioides	E	0	0
Flowering Plants	layia, beach	Layia carnosa	E	0	0
Flowering Plants	lead-plant, Crenulate	Amorpha crenulata	E	0	0
Flowering Plants	leather flower, Alabama	Clematis socialis	E	0	0
Flowering Plants	leather flower, Morefield's	Clematis morefieldii	E	0	0
Flowering Plants	lessingia, San Francisco	Lessingia germanorum	E	0	0
Flowering Plants	liliwai	Acaena exigua	E	0	0
Flowering Plants	lily, Minnesota dwarf trout	Erythronium propullans	E	0	0
Flowering Plants	lily, Pitkin Marsh	Lilium pardalinum pitkinense	E	0	0
Flowering Plants	lily, Western	Lilium occidentale	E	0	0
Flowering Plants	liveforever, Laguna Beach	Dudleya stolonifera	T	0	0
Flowering Plants	liveforever, Santa Barbara Island	Dudleya traskiae	E	0	0
Flowering Plants	locoweed, Fassett's	Oxytropis campestris chartacea	T	0	0
Flowering Plants	lomatum, Bradshaw's	Lomatium bradshawii	E	0	0
Flowering Plants	loosestrife, rough-leaved	Lysimachia asperulaefolia	E	0	0
Flowering Plants	lo'ulu	Pritchardia remota	E	0	0
Flowering Plants	lo'ulu	Pritchardia viscosa	E	0	0
Flowering Plants	lo'ulu	Pritchardia napaliensis	E	0	0
Flowering Plants	lo'ulu	Pritchardia affinis	E	0	0
Flowering Plants	lo'ulu	Pritchardia schattaueri	E	0	0
Flowering Plants	lo'ulu	Pritchardia kaalae	E	0	0
Flowering Plants	lo'ulu	Pritchardia munroi	E	0	0
Flowering Plants	lo'ulu, (=wahane)	Pritchardia aylmer-robinsonii	E	0	0
Flowering Plants	lousewort, Furbish	Pedicularis furbishiae	E	0	0
Flowering Plants	love grass, Fosberg's	Eragrostis fosbergii	E	0	0

1999 Data Request For Federal Agencies - Total Expenditures from the Bureau of Reclamation

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs /Acquisition Cost
Flowering Plants	lupine, clover	Lupinus tidestromii	E	0	0
Flowering Plants	lupine, scrub	Lupinus aridorum	E	0	0
Flowering Plants	mahoe	Alectryon macrococcus	E	0	0
Flowering Plants	makou	Peucedanum sandwicense	T	0	0
Flowering Plants	malacothrix, island	Malacothrix squalida	E	0	0
Flowering Plants	Malacothrix, Santa Cruz Island	Malacothrix indecora	E	0	0
Flowering Plants	mallow, Kern	Eremalche kernensis	E	7,142	0
Flowering Plants	mallow, Peter's Mountain	Iliamna corei	E	0	0
Flowering Plants	manaca, palma de	Calyptronoma rivalis	T	0	0
Flowering Plants	manioc, Walker's	Manihot walkerae	E	0	0
Flowering Plants	manzanita, Del Mar	Arctostaphylos glandulosa crassifolia	E	0	0
Flowering Plants	manzanita, Ione	Arctostaphylos myrtifolia	T	0	0
Flowering Plants	manzanita, Morro	Arctostaphylos morroensis	T	0	0
Flowering Plants	manzanita, pallid	Arctostaphylos pallida	T	0	0
Flowering Plants	Manzanita, Presidio	Arctostaphylos hookeri ravenii	E	0	0
Flowering Plants	manzanita, Santa Rosa Island	Arctostaphylos confertiflora	E	0	0
Flowering Plants	ma' o hau hele, (=native yellow hibiscus)	Hibiscus brackenridgei	E	0	0
Flowering Plants	ma' oli' oli	Schiedea kealiae	E	0	0
Flowering Plants	ma' oli' oli	Schiedea apokremnos	E	0	0
Flowering Plants	mapele	Cyrtandra cyaneoides	E	0	0
Flowering Plants	mariposa lily, Tiburon	Calochortus tiburonensis	T	0	0
Flowering Plants	maua	Xylosma crenatum	E	0	0
Flowering Plants	meadowfoam, Butte County	Limnanthes floccosa californica	E	0	0
Flowering Plants	meadowfoam, Sebastopol	Limnanthes vinculans	E	0	0
Flowering Plants	meadowrue, Cooley's	Thalictrum cooleyi	E	0	0
Flowering Plants	mehamehame	Flueggea neowawraea	E	0	0
Flowering Plants	mesa-mint, Otay	Pogogyne nudiuscula	E	0	0
Flowering Plants	mesa-mint, San Diego	Pogogyne abramsii	E	0	0
Flowering Plants	milk-vetch, Applegate's	Astragalus applegatei	E	0	0
Flowering Plants	milk-vetch, Ash meadows	Astragalus phoenix	T	0	0
Flowering Plants	milk-vetch, Braunton's	Astragalus brauntonii	E	0	0
Flowering Plants	milk-vetch, Clara Hunt's	Astragalus clarianus	E	0	0
Flowering Plants	milk-vetch, Coachella Valley	Astragalus lentiginosus coachellae	E	0	0
Flowering Plants	milk-vetch, coastal dunes	Astragalus tener titi	E	0	0
Flowering Plants	milk-vetch, Cushenbury	Astragalus albens	E	0	0
Flowering Plants	milk-vetch, Fish Slough	Astragalus lentiginosus piscinensis	T	0	0
Flowering Plants	milk-vetch, heliotrope	Astragalus montii	T	0	0
Flowering Plants	milk-vetch, Jesup's	Astragalus robbinsii jesupi	E	0	0
Flowering Plants	milk-vetch, Lane Mountain	Astragalus jacgerianus	E	0	0
Flowering Plants	milk-vetch, Mancos	Astragalus humillimus	E	0	0
Flowering Plants	milk-vetch, Osterhout	Astragalus osterhoutii	E	0	0
Flowering Plants	milk-vetch, Peirson's	Astragalus magdalenae peirsonii	T	0	0
Flowering Plants	milk-vetch, Sentry	Astragalus cremnophylax cremnophylax	E	0	0
Flowering Plants	milk-vetch, triple-ribbed	Astragalus tricarinatus	E	0	0
Flowering Plants	milkpea, Small's	Galactia smallii	E	0	0
Flowering Plants	milkweed, Mead's	Asclepias meadii	T	0	0
Flowering Plants	milkweed, Welsh's	Asclepias welshii	T	0	0
Flowering Plants	mint, Garrett's	Dicerandra christmanii	E	0	0
Flowering Plants	mint, Lakela's	Dicerandra immaculata	E	0	0
Flowering Plants	mint, longspurred	Dicerandra cornutissima	E	0	0
Flowering Plants	mint, scrub	Dicerandra frutescens	E	0	0
Flowering Plants	monardella, willow	Monardella linoides viminea	E	0	0
Flowering Plants	monkey-flower, Michigan	Mimulus glabratus michiganensis	E	0	0
Flowering Plants	monkshood, northern wild	Aconitum noveboracense	T	0	0

1999 Data Request For Federal Agencies - Total Expenditures from the Bureau of Reclamation

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs /Acquisition Cost
Flowering Plants	morning-glory, Stebbins'	Calystegia stebbinsii	E	0	0
Flowering Plants	mountain balm, Indian Knob	Eriodictyon altissimum	E	0	0
Flowering Plants	mountain-mahogany, Catalina Island	Cercocarpus traskiae	E	0	0
Flowering Plants	mustard, Carter's	Warea carteri	E	0	0
Flowering Plants	mustard, Penland alpine fen	Eutrema penlandii	T	0	0
Flowering Plants	mustard, slender-petaled	Thelypodium stenopetalum	E	0	0
Flowering Plants	na'ena'e	Dubautia latifolia	E	0	0
Flowering Plants	na'ena'e	Dubautia plantaginea humilis	E	0	0
Flowering Plants	na'ena'e	Dubautia pauciflora	E	0	0
Flowering Plants	na'ena'e	Dubautia herbstobatae	E	0	0
Flowering Plants	nani wai'ale'ale	Viola kauaiensis wahiawaensis	E	0	0
Flowering Plants	nanu	Gardenia mannii	E	0	0
Flowering Plants	naupaka, dwarf	Scaevola coriacea	E	0	0
Flowering Plants	navarretia, few-flowered	Navarretia leucocephala pauciflora	E	0	0
Flowering Plants	navarretia, many-flowered	Navarretia leucocephala plieantha	E	0	0
Flowering Plants	navarretia, spreading	Navarretia fossalis	T	0	0
Flowering Plants	nehe	Lipochaeta fauriei	E	0	0
Flowering Plants	nehe	Lipochaeta waimeaensis	E	0	0
Flowering Plants	nehe	Lipochaeta tenuifolia	E	0	0
Flowering Plants	nehe	Lipochaeta lobata leptophylla	E	0	0
Flowering Plants	nehe	Lipochaeta kamolensis	E	0	0
Flowering Plants	nehe	Lipochaeta micrantha	E	0	0
Flowering Plants	nehe	Lipochaeta venosa	E	0	0
Flowering Plants	nioi	Eugenia koolauensis	E	0	0
Flowering Plants	niterwort, Amargosa	Nitrophila mohavensis	E	0	0
Flowering Plants	No common name	Achyranthes mutica	E	0	0
Flowering Plants	No common name	Bonamia menziesii	E	0	0
Flowering Plants	No common name	Schiedea sarmentosa	E	0	0
Flowering Plants	No common name	Schiedea membranacea	E	0	0
Flowering Plants	No common name	Schiedea hookeri	E	0	0
Flowering Plants	No common name	Sanicula purpurea	E	0	0
Flowering Plants	No common name	Phyllostegia parviflora	E	0	0
Flowering Plants	No common name	Phyllostegia knudsenii	E	0	0
Flowering Plants	No common name	Phyllostegia hirsuta	E	0	0
Flowering Plants	No common name	Lobelia gaudichaudii koolauensis	E	0	0
Flowering Plants	No common name	Neraudia ovata	E	0	0
Flowering Plants	No common name	Hesperomannia arbuscula	E	0	0
Flowering Plants	No common name	Hesperomannia arborescens	E	0	0
Flowering Plants	No common name	Hedyotis parvula	E	0	0
Flowering Plants	No common name	Hedyotis degeneri	E	0	0
Flowering Plants	No common name	Gouania vitifolia	E	0	0
Flowering Plants	No common name	Gouania meyenii	E	0	0
Flowering Plants	No common name	Gouania hillebrandii	E	0	0
Flowering Plants	No common name	Geocarpon minimum	T	0	0
Flowering Plants	No common name	Gahnia lanaiensis	E	0	0
Flowering Plants	No common name	Phyllostegia kaalaensis	E	0	0
Flowering Plants	No common name	Eugenia woodburyana	E	0	0
Flowering Plants	No common name	Phyllostegia mannii	E	0	0
Flowering Plants	No common name	Ilex sintenisii	E	0	0
Flowering Plants	No common name	Cranichis ricartii	E	0	0
Flowering Plants	No common name	Vernonia proctorii	E	0	0
Flowering Plants	No common name	Trematolobelia singularis	E	0	0
Flowering Plants	No common name	Stenogyne campanulata	E	0	0
Flowering Plants	No common name	Stenogyne bifida	E	0	0

1999 Data Request For Federal Agencies - Total Expenditures from the Bureau of Reclamation

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs /Acquisition Cost
Flowering Plants	No common name	Spermolepis hawaiiensis	E	0	0
Flowering Plants	No common name	Silene perimani	E	0	0
Flowering Plants	No common name	Schiedea nuttallii	E	0	0
Flowering Plants	No common name	Schiedea kauaiensis	E	0	0
Flowering Plants	No common name	Sanicula mariversa	E	0	0
Flowering Plants	No common name	Phyllostegia wawrana	E	0	0
Flowering Plants	No common name	Phyllostegia warshaueri	E	0	0
Flowering Plants	No common name	Phyllostegia velutina	E	0	0
Flowering Plants	No common name	Phyllostegia waimeae	E	0	0
Flowering Plants	No common name	Mariscus fauriei	E	0	0
Flowering Plants	No common name	Lysimachia maxima	E	0	0
Flowering Plants	No common name	Lysimachia lydgatei	E	0	0
Flowering Plants	No common name	Lyonia truncata proctorii	E	0	0
Flowering Plants	No common name	Leptocereus grantianus	E	0	0
Flowering Plants	No common name	Catesbaea melanocarpa	E	0	0
Flowering Plants	No common name	Auerodendron pauciflorum	E	0	0
Flowering Plants	No common name	Aristida chaseae	E	0	0
Flowering Plants	No common name	Remya montgomeryi	E	0	0
Flowering Plants	No common name	Alsinidendron viscosum	E	0	0
Flowering Plants	No common name	Schoepfia arenaria	T	0	0
Flowering Plants	No common name	Schiedea spergulina spergulina	T	0	0
Flowering Plants	No common name	Schiedea spergulina leiopoda	E	0	0
Flowering Plants	No common name	Schiedea lydgatei	E	0	0
Flowering Plants	No common name	Schiedea helleri	E	0	0
Flowering Plants	No common name	Schiedea haleakalensis	E	0	0
Flowering Plants	No common name	Gesneria pauciflora	T	0	0
Flowering Plants	No common name	Myrcia paganii	E	0	0
Flowering Plants	No common name	Mariscus pennatiformis	E	0	0
Flowering Plants	No common name	Temstroemia subsessilis	E	0	0
Flowering Plants	No common name	Silene hawaiiensis	T	0	0
Flowering Plants	No common name	Poa siphonoglossa	E	0	0
Flowering Plants	No common name	Platanthera holochila	E	0	0
Flowering Plants	No common name	Phyllostegia mollis	E	0	0
Flowering Plants	No common name	Mitracarpus polycladus	E	0	0
Flowering Plants	No common name	Mitracarpus maxwelliae	E	0	0
Flowering Plants	No common name	Lysimachia filifolia	E	0	0
Flowering Plants	No common name	Lobelia monostachya	E	0	0
Flowering Plants	No common name	Lepanthes eltoeroensis	E	0	0
Flowering Plants	No common name	Daphnopsis hellerana	E	0	0
Flowering Plants	No common name	Cordia bellonis	E	0	0
Flowering Plants	No common name	Chamaecrista glandulosa mirabilis	E	0	0
Flowering Plants	No common name	Calyptanthus thomasiana	E	0	0
Flowering Plants	No common name	Viola oahuensis	E	0	0
Flowering Plants	No common name	Viola lanaiensis	E	0	0
Flowering Plants	No common name	Viola helenae	E	0	0
Flowering Plants	No common name	Vigna o-wahuensis	E	0	0
Flowering Plants	No common name	Tetramolopium rockii	T	0	0
Flowering Plants	No common name	Tetramolopium remyi	E	0	0
Flowering Plants	No common name	Tetramolopium lepidotum lepidotum	E	0	0
Flowering Plants	No common name	Tetramolopium filiforme	E	0	0
Flowering Plants	No common name	Tetramolopium arenarium	E	0	0
Flowering Plants	No common name	Stenogyne kanehoana	E	0	0
Flowering Plants	No common name	Stenogyne angustifolia angustifolia	E	0	0
Flowering Plants	No common name	Silene lanceolata	E	0	0

1999 Data Request For Federal Agencies - Total Expenditures from the Bureau of Reclamation

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs /Acquisition Cost
Flowering Plants	No common name	<i>Silene alexandri</i>	E	0	0
Flowering Plants	No common name	<i>Schiedea kaalae</i>	E	0	0
Flowering Plants	No common name	<i>Remya kauaiensis</i>	E	0	0
Flowering Plants	No common name	<i>Phyllostegia glabra lanaiensis</i>	E	0	0
Flowering Plants	No common name	<i>Neraudia sericea</i>	E	0	0
Flowering Plants	No common name	<i>Neraudia angulata</i>	E	0	0
Flowering Plants	No common name	<i>Munroidendron racemosum</i>	E	0	0
Flowering Plants	No common name	<i>Lobelia oahuensis</i>	E	0	0
Flowering Plants	No common name	<i>Lobelia niihauensis</i>	E	0	0
Flowering Plants	No common name	<i>Hesperomannia lygatei</i>	E	0	0
Flowering Plants	No common name	<i>Alsinidendron trinerve</i>	E	0	0
Flowering Plants	No common name	<i>Alsinidendron obovatum</i>	E	0	0
Flowering Plants	No common name	<i>Abutilon sandwicense</i>	E	0	0
Flowering Plants	No common name	<i>Abutilon eremitopetalum</i>	E	0	0
Flowering Plants	No common name	<i>Schiedea verticillata</i>	E	0	0
Flowering Plants	No common name	<i>Amaranthus brownii</i>	E	0	0
Flowering Plants	nohoanu	<i>Geranium multiflorum</i>	E	0	0
Flowering Plants	oak, Hinckley	<i>Quercus hinckleyi</i>	T	0	0
Flowering Plants	oha	<i>Delissea rivularis</i>	E	0	0
Flowering Plants	oha	<i>Delissea undulata</i>	E	0	0
Flowering Plants	oha	<i>Delissea subcordata</i>	E	0	0
Flowering Plants	oha	<i>Delissea rhytidosperra</i>	E	0	0
Flowering Plants	`oha wai	<i>Clermontia drepanomorpha</i>	E	0	0
Flowering Plants	`oha wai	<i>Clermontia peleana</i>	E	0	0
Flowering Plants	`oha wai	<i>Clermontia oblongifolia brevipes</i>	E	0	0
Flowering Plants	`oha wai	<i>Clermontia samuelii</i>	E	0	0
Flowering Plants	`oha wai	<i>Clermontia oblongifolia mauiensis</i>	E	0	0
Flowering Plants	`oha wai	<i>Clermontia pyrularia</i>	E	0	0
Flowering Plants	`oha wai	<i>Clermontia lindseyana</i>	E	0	0
Flowering Plants	ohai	<i>Sesbania tomentosa</i>	E	0	0
Flowering Plants	`ohe`ohe	<i>Tetraplasandra gymnocarpa</i>	E	0	0
Flowering Plants	olulu	<i>Brighamia insignis</i>	E	0	0
Flowering Plants	onion, Munz's	<i>Allium munzii</i>	E	0	0
Flowering Plants	opuhe	<i>Urera kaalae</i>	E	0	0
Flowering Plants	orchid, eastern prairie fringed	<i>Platanthera leucophaea</i>	T	0	0
Flowering Plants	orchid, western prairie fringed	<i>Platanthera praecleara</i>	T	0	0
Flowering Plants	orcutt grass, Greene's	<i>Tuctoria greenii</i>	E	0	0
Flowering Plants	orcutt grass, hairy	<i>Orcuttia pilosa</i>	E	0	0
Flowering Plants	orcutt grass, Sacramento	<i>Orcuttia viscida</i>	E	0	0
Flowering Plants	orcutt grass, San Joaquin	<i>Orcuttia inaequalis</i>	T	0	0
Flowering Plants	orcutt grass, slender	<i>Orcuttia tenuis</i>	T	0	0
Flowering Plants	owl's-clover, fleshy	<i>Castilleja campestris succulenta</i>	T	0	0
Flowering Plants	oxytheca, cushenbury	<i>Oxytheca parishii goodmaniana</i>	E	0	0
Flowering Plants	paintbrush, ash-grey	<i>Castilleja cinerea</i>	T	0	0
Flowering Plants	paintbrush, golden	<i>Castilleja levisecta</i>	T	0	0
Flowering Plants	paintbrush, soft-leaved	<i>Castilleja mollis</i>	E	0	0
Flowering Plants	paintbrush, Tiburon	<i>Castilleja affinis neglecta</i>	E	0	0
Flowering Plants	palo colorado	<i>Temstroemia luquillensis</i>	E	0	0
Flowering Plants	palo de jazmin	<i>Styrax portoricensis</i>	E	0	0
Flowering Plants	palo de nigua	<i>Cornutia obovata</i>	E	0	0
Flowering Plants	palo de ramon	<i>Banara vanderbiltii</i>	E	0	0
Flowering Plants	palo de rosa	<i>Ottoschulzia rhodoxylon</i>	E	0	0
Flowering Plants	pamakani	<i>Tetramolopium capillare</i>	E	0	0
Flowering Plants	pamakani	<i>Viola chamissoniana chamissoniana</i>	E	0	0

1999 Data Request For Federal Agencies - Total Expenditures from the Bureau of Reclamation

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs /Acquisition Cost
Flowering Plants	panicgrass, Carter's	<i>Panicum fauriei carteri</i>	E	0	0
Flowering Plants	pau'ala, (=alulu)	<i>Brighamia rockii</i>	E	0	0
Flowering Plants	pawpaw, beautiful	<i>Deeringothamnus pulchellus</i>	E	0	0
Flowering Plants	pawpaw, four-petal	<i>Asimina tetramera</i>	E	0	0
Flowering Plants	pawpaw, Rugel's	<i>Deeringothamnus rugelii</i>	E	0	0
Flowering Plants	pelos del diablo	<i>Aristida portoricensis</i>	E	0	0
Flowering Plants	pennyroyal, Todsens's	<i>Hedeoma todsenii</i>	E	0	0
Flowering Plants	penstemon, blowout	<i>Penstemon haydenii</i>	E	0	0
Flowering Plants	pentachaeta, Lyon's	<i>Pentachaeta lyonii</i>	E	0	0
Flowering Plants	pentachaeta, white-rayed	<i>Pentachaeta bellidiflora</i>	E	0	0
Flowering Plants	peperomia, Wheeler's	<i>Peperomia wheeleri</i>	E	0	0
Flowering Plants	phacelia, clay	<i>Phacelia argillacea</i>	E	0	0
Flowering Plants	phacelia, island	<i>Phacelia insularis insularis</i>	E	0	0
Flowering Plants	phacelia, North Park	<i>Phacelia formosula</i>	E	0	0
Flowering Plants	phlox, Texas trailing	<i>Phlox nivalis texensis</i>	E	0	0
Flowering Plants	pigeon wings	<i>Clitoria fragrans</i>	T	0	0
Flowering Plants	pilo	<i>Hedyotis mannii</i>	E	0	0
Flowering Plants	pink, swamp	<i>Helonias bullata</i>	T	0	0
Flowering Plants	pinkroot, gentian	<i>Spigelia gentianoides</i>	E	0	0
Flowering Plants	piperia, Yadon's	<i>Piperia yadonii</i>	E	0	0
Flowering Plants	pitaya, Davis' green	<i>Echinocereus viridiflorus davisii</i>	E	0	0
Flowering Plants	pitcher-plant, Alabama canebrake	<i>Sarracenia rubra alabamensis</i>	E	0	0
Flowering Plants	pitcher-plant, green	<i>Sarracenia oreophila</i>	E	0	0
Flowering Plants	pitcher-plant, mountain sweet	<i>Sarracenia rubra jonesii</i>	E	0	0
Flowering Plants	plum, scrub	<i>Prunus geniculata</i>	E	0	0
Flowering Plants	po'e	<i>Portulaca sclerocarpa</i>	E	0	0
Flowering Plants	pogonia, small whorled	<i>Isotria medeoloides</i>	T	0	0
Flowering Plants	polygala, Lewton's	<i>Polygala lewtonii</i>	E	0	0
Flowering Plants	polygala, tiny	<i>Polygala smallii</i>	E	0	0
Flowering Plants	pondberry	<i>Lindera melissifolia</i>	E	0	0
Flowering Plants	pondweed, Little Aguja Creek	<i>Potamogeton clystocarpus</i>	E	0	0
Flowering Plants	popolo 'aiakeakua	<i>Solanum sandwicense</i>	E	0	0
Flowering Plants	popolo ku mai	<i>Solanum incompletum</i>	E	0	0
Flowering Plants	poppy, Sacramento prickly	<i>Argemone pleiacantha pinnatisecta</i>	E	0	0
Flowering Plants	poppy-mallow, Texas	<i>Callirhoe scabriuscula</i>	E	0	0
Flowering Plants	potato-bean, Price's	<i>Apios priceana</i>	T	0	0
Flowering Plants	potentilla, Hickman's	<i>Potentilla hickmanii</i>	E	0	0
Flowering Plants	prairie-clover, leafy	<i>Dalea foliosa</i>	E	0	0
Flowering Plants	prickly-apple, fragrant	<i>Cereus eriophorus fragrans</i>	E	0	0
Flowering Plants	prickly-ash, St. Thomas	<i>Zanthoxylum thomasianum</i>	E	0	0
Flowering Plants	primrose, Maguire	<i>Primula maguirei</i>	T	0	0
Flowering Plants	pussypaws, Mariposa	<i>Calyptidium pulchellum</i>	T	0	0
Flowering Plants	pu'uka'a	<i>Cyperus trachysanthos</i>	E	0	0
Flowering Plants	rattleweed, hairy	<i>Baptisia arachnifera</i>	E	0	0
Flowering Plants	reed-mustard, Barneby	<i>Schoenocrambe barnebyi</i>	E	0	0
Flowering Plants	reed-mustard, clay	<i>Schoenocrambe argillacea</i>	T	0	0
Flowering Plants	remya, Maui	<i>Remya maiensis</i>	E	0	0
Flowering Plants	rhododendron, Chapman	<i>Rhododendron chapmanii</i>	E	0	0
Flowering Plants	ridge-cress, Barneby	<i>Lepidium barnebyanum</i>	E	0	0
Flowering Plants	rock-cress, Braun's	<i>Arabis perstellata</i>	E	0	0
Flowering Plants	rock-cress, Hoffmann's	<i>Arabis hoffmannii</i>	E	0	0
Flowering Plants	rock-cress, McDonald's	<i>Arabis mcdonaldiana</i>	E	0	0
Flowering Plants	rock-cress, shale barren	<i>Arabis serotina</i>	E	0	0
Flowering Plants	rockcress, Santa Cruz Island	<i>Sibara filifolia</i>	E	0	0

1999 Data Request For Federal Agencies - Total Expenditures from the Bureau of Reclamation

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs /Acquisition Cost
Flowering Plants	rosemary, Apalachicola	Conradina glabra	E	0	0
Flowering Plants	rosemary, Cumberland	Conradina verticillata	T	0	0
Flowering Plants	rosemary, Etonia	Conradina etonia	E	0	0
Flowering Plants	rosemary, short-leaved	Conradina brevifolia	E	0	0
Flowering Plants	roseroot, Leedy's	Sedum integrifolium leedyi	T	0	0
Flowering Plants	rush-pea, slender	Hoffmannseggia tenella	E	0	0
Flowering Plants	rush-rose, island	Helianthemum greenei	T	0	0
Flowering Plants	sand-verbena, large-fruited	Abronia macrocarpa	E	0	0
Flowering Plants	sandalwood, Lanai or 'iliahi	Santalum freycinetianum lanaiense	E	0	0
Flowering Plants	sandbur, agrimony or Kamanomano	Cenchrus agrimonioides	E	0	0
Flowering Plants	sandlace	Polygonella myriophylla	E	0	0
Flowering Plants	sandwort, Bear Valley	Arenaria ursina	T	0	0
Flowering Plants	sandwort, Cumberland	Arenaria cumberlandensis	E	0	0
Flowering Plants	sandwort, Marsh	Arenaria paludicola	E	0	0
Flowering Plants	schiedea, Diamond Head	Schiedea adamantis	E	0	0
Flowering Plants	seablite, California	Suaeda californica	E	0	0
Flowering Plants	seagrass, Johnson's	Halophila johnsonii	T	0	0
Flowering Plants	sedge, Navajo	Carex specuicola	T	0	0
Flowering Plants	sedge, white	Carex albida	E	0	0
Flowering Plants	silversword, Haleakala	Argyroxiphium sandwicense macrocephalum	T	0	0
Flowering Plants	silversword, Mauna Kea	Argyroxiphium sandwicense sandwicense	E	0	0
Flowering Plants	silversword, Mauna Loa	Argyroxiphium kauense	E	0	0
Flowering Plants	skullcap, Florida	Scutellaria floridana	T	0	0
Flowering Plants	skullcap, large-flowered	Scutellaria montana	E	0	0
Flowering Plants	snakeroot	Eryngium cuneifolium	E	0	0
Flowering Plants	sneezeweed, Virginia	Helenium virginicum	T	0	0
Flowering Plants	snowbells, Texas	Styrax texanus	E	0	0
Flowering Plants	spineflower, Ben Lomond	Chorizanthe pungens hartwegiana	E	0	0
Flowering Plants	spineflower, Howell's	Chorizanthe howellii	E	0	0
Flowering Plants	spineflower, Monterey	Chorizanthe pungens pungens	T	0	0
Flowering Plants	spineflower, Orcutt's	Chorizanthe orcuttiana	E	0	0
Flowering Plants	spineflower, Robust	Chorizanthe robusta	E	0	0
Flowering Plants	spineflower, slender-horned	Dodecahema leptoceras	E	0	0
Flowering Plants	spineflower, Sonoma	Chorizanthe valida	E	0	0
Flowering Plants	spiraea, Virginia	Spiraea virginiana	T	0	0
Flowering Plants	spurge, deltoid	Chamaesyce deltoidea deltoidea	E	0	0
Flowering Plants	spurge, Garber's	Chamaesyce garberi	T	0	0
Flowering Plants	spurge, Hoover's	Chamaesyce hooveri	T	0	0
Flowering Plants	spurge, telephus	Euphorbia telephioides	T	0	0
Flowering Plants	stonecrop, Lake County	Parvisedum leiocarpum	E	0	0
Flowering Plants	sumac, Michaux's	Rhus michauxii	E	0	0
Flowering Plants	sunburst, Hartweg's golden	Pseudobahia bahiifolia	E	0	0
Flowering Plants	sunburst, San Joaquin adobe	Pseudobahia peirsonii	T	0	0
Flowering Plants	sunflower, Eggert's	Helianthus eggertii	T	0	0
Flowering Plants	sunflower, San Mateo woolly	Eriophyllum latilobum	E	0	0
Flowering Plants	sunflower, Schweinitz's	Helianthus schweinitzii	E	0	0
Flowering Plants	sunray, Ash Meadows	Enceliopsis nudicaulis corrugata	T	0	0
Flowering Plants	sunshine, Sonoma	Blennosperma bakeri	E	0	0
Flowering Plants	taraxacum, California	Taraxacum californicum	E	0	0
Flowering Plants	tarplant, Otay	Hemizonia conjugens	T	0	0
Flowering Plants	thelypody, Howell's spectacular	Thelypodium howellii spectabilis	T	0	0
Flowering Plants	thistle, Chorro Creek bog	Cirsium fontinale obispoense	E	0	0
Flowering Plants	thistle, fountain	Cirsium fontinale fontinale	E	0	0
Flowering Plants	thistle, Loch Lomond coyote	Eryngium constancei	E	0	0



1999 Data Request For Federal Agencies - Total Expenditures from the Bureau of Reclamation

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs /Acquisition Cost
Flowering Plants	thistle, Pitcher's	Cirsium pitcheri	T	0	0
Flowering Plants	thistle, Sacramento Mountains	Cirsium vineaceum	T	0	0
Flowering Plants	thistle, Suisun	Cirsium hydrophilum hydrophilum	E	1,000	0
Flowering Plants	thormint, San Diego	Acanthomintha ilicifolia	T	0	0
Flowering Plants	thormint, San Mateo	Acanthomintha obovata duttonii	E	0	0
Flowering Plants	townsendia, Last Chance	Townsendia aprica	T	0	0
Flowering Plants	trillium, persistent	Trillium persistens	E	0	0
Flowering Plants	trillium, relict	Trillium reliquum	E	0	0
Flowering Plants	twipod, Dudley Bluffs	Physaria obcordata	T	0	0
Flowering Plants	uhiuhi	Caesalpinia kavaianse	E	0	0
Flowering Plants	uvillo	Eugenia haematocarpa	E	0	0
Flowering Plants	vervain, Red Hills	Verbena californica	T	0	0
Flowering Plants	vetch, Hawaiian	Vicia menziesii	E	0	0
Flowering Plants	wallflower, Ben Lomond	Erysimum teretifolium	E	0	0
Flowering Plants	wallflower, Contra Costa	Erysimum capitatum angustatum	E	0	0
Flowering Plants	wallflower, Menzies'	Erysimum menziesii	E	0	0
Flowering Plants	walnut, West Indian or nogal	Juglans jamaicensis	E	0	0
Flowering Plants	warea, wide-leaf	Warea amplexifolia	E	0	0
Flowering Plants	water-plantain, Kral's	Sagittaria secundifolia	T	0	0
Flowering Plants	water-umbel, Huachuca	Lilaeopsis schaffneriana recurva	E	0	0
Flowering Plants	water-willow, Cooley's	Justicia cooleyi	E	0	0
Flowering Plants	watercress, Gambel's	Rorippa gambellii	E	0	0
Flowering Plants	whitlow-wort, papery	Paronychia chartacea	T	0	0
Flowering Plants	wild-buckwheat, clay-loving	Eriogonum pelinophilum	E	0	0
Flowering Plants	wild-buckwheat, gypsum	Eriogonum gypsophilum	T	0	0
Flowering Plants	wild-buckwheat, southern mountain	Eriogonum kennedyi austromontanum	T	0	0
Flowering Plants	wild-rice, Texas	Zizania texana	E	0	0
Flowering Plants	wire-lettuce, Malheur	Stephanomeria malheurenensis	E	0	0
Flowering Plants	wireweed	Polygonella basiramaia	E	0	0
Flowering Plants	woodland-star, San Clemente Island	Lithophragma maximum	E	0	0
Flowering Plants	woolly-star, Hoover's	Eriastrum hooveri	T	7,142	0
Flowering Plants	woolly-star, Santa Ana River	Eriastrum densifolium sanctorum	E	0	0
Flowering Plants	wooly-threads, San Joaquin	Lembertia congdonii	E	7,142	0
Flowering Plants	ziziphus, Florida	Ziziphus celata	E	0	0
Conifers and Cycads	cypress, Gowen	Cupressus goveniana goveniana	T	0	0
Conifers and Cycads	cypress, Santa Cruz	Cupressus abramsiana	E	0	0
Conifers and Cycads	Torreya, Florida	Torreya taxifolia	E	0	0
Ferns and Allies	diellia, asplenium-leaved	Diellia erecta	E	0	0
Ferns and Allies	fern, Alabama streak-sorus	Thelypteris pilosa alabamensis	T	0	0
Ferns and Allies	fern, Aleutian shield	Polystichum aleuticum	E	0	0
Ferns and Allies	fern, American hart's-tongue	Asplenium scolopendrium americanum	T	0	0
Ferns and Allies	fern, Elfin tree	Cyathea dryopteroides	E	0	0
Ferns and Allies	fern, pendant kihi	Adenophorus periens	E	0	0
Ferns and Allies	ihi`ihi	Marsilea villosa	E	0	0
Ferns and Allies	No common name	Asplenium fragile insulare	E	0	0
Ferns and Allies	No common name	Diellia falcata	E	0	0
Ferns and Allies	No common name	Diellia pallida	E	0	0
Ferns and Allies	No common name	Thelypteris yaucoensis	E	0	0
Ferns and Allies	No common name	Thelypteris verecunda	E	0	0
Ferns and Allies	No common name	Thelypteris inabonensis	E	0	0
Ferns and Allies	No common name	Tectaria estremezana	E	0	0
Ferns and Allies	No common name	Polystichum calderonense	E	0	0
Ferns and Allies	No common name	Elaphoglossum serpens	E	0	0
Ferns and Allies	No common name	Diellia unisora	E	0	0

1999 Data Request For Federal Agencies - Total Expenditures from the Bureau of Reclamation

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs /Acquisition Cost
Ferns and Allies	No common name	Adiantum vivesii	E	0	0
Ferns and Allies	No common name	Diplazium molokaiense	E	0	0
Ferns and Allies	No common name	Pteris lidgatei	E	0	0
Ferns and Allies	pauoa	Ctenitis squamigera	E	0	0
Ferns and Allies	quillwort, black spored	Isoetes melanospora	E	0	0
Ferns and Allies	quillwort, Louisiana	Isoetes louisianensis	E	0	0
Ferns and Allies	quillwort, mat-forming	Isoetes tegetiformans	E	0	0
Ferns and Allies	wawae`iole	Huperzia mannii	E	0	0
Ferns and Allies	wawae`iole, (=ha`iwale)	Phlegmariurus nutans	E	0	0
Lichens	cladonia, Florida perforate	Cladonia perforata	E	0	0
Lichens	lichen, rock gnome	Gymnoderma lineare	E	0	0

Grand Total

37,395,007

2,234,600

# NPS TE Species Expenditures

NAMES SCIENTIFIC	COMMON	LISTING STATUS*	EXPENDITURES			
			1998	1999	2000	2001
Acipenser brevirostrum	shortnose sturgeon	E	300	0	0	10,000
Acipenser oxyrinchus desotoi	gulf sturgeon	T	0	1,000	1,000	0
Adenophorus periens	pendant kihifern	E	0	0	0	0
Aeschynomene virginica	Virginia Sensitive jointvetch	T	0	0	6,000	25,000
Alasmidonta atropurpurea	cumberland elktoe	E	2,667	2,666	2,666	2,666
Alasmidonta heterodon	dwarf wedge mussel	E	1,412	1,608	17,520	16,520
Alopecurus aequalis sonomensis	Sonoma shortawn foxtail	E	500	500	10,000	10,000
Amaranthus pumilus	seaside amaranth	T	31,360	44,422	107,924	149,872
Ameiva polops	St. Croix ground lizard	E	0	16,200	12,800	1,800
Ammodramus maritimus mirabilis	Cape Sable seaside sparrow	E	333,000	205,000	320,500	262,500
Antilocapra americana sonoriensi	Sonoran pronghorn	E	71,000	46,000	89,000	76,000
Aphelocoma coerulescens	florida scrub-jay	T	6,000	2,000	4,000	4,000
Apios priceana	Prince's potato bean	T	200	200	300	300
Arabis hoffmannii	Hoffman's rockcress	E	1,000	1,000	1,000	1,000
Arabis perstellata	Nevada rockcress	E	200	200	300	300
Arctostaphylos confertiflora	Santa Rosa Island manzanita	E	5,000	1,700	1,700	2,800
Argyroxiphium kauense	kau silversword	E	10,000	30,000	30,000	40,000
Argyroxiphium sandwicense macrocephalus	haleakala silversword	T	0	500	500	0
Argyroxiphium sandwicense sandwicense	Hawaii silversword	E	0	0	0	0
Asplenium rhomboideum	diamond spleenwort	E	0	500	500	500
Astragalus bibullatus	Guthries ground plum	E	0	0	0	600
Astragalus cremnophylax var. cremnophyla	sentry milkvetch	E	1,500	1,500	1,500	1,500
Brachyramphus marmoratus marmora	marbled murrelet	T	81,500	73,000	77,000	57,000
Buteo solitarius	hawaiian hawk	E	0	0	0	0
Caesalpinia kavaense	uhiuhi	E	0	0	0	0
Calytranthes thomasiana	Thomas' lidflower	E	0	0	500	0
Canis lupus	gray wolf	EXPN	799,195	749,296	792,785	772,400
Canis rufus	red wolf	EXPN	20,000	0	0	0
Caretta caretta	loggerhead sea turtle	T	170,581	240,238	260,112	310,113
Carex specuicola	Navaho sedge	T	1,000	1,000	0	0
Castilleja mollis	softleaf indian paintbrush	E	7,600	13,000	9,500	8,000
Chamaesyce garberi	Garber's sandmat	T	2,200	0	0	0
Charadrius alexandrinus	western snowy plover	E	90,000	65,000	100,000	64,000
Charadrius melodus	piping plover	E	270,669	314,231	323,022	533,926
Chelonia mydas	common green sea turtle	T	55,601	60,032	62,630	70,817
Chorizanthe valida	Sonoma spineflower	E	1,000	10,000	5,000	10,000
Cirsium pitcheri	Pitcher's thistle	T	2,000	3,600	10,100	9,550
Clemmys muhlenbergii	bog turtle	T	9,450	7,050	18,600	38,770
Clermontia peleana peleana	haha	E	0	0	0	0
Condradilla caelata	Birdwing pearly mussel	E	200	200	300	300
Corvus hawaiiensis	'alala	E	0	0	0	0
Corynorhinus townsendii	Ozark big ear bat	E	18,300	18,300	20,900	23,300
Coryphantha ramillosa	bunched cory cactus	T	1,000	1,800	1,000	1,600
Crocodylus acutus	American crocodile	E	27,600	20,659	24,637	25,137
Cycladenia humilis jonesii	Jone's cycladenia	T	1,500	0	0	0
Cynomys parvidens	Utah prairie dog	T	10,000	15,000	20,000	20,000
Cyprinella monacha	Chromium shiner	T	1,400	1,400	1,500	2,950
Cyprinodon diabolis	Devils Hole pupfish	E	200,000	3,000	3,000	45,000
Cyprinodon macularius	Desert pupfish	E	7,000	3,000	5,000	5,000
Cyprogenia stegaria	fanshell	E	0	0	0	1,000
Cyrtandra giffardii	forest cyrtandra	E	0	0	0	0
Dalea foliosa	leafy prairie-flower	E	200	200	300	300
Dendroica kirtlandii	kirtland's warbler	E	200	200	200	100
Dermodochelys coriacea	leatherback sea turtle	E	36,253	40,644	40,523	46,105
Drymarchon corais couperi	eastern indigo snake	T	0	5,000	5,000	16,200
Dudleya nesiotica	Santa Cruz Island liveforever	E	0	1,000	500	500
Dudleya traskiae	Santa Barbara Island liveforever	E	1,000	2,000	1,500	500
Echinacea tennesseensis	Tennessee purple coneflower	E	200	200	300	300
Echinocereus chisoensis chisoensis	chisos mountain hedgehog cactus	T	1,600	3,800	24,000	34,000
Empidonax traillii extimus	Southwestern willow flycatcher	E	13,600	13,600	10,400	8,900
Epioblasma brevidens	Cumberlandian combshell	E	2,667	2,666	2,666	2,666
Epioblasma capsaeformis	oyster mussel	E	2,667	2,666	2,666	2,666
Epioblasma torulosa rangiana	northern riffleshell	E	0	0	0	1,000
Epioblasma torulosa tortulosa	purple cats paw pearly mussel	E	0	0	0	1,500
Epioblasma walkeri	tan riffleshell	E	2,867	2,866	2,966	2,966
Eretmodochelys imbricata	hawksbill sea turtle	E	182,681	187,358	187,952	180,333
Erigeron maguirei	MaGuire's daisy	T	5,000	5,000	5,000	5,000
Etheostoma boschungii	slackwater darter	T	600	1,200	2,600	1,200
Etheostoma percnurum	duskytail darter	E	0	0	1,200	23,650

# NPS TE Species Expenditures

NAMES SCIENTIFIC	COMMON	LISTING STATUS*	EXPENDITURES			
			1998	1999	2000	2001
<i>Etheostoma rubrum</i>	Bavou darter	T	200	200	200	2,400
<i>Eucyclogobius newberryi</i>	tidewater goby	E	25,000	5,000	10,000	5,000
<i>Eumetopias jubatus</i>	Steller sea lion	E	15,000	10,000	20,000	30,000
<i>Falco peregrinus</i>	peregrine	DM	136,872	105,181	155,429	104,806
<i>Fusconaia cor</i>	shiny pigtoe	E	200	200	300	300
<i>Galium buxifolium</i>	Santa Cruz Island bedstraw	DM	1,000	1,000	1,000	1,000
<i>Gambusia gaigei</i>	Big Bend gambusia	E	29,093	21,800	16,900	6,900
<i>Geum radiatum</i>	Appalachian avens	E	15,000	9,000	9,000	9,600
<i>Gila cypha</i>	humpback chub	E	0	12,000	7,000	2,000
<i>Gila elegans</i>	bonytail	E	5,000	5,000	5,000	5,000
<i>Gilia tenuiflora hoffmannii</i>	Hoffman's gilia	DM	4,600	4,600	3,800	1,000
<i>Glaucidium brasilianum cactorum</i>	cactus ferruginous pygmy-owl	E	3,000	3,000	4,000	5,000
<i>Glaucomys sabrinus coloratus</i>	Carolina northern flying squirrel	E	0	5,000	5,000	27,300
<i>Gopherus agassizii</i>	desert tortoise	T	81,000	60,000	62,000	50,000
<i>Gopherus polyphemus</i>	gopher tortoise	T	3,000	3,000	18,000	9,000
<i>Graptemys oculifera</i>	ringed sawback turtle	T	200	200	300	300
<i>Grus americana</i>	whooping crane	EXPN	7,000	7,000	7,000	7,000
<i>Gymnoderma lineare</i>	rock gnome lichen	E	10,000	9,000	9,000	9,300
<i>Gymnogyis californianus</i>	california condor	EXPN	500	5,500	15,000	38,600
<i>Haliaeetus leucocephalus</i>	bald eagle	T	305,145	229,508	270,226	274,025
<i>Helianthemum greenii</i>	island rush-rose	T	1,000	1,000	1,000	1,600
<i>Helianthus eggertii</i>	Egbert's sunflower	T	3,200	200	300	11,300
<i>Helonias bullata</i>	swamp pink	T	0	0	0	900
<i>Hemignathus munroi</i>	'akiapola'au	E	0	0	0	0
<i>Heraldes aristodemus ponceanus</i>	Schau swallowtail	E	840	935	1,582	1,882
<i>Hexastylis naniflora</i>	dwarf-flowered heartleaf	T	150	150	150	2,016
<i>Hibiscadelphus giffardianus</i>	Kauai hau kuahiwi	E	500	1,000	2,000	2,000
<i>Ischaemum byrnone</i>	Hilo murainagrass	E	1,000	3,000	4,000	2,000
<i>Isotria medeoloides</i>	small whorled pogonia orchid	T	1,000	2,000	1,000	2,740
<i>Kokia drynarioides</i>	Hawaii tree cotton	E	0	0	0	0
<i>Lampsilis abrupta</i>	pink mucket	E	0	0	0	1,000
<i>Lampsilis higginsii</i>	Higgins' eye pearly mussel	E	41,400	51,000	65,000	110,500
<i>Lampsilis perovalis</i>	orange-nacre mucket	T	200	200	300	300
<i>Lasiurus cinereus semotus</i>	Hawaiian hoary bat	E	0	0	0	0
<i>Lavia cariosa</i>	Beach Lavia	E	1,000	1,000	2,000	16,000
<i>Lepidochelys kempii</i>	Kemp's ridley sea turtle	E	172,528	205,392	214,745	165,512
<i>Leptonycteris curasoae verbabuen</i>	lesser long-nosed bat	E	8,000	8,000	9,000	9,000
<i>Leptonycteris nivalis</i>	Mexican long-nosed bat	E	200	200	200	200
<i>Lesquerella filiformis</i>	Missouri bladderpod	E	35,500	69,600	69,600	88,100
<i>Liatris helleri</i>	Heller's blazingstar	T	10,000	0	0	720
<i>Lilium occidentale</i>	Western Lily	E	0	0	1,000	1,000
<i>Loxops coccineus coccineus</i>	honeycreeper	E	0	0	0	0
<i>Lupinus tidestromii</i>	clover lupine	E	1,000	1,000	2,000	15,000
<i>Lycaeides melissa samuelis</i>	Kamer blue butterfly	E	28,850	35,550	20,450	33,450
<i>Lynx canadensis</i>	lynx	T	12,250	48,300	91,925	135,900
<i>Mahonia pinnata insularis</i>	island barberry	E	2,500	500	500	500
<i>Malacothamnus fasciculatus nesio</i>	santa cruz island bus	E	500	500	500	500
<i>Malacothrix indecora</i>	santa cruz island mal	E	7,400	4,000	1,000	1,000
<i>Malacothrix squalida</i>	island malacothrix	E	500	500	500	500
<i>Megaptera novaeangliae</i>	humpback whale	E	70,000	70,000	98,000	260,000
<i>Melicope zahlbruckneri</i>	kipuka piaula	E	0	0	1,000	2,000
<i>Microhexura montivaga</i>	Spruce-fir moss spider	E	0	9,800	9,800	9,800
<i>Mimulus glabratus michiganensis</i>	Michigan monkey-flower	E	0	0	0	200
<i>Mustela nigripes</i>	black-footed ferret	EXPN	165,000	135,000	112,000	135,000
<i>Mycteria americana</i>	wood stork	E	8,340	8,935	24,082	10,882
<i>Myotis grisescens</i>	gray bat	E	20,600	20,150	35,950	29,550
<i>Myotis sodalis</i>	Indiana bat	E	38,808	55,200	54,278	58,175
<i>Neraudia ovata</i>	big island ma'olea	E	0	0	0	0
<i>Nerodia clarkii taeniata</i>	Atlantic salt marsh snake	T	0	1,000	1,000	0
<i>Nesochen sandvicensis</i>	hawaiian goose	E	30,000	45,000	54,000	54,000
<i>Nothocestrum breviflorum</i>	smallflower aiea	E	0	0	5,000	2,000
<i>Notropis girardi</i>	Arkansas river shiner	T	0	216	432	1,080
<i>Notropis topeka</i>	Topeka shiner	E	2,000	2,000	2,000	27,000
<i>Noturus baileyi</i>	smoky madtom	E	1,200	1,200	1,200	2,650
<i>Noturus flavipinnis</i>	yellowfin madtom	T	1,200	1,200	1,200	2,650
<i>Obovaria retusa</i>	golf stick pearly mussel	E	0	0	0	1,000
<i>Ochrosia kilauaeensis</i>	Hawaii yellowwood	E	0	0	0	0
<i>Oenothera californica eurekaensis</i>	eureka dunes evening-	E	10,000	0	32,500	2,500
<i>Oncorhynchus clarkii stomias</i>	greenback cutthroat trout	T	31,000	33,500	31,500	31,000
<i>Oncorhynchus keta</i>	chum salmon	T	0	0	1,000	3,000
<i>Oncorhynchus kisutch</i>	Coho salmon	T	194,000	189,000	130,000	148,000
<i>Oncorhynchus mykiss</i>	Steelhead	T	25,000	25,000	67,000	63,000

# NPS TE Species Expenditures

NAMES SCIENTIFIC	COMMON	LISTING STATUS*	EXPENDITURES			
			1998	1999	2000	2001
Oncorhynchus nerka	sockeye salmon	T	4,000	10,000	25,000	13,000
Oncorhynchus tshawytscha	chinook salmon	T	21,500	21,500	67,500	66,500
Oreomyza mana	hawaii creeper	E	0	0	0	0
Ovis canadensis sierrae	Sierra Nevada bighorn sheep	E	10,500	5,300	3,400	3,500
Oxyloma haydeni kanabensis	kanab ambersnail	E	5,000	5,000	2,000	2,000
Palaemonias ganteri	Kentucky cave shrimp	E	0	0	0	10,000
Pediocactus bradyi	Brady's hedgehog cactus	E	2,000	0	1,000	0
Pediocactus despaini	Despain's cactus	E	10,000	10,000	2,000	2,000
Pediocactus winkleri	Winkler's cactus	T	10,000	10,000	6,000	6,000
Pegias fabula	little-wing pearly mussel	E	2,667	2,666	2,666	2,666
Pelecanus occidentalis	brown pelican	E	22,600	33,750	43,700	27,600
Pentachaeta bellidiflora	whiteray pygmydaisy	E	0	0	0	0
Peromyscus polionotus niveiventris	southeastern beach mouse	T	0	5,000	5,000	7,000
Peromyscus polionotus trissyllep	Perdido Key Beach mouse	E	7,000	8,000	118,000	42,000
Phacelia insularis insularis	Santa Rosa Island scorpionweed	E	7,400	4,000	500	4,000
Phoxinus cumberlandensis	blackside dace	T	11,400	11,600	11,950	16,950
Phyllostegia racemosa	kiponapona	E	0	0	0	500
Physeter catodon	sperm whale	E	0	0	1,000	0
Picoides borealis	red-cockaded woodpecker	E	33,000	57,200	60,500	61,600
Plantago hawaiiensis	Hawaii plantain	E	1,000	1,000	2,000	3,000
Platanthera praeclara	Great Plains white fringed orchid	T	17,500	42,600	30,900	56,560
Plebobasus cooperianus	orange-footed pearly mussel	E	200	200	300	300
Pleomele hawaiiensis	Hawaii hala pepe	E	500	500	500	1,000
Plethodon shenandoah	Shenandoah salamander	E	0	6,000	0	0
Pleurobema clava	clubshell	E	0	0	0	1,000
Pleurobema plenum	rough pigtoe	E	0	0	0	1,000
Polysticta stelleri	steller's eider	T	0	0	0	10,000
Portulaca sclerocarpa	'ihi makole	E	5,000	5,000	2,000	0
Pritchardia affinis	Hawaii pritchardia	E	1,000	1,000	2,000	1,000
Psittirostra psittacea	'o'u	E	0	0	0	0
Pterodroma phaeopygia sandwichen	hawaiian dark-rumped petrel	E	2,000	5,000	0	74,000
Ptilimnium nodosum	piedmont mock bishopweed	E	608	608	608	13,040
Ptychocheilus lucius	Colorado pikeminnow	E	500	12,500	26,000	26,000
Puffinus auricularis	'a'o	T	0	0	0	0
Puma concolor coryi	florida panther	E	103,000	105,000	134,800	171,800
Quadrula fragosa	winged mapleleaf mussel	E	41,400	51,000	65,000	75,000
Rana aurora draytoni	California red-legged frog	T	50,000	48,000	65,000	57,000
Sagittaria secundifolia	Little River arrowhead	T	0	2,000	0	0
Salvelinus confluentus	bull trout	T	72,100	174,850	144,400	132,100
Sarracenia oreophila	green pitcherplant	E	25,000	3,000	3,000	3,000
Schoenocrambe bamebyi	Bameby thelypody	E	1,000	1,000	1,000	1,000
Sclerocactus mariposensis	Lloyd's mariposa cactus	T	1,000	1,400	1,000	1,600
Sclerocactus wrightiae	Wright's fishhook cactus	E	0	1,000	6,000	6,000
Scutellaria montana	largeflower skullcap	E	100	100	100	100
Sesbania tomentosa	Oahu riverhemp	E	15,000	0	0	0
Sicyos alba	anunu	E	0	0	0	1,000
Silene hawaiiensis	Hawaii catchfly	T	0	0	0	0
Spermolepis hawaiiensis	Hawaii scaleseed	E	0	0	0	0
Speyeria zerene myrtieae	Myrtle's silverspot	E	5	0	0	10
Spiraea virginiana	Virginia spirea	T	500	500	500	500
Spiranthes diluvialis	Ute ladies' tresses	T	33,000	108,000	97,000	7,000
Stema antillarum athalassos	Interior least tern	E	7,500	32,150	28,600	18,500
Stema dougallii dougallii	Roseate tern	E	2,840	6,335	6,982	7,282
Strix occidentalis caurina	northern spotted owl	T	381,750	291,500	492,047	444,127
Strix occidentalis lucida	mexican spotted owl	T	56,500	75,000	44,000	130,300
Stygobromus hayi	Hay's spring amphipod	E	0	2,500	13,000	28,000
Swallenia alexandrae	Eureka dunegrass	E	10,000	0	2,500	2,500
Syncaris pacifica	Californian fresh water shrimp	E	0	2,000	0	0
Thysanocarpus conchuliferus	lacepod	T	500	500	500	500
Townsendia aprica	last chance townsend	T	0	0	8,000	8,000
Toxolasma cylindrellus	pale lilliput pearly mussel	E	200	200	300	300
Trichechus manatus	manatee	E	14,100	14,118	30,573	18,273
Trifolium amoenum	showy indian clover	E	0	0	0	0
Ursus americanus luteolus	Louisiana black bear	T	200	200	300	300
Ursus arctos horribilis	grizzly bear	T	978,156	827,543	1,007,639	1,173,055
Villosa perpurpurea	purple bean mussel	E	1,875	1,875	1,875	1,875
Villosa trabalis	Cumberland bean mussel	E	4,542	4,541	4,541	4,541
Vireo atricapillus	black-capped vireo	E	6,800	6,800	15,300	6,000
Vireo bellii pusillus	least bell's vireo	E	1,625	11,968	0	2,104
Xyrauchen texanus	razorback sucker	E	10,500	20,500	11,000	11,000
Xyris tennesseensis	Tennessee yelloweyed grass	E	200	200	300	300

## NPS TE Species Expenditures

NAMES		LISTING STATUS*	EXPENDITURES			
SCIENTIFIC	COMMON		1998	1999	2000	2001
Zanthoxylum hawaiiense	Hawaii pricklyash	E	0	0	0	0
<b>TOTALS</b>			<b>\$6,054,714</b>	<b>\$5,802,823</b>	<b>\$7,000,199</b>	<b>\$7,733,028</b>



# United States Department of the Interior

## OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

Washington, D.C. 20240

OCT 12 2001

### Memorandum

To: Acting Director, Fish and Wildlife Service

From: Acting Director, Office of Surface Mining *Michael H. Owers*

Subject: Office of Surface Mining Data for FY99 and FY00 Endangered Species Expenditures Report to Congress

Thank you for your letter of September 17, 2001, requesting information on reasonably identifiable expenditures made by the Office of Surface Mining (OSM) during Fiscal Years (FYs) 1999 (99) and 2000 (00) for the conservation of endangered or threatened species.

As you are aware, all surface coal mining and reclamation must be carried out in accordance with the Surface Mining Control and Reclamation Act (SMCRA) and also must comply with the requirements of the Endangered Species Act, whether OSM or a State - through an OSM-approved program - is the regulatory authority. Specifically, mining and reclamation plans must describe "how, to the extent possible using the best technology currently available, the operator will minimize disturbances and adverse impacts on fish and wildlife and related environmental values, including compliance with the Endangered Species Act ... and how enhancement of these resources will be achieved where practicable." SMCRA also provides for the reclamation of abandoned mine lands, and while States and Indian tribes determine how such reclamation will be accomplished, OSM encourages the creation of wildlife habitats and wetlands.

In response to your request, we have reviewed our records and have no data to report based upon our clarification with your staff of the following points:

- Data collection applies only to those species that were listed as either threatened or endangered as of September 30, 1999, for FY99 data and as of September 30, 2000, for FY00 data;

- Data from States is solicited separately and will be reported to the U.S. Fish and Wildlife Service individually and independent of the Federal data submission; and
- Requiring submitting agencies to pro-rate costs when staff are not assigned full-time on a single species (or a discrete project involving a single species) is considered unduly burdensome, and such costs need not be reported, e.g., portion of a mine plan or permitting review associated with a particular listed species.

Should you have any questions concerning this response, please do not hesitate to contact Mary Josie Blanchard, Assistant Director, Program Support, at (202) 208-4264 or me at (202) 208-4006.





# United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Washington, D.C. 20240

<http://www.blm.gov>

December 20, 2001

Mr. Marshall Jones  
Acting Director  
U.S. Fish and Wildlife Service  
1849 C Street, N.W.  
Washington, D.C. 20240

Dear Mr. Jones:

In response to your request for the Fiscal Year 1999 Threatened and Endangered Species Expenditures by the Bureau of Land Management, I have enclosed a detailed breakdown of the expenditures by species.

Please contact Eric Lawton at (202) 452-7760 if you need any additional information.

Sincerely,

Michael A. Haske  
Deputy Group Manager  
Fish, Wildlife and Forests Group

Enclosure

Bureau of Land Management - FY1999 Endangered and Threatened Species Expenditures  
As of Fiscal Year 1999 (September 30, 1999)

11/30/2001

A running total of expenditures for each column is below each heading.  
If you have any questions, contact Eric Lawton at 202-452-7760.

Group	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
				8,974,700	8,590,000
Mammals	bat, Indiana	Myotis sodalis	E	500	
Mammals	bat, lesser long-nosed	Leptonycteris curasoae yerbabuena	E	24,000	
Mammals	bat, Mexican long-nosed	Leptonycteris nivalis	E	1,000	
Mammals	bear, grizzly	Ursus arctos horribilis	T	26,000	
Mammals	ferret, black-footed	Mustela nigripes	E	364,000	
Mammals	fox, San Joaquin kit	Vulpes macrotis mutica	E	20,000	
Mammals	jaguar	Panthera onca	E	3,000	
Mammals	kangaroo rat, giant	Dipodomys ingens	E	50,000	
Mammals	kangaroo rat, Stephens'	Dipodomys stephensi	E	20,000	
Mammals	kangaroo rat, Tipton	Dipodomys nitratoides nitratoides	E	20,000	
Mammals	mouse, Preble's meadow jumping	Zapus hudsonius preblei	T	6,000	
Mammals	prairie dog, Utah	Cynomys parvidens	T	192,000	
Mammals	pronghorn, Sonoran	Antilocapra americana sonoriensis	E	43,500	
Mammals	vole, Hualapai Mexican	Microtus mexicanus hualpaiensis	E		25,000
Mammals	wolf, gray	Canis lupus	E, T	25,000	
Birds	condor, California	Gymnogyps californianus	E	75,000	
Birds	crane, whooping	Grus americana	E	3,000	
Birds	curlew, Eskimo	Numenius borealis	E	1,000	
Birds	eagle, bald	Haliaeetus leucocephalus	T	159,700	
Birds	elder, spectacled	Somateria fischeri	T	18,000	
Birds	elder, Steller's	Polysticta stelleri	T	17,000	
Birds	falcon, American peregrine	Falco peregrinus anatum	DM	94,400	
Birds	falcon, northern aplomado	Falco femoralis septentrionalis	E	32,000	
Birds	flycatcher, southwestern willow	Empidonax traillii extimus	E	468,900	25,000
Birds	gnatcatcher, coastal California	Polioptila californica californica	T	31,000	
Birds	murrelet, marbled	Brachyramphus marmoratus marmoratus	T	519,000	
Birds	owl, Mexican spotted	Strix occidentalis lucida	T	61,000	1,000
Birds	owl, northern spotted	Strix occidentalis caurina	T	426,000	
Birds	pelican, brown	Pelecanus occidentalis	E	6,000	
Birds	Plover, piping	Charadrius melodus	E, T	15,000	
Birds	plover, western snowy	Charadrius alexandrinus nivosus	T	122,000	
Birds	pygmy-owl, cactus ferruginous	Glaucidium brasilianum cactorum	E	35,000	
Birds	rail, Yuma clapper	Rallus longirostris yumanensis	E	6,000	
Birds	tern, least	Sterna antillarum	E	8,500	
Birds	vireo, least Bell's	Vireo bellii pusillus	E	5,000	
Reptiles	lizard, blunt-nosed leopard	Gambelia silus	E	20,000	
Reptiles	lizard, Coachella Valley fringe-toed	Uma inornata	T	2,000	
Reptiles	rattlesnake, New Mexican ridge-nosed	Crotalus willardi obscurus	T	1,500	

Grot	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Cos.
				8,974,700	8,590,000
Mammals	bat, Indiana	Myotis sodalis	E	500	
Mammals	bat, lesser long-nosed	Leptonycteris curasoae yerbabuenae	E	24,000	
Mammals	bat, Mexican long-nosed	Leptonycteris nivalis	E	1,000	
Mammals	bear, grizzly	Ursus arctos horribilis	T	26,000	
Mammals	ferret, black-footed	Mustela nigripes	E	364,000	
Mammals	fox, San Joaquin kit	Vulpes macrotis mutica	E	20,000	
Mammals	jaguar	Panthera onca	E	3,000	
Mammals	kangaroo rat, giant	Dipodomys ingens	E	50,000	
Mammals	kangaroo rat, Stephens'	Dipodomys stephensi	E	20,000	
Mammals	kangaroo rat, Tipton	Dipodomys nitratoides nitratoides	E	20,000	
Mammals	mouse, Preble's meadow jumping	Zapus hudsonius preblei	T	6,000	
Mammals	prairie dog, Utah	Cynomys parvidens	T	192,000	
Mammals	pronghorn, Sonoran	Antilocapra americana sonoriensis	E	43,500	
Mammals	vole, Hualapai Mexican	Microtus mexicanus hualpalensis	E		25,000
Mammals	wolf, gray	Canis lupus	E, T	25,000	
Birds	condor, California	Gymnogyps californianus	E	75,000	
Birds	crane, whooping	Grus americana	E	3,000	
Birds	curlew, Eskimo	Numenius borealis	E	1,000	
Birds	eagle, bald	Haliaeetus leucocephalus	T	159,700	
Birds	elder, spectacled	Somateria fischeri	T	18,000	
Birds	elder, Steller's	Polysticta stelleri	T	17,000	
Birds	falcon, American peregrine	Falco peregrinus anatum	DM	94,400	
Birds	falcon, northern aplomado	Falco femoralis septentrionalis	E	32,000	
Birds	flycatcher, southwestern willow	Empidonax traillii extimus	E	468,900	25,000
Birds	gnatcatcher, coastal California	Polioptila californica californica	T	31,000	
Birds	murrelet, marbled	Brachyramphus marmoratus marmoratus	T	519,000	
Birds	owl, Mexican spotted	Strix occidentalis lucida	T	61,000	1,000
Birds	owl, northern spotted	Strix occidentalis caurina	T	428,000	
Birds	pelican, brown	Pelecanus occidentalis	E	6,000	
Birds	plover, piping	Charadrius melodus	E, T	15,000	
Birds	plover, western snowy	Charadrius alexandrinus nivosus	T	122,000	
Birds	pygmy-owl, cactus ferruginous	Glaucidium brasilianum cactorum	E	35,000	
Birds	rail, Yuma clapper	Rallus longirostris yumanensis	E	6,000	
Birds	tern, least	Sterna antillarum	E	8,500	
Birds	vireo, least Bell's	Vireo bellii pusillus	E	5,000	
Reptiles	lizard, blunt-nosed leopard	Gambella silus	E	20,000	
Reptiles	lizard, Coachella Valley fringe-toed	Uma inornata	T	2,000	
Reptiles	rattlesnake, New Mexican ridge-nosed	Crotalus willardi obscurus	T	1,500	

Source: BLM FY1999 Call for Fish, Wildlife, Botany, and Threatened and Endangered Species Program Data

Page 1 of 4

Source: BLM FY1999 Call for Fish, Wildlife, Botany, and Threatened and Endangered Species Program Data

Page 2 of 4

Bureau of Land Management - FY1999 Endangered and Threatened Species Expenditures  
As of Fiscal Year 1999 (September 30, 1999)

1/30/2001

Group	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Fishes	woundfin	Plagopterus argentissimus	E	27,000	
Snails	ambersnail, Kanab	Oxytoma haydeni kanabensis	E	19,000	
Snails	limpet, Banbury Springs	Lanx sp.	E	100	
Snails	snail, Bliss Rapids	Taylorconcha serpenticola	T	500	
Snails	snail, Morro shoulderband	Helminthoglypta walkeriana	E	2,000	
Snails	snail, Utah valvata	Valvata utahensis	E	500	
Snails	springsnail, Alamosa	Tryonia alamosae	E	2,000	
Snails	springsnail, Bruneau Hot	Pyrgulopsis bruneauensis	E	13,000	
Snails	springsnail, Idaho	Fontelicella idahoensis	E	16,000	
Snails	springsnail, Socorro	Pyrgulopsis neomexicana	E	2,000	
Insects	beetle, American burying	Nicrophorus americanus	E	2,000	
Insects	butterfly, Uncompahgre fritillary	Boloria acrocnema	E	15,000	
Insects	moth, Kern primrose sphinx	Euproserpinus euterpe	T	500	
Crustaceans	fairy shrimp, longhorn	Branchinecta longiantenna	E	2,000	
Crustaceans	fairy shrimp, vernal pool	Branchinecta lynchi	T	2,500	
Crustaceans	isopod, Socorro	Thermosphaeroma thermophilus	E	2,000	
Flowering Plants	bear-poppy, dwarf	Arctomecon humilis	E	22,500	
Flowering Plants	bladderpod, Dudley Bluffs	Lesquerella congesta	T	12,000	
Flowering Plants	bladderpod, kodachrome	Lesquerella tumulosa	E	7,000	
Flowering Plants	cactus, Arizona hedgehog	Echinocereus triglochidatus arizonicus	E	1,000	
Flowering Plants	cactus, Bakersfield	Opuntia treleasei	E	500	
Flowering Plants	cactus, Brady pincushion	Pedlocactus bradyi	E	10,000	
Flowering Plants	cactus, Knowlton	Pedlocactus knowltonii	E	5,500	
Flowering Plants	cactus, Kuenzler hedgehog	Echinocereus fendleri kuenzleri	E	17,500	
Flowering Plants	cactus, Lee pincushion	Coryphantha sneedii leei	T	12,500	
Flowering Plants	cactus, Mesa Verde	Sclerocactus mesae-verdae	T	5,000	
Flowering Plants	cactus, Peebles Navajo	Pedlocactus peeblesianus peeblesianus	E	6,000	
Flowering Plants	cactus, San Rafael	Pedlocactus despainii	E	7,000	
Flowering Plants	cactus, Siler pincushion	Pedlocactus sileri	T	5,000	
Flowering Plants	cactus, Unita Basin hookless	Sclerocactus glaucus	T	4,000	
Flowering Plants	cactus, Winkler	Pedlocactus winkleri	T	16,800	
Flowering Plants	cactus, Wright fishhook	Sclerocactus wrightiae	E	10,800	
Flowering Plants	clarkia, Springville	Clarkia springvillensis	T	1,000	
Flowering Plants	cliff-rose, Arizona	Purshia subintegra	E	11,000	
Flowering Plants	cycladenia, Jones	Cycladenia humilis jonesii	T	6,500	
Flowering Plants	daisy, Maguire	Erigeron maguirei	T	7,000	
Flowering Plants	feabane, Zuni	Erigeron rhizomatus	T	2,000	
Flowering Plants	four-o'clock, MacFarlane's	Mirabilis macfarlanei	T	17,000	
Flowering Plants	grass, California Orcutt	Orcuttia californica	E	1,000	
Flowering Plants	howellia, water	Howellia aquatilis	T	1,000	
Flowering Plants	jewelflower, California	Caulanthus californicus	E	15,000	
Flowering Plants	ladies'-tresses, Ute	Spiranthes diluvialis	T	49,100	

Bureau of Land Management - FY1999 Endangered and Threatened Species Expenditures  
As of Fiscal Year 1999 (September 30, 1999)

11/30/2001

Group	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	layia, beach	Layia carnosa	E	100,000	
Flowering Plants	lily, Western	Lilium occidentale	E	6,000	
Flowering Plants	lomatum, Bradshaw's	Lomatium bradshawii	E	10,000	56,000
Flowering Plants	mallow, Kern	Eremalche kernensis	E	20,000	
Flowering Plants	milk-vetch, Coachella Valley	Astragalus lentiginosus coachellae	E	1,000	
Flowering Plants	milk-vetch, Fish Slough	Astragalus lentiginosus piscinensis	T	5,000	
Flowering Plants	milk-vetch, Mancoas	Astragalus humillimus	E	8,000	
Flowering Plants	milk-vetch, Osterhout	Astragalus osterhoutii	E	9,000	
Flowering Plants	milk-vetch, triple-ribbed	Astragalus tricarinatus	E	1,000	
Flowering Plants	milkweed, Welsh's	Asclepias welshii	T	37,000	
Flowering Plants	mustard, Penland alpine fen	Eutrema penlandii	T	4,000	
Flowering Plants	onion, Munz's	Allium munzii	E	2,000	
Flowering Plants	orchid, western prairie fringed	Platanthera praeclara	T	1,000	
Flowering Plants	owl's-clover, fleshy	Castilleja campestris succulenta	T	1,000	
Flowering Plants	pawpaw, four-petal	Asimina tetramera	E	1,000	
Flowering Plants	pennyroyal, Todsens	Hedeoma todsenii	E	500	
Flowering Plants	penstemon, blowout	Penstemon haydenii	E	4,500	
Flowering Plants	phacelia, North Park	Phacelia formosula	E	9,000	
Flowering Plants	poppy, Sacramento prickly	Argemone pleiacantha pinnatisecta	E	500	
Flowering Plants	reed-mustard, Barneby	Schoenocrambe barnebyi	E	4,100	
Flowering Plants	rock-cress, McDonald's	Arabis mcdonaldiana	E	200	
Flowering Plants	townsendia, Last Chance	Townsendia aprica	T	12,200	
Flowering Plants	twinpod, Dudley Bluffs	Physaria obcordata	T	12,000	
Flowering Plants	wallflower, Menzies'	Erysimum menziesii	E	100,000	
Flowering Plants	wild-buckwheat, clay-loving	Eriogonum pelinophilum	E	5,000	
Flowering Plants	wire-lettuce, Malheur	Stephanomeria malheurensis	E	2,500	
Flowering Plants	woolly-star, Hoover's	Eriastrum hooveri	T	5,000	
Lichens	cladonia, Florida perforate	Cladonia perforata	E	1,000	

Federal Aviation Administration FY 1999 T&E Costs

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	pentachaeta, Lyon's	Pentachaeta lyonii	E	\$4,000	\$0

Federal Highway Administration 1999

species	totals for species on pln/con	planning/construction	total for land acquistn
cardamine micranthera		15,299	
	<b>15,299</b>	<b>15,299</b>	
Helonia bullata		2,020	
	<b>2,020</b>	<b>2,020</b>	
Isotria medeoloides		3,000	
	<b>3,000</b>	<b>3,000</b>	
Helenium virginicum		254	
	<b>254</b>	<b>254</b>	
		0	
Cynomys parvidens		12,000	
	<b>12,000</b>	<b>12,000</b>	
Empidonax traillii extimus		300	
	<b>300</b>	<b>300</b>	
Spiranthes diluvialis		1,000	
	<b>1,000</b>	<b>1,000</b>	
Phacelia argillacea		5,300	
	<b>5,300</b>	<b>5,300</b>	
Florida panther		100,000	
	<b>100,000</b>	<b>100,000</b>	
desert tortoise		150,000	
	<b>150,000</b>	<b>150,000</b>	
California gnatcatcher		25,000	
	<b>25,000</b>	<b>25,000</b>	
marbled murrelet		65,000	
	<b>65,000</b>	<b>65,000</b>	
salmon, summer chum		100,000	
	<b>100,000</b>	<b>100,000</b>	

salmon, chinook		320,000	320,000	0
	320,000		320,000	
steelhead O. mykiss		139,300	139,300	0
	139,300		139,300	
bald eagle		1,026,500	1,026,500	0
	1,026,500		1,026,500	
northern spotted owl		68,000	68,000	0
	68,000		68,000	
fat pocketbook mussel		7,500	7,500	0
	7,500		7,500	
cirsium pitcheri		1,100	1,100	0
	1,100		1,100	
solidago houghtonii		800	800	0
	800		800	
Iris lacustris		1,500	1,500	0
	1,500		1,500	
Mitchell's satyr butterfly		51,000	51,000	0
	51,000		51,000	108,000
Indiana bat	total 159,000	556,000	556,000	
		556,000	556,000	
Notropis topeka		3,800	3,800	0
		3,800	3,800	
gray bat		2,000	2,000	0
		2,000	2,000	
Virginia big eared bat		30,000	30,000	0
		30,000	30,000	
Virginia northern flying squirrel		40,000	40,000	0
		40,000	40,000	
				0



cheat mountain salamander		15,000	
	15,000	15,000	
clubshell mussel			0
	125,000	125,000	
pinkmucket pearley mussel			0
	2,500	2,500	
Pleurobema collina			0
	2,500	2,500	
clover, running buffalo			0
	12,000	12,000	
Harperella			0
	20,000	20,000	
Spiraea, Virginia			0
	3,500	3,500	
Dendroica chrysoparia			0
	34,400	34,400	
vireo atricapillus			0
	37,200	37,200	
Ancistrocactus tobuschii			0
	900	900	
callirhoe scabriscula			0
	400	400	
concho water snake			0
	1,000	1,000	
phlox nivalis Texensis			0
	2,900	2,900	
white bladderpod			0
	1,700	1,700	
Red cockaded woodpecker			0
	19,100	19,100	

Houston toad		5,000	0
	5,000	5,000	
Barton Springs salamander		200,000	0
	200,000	200,000	
fountain darter		500	0
	500	500	
whooping crane		1,400	0
	1,400	1,400	
ocelot		10,500	0
	10,500	10,500	
Slender rush-pea		9,300	0
	9,300	9,300	
Navasota Ladies tresses		5,500	0
	5,500	5,500	
Interior least tern		100	0
	100	100	
Karst invertebrates (unspecified)		141,000	0
	141,000	141,000	
South Texas ambrosia		100	0
	100	100	
Schweinitz sunflower		23,000	0
	23,000	23,000	
Canada lynx		220,000	0
	220,000	220,000	
gray wolf		23,000	0
	23,000	23,000	
Prebbles meadow jumping mouse		600,000	0
	600,000	600,000	
Black footed ferret		21,500	0

	21,500	21,500	0
manatee		2,000	
	2,000	2,000	
key deer		140,000	0
	140,000	140,000	
Garber's spurge		2,000	0
	2,000	2,000	
VELB		80,700	0
	80,700	80,700	
giant garter snake		95,800	0
	95,800	95,800	
San Joaquin kit fox		140,000	0
	140,000	140,000	
fall run chinook salmon		18,300	0
	18,300	18,300	
steelhead, california		39,300	0
	39,300	39,300	
Sacramento splittail		18,300	0
	18,300	18,300	
Giant Kangaroo rat		98,500	0
	98,500	98,500	
Tipton Kangaroo rat		77,500	0
	77,500	77,500	
Fairy tadpole shrimp		98,500	0
	98,500	98,500	
delta smelt		18,300	0
	18,300	18,300	
blunt nosed leopard lizard		77,500	0
	77,500	77,500	
			0

California jewelflower		77,500	
	77,500	77,500	
Fresno kangaroo rat			0
	77,500	77,500	
San Joaquin wooley threads			0
	3,500	3,500	
Hoover's wooley star			0
	3,500	3,500	
Vernal pool fairy shrimp			0
	91,500	91,500	
Least Bell's vireo			0
	22,000	22,000	
Santa Cruz long toed salamander			0
	21,000	21,000	
Robust spine flower			0
	5,000	5,000	
Monterey spine flower			0
	5,000	5,000	
Santa Cruz tarplant			0
	5,000	5,000	
Tidewater gobies			0
	26,000	26,000	
Scott's valley spineflower			0
	5,000	5,000	
Conservancy fairy shrimp			0
	21,000	21,000	
Owen's tui chub			0
	10,000	10,000	
Owen's pupfish			0
	15,000	15,000	

California red-legged frog		21,000	0
	<b>21,000</b>	<b>21,000</b>	
southwestern willow flycatcher		5,100	0
	<b>5,100</b>	<b>5,100</b>	
Cactus ferruginous pygmy owl		1,900	0
	<b>1,900</b>	<b>1,900</b>	
Etowah darter		37,000	0
	<b>37,000</b>	<b>37,000</b>	
little amphianthus		3,200	0
	<b>3,200</b>	<b>3,200</b>	
Cherokee darter		1,000	0
	<b>1,000</b>	<b>1,000</b>	
western prairie fringed orchid		1,200	0
	<b>1,200</b>	<b>1,200</b>	
water howellia		4500	0
	<b>4500</b>	<b>4500</b>	
golden paintbrush		4500	0
	<b>4500</b>	<b>4500</b>	
grizzly bear		10,000	0
	<b>10,000</b>	<b>10,000</b>	
bull trout		30,000	0
	<b>30,000</b>	<b>30,000</b>	
<b>Grand Total</b>			<b>0</b>
	<b>5,680,273</b>		<b>108000</b>
<b>Grand Total</b>		<b>5680273</b>	<b>108000</b>
<b>total both categories</b>			<b>5,788,273</b>



## U.S. Customs Service

1300 Pennsylvania Avenue, N.W. Washington, D.C. 20229

ADM-6-04-OF:BD:OF TGC

November 30, 2001

Mr. Marshall P. Jones, Jr.  
Director  
Fish and Wildlife Service  
U.S. Department of the Interior  
1849 C Street, NW.  
Washington, D.C. 20240

Dear Mr. Jones:

This is in response to your letter dated September 19, 2001, in which you requested that the U.S. Customs Service report on expenditures made primarily for the conservation of endangered or threatened species.

Although Customs is one of the lead agencies in the enforcement of the endangered or threatened species laws and the regulation and international conventions on these species, we do not specifically allocate funding for this purpose. Nor do we have a system to capture the cost of seizing a product of an endangered species or detaining an endangered species at any one of our border sites. This task is integrated into the overall function of Customs operational groups, such as special agents, inspectors, and import specialists. Therefore, enforcement of the endangered or threatened species laws, as well as the regulation and international conventions is a part of the regular duties within the broad range of Customs responsibilities. As a result, we cannot identify the Fiscal Year 1999 nor Fiscal Year 2000 expenditures made primarily for the conservation of endangered or threatened species pursuant to the Endangered Species Act Amendments of 1988.

However, be assured that the U.S. Customs Service, in conjunction with the Fish and Wildlife Service (FWS), continues to investigate cases involving illegal, as well as, smuggled importations of endangered and threatened species pursuant to the Endangered Species Act and the Convention on International Trade in Endangered Species of Wild Fauna and Flora. Furthermore, at FWS designated ports of entry, Customs inspectors, agents, and import specialists assist in wildlife enforcement by ensuring that suspect shipments are detained to await clearance by local FWS officers, and when appropriate, ordering the redelivery of the shipment and assessing penalties in required cases. At non-designated ports of entry our personnel perform enforcement actions on behalf of FWS in enforcing the Endangered Species Act Amendments of 1988.

TRADITION

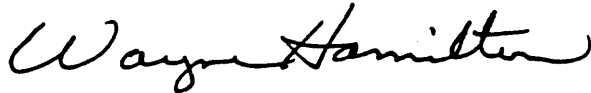
SERVICE

HONOR

Even though specific expenditures are not available, we can assure you that Customs continues its effort to work in cooperation with FWS. We expect this enforcement initiative will have a significant impact on attempted illegal importations in the future.

If you require more information, please feel free to have a member of your staff contact Mr. Kurt Hahn, Director, Budget Formulation, on (202) 927-4084.

Sincerely,

A handwritten signature in cursive script that reads "Wayne Hamilton".

C. Wayne Hamilton  
Assistant Commissioner  
Office of Finance



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

NOV 26 2001

OFFICE OF  
ENFORCEMENT AND  
COMPLIANCE ASSURANCE

Marshall P. Jones, Jr.  
Acting Director  
Fish and Wildlife Service  
U.S. Department of Interior  
Washington, D.C. 20240

Reference: FWS/AES/OPO/004747

Dear Mr. Jones:

This is in response to your letter of September 19, 2001 requesting information concerning expenditures by the U.S. Environmental Protection Agency (EPA) for the conservation of listed endangered and threatened species. As requested, enclosed are estimates of reasonably identifiable expenditures for FY 1999 and FY 2000, categorized by species. These estimates are limited, as directed by your guidance, to those funds spent on specific species and do not include funds spent on broader endangered species programs/projects or consultations under Section 7 of the Endangered Species Act that involved several species where the costs are not easily divided by species.

In addition, we will be forwarding via email the data submission in Microsoft Excel format to Martha Balislarsen of your staff, as requested. Should you have any additional questions please contact Cliff Rader of my staff at (202) 564-7159.

Sincerely,

A handwritten signature in cursive script, appearing to read "Anne Norton Miller".

Anne Norton Miller  
Director  
Office of Federal Activities

Enclosure



Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

1999 Data Request For Federal Agencies

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Mammals	bat, gray	<i>Myotis grisescens</i>	E	2799.84	
Mammals	bat, Hawaiian hoary	<i>Lasiurus cinereus semotus</i>	E		
Mammals	bat, Indiana	<i>Myotis sodalis</i>	E	864.48	
Mammals	bat, lesser long-nosed	<i>Leptonycteris curasoae yerbabuenae</i>	E		
Mammals	bat, little Mariana fruit	<i>Pteropus tokudae</i>	E		
Mammals	bat, Mariana fruit	<i>Pteropus mariannus mariannus</i>	E		
Mammals	bat, Mexican long-nosed	<i>Leptonycteris nivalis</i>	E		
Mammals	bat, Ozark big-eared	<i>Corynorhinus townsendii ingens</i>	E		
Mammals	bat, Virginia big-eared	<i>Corynorhinus townsendii virginianus</i>	E	472.48	
Mammals	bear, grizzly	<i>Ursus arctos horribilis</i>	T		
Mammals	bear, Louisiana black	<i>Ursus americanus luteolus</i>	T		
Mammals	caribou, woodland	<i>Rangifer tarandus caribou</i>	E		
Mammals	deer, Columbian white-tailed	<i>Odocoileus virginianus leucurus</i>	E		
Mammals	deer, Key	<i>Odocoileus virginianus clavium</i>	E	276.48	
Mammals	ferret, black-footed	<i>Mustela nigripes</i>	E		
Mammals	fox, San Joaquin kit	<i>Vulpes macrotis mutica</i>	E		
Mammals	jaguar	<i>Panthera onca</i>	E		
Mammals	jaguarundi, Gulf Coast	<i>Herpailurus yagouaroundi cacomitti</i>	E		
Mammals	jaguarundi, Sinaloa	<i>Herpailurus yagouaroundi tolteca</i>	E		
Mammals	kangaroo rat, Fresno	<i>Dipodomys nitratoides exilis</i>	E		
Mammals	kangaroo rat, giant	<i>Dipodomys ingens</i>	E		
Mammals	kangaroo rat, Morro Bay	<i>Dipodomys heermanni morroensis</i>	E		
Mammals	kangaroo rat, San Bernardino Merriam's	<i>Dipodomys merriami parvus</i>	E		
Mammals	kangaroo rat, Stephens'	<i>Dipodomys stephensi</i>	E		
Mammals	kangaroo rat, Tipton	<i>Dipodomys nitratoides nitratoides</i>	E		
Mammals	manatee, West Indian	<i>Trichechus manatus</i>	E		
Mammals	mountain beaver, Point Arena	<i>Aplodontia rufa nigra</i>	E	11451.2	
Mammals	Mouse, Alabama beach	<i>Peromyscus polionotus ammobates</i>	E		
Mammals	Mouse, Anastasia Island beach	<i>Peromyscus polionotus phasma</i>	E		
Mammals	Mouse, Choctawhatchee beach	<i>Peromyscus polionotus allophrys</i>	E		
Mammals	Mouse, Key Largo cotton	<i>Peromyscus gossypinus allapaticola</i>	E		
Mammals	mouse, Pacific pocket	<i>Perognathus longimembris pacificus</i>	E		
Mammals	Mouse, Perdido Key beach	<i>Peromyscus polionotus trissyllepsis</i>	E		
Mammals	mouse, Preble's meadow jumping	<i>Zapus hudsonius preblei</i>	T		
Mammals	mouse, salt marsh harvest	<i>Reithrodontomys raviventris</i>	E		
Mammals	Mouse, southeastern beach	<i>Peromyscus polionotus niveiventris</i>	T		
Mammals	mouse, St. Andrew beach	<i>Peromyscus polionotus peninsularis</i>	E		
Mammals	ocelot	<i>Leopardus pardalis</i>	E		
Mammals	otter, southern sea	<i>Enhydra lutris nereis</i>	T		
Mammals	panther, Florida	<i>Puma concolor coryi</i>	E	13382.4	

Federal, Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Mammals	prairie dog, Utah	Cynomys parvidens	T	276.48	
Mammals	pronghorn, Sonoran	Antilocapra americana sonoriensis	E		
Mammals	puma, eastern	Puma concolor cougar	E		
Mammals	rabbit, Lower Keys marsh	Sylvilagus palustris hefneri	E		
Mammals	rice rat	Oryzomys palustris natator	E		
Mammals	sea-lion, Steller	Eumetopias jubatus	E, T		
Mammals	seal, Caribbean monk	Monachus tropicalis	E		
Mammals	seal, Guadalupe fur	Arctocephalus townsendi	T		
Mammals	seal, Hawaiian monk	Monachus schaulniskii	E		
Mammals	sheep, bighorn	Ovis canadensis	E		
Mammals	sheep, bighorn	Ovis canadensis californiana	E		
Mammals	squirrel, Carolina northern flying	Glaucomys sabrinus coloratus	E		
Mammals	squirrel, Delmarva Peninsula fox	Sciurus niger cinereus	E		
Mammals	squirrel, Mount Graham red	Tamiasciurus hudsonicus grahamensis	E	276.48	
Mammals	squirrel, Virginia northern flying	Glaucomys sabrinus fuscus	E		
Mammals	vole, Amargosa	Microtus californicus scirpensis	E		
Mammals	vole, Florida salt marsh	Microtus pennsylvanicus dukecampbelli	E		
Mammals	vole, Hualapai Mexican	Microtus mexicanus hualpaiensis	E		
Mammals	whale, blue	Balaenoptera musculus	E		
Mammals	whale, bowhead	Balaena mysticetus	E		
Mammals	whale, finback	Balaenoptera physalus	E		
Mammals	whale, humpback	Megaptera novaeangliae	E		
Mammals	whale, right	Balaena glacialis	E		
Mammals	whale, Sei	Balaenoptera borealis	E		
Mammals	whale, sperm	Physeter catodon	E		
Mammals	wolf, gray	Canis lupus	E, T		
Mammals	wolf, red	Canis rufus	E	552.96	
Mammals	woodrat, Key Largo	Neotoma floridana smalli	E		
Birds	akepa, Hawaii	Loxops coccineus coccineus	E		
Birds	akepa, Maui	Loxops coccineus ochraceus	E		
Birds	akiapoua, Kauai	Hemignathus procerus	E		
Birds	akiapoua	Hemignathus munroi	E		
Birds	Albatross, short-tailed	Phoebastria albatrus	E		
Birds	blackbird, yellow-shouldered	Agelaius xanthomus	E		
Birds	bobwhite, masked	Collinus virginianus ridgwayi	E		
Birds	broadbill, Guam	Myiagra freycineti	E		
Birds	cahow	Pterodroma cahow	E		
Birds	caracara, Audubon's crested	Polyborus plancus audubonii	T		
Birds	condor, California	Gymnogyps californianus	E		
Birds	coot, Hawaiian	Fulica americana alai	E		
Birds	crane, Mississippi sandhill	Grus canadensis pulla	E		
Birds	crane, whooping	Grus americana	E		

Federally Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Birds	creeper, Hawaii	Oreomyza mana	E	196	
Birds	creeper, Molokai	Paroreomyza flammea	E		
Birds	creeper, Oahu	Paroreomyza maculata	E		
Birds	crow, Hawaiian	Corvus hawaiiensis	E		
Birds	crow, Mariana	Corvus kubaryi	E		
Birds	crow, white-necked	Corvus leucognaphalus	E		
Birds	curlew, Eskimo	Numenius borealis	E		
Birds	duck, Hawaiian	Anas wyvilliana	E		
Birds	duck, Laysan	Anas laysanensis	E		
Birds	eagle, bald	Haliaeetus leucocephalus	T		
Birds	eider, spectacled	Somateria fischeri	T		
Birds	eider, Steller's	Polysticta stelleri	T		
Birds	falcon, American peregrine	Falco peregrinus anatum	DM		
Birds	falcon, northern aplomado	Falco femoralis septentrionalis	E		
Birds	finch, Laysan	Telespyza cantans	E	668.48	
Birds	finch, Nihoa	Telespyza ultima	E		
Birds	flycatcher, southwestern willow	Empidonax traillii extimus	E	6000	
Birds	gnatcatcher, coastal California	Polioptila californica californica	T		
Birds	goose, Hawaiian	Branta sandvicensis	E		
Birds	hawk, Hawaiian	Buteo solitarius	E		
Birds	hawk, Puerto Rican broad-winged	Buteo platypterus brunescens	E		
Birds	hawk, Puerto Rican sharp-shinned	Accipiter striatus venator	E		
Birds	honeycreeper, crested	Palmeria dolei	E		
Birds	jay, Florida scrub	Aphelocoma coerulescens	T		
Birds	kingfisher, Guam Micronesian	Halcyon cinnamomina cinnamomina	E		
Birds	kite, Everglade snail	Rostrhamus sociabilis plumbeus	E		
Birds	mallard, Mariana	Anas oustaleti	E		
Birds	megapode, Micronesian	Megapodius laperouse	E		
Birds	millerbird, Nihoa	Acrocephalus familiaris kingi	E		
Birds	monarch, Tinian	Monarcha takatsukasae	T		
Birds	moorhen, Hawaiian common	Gallinula chloropus sandvicensis	E	1578.4	
Birds	moorhen, Mariana common	Gallinula chloropus guami	E		
Birds	murrelet, marbled	Brachyramphus marmoratus marmoratus	T		
Birds	nightjar, Puerto Rican	Caprimulgus noctitherus	E		
Birds	nukupu`u	Hemignathus lucidus	E		
Birds	`o`o, Kauai	Moho braccatus	E		
Birds	`o`u	Psittirostra psittacea	E		
Birds	owl, Mexican spotted	Strix occidentalis lucida	T		
Birds	owl, northern spotted	Strix occidentalis caurina	T		
Birds	palila	Loxioides bailleui	E		
Birds	parrot, Puerto Rican	Amazona vittata	E		
Birds	parrotbill, Maui	Pseudonestor xanthophrys	E		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Birds	pelican, brown	<i>Pelecanus occidentalis</i>	E		
Birds	petrel, Hawaiian dark-rumped	<i>Pterodroma phaeopygia sandwichensis</i>	E		
Birds	pigeon, Puerto Rican plain	<i>Columba inornata wetmorei</i>	E		
Birds	Plover, piping	<i>Charadrius melodus</i>	E, T		
Birds	plover, western snowy	<i>Charadrius alexandrinus nivosus</i>	T		
Birds	po'ouli	<i>Melanerpes formicivorus</i>	E		
Birds	prairie-chicken, Attwater's greater	<i>Tympanuchus cupido attwateri</i>	E		
Birds	pygmy-owl, cactus ferruginous	<i>Glaucidium brasilianum cactorum</i>	E		
Birds	rail, California clapper	<i>Rallus longirostris obsoletus</i>	E	2684.32	
Birds	rail, Guam	<i>Rallus owstoni</i>	E		
Birds	rail, light-footed clapper	<i>Rallus longirostris levipes</i>	E		
Birds	rail, Yuma clapper	<i>Rallus longirostris yumanensis</i>	E		
Birds	shearwater, Newell's Townsend's	<i>Puffinus auricularis newelli</i>	T		
Birds	shrike, San Clemente loggerhead	<i>Lanius ludovicianus mearnsi</i>	E		
Birds	sparrow, Cape Sable seaside	<i>Ammodramus maritimus mirabilis</i>	E		
Birds	sparrow, Florida grasshopper	<i>Ammodramus savannarum floridanus</i>	E		
Birds	sparrow, San Clemente sage	<i>Amphispiza belli clementeae</i>	T		
Birds	stilt, Hawaiian	<i>Himantopus mexicanus knudseni</i>	E		
Birds	stork, wood	<i>Mycteria americana</i>	E		
Birds	swiftlet, Mariana gray	<i>Aerodramus vanikorensis bartschi</i>	E	325.48	
Birds	tern, California least	<i>Sterna antillarum browni</i>	E		
Birds	tern, least	<i>Sterna antillarum</i>	E		
Birds	tern, roseate	<i>Sterna dougallii dougallii</i>	E, T		
Birds	thrush, large Kauai	<i>Myadestes myadestinus</i>	E	7892	
Birds	thrush, Molokai	<i>Myadestes lanaiensis rutha</i>	E		
Birds	thrush, small Kauai	<i>Myadestes palmeri</i>	E		
Birds	towhee, Inyo California	<i>Pipilo crissalis eremophilus</i>	T		
Birds	vireo, black-capped	<i>Vireo atricapillus</i>	E		
Birds	vireo, least Bell's	<i>Vireo bellii pusillus</i>	E	67000	
Birds	warbler, Bachman's	<i>Vermivora bachmanii</i>	E		
Birds	warbler, golden-cheeked	<i>Dendroica chrysoparia</i>	E		
Birds	warbler, Kirtland's	<i>Dendroica kirtlandii</i>	E		
Birds	warbler, nightingale reed	<i>Acrocephalus luscini</i>	E		
Birds	white-eye, bridled	<i>Zosterops conspicillatus conspicillatus</i>	E		
Birds	woodpecker, ivory-billed	<i>Campephilus principalis</i>	E		
Birds	woodpecker, red-cockaded	<i>Picoides borealis</i>	E		
Reptiles	anole, Culebra Island giant	<i>Anolis roosevelti</i>	E		
Reptiles	boa, Mona	<i>Epicrates monensis monensis</i>	T		
Reptiles	boa, Puerto Rican	<i>Epicrates inornatus</i>	E		
Reptiles	boa, Virgin Islands tree	<i>Epicrates monensis granti</i>	E		
Reptiles	crocodile, American	<i>Crocodylus acutus</i>	E		
Reptiles	gecko, Monito	<i>Sphaerodactylus micropithecus</i>	E		

Fede Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Reptiles	iguana, Mona ground	Cyclura stejnegeri	T		
Reptiles	lizard, blunt-nosed leopard	Gambella silus	E		
Reptiles	lizard, Coachella Valley fringe-toed	Uma inornata	T		
Reptiles	lizard, island night	Xantusia riversiana	T	748.96	
Reptiles	lizard, St. Croix ground	Ameiva polops	E		
Reptiles	rattlesnake, New Mexican ridge-nosed	Crotalus willardi obscurus	T		
Reptiles	sea turtle, green	Chelonia mydas	E, T		
Reptiles	sea turtle, hawksbill	Eretmochelys imbricata	E		
Reptiles	sea turtle, Kemp's ridley	Lepidochelys kempi	E		
Reptiles	sea turtle, leatherback	Demochelys coriacea	E		
Reptiles	sea turtle, loggerhead	Caretta caretta	T		
Reptiles	sea turtle, olive ridley	Lepidochelys olivacea	E, T	1025.44	
Reptiles	skink, bluetail mole	Eumeces egregius lividus	T	748.96	
Reptiles	skink, sand	Neoseps reynoldsi	T	748.96	
Reptiles	snake, Atlantic salt marsh	Nerodia clarkii taeniata	T	374.48	
Reptiles	snake, Concho water	Nerodia paucimaculata	T	1025.44	
Reptiles	snake, copperbelly water	Nerodia erythrogaster neglecta	T		
Reptiles	snake, eastern indigo	Drymarchon corais couperi	T		
Reptiles	snake, giant garter	Thamnophis gigas	T		
Reptiles	snake, Lake Erie water	Nerodia sipedon insularum	T		
Reptiles	snake, San Francisco garter	Thamnophis sirtalis tetrataenia	E		
Reptiles	tortoise, desert	Gopherus agassizii	T	829.44	
Reptiles	tortoise, gopher	Gopherus polyphemus	T		
Reptiles	turtle, Alabama red-belly	Pseudemys alabamensis	E		
Reptiles	turtle, bog	Clemmys muhlenbergii	T		
Reptiles	turtle, flattened musk	Stemotherus depressus	T		
Reptiles	turtle, Plymouth redbelly	Pseudemys rubriventris bangsi	E		
Reptiles	turtle, ringed map	Graptemys oculifera	T		
Reptiles	turtle, yellow-blotched map	Graptemys flavimaculata	T	748.96	
Reptiles	whipsnake, Alameda	Masticophis lateralis euryxanthus	T	829.44	
Amphibians	coqui, golden	Eleutherodactylus jasperi	T	748.96	
Amphibians	frog, California red-legged	Rana aurora draytonii	T		
Amphibians	guajon	Eleutherodactylus cooki	T		
Amphibians	salamander, Barton Springs	Eurycea sosorum	E		
Amphibians	salamander, Cheat Mountain	Plethodon nettingi	T		
Amphibians	salamander, desert slender	Batrachoseps aridus	E		
Amphibians	salamander, flatwoods	Ambystoma cingulatum	T		
Amphibians	salamander, Red Hills	Phaeognathus hubrichti	T		
Amphibians	salamander, San Marcos	Eurycea nana	T	829.44	
Amphibians	salamander, Santa Cruz long-toed	Ambystoma macrodactylum croceum	E		
Amphibians	salamander, Shenandoah	Plethodon shenandoah	E		
Amphibians	salamander, Sonoran tiger	Ambystoma tigrinum stebbinsi	E		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Amphibians	salamander, Texas blind	Typhlomolge rathbuni	E	1105.92	
Amphibians	toad, arroyo	Bufo microscaphus californicus	E		
Amphibians	toad, Houston	Bufo houstonensis	E		
Amphibians	toad, Puerto Rican crested	Peltophryne lemur	T		
Amphibians	toad, Wyoming	Bufo hemiophrys baxteri	E		
Fishes	catfish, Yaqui	Ictalurus pricei	T		
Fishes	cavefish, Alabama	Speoplatyrhinus poulsoni	E		
Fishes	cavefish, Ozark	Amblyopsis rosae	T	829.44	
Fishes	chub, bonetail	Gila elegans	E		
Fishes	chub, Borax Lake	Gila boraxobius	E		
Fishes	chub, Chihuahua	Gila nigrescens	T		
Fishes	chub, humpback	Gila cypha	E		
Fishes	chub, Hutton tui	Gila bicolor ssp.	T		
Fishes	chub, Mohave tui	Gila bicolor mohavensis	E		
Fishes	chub, Oregon	Oregonichthys crameri	E	829.44	
Fishes	chub, Owens tui	Gila bicolor snyderi	E		
Fishes	chub, Pahrnagat roundtail	Gila robusta jordani	E		
Fishes	chub, slender	Erimystax cahni	T		
Fishes	chub, Sonora	Gila ditaenia	T		
Fishes	chub, spotfin	Cyprinella monacha	T		
Fishes	chub, Virgin River	Gila robusta seminuda	E		
Fishes	chub, Yaqui	Gila purpurea	E		
Fishes	cul-ui	Chasmistes cujus	E		
Fishes	dace, Ash Meadows speckled	Rhinichthys osculus nevadensis	E	472.48	
Fishes	dace, blackside	Phoxinus cumberlandensis	T		
Fishes	dace, Clover Valley speckled	Rhinichthys osculus oligoporus	E		
Fishes	dace, desert	Eremichthys acros	T		
Fishes	dace, Foskett speckled	Rhinichthys osculus ssp.	T		
Fishes	dace, Independence Valley speckled	Rhinichthys osculus lethoporus	E		
Fishes	dace, Kendall Warm Springs	Rhinichthys osculus thermalis	E		
Fishes	dace, Moapa	Moapa coriacea	E	374.48	
Fishes	darler, amber	Percina antesella	E		
Fishes	darler, bayou	Etheostoma rubrum	T		
Fishes	darler, bluemask	Etheostoma sp.	E		
Fishes	darler, boulder	Etheostoma wapiti	E		
Fishes	darler, Cherokee	Etheostoma scotti	T		
Fishes	darler, duskytail	Etheostoma percnurum	E		
Fishes	darler, Etowah	Etheostoma etowahae	E	374.48	
Fishes	darler, fountain	Etheostoma fonticola	E	15000	
Fishes	darler, goldline	Percina aurolineata	T		
Fishes	darler, leopard	Percina pantherina	T	374.48	
Fishes	darler, Maryland	Etheostoma sellare	E	374.48	

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Fishes	darler, Niangua	Etheostoma nianguae	T		
Fishes	darler, Okaloosa	Etheostoma okaloosae	E	374.48	
Fishes	darler, relict	Etheostoma chienense	E	1382.4	
Fishes	darler, slackwater	Etheostoma boschungii	T	374.48	
Fishes	darler, snail	Percina tanasi	T		
Fishes	darler, watercress	Etheostoma nuchale	E		
Fishes	gambusia, Big Bend	Gambusia gaigei	E		
Fishes	gambusia, Clear Creek	Gambusia heterochir	E		
Fishes	gambusia, Pecos	Gambusia nobilis	E	374.48	
Fishes	gambusia, San Marcos	Gambusia georgei	E		
Fishes	goby, tidewater	Eucyclogobius newberryi	E	472.48	
Fishes	logperch, Conasauga	Percina jenkinsi	E	300.98	
Fishes	logperch, Roanoke	Percina rex	E		
Fishes	madtom, Neosho	Noturus placidus	T		
Fishes	madtom, pygmy	Noturus stanauil	E		
Fishes	madtom, Scioto	Noturus trautmani	E		
Fishes	madtom, smoky	Noturus baileyi	E		
Fishes	madtom, yellowfin	Noturus flavipinnis	T	236.24	
Fishes	minnow, loach	Tiaroga cobitis	T		
Fishes	minnow, Rio Grande silvery	Hybognathus amarus	E	6000	
Fishes	pikeminnow, Colorado	Ptychocheilus lucius	E	14000	
Fishes	poolfish, Pahrump	Empetrichthys latos	E		
Fishes	pupfish, Ash Meadows Amargosa	Cyprinodon nevadensis mionectes	E		
Fishes	pupfish, Comanche Springs	Cyprinodon elegans	E		
Fishes	pupfish, desert	Cyprinodon macularius	E		
Fishes	pupfish, Devils Hole	Cyprinodon diabolis	E		
Fishes	pupfish, Leon Springs	Cyprinodon bovinus	E		
Fishes	pupfish, Owens	Cyprinodon radiosus	E		
Fishes	pupfish, Warm Springs	Cyprinodon nevadensis pectoralis	E		
Fishes	salmon, chinook	Oncorhynchus tshawytscha	E, T		
Fishes	salmon, chum	Oncorhynchus keta	T		
Fishes	salmon, coho	Oncorhynchus kisutch	T	829.44	
Fishes	salmon, sockeye	Oncorhynchus nerka	E, T		
Fishes	sculpin, pygmy	Cottus pygmaeus	T		
Fishes	shiner, Arkansas River	Notropis girardi	T		
Fishes	shiner, beautiful	Cyprinella formosa	T		
Fishes	shiner, blue	Cyprinella caerulea	T	829.44	
Fishes	shiner, Cahaba	Notropis cahabae	E		
Fishes	shiner, Cape Fear	Notropis mekistocholas	E		
Fishes	shiner, palezone	Notropis albizonatus	E		
Fishes	shiner, Pecos bluntnose	Notropis simus pecosensis	T		
Fishes	shiner, Topeka	Notropis topeka	E	10000	

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Fishes	silverside, Waccamaw	Menidia extensa	T		
Fishes	smelt, delta	Hypomesus transpacificus	T	236.24	
Fishes	spikedace	Meda fulgida	T	162.74	
Fishes	spinedace, Big Spring	Lepidomeda mollispinis pratensis	T	300.98	
Fishes	spinedace, Little Colorado	Lepidomeda vittata	T	334.24	
Fishes	spinedace, White River	Lepidomeda albivallis	E		
Fishes	splittail, Sacramento	Pogonichthys macrolepidotus	T		
Fishes	springfish, Hiko White River	Crenichthys baileyi grandis	E	300.98	
Fishes	springfish, Railroad Valley	Crenichthys nevadae	T		
Fishes	springfish, White River	Crenichthys baileyi baileyi	E		
Fishes	steelhead	Oncorhynchus mykiss	E, T		
Fishes	stickleback, unarmored threespine	Gasterosteus aculeatus williamsoni	E		
Fishes	sturgeon, Gulf	Acipenser oxyrinchus desotoi	T		
Fishes	sturgeon, pallid	Scaphirhynchus albus	E		
Fishes	sturgeon, shortnose	Acipenser brevirostrum	E		
Fishes	sturgeon, white	Acipenser transmontanus	E		
Fishes	sucker, June	Chasmistes liorus	E		
Fishes	sucker, Lost River	Deltistes luxatus	E		
Fishes	Sucker, Modoc	Catostomus microps	E		
Fishes	sucker, razorback	Xyrauchen texanus	E	14000	
Fishes	Sucker, shortnose	Chasmistes brevirostris	E	552.96	
Fishes	sucker, Warner	Catostomus warnerensis	T	927.44	
Fishes	topminnow, Gila	Poeciliopsis occidentalis	E	32000	
Fishes	trout, Apache	Oncorhynchus apache	T		
Fishes	trout, bull	Salvelinus confluentus	T		
Fishes	trout, Gila	Oncorhynchus gilae	E		
Fishes	trout, greenback cutthroat	Oncorhynchus clarki stomias	T		
Fishes	trout, Lahontan cutthroat	Oncorhynchus clarki henshawi	T		
Fishes	trout, Little Kern golden	Oncorhynchus aguabonita whitei	T		
Fishes	trout, Paiute cutthroat	Oncorhynchus clarki seleniris	T		
Fishes	woundfin	Plagopterus argentissimus	E		
Clams	acornshell, southern	Epioblasma othcaloogensis	E		
Clams	bankclimber, purple	Elliptoideus sloatianus	T		
Clams	bean, Cumberland	Villosa trabalis	E		
Clams	bean, purple	Villosa perpurpurea	E		
Clams	blossom, green	Epioblasma torulosa gubernaculum	E		
Clams	blossom, tubercled	Epioblasma torulosa torulosa	E		
Clams	blossom, turgid	Epioblasma turgidula	E	829.44	
Clams	blossom, yellow	Epioblasma florentina florentina	E		
Clams	catspaw	Epioblasma obliquata obliquata	E		
Clams	catspaw, white	Epioblasma obliquata perobliqua	E		
Clams	clubshell	Pleuroberma clava	E	325.48	



Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Clams	clubshell, black	Pleurobema curtum	E	650.96	
Clams	clubshell, ovate	Pleurobema perovatum	E		
Clams	clubshell, southern	Pleurobema decisum	E		
Clams	combshell, Cumberlandian	Epioblasma brevidens	E		
Clams	combshell, southern	Epioblasma penita	E	472.48	
Clams	combshell, upland	Epioblasma metastrata	E		
Clams	elktoe, Appalachian	Alasmidonta ravenellana	E		
Clams	elktoe, Cumberland	Alasmidonta atropurpurea	E	472.48	
Clams	fanshell	Cyprogenia stegaria	E		
Clams	fatmucket, Arkansas	Lampsilis powelli	T	650.96	
Clams	heelsplitter, Alabama	Potamilius inflatus	T		
Clams	heelsplitter, Carolina	Lasmigona decorata	E	300.98	
Clams	higgins eye	Lampsilis higginsii	E	300.98	
Clams	kidneyshell, triangular	Ptychobranthus greeni	E		
Clams	lampmussel, Alabama	Lampsilis virescens	E		
Clams	lilliput, pale	Toxolasma cylindrellus	E		
Clams	mapleleaf, winged	Quadrula fragosa	E	300.98	
Clams	moccasinshell, Alabama	Medionidus acutissimus	T	374.48	
Clams	moccasinshell, Coosa	Medionidus parvulus	E		
Clams	moccasinshell, Gulf	Medionidus penicillatus	E		
Clams	moccasinshell, Ochlockonee	Medionidus simpsonianus	E	748.96	
Clams	monkeyface, Appalachian	Quadrula sparsa	E	2362.4	
Clams	monkeyface, Cumberland	Quadrula intermedia	E		
Clams	mucket, orangenacre	Lampsilis perovalis	T		
Clams	mucket, pink	Lampsilis abrupta	E		
Clams	mussel, oyster	Epioblasma capsaeformis	E		
Clams	pearshell, Louisiana	Margaritifera hembeli	T	472.48	
Clams	pearlymussel, birdwing	Conradilla caelata	E	748.96	
Clams	pearlymussel, cracking	Hemistena lata	E	650.96	
Clams	pearlymussel, Curtis	Epioblasma florentina curtisii	E	748.96	
Clams	pearlymussel, dromedary	Dromus dromas	E		
Clams	pearlymussel, littlewing	Pegias fabula	E		
Clams	pearlymussel, white wartyback	Plethobasus cicatricosus	E	472.48	
Clams	pigtoe, Cumberland	Pleurobema gibberum	E		
Clams	pigtoe, dark	Pleurobema furvum	E	472.48	
Clams	pigtoe, finereyed	Fusconalia cuneolus	E	748.96	
Clams	pigtoe, flat	Pleurobema marshalli	E		
Clams	pigtoe, heavy	Pleurobema tailianum	E		
Clams	pigtoe, oval	Pleurobema pyriforme	E	472.48	
Clams	pigtoe, rough	Pleurobema plenum	E		
Clams	pigtoe, shiny	Fusconalia cor	E	472.48	
Clams	pigtoe, southern	Pleurobema georgianum	E	472.48	

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Clams	pimpleback, orangefoot	Plethobasus cooperianus	E	472.48	
Clams	pocketbook, fat	Potamilus capax	E		
Clams	pocketbook, finelined	Lampsilis altilis	T	472.48	
Clams	pocketbook, Ouachita rock	Arkansia wheeleri	E		
Clams	pocketbook, shinyrayed	Lampsilis subangulata	E		
Clams	pocketbook, speckled	Lampsilis streckeri	E		
Clams	rabbitsfoot, rough	Quadrula cylindrica strigillata	E		
Clams	riffleshell, northern	Epioblasma torulosa rangiana	E	472.48	
Clams	riffleshell, tan	Epioblasma florentina walkeri	E		
Clams	ring pink	Obovaria retusa	E		
Clams	slabshell, Chipola	Elliptio chipolaensis	T	472.48	
Clams	spiny mussel, James	Pleurobema collina	E	472.48	
Clams	spiny mussel, Tar River	Elliptio steinstansana	E	472.48	
Clams	stirrupshell	Quadrula stapes	E		
Clams	three-ridge, fat	Amblema neisleri	E		
Clams	wedgemussel, dwarf	Alasmidonta heterodon	E		
Snails	ambersnail, Kanab	Oxyloma haydeni kanabensis	E	472.48	
Snails	elimia, lacy	Elimia crenatella	T	472.48	
Snails	limpet, Banbury Springs	Lanx sp.	E	472.48	
Snails	lioplax, cylindrical	Lioplax cyclostomaformis	E	472.48	
Snails	marstonia, royal	Pyrgulopsis ogmorhapha	E		
Snails	pebblesnail, flat	Lepyrium showalteri	E		
Snails	riversnail, Anthony's	Atheamnia anthonyi	E		
Snails	rocksnail, painted	Leptoxis taeniata	T		
Snails	rocksnail, plicate	Leptoxis plicata	E		
Snails	rocksnail, round	Leptoxis ampla	T		
Snails	shagreen, Magazine Mountain	Mesodon magazinensis	T		
Snails	snail, Bliss Rapids	Taylorconcha serpenticola	T		
Snails	snail, Chittenango ovate amber	Succinea chittenangoensis	T	650.96	
Snails	snail, flat-spined three-toothed	Triodopsis platysayoides	T		
Snails	snail, Iowa Pleistocene	Discus macclintocki	E	650.96	
Snails	snail, Morro shoulderband	Helminthoglypta walkeriana	E		
Snails	snail, noonday	Mesodon clarki nantahala	T		
Snails	snail, painted snake coiled forest	Anguispira picta	T		
Snails	snail, Snake River physa	Physa natricina	E	187.24	
Snails	snail, Stock Island tree	Orthalicus reses	T	300.98	
Snails	snail, tulotoma	Tulotoma magnifica	E	300.98	
Snails	snail, Utah valvata	Valvata utahensis	E		
Snails	snail, Virginia fringed mountain	Polygyriscus virginianus	E		
Snails	snails, Oahu tree	Achatinella spp.	E		
Snails	spring snail, Alamosa	Tryonia alamosae	E		
Snails	spring snail, Bruneau Hot	Pyrgulopsis bruneauensis	E		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Snails	springsnail, Idaho	Fontelicella idahoensis	E		
Snails	springsnail, Socorro	Pyrgulopsis neomexicana	E		
Insects	beetle, American burying	Nicrophorus americanus	E		
Insects	beetle, Coffin Cave mold	Batrissodes texanus	E	300.98	
Insects	beetle, Comal Springs dryopid	Stygoparnus comalensis	E		
Insects	beetle, Comal Springs riffle	Heterelmis comalensis	E		
Insects	beetle, delta green ground	Elaphrus viridis	T		
Insects	beetle, Hungerford's crawling water	Brychius hungerfordi	E	374.48	
Insects	beetle, Kretschmarr Cave mold	Texamaurops reddelli	E		
Insects	beetle, Mount Hermon June	Polyphylla barbata	E		
Insects	beetle, Tooth Cave ground	Rhadine persephone	E		
Insects	beetle, valley elderberry longhorn	Desmocerus californicus dimorphus	T		
Insects	butterfly, bay checkerspot	Euphydryas editha bayensis	T		
Insects	butterfly, Behren's silverspot	Speyeria zerene behrensii	E		
Insects	butterfly, callippe silverspot	Speyeria callippe callippe	E		
Insects	butterfly, El Segundo blue	Euphilotes battoides allyni	E		
Insects	butterfly, Kerner blue	Lycaeides melissa samuelis	E		
Insects	butterfly, Lange's metalmark	Apodemia mormo langei	E		
Insects	butterfly, lotis blue	Lycaeides argyrognomon lotis	E		
Insects	butterfly, mission blue	Icaricia icarioides missionensis	E		
Insects	butterfly, Mitchell's satyr	Neonympha mitchellii mitchellii	E		
Insects	butterfly, Myrtle's silverspot	Speyeria zerene myrtleae	E		
Insects	butterfly, Oregon silverspot	Speyeria zerene hippolyta	T		
Insects	butterfly, Palos Verdes blue	Glaucopteryx lygdamus palosverdesensis	E		
Insects	butterfly, Quino checkerspot	Euphydryas editha quino	E		
Insects	butterfly, Saint Francis' satyr	Neonympha mitchellii francisci	E		
Insects	butterfly, San Bruno elfin	Callophrys mossii bayensis	E		
Insects	butterfly, Schaus swallowtail	Heraclides aristodemus ponceanus	E		
Insects	butterfly, Smith's blue	Euphilotes enoptes smithi	E		
Insects	butterfly, Uncompahgre fritillary	Boloria acrocnema	E		
Insects	dragonfly, Hine's emerald	Somatochlora hineana	E		
Insects	fly, Delhi Sands flower-loving	Rhaphiomidas terminatus abdominalis	E		
Insects	grasshopper, Zayante band-winged	Trimerotropis infantilis	E		
Insects	moth, Kern primrose sphinx	Euproserpinus euterpe	T		
Insects	naucorid, Ash Meadows	Ambrysus amargosus	T		
Insects	skipper, Laguna Mountains	Pyrgus ruralis lagunae	E		
Insects	skipper, Pawnee montane	Hesperia leonardus montana	T		
Insects	tiger beetle, northeastern beach	Cicindela dorsalis dorsalis	T		
Insects	tiger beetle, Puritan	Cicindela puritana	T		
Arachnids	harvestman, Bee Creek Cave	Texella reddelli	E		
Arachnids	harvestman, Bone Cave	Texella reyesi	E		
Arachnids	pseudoscorpion, Tooth Cave	Tartarocreagriss texana	E		

Federally Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Arachnids	spider, spruce-fir moss	Microhexura montivaga	E		
Arachnids	spider, Tooth Cave	Neoleptoneta myopica	E		
Crustaceans	amphipod, Hay's Spring	Stygobromus hayi	E	829.44	
Crustaceans	amphipod, Illinois cave	Gammarus acherondytes	E		
Crustaceans	amphipod, Peck's cave	Stygobromus pecki	E		
Crustaceans	crayfish, cave	Cambarus zophonastes	E		
Crustaceans	crayfish, cave	Cambarus aculabrum	E		
Crustaceans	crayfish, Nashville	Orconectes shoupi	E		
Crustaceans	crayfish, Shasta	Pacifastacus fortis	E		
Crustaceans	fairy shrimp, Conservancy	Branchinecta conservatio	E		
Crustaceans	fairy shrimp, longhorn	Branchinecta longiantenna	E		
Crustaceans	fairy shrimp, Riverside	Streptocephalus woottoni	E		
Crustaceans	fairy shrimp, San Diego	Branchinecta sandiegonensis	E		
Crustaceans	fairy shrimp, vernal pool	Branchinecta lynchi	T		
Crustaceans	isopod, Lee County cave	Lirceus usdagalun	E		
Crustaceans	isopod, Madison Cave	Antrolana lira	T	829.44	
Crustaceans	isopod, Socorro	Thermosphaeroma thermophilus	E		
Crustaceans	shrimp, Alabama cave	Palaemonias alabamae	E		
Crustaceans	shrimp, California freshwater	Syncaris pacifica	E		
Crustaceans	shrimp, Kentucky cave	Palaemonias ganteri	E		
Crustaceans	shrimp, Squirrel Chimney Cave	Palaemonetes cummingi	T		
Crustaceans	tadpole shrimp, vernal pool	Lepidurus packardii	E		
Flowering Plants	'a'e	Zanthoxylum hawaiiense	E		
Flowering Plants	'a'e	Zanthoxylum dipetalum tomentosum	E		
Flowering Plants	agave, Arizona	Agave arizonica	E		
Flowering Plants	'aiea	Nothocestrum breviflorum	E		
Flowering Plants	'aiea	Nothocestrum peltatum	E		
Flowering Plants	'akoko	Euphorbia haelealeana	E		
Flowering Plants	'akoko	Chamaesyce rockii	E		
Flowering Plants	'akoko	Chamaesyce herbstii	E		
Flowering Plants	'akoko	Chamaesyce kuwaleana	E		
Flowering Plants	'akoko	Chamaesyce celastroides kaenana	E		
Flowering Plants	'akoko	Chamaesyce halemanui	E		
Flowering Plants	'akoko	Chamaesyce deppeana	E		
Flowering Plants	'akoko, Ewa Plains	Chamaesyce skottsbergii kalaeloana	E		
Flowering Plants	alani	Melicope saint-johnii	E		
Flowering Plants	alani	Melicope ovalis	E		
Flowering Plants	alani	Melicope adscendens	E		
Flowering Plants	alani	Melicope zahlbruckneri	E		
Flowering Plants	alani	Melicope reflexa	E		
Flowering Plants	alani	Melicope quadrangularis	E		
Flowering Plants	alani	Melicope pallida	E		

Feder. Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	alani	Melicope munroi	E		
Flowering Plants	alani	Melicope balloui	E		
Flowering Plants	alani	Melicope knudsenii	E		
Flowering Plants	alani	Melicope lydgatei	E		
Flowering Plants	alani	Melicope mucronulata	E		
Flowering Plants	alani	Melicope haupuensis	E		
Flowering Plants	alocarya, Callstoga	Plaglobothrys strictus	E		
Flowering Plants	alopecurus, Sonoma	Alopecurus aequalis sonomensis	E		
Flowering Plants	amaranth, seabeach	Amaranthus pumilus	T		
Flowering Plants	ambrosia, south Texas	Ambrosia cheiranthifolia	E		
Flowering Plants	amphianthus, little	Amphianthus pusillus	T		
Flowering Plants	'anaunau	Lepidium arbuscula	E		
Flowering Plants	'anunu	Sicyos alba	E		
Flowering Plants	arrowhead, bunched	Sagittaria fasciculata	E		
Flowering Plants	aster, decurrent false	Boltonia decurrens	T		
Flowering Plants	aster, Florida golden	Chrysopsis floridana	E		
Flowering Plants	aster, Ruth's golden	Pityopsis rutili	E		
Flowering Plants	aupaka	Isodendron laurifolium	E		
Flowering Plants	aupaka	Isodendron hosakae	E		
Flowering Plants	aupaka	Isodendron longifolium	T		
Flowering Plants	avens, spreading	Geum radiatum	E		
Flowering Plants	'awikiwiki	Canavalia molokalensis	E		
Flowering Plants	awiwi	Hedyotis cookiana	E		
Flowering Plants	awiwi	Centaurium sebaeoides	E		
Flowering Plants	ayenia, Texas	Ayenia limitaris	E		
Flowering Plants	Baccharis, Encinitas	Baccharis vanessae	T		
Flowering Plants	barberry, island	Berberis pinnata insularis	E		
Flowering Plants	barberry, Nevin's	Berberis nevinii	E		
Flowering Plants	barberry, Truckee	Berberis sonnei	E	1417.44	
Flowering Plants	bariaco	Trichilia triacantha	E		
Flowering Plants	beaked-rush, Knieskem's	Rhynchospora knieskemii	T		
Flowering Plants	bear-poppy, dwarf	Arctomecon humilis	E	864.48	
Flowering Plants	beardtongue, Penland	Penstemon penlandii	E		
Flowering Plants	beargrass, Britton's	Nolina brittoniana	E		
Flowering Plants	beauty, Harper's	Harperocallis flava	E		
Flowering Plants	bedstraw, El Dorado	Galium californicum sierrae	E		
Flowering Plants	bedstraw, island	Galium buxifolium	E		
Flowering Plants	bellflower, Brooksville	Campanula robinlae	E		
Flowering Plants	birch, Virginia round-leaf	Betula uber	T		
Flowering Plants	bird's beak, palmate-bracted	Cordylanthus palmatus	E		
Flowering Plants	bird's-beak, Pennell's	Cordylanthus tenuis capillaris	E		
Flowering Plants	bird's-beak, salt marsh	Cordylanthus maritimus maritimus	E		

**Federally Listed Endangered and Threatened Wildlife and Plants**  
**As of Fiscal Year 1999 (September 30, 1999)**

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	bird's-beak, soft	<i>Cordyanthus mollis mollis</i>	E		
Flowering Plants	birds-in-a-nest, white	<i>Macbridea alba</i>	T		
Flowering Plants	bittercress, small-anthered	<i>Cardamine micranthera</i>	E		
Flowering Plants	bladderpod, Dudley Bluffs	<i>Lesquerella congesta</i>	T		
Flowering Plants	bladderpod, kodachrome	<i>Lesquerella tumulosa</i>	E		
Flowering Plants	bladderpod, lyrate	<i>Lesquerella lyrata</i>	T		
Flowering Plants	bladderpod, Missouri	<i>Lesquerella filiformis</i>	E		
Flowering Plants	bladderpod, San Bernardino Mountains	<i>Lesquerella kingii bernardina</i>	E		
Flowering Plants	bladderpod, Spring Creek	<i>Lesquerella perforata</i>	E		
Flowering Plants	bladderpod, white	<i>Lesquerella pallida</i>	E		
Flowering Plants	blazingstar, Ash Meadows	<i>Mentzelia leucophylla</i>	T		
Flowering Plants	blazingstar, Heller's	<i>Liatris helleri</i>	T		
Flowering Plants	blazingstar, scrub	<i>Liatris ohlingeriae</i>	E		
Flowering Plants	blue-star, Kearney's	<i>Amsonia keameyana</i>	E		
Flowering Plants	bluecurls, Hidden Lake	<i>Trichostema austrorontanum compactum</i>	T		
Flowering Plants	bluegrass, Hawaiian	<i>Poa sandvicensis</i>	E		
Flowering Plants	bluegrass, Mann's	<i>Poa mannii</i>	E		
Flowering Plants	bluegrass, Napa	<i>Poa napensis</i>	E		
Flowering Plants	bluegrass, San Bernardino	<i>Poa atropurpurea</i>	E		
Flowering Plants	bluet, Roan Mountain	<i>Hedyotis purpurea montana</i>	E		
Flowering Plants	bonamia, Florida	<i>Bonamia grandiflora</i>	T		
Flowering Plants	boxwood, Vahl's	<i>Buxus vahlii</i>	E		
Flowering Plants	brodiaea, Chinese Camp	<i>Brodiaea pallida</i>	T		
Flowering Plants	brodiaea, thread-leaved	<i>Brodiaea filifolia</i>	T		
Flowering Plants	broom, San Clemente Island	<i>Lotus dendroideus traskiae</i>	E		
Flowering Plants	buckwheat, cushenbury	<i>Eriogonum ovalifolium vineum</i>	E		
Flowering Plants	buckwheat, lone	<i>Eriogonum apricum</i>	E		
Flowering Plants	buckwheat, scrub	<i>Eriogonum longifolium gnaphalifolium</i>	T		
Flowering Plants	buckwheat, steamboat	<i>Eriogonum ovalifolium williamsiae</i>	E		
Flowering Plants	bulrush, Northeastern	<i>Scirpus ancistrochaetus</i>	E		
Flowering Plants	bush-clover, prairie	<i>Lespedeza leptostachya</i>	T		
Flowering Plants	bush-mallow, San Clemente Island	<i>Malacothamnus clementinus</i>	E		
Flowering Plants	bush-mallow, Santa Cruz Island	<i>Malacothamnus fasciculatus nesloticus</i>	E		
Flowering Plants	buttercup, autumn	<i>Ranunculus acrifolmis aestivalis</i>	E		
Flowering Plants	butterweed, Layne's	<i>Senecio layneae</i>	T		
Flowering Plants	butterwort, Godfrey's	<i>Pinguicula ionantha</i>	T		
Flowering Plants	button, Mohr's Barbara	<i>Marshallia mohrii</i>	T		
Flowering Plants	button-celery, San Diego	<i>Eryngium aristulatum parishii</i>	E		
Flowering Plants	cactus, Arizona hedgehog	<i>Echinocereus triglochidiatus arizonicus</i>	E		
Flowering Plants	cactus, Bakersfield	<i>Opuntia treleasei</i>	E		
Flowering Plants	cactus, black lace	<i>Echinocereus reichenbachii albertii</i>	E		
Flowering Plants	cactus, Brady pincushion	<i>Pediocactus bradyi</i>	E		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	cactus, Chisos Mtn. hedgehog	Echinocereus chisoensis chisoensis	T		
Flowering Plants	cactus, Cochise pincushion	Coryphantha robbinsorum	T		
Flowering Plants	cactus, Key tree	Pilosocereus robinii	E		
Flowering Plants	cactus, Knowlton	Pediocactus knowltonii	E		
Flowering Plants	cactus, Kuenzier hedgehog	Echinocereus fendleri kuenzleri	E		
Flowering Plants	cactus, Lee pincushion	Coryphantha sneedii leei	T		
Flowering Plants	cactus, Lloyd's hedgehog	Echinocereus lloydii	DR		
Flowering Plants	cactus, Lloyd's Mariposa	Echinomastus mariposensis	T		
Flowering Plants	cactus, Mesa Verde	Sclerocactus mesae-verdae	T		
Flowering Plants	cactus, Nellie cory	Coryphantha minima	E		
Flowering Plants	cactus, Nichol's Turk's head	Echinocactus horizontalonius nicholii	E		
Flowering Plants	cactus, Peebles Navajo	Pediocactus peeblesianus peeblesianus	E		
Flowering Plants	cactus, Pima pineapple	Coryphantha scheeri robustispina	E	13000	
Flowering Plants	cactus, San Rafael	Pediocactus despainii	E		
Flowering Plants	cactus, Siler pincushion	Pediocactus sileri	T		
Flowering Plants	cactus, Sneed pincushion	Coryphantha sneedii sneedii	E		
Flowering Plants	cactus, star	Astrophytum asterias	E		
Flowering Plants	cactus, Tobusch fishhook	Ancistrocactus tobuschii	E		
Flowering Plants	cactus, Unita Basin hookless	Sclerocactus glaucus	T		
Flowering Plants	cactus, Winkler	Pediocactus winkleri	T		
Flowering Plants	cactus, Wright fishhook	Sclerocactus wrightiae	E		
Flowering Plants	campan, fringed	Silene polypetala	E		
Flowering Plants	capa rosa	Callicarpa ampla	E		
Flowering Plants	cat's-eye, Terlingua Creek	Cryptantha crassipes	E		
Flowering Plants	ceanothus, coyote	Ceanothus ferrisae	E		
Flowering Plants	ceanothus, Pine Hill	Ceanothus roderickii	E		
Flowering Plants	ceanothus, Vail Lake	Ceanothus ophlochilus	T		
Flowering Plants	centaury, spring-loving	Centaurium namophilum	T		
Flowering Plants	chaff-flower, round-leaved	Achyranthes splendens rotundata	E		
Flowering Plants	chaffseed, American	Schwalbea americana	E		
Flowering Plants	checker-mallow, Kenwood Marsh	Sidalcea oregana valida	E		
Flowering Plants	checker-mallow, Nelson's	Sidalcea nelsoniana	T		
Flowering Plants	checker-mallow, pedate	Sidalcea pedata	E		
Flowering Plants	chupacallos	Pleodendron macranthum	E		
Flowering Plants	cinquefoil, Robbins'	Potentilla robbinsiana	E		
Flowering Plants	clarkia, Pismo	Clarkia speciosa immaculata	E		
Flowering Plants	clarkia, Presidio	Clarkia franciscana	E		
Flowering Plants	clarkia, Springville	Clarkia springvillensis	T		
Flowering Plants	clarkia, Vine Hill	Clarkia imbricata	E		
Flowering Plants	cliff-rose, Arizona	Purshia subintegra	E		
Flowering Plants	clover, Monterey	Trifolium trichocalyx	E		
Flowering Plants	clover, running buffalo	Trifolium stoloniferum	E		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	clover, showy Indian	Trifolium amoenum	E		
Flowering Plants	cobana negra	Stahliia monosperma	T		
Flowering Plants	coneflower, smooth	Echinacea laevigata	E		
Flowering Plants	coneflower, Tennessee purple	Echinacea tennesseensis	E		
Flowering Plants	cory cactus, bunched	Coryphantha ramillosa	T		
Flowering Plants	cress, toad-flax	Schoenocrambe suffrutescens	E		
Flowering Plants	crownbeard, big-leaved	Verbesina dissita	T		
Flowering Plants	crownscale, San Jacinto Valley	Atriplex coronata notatior	E		
Flowering Plants	cycladenia, Jones	Cycladenia humilis Jonesii	T		
Flowering Plants	daisy, lakeside	Hymenoxys herbacea	T		
Flowering Plants	daisy, Maguire	Erigeron maguirei	T		
Flowering Plants	daisy, Parish's	Erigeron parishii	T		
Flowering Plants	dawn-flower, Texas prairie	Hymenoxys texana	E		
Flowering Plants	dogweed, ashy	Thymophylla tephroleuca	E		
Flowering Plants	dropwort, Canby's	Oxypolis canbyi	E		
Flowering Plants	dudleya, Conejo	Dudleya abramsii parva	T		
Flowering Plants	dudleya, marcescent	Dudleya cymosa marcescens	T		
Flowering Plants	dudleya, Santa Clara Valley	Dudleya setchellii	E		
Flowering Plants	dudleya, Santa Cruz Island	Dudleya nesiotica	T		
Flowering Plants	dudleya, Verity's	Dudleya verityi	T		
Flowering Plants	dudleyea, Santa Monica Mountains	Dudleya cymosa ovatifolia	T		
Flowering Plants	dwarf-flax, Marin	Hesperolinon congestum	T		
Flowering Plants	erubia	Solanum drymophilum	E		
Flowering Plants	evening-primrose, Antioch Dunes	Oenothera deltoides howellii	E		
Flowering Plants	evening-primrose, Eureka Valley	Oenothera avita eurekaensis	E		
Flowering Plants	evening-primrose, San Benito	Camissonia benitensis	T		
Flowering Plants	fiddleneck, large-flowered	Amsinckia grandiflora	E		
Flowering Plants	flannelbush, Mexican	Fremontodendron mexicanum	E		
Flowering Plants	flannelbush, Pine Hill	Fremontodendron californicum decumbens	E		
Flowering Plants	fleabane, Zuni	Erigeron rhizomatus	T		
Flowering Plants	four-o'clock, MacFarlane's	Mirabilis macfarlanei	T		
Flowering Plants	frankenia, Johnston's	Frankenia johnstonii	E		
Flowering Plants	fringe-tree, pygmy	Chionanthus pygmaeus	E		
Flowering Plants	fringe-pod, Santa Cruz Island	Thysanocarpus conchuliferus	E		
Flowering Plants	gardenia, Hawaiian	Gardenia brighamii	E		
Flowering Plants	geranium, Hawaiian red-flowered	Geranium arboreum	E	864.48	
Flowering Plants	gerardia, sandplain	Agalinis acuta	E		
Flowering Plants	gilia, Hoffmann's slender-flowered	Gilia tenuiflora hoffmannii	E		
Flowering Plants	gilia, Monterey	Gilia tenuiflora arenaria	E		
Flowering Plants	goetzea, beautiful	Goetzea elegans	E		
Flowering Plants	goldenrod, Blue Ridge	Solidago spithamaea	T		
Flowering Plants	goldenrod, Houghton's	Solidago houghtonii	T		



Federally Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	goldenrod, Short's	<i>Solidago shortii</i>	E		
Flowering Plants	goldenrod, white-haired	<i>Solidago albopilosa</i>	T		
Flowering Plants	goldfields, Burke's	<i>Lasthenia burkei</i>	E		
Flowering Plants	goldfields, Contra Costa	<i>Lasthenia conjugens</i>	E		
Flowering Plants	gooseberry, Miccosukee	<i>Ribes echinellum</i>	T		
Flowering Plants	gourd, Okeechobee	<i>Cucurbita okeechobeensis okeechobeensis</i>	E		
Flowering Plants	grass, California Orcutt	<i>Orcuttia californica</i>	E		
Flowering Plants	grass, Colusa	<i>Neostapfia colusana</i>	T		
Flowering Plants	grass, Eureka Dune	<i>Swallenia alexandrae</i>	E		
Flowering Plants	grass, Solano	<i>Tuctoria mucronata</i>	E		
Flowering Plants	grass, Tennessee yellow-eyed	<i>Xyris tennesseensis</i>	E		
Flowering Plants	ground-plum, Pyne's	<i>Astragalus bibullatus</i>	E		
Flowering Plants	groundsel, San Francisco Peaks	<i>Senecio franciscanus</i>	T		
Flowering Plants	gumplant, Ash Meadows	<i>Grindelia fraxino-pratensis</i>	T		
Flowering Plants	haha	<i>Cyanea humboldtiana</i>	E		
Flowering Plants	haha	<i>Cyanea grimesiana grimesiana</i>	E		
Flowering Plants	haha	<i>Cyanea pinnatifida</i>	E		
Flowering Plants	haha	<i>Cyanea hamatiflora hamatiflora</i>	E		
Flowering Plants	haha	<i>Cyanea mannil</i>	E		
Flowering Plants	haha	<i>Cyanea glabra</i>	E		
Flowering Plants	haha	<i>Cyanea dunbarii</i>	E		
Flowering Plants	haha	<i>Cyanea copelandii copelandii</i>	E		
Flowering Plants	haha	<i>Cyanea asarifolia</i>	E		
Flowering Plants	haha	<i>Cyanea macrostegia gibsonii</i>	E		
Flowering Plants	haha	<i>Cyanea lobata</i>	E		
Flowering Plants	haha	<i>Cyanea hamatiflora carlsonii</i>	E		
Flowering Plants	haha	<i>Cyanea grimesiana obatae</i>	E		
Flowering Plants	haha	<i>Cyanea copelandii haleakalaensis</i>	E		
Flowering Plants	haha	<i>Cyanea longiflora</i>	E		
Flowering Plants	haha	<i>Cyanea koolauensis</i>	E		
Flowering Plants	haha	<i>Cyanea remyi</i>	E		
Flowering Plants	haha	<i>Cyanea acuminata</i>	E		
Flowering Plants	haha	<i>Cyanea undulata</i>	E		
Flowering Plants	haha	<i>Cyanea truncata</i>	E		
Flowering Plants	haha	<i>Cyanea recta</i>	T		
Flowering Plants	haha	<i>Cyanea procera</i>	E		
Flowering Plants	haha	<i>Cyanea stictophylla</i>	E		
Flowering Plants	haha	<i>Cyanea platyphylla</i>	E		
Flowering Plants	haha	<i>Cyanea shipmannii</i>	E		
Flowering Plants	haha	<i>Cyanea st-johnii</i>	E		
Flowering Plants	haha	<i>Cyanea superba</i>	E		
Flowering Plants	haha	<i>Cyanea mceldowneyi</i>	E		

Fede. / Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	haha	Cyanea crispa	E		
Flowering Plants	ha'iwale	Cyrtandra dentata	E		
Flowering Plants	ha'iwale	Cyrtandra viridiflora	E		
Flowering Plants	ha'iwale	Cyrtandra tintinnabula	E		
Flowering Plants	ha'iwale	Cyrtandra limahullensis	T		
Flowering Plants	ha'iwale	Cyrtandra munroi	E		
Flowering Plants	ha'iwale	Cyrtandra giffardii	E		
Flowering Plants	ha'iwale	Cyrtandra crenata	E		
Flowering Plants	ha'iwale	Cyrtandra subumbellata	E		
Flowering Plants	ha'iwale	Cyrtandra polyantha	E		
Flowering Plants	hala pepe	Pleomele hawaiiensis	E		
Flowering Plants	harebells, Avon Park	Crotalaria avonensis	E		
Flowering Plants	harperella	Ptilimnium nodosum	E		
Flowering Plants	hau kuahiwi	Hibiscadelphus giffardianus	E		
Flowering Plants	hau kuahiwi	Hibiscadelphus hualalaiensis	E		
Flowering Plants	hau kuahiwi	Hibiscadelphus woodii	E		
Flowering Plants	heartleaf, dwarf-flowered	Hexastylis naniflora	T		
Flowering Plants	heather, mountain golden	Hudsonia montana	T		
Flowering Plants	heau	Exocarpos luteolus	E		
Flowering Plants	hedyotis, Na Pali beach	Hedyotis st.-johnii	E		
Flowering Plants	hibiscus, Clay's	Hibiscus clayi	E		
Flowering Plants	higo, chumbo	Harrisia portoricensis	T		
Flowering Plants	higuero de sierra	Crescentia portoricensis	E		
Flowering Plants	holei	Ochrosia kilaueaensis	E		
Flowering Plants	holly, Cook's	Ilex cookii	E		
Flowering Plants	Honohono	Haplostachys haplostachya	E		
Flowering Plants	howellia, water	Howellia aquatilis	T	49000	
Flowering Plants	hypericum, highlands scrub	Hypericum cumulicola	E		
Flowering Plants	iliau, dwarf	Wilkesia hobbii	E		
Flowering Plants	indian paintbrush, San Clemente Island	Castilleja grisea	E		
Flowering Plants	ipomopsis, Holy Ghost	Ipomopsis sancti-spiritus	E		
Flowering Plants	iris, dwarf lake	Iris lacustris	T		
Flowering Plants	irisette, white	Sisyrinchium dichotomum	E		
Flowering Plants	ischaemum, Hilo	Ischaemum byrone	E		
Flowering Plants	ivesia, Ash Meadows	Ivesia kingii eremica	T	1417.44	
Flowering Plants	jacquemontia, beach	Jacquemontia reclinata	E		
Flowering Plants	jewelflower, California	Caulanthus californicus	E		
Flowering Plants	jewelflower, Metcalf Canyon	Streptanthus albidus albidus	E		
Flowering Plants	jewelflower, Tiburon	Streptanthus niger	E		
Flowering Plants	joint-vetch, sensitive	Aeschynomene virginica	T		
Flowering Plants	kamakahaia	Labordia triflora	E		
Flowering Plants	kamakahaia	Labordia tinifolia lanaiensis	E		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	kamakahala	Labordia cyrtandrae	E		
Flowering Plants	kamakahala	Labordia tinifolia wahlawaensis	E		
Flowering Plants	kamakahala	Labordia lydgatei	E		
Flowering Plants	kaui hau kuahiwi	Hibiscadelphus distans	E		
Flowering Plants	kauiia	Colubrina oppositifolia	E		
Flowering Plants	kaulu	Pteralyxia kauaiensis	E		
Flowering Plants	ki'o'ele	Hedyotis coriacea	E		
Flowering Plants	kiponapona	Phyllostegia racemosa	E		
Flowering Plants	kohe malama malama o kanaloa	Kanaloa kahoolawensis	E		
Flowering Plants	koki'o	Kokia drynarioides	E		
Flowering Plants	koki'o ke'oke'o	Hibiscus walmeae hannerae	E		
Flowering Plants	koki'o ke'oke'o	Hibiscus arnottianus immaculatus	E		
Flowering Plants	koki'o, (=Cooke's koki'o)	Kokia cooki	E		
Flowering Plants	koki'o, (=Kaua'i koki'o)	Kokia kauaiensis	E		
Flowering Plants	kolea	Myrsine linearifolia	T		
Flowering Plants	kolea	Myrsine juddii	E		
Flowering Plants	ko'oko'olau	Bidens micrantha kalealaha	E		
Flowering Plants	ko'oko'olau	Bidens webkei	E		
Flowering Plants	ko'oloa'ula	Abutilon menziesii	E		
Flowering Plants	Kopa	Hedyotis schlechtendahlana remyi	E		
Flowering Plants	kuahiwi laukahi	Plantago princeps	E		
Flowering Plants	kuahiwi laukahi	Plantago hawaiensis	E		
Flowering Plants	kuawawaenohu	Alsinidendron lychnoides	E		
Flowering Plants	kula wahine noho	Isodendron pyriformium	E		
Flowering Plants	kulu'i	Nototrichium humile	E		
Flowering Plants	ladies'-tresses, Canelo Hills	Spiranthes delitescens	E		
Flowering Plants	ladies'-tresses, Navasota	Spiranthes parksii	E		
Flowering Plants	ladies'-tresses, Ute	Spiranthes diluvialis	T		
Flowering Plants	Lagu, Hyan	Serianthes nelsonii	E		
Flowering Plants	larkspur, San Clemente Island	Delphinium variegatum kinkiense	E		
Flowering Plants	lau`ehu	Panicum niuhauense	E		
Flowering Plants	laulihilihi, (=Ma'oli'oli)	Schiedea stellarioides	E		
Flowering Plants	layia, beach	Layia camosa	E		
Flowering Plants	lead-plant, Crenulate	Amorpha crenulata	E		
Flowering Plants	leather flower, Alabama	Clematis socialis	E		
Flowering Plants	leather flower, Morefield's	Clematis morefieldii	E		
Flowering Plants	lessingia, San Francisco	Lessingia germanorum	E		
Flowering Plants	liliwai	Acaena exigua	E		
Flowering Plants	lily, Minnesota dwarf trout	Erythronium propullans	E		
Flowering Plants	lily, Pitkin Marsh	Lilium pardalinum pitkinense	E		
Flowering Plants	lily, Western	Lilium occidentale	E		
Flowering Plants	liveforever, Laguna Beach	Dudleya stolonifera	T		

Fede. Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	liveforever, Santa Barbara Island	Dudleya traskiae	E		
Flowering Plants	locoweed, Fassett's	Oxytropis campestris chartacea	T		
Flowering Plants	lomatium, Bradshaw's	Lomatium bradshawii	E		
Flowering Plants	loosestrife, rough-leaved	Lysimachia asperulaefolia	E		
Flowering Plants	lo'ulu	Pritchardia remota	E		
Flowering Plants	lo'ulu	Pritchardia viscosa	E		
Flowering Plants	lo'ulu	Pritchardia napaliensis	E		
Flowering Plants	lo'ulu	Pritchardia affinis	E		
Flowering Plants	lo'ulu	Pritchardia schattaueri	E		
Flowering Plants	lo'ulu	Pritchardia kaalae	E		
Flowering Plants	lo'ulu	Pritchardia munroi	E		
Flowering Plants	lo'ulu, (=wahane)	Pritchardia aylmer-robinsonii	E		
Flowering Plants	lousewort, Furbish	Pedicularis furbishiae	E		
Flowering Plants	love grass, Fosberg's	Eragrostis fosbergii	E		
Flowering Plants	lupine, clover	Lupinus tidestromii	E		
Flowering Plants	lupine, scrub	Lupinus aridorum	E		
Flowering Plants	mahoe	Alectryon macrococcus	E		
Flowering Plants	makou	Peucedanum sandwicense	T		
Flowering Plants	malacothrix, island	Malacothrix squalida	E		
Flowering Plants	Malacothrix, Santa Cruz Island	Malacothrix indecora	E		
Flowering Plants	mallow, Kern	Eremalche kernensis	E		
Flowering Plants	mallow, Peter's Mountain	Iliamna corei	E		
Flowering Plants	manaca, palma de	Calyptronoma rivalis	T		
Flowering Plants	manioc, Walker's	Manihot walkerae	E		
Flowering Plants	manzanita, Del Mar	Arctostaphylos glandulosa crassifolia	E		
Flowering Plants	manzanita, lone	Arctostaphylos myrtifolia	T		
Flowering Plants	manzanita, Morro	Arctostaphylos morroensis	T		
Flowering Plants	manzanita, pallid	Arctostaphylos pallida	T	1210.08	
Flowering Plants	Manzanita, Presidio	Arctostaphylos hookeri ravenii	E		
Flowering Plants	manzanita, Santa Rosa Island	Arctostaphylos confertiflora	E		
Flowering Plants	ma'o hau hele, (=native yellow hibiscus)	Hibiscus brackenridgei	E		
Flowering Plants	ma'oli'oli	Schiedea kealiae	E		
Flowering Plants	ma'oli'oli	Schiedea apokremnos	E		
Flowering Plants	mapele	Cyrtandra cyaneoides	E		
Flowering Plants	mariposa lily, Tiburon	Calochortus tiburonensis	T		
Flowering Plants	maua	Xylosma crenatum	E		
Flowering Plants	meadowfoam, Butte County	Limnanthes floccosa californica	E		
Flowering Plants	meadowfoam, Sebastopol	Limnanthes vinculans	E		
Flowering Plants	meadowrue, Cooley's	Thalictrum cooleyi	E		
Flowering Plants	mehamehame	Flueggea neowawraea	E		
Flowering Plants	mesa-mint, Otay	Pogogyne nudiuscula	E		
Flowering Plants	mesa-mint, San Diego	Pogogyne abramsii	E		

Federally Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	milk-vetch, Applegate's	<i>Astragalus applegatei</i>	E		
Flowering Plants	milk-vetch, Ash meadows	<i>Astragalus phoenix</i>	T		
Flowering Plants	milk-vetch, Braunton's	<i>Astragalus brauntonii</i>	E		
Flowering Plants	milk-vetch, Clara Hunt's	<i>Astragalus clarianus</i>	E		
Flowering Plants	milk-vetch, Coachella Valley	<i>Astragalus lentiginosus coachellae</i>	E		
Flowering Plants	milk-vetch, coastal dunes	<i>Astragalus tener titi</i>	E		
Flowering Plants	milk-vetch, Cushenbury	<i>Astragalus albens</i>	E		
Flowering Plants	milk-vetch, Fish Slough	<i>Astragalus lentiginosus piscinensis</i>	T		
Flowering Plants	milk-vetch, heliotrope	<i>Astragalus montii</i>	T		
Flowering Plants	milk-vetch, Jesup's	<i>Astragalus robbinsii jesupi</i>	E		
Flowering Plants	milk-vetch, Lane Mountain	<i>Astragalus jaegerianus</i>	E		
Flowering Plants	milk-vetch, Mancos	<i>Astragalus humillimus</i>	E		
Flowering Plants	milk-vetch, Osterhout	<i>Astragalus osterhoutii</i>	E		
Flowering Plants	milk-vetch, Peirson's	<i>Astragalus magdalenae peirsonii</i>	T		
Flowering Plants	milk-vetch, Sentry	<i>Astragalus cremnophylax cremnophylax</i>	E		
Flowering Plants	milk-vetch, triple-ribbed	<i>Astragalus tricarlinatus</i>	E		
Flowering Plants	milkpea, Small's	<i>Galactia smallii</i>	E		
Flowering Plants	milkweed, Mead's	<i>Asclepias meadii</i>	T		
Flowering Plants	milkweed, Welsh's	<i>Asclepias welshii</i>	T		
Flowering Plants	mint, Garrett's	<i>Dicerandra christmanii</i>	E		
Flowering Plants	mint, Lakela's	<i>Dicerandra immaculata</i>	E		
Flowering Plants	mint, longspurred	<i>Dicerandra comutissima</i>	E		
Flowering Plants	mint, scrub	<i>Dicerandra frutescens</i>	E		
Flowering Plants	monardella, willow	<i>Monardella linoides viminea</i>	E		
Flowering Plants	monkey-flower, Michigan	<i>Mimulus glabratus michiganensis</i>	E		
Flowering Plants	monkshood, northern wild	<i>Aconitum noveboracense</i>	T		
Flowering Plants	morning-glory, Stebbins'	<i>Calystegia stebbinsii</i>	E		
Flowering Plants	mountain balm, Indian Knob	<i>Eriodictyon altissimum</i>	E		
Flowering Plants	mountain-mahogany, Catalina Island	<i>Cercocarpus traskiae</i>	E		
Flowering Plants	mustard, Carter's	<i>Warea carteri</i>	E		
Flowering Plants	mustard, Penland alpine fen	<i>Eutrema penlandii</i>	T		
Flowering Plants	mustard, slender-petaled	<i>Thelypodium stenopetalum</i>	E		
Flowering Plants	na'ena'e	<i>Dubautia latifolia</i>	E		
Flowering Plants	na'ena'e	<i>Dubautia plantaginea humilis</i>	E		
Flowering Plants	na'ena'e	<i>Dubautia pauciflora</i>	E		
Flowering Plants	na'ena'e	<i>Dubautia herbstobatae</i>	E		
Flowering Plants	nani wai'ale'ale	<i>Viola kauaiensis wahiiwaensis</i>	E		
Flowering Plants	nanu	<i>Gardenia mannii</i>	E		
Flowering Plants	naupaka, dwarf	<i>Scaevola coriacea</i>	E		
Flowering Plants	navaretia, few-flowered	<i>Navaretia leucocephala pauciflora</i>	E		
Flowering Plants	navaretia, many-flowered	<i>Navaretia leucocephala plieantha</i>	E		
Flowering Plants	navaretia, spreading	<i>Navaretia fossalis</i>	T		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	nehe	Lipochaeta fauriei	E		
Flowering Plants	nehe	Lipochaeta walmeaensis	E		
Flowering Plants	nehe	Lipochaeta tenuifolia	E		
Flowering Plants	nehe	Lipochaeta lobata leptophylla	E		
Flowering Plants	nehe	Lipochaeta kamolensis	E		
Flowering Plants	nehe	Lipochaeta micrantha	E		
Flowering Plants	nehe	Lipochaeta venosa	E		
Flowering Plants	niol	Eugenia koolauensis	E		
Flowering Plants	niterwort, Amargosa	Nitrophila mohavensis	E		
Flowering Plants	No common name	Achyranthes mutica	E		
Flowering Plants	No common name	Bonamia menziesii	E		
Flowering Plants	No common name	Schiedea sarmentosa	E		
Flowering Plants	No common name	Schiedea membranacea	E		
Flowering Plants	No common name	Schiedea hookeri	E		
Flowering Plants	No common name	Sanicula purpurea	E		
Flowering Plants	No common name	Phyllostegia parviflora	E		
Flowering Plants	No common name	Phyllostegia knudsenii	E		
Flowering Plants	No common name	Phyllostegia hirsuta	E		
Flowering Plants	No common name	Lobelia gaudichaudii koolauensis	E		
Flowering Plants	No common name	Neraudia ovata	E		
Flowering Plants	No common name	Hesperomannia arbuscula	E		
Flowering Plants	No common name	Hesperomannia arborescens	E		
Flowering Plants	No common name	Hedyotis parvula	E		
Flowering Plants	No common name	Hedyotis degeneri	E		
Flowering Plants	No common name	Gouania vitifolia	E		
Flowering Plants	No common name	Gouania meyenii	E		
Flowering Plants	No common name	Gouania hillebrandii	E		
Flowering Plants	No common name	Geocarpon minimum	T		
Flowering Plants	No common name	Gahnia lanalensis	E		
Flowering Plants	No common name	Phyllostegia kaalaensis	E		
Flowering Plants	No common name	Eugenia woodburyana	E		
Flowering Plants	No common name	Phyllostegia mannii	E		
Flowering Plants	No common name	Ilex sintenisii	E		
Flowering Plants	No common name	Cranichis ricartii	E		
Flowering Plants	No common name	Vernonia proctorii	E		
Flowering Plants	No common name	Trematolobelia singularis	E		
Flowering Plants	No common name	Stenogyne campanulata	E		
Flowering Plants	No common name	Stenogyne bifida	E		
Flowering Plants	No common name	Spermolepis hawaiiensis	E		
Flowering Plants	No common name	Silene perlmanii	E		
Flowering Plants	No common name	Schiedea nuttallii	E		
Flowering Plants	No common name	Schiedea kauaiensis	E		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	No common name	Sanicula mariversa	E		
Flowering Plants	No common name	Phyllostegia wawrana	E		
Flowering Plants	No common name	Phyllostegia warshaueri	E		
Flowering Plants	No common name	Phyllostegia velutina	E		
Flowering Plants	No common name	Phyllostegia walmeae	E		
Flowering Plants	No common name	Mariscus fauriei	E		
Flowering Plants	No common name	Lysimachia maxima	E		
Flowering Plants	No common name	Lysimachia lydgatei	E		
Flowering Plants	No common name	Lyonia truncata proctorii	E		
Flowering Plants	No common name	Leptocereus grantianus	E		
Flowering Plants	No common name	Catesbaea melanocarpa	E		
Flowering Plants	No common name	Auerodendron pauciflorum	E		
Flowering Plants	No common name	Aristida chaseae	E		
Flowering Plants	No common name	Remya montgomeryi	E		
Flowering Plants	No common name	Alsinidendron viscosum	E		
Flowering Plants	No common name	Schoepfia arenaria	T		
Flowering Plants	No common name	Schiedea spergulina spergulina	T		
Flowering Plants	No common name	Schiedea spergulina leiopoda	E		
Flowering Plants	No common name	Schiedea lydgatei	E		
Flowering Plants	No common name	Schiedea helleri	E		
Flowering Plants	No common name	Schiedea haleakalensis	E		
Flowering Plants	No common name	Gesneria pauciflora	T		
Flowering Plants	No common name	Myrcia paganii	E		
Flowering Plants	No common name	Mariscus pennatiformis	E		
Flowering Plants	No common name	Temstroemia subsessilis	E		
Flowering Plants	No common name	Silene hawaiiensis	T		
Flowering Plants	No common name	Poa siphonoglossa	E		
Flowering Plants	No common name	Platanthera holochila	E		
Flowering Plants	No common name	Phyllostegia mollis	E		
Flowering Plants	No common name	Mitracarpus polycladus	E		
Flowering Plants	No common name	Mitracarpus maxwelliae	E		
Flowering Plants	No common name	Lysimachia filifolia	E		
Flowering Plants	No common name	Lobelia monostachya	E		
Flowering Plants	No common name	Lepanthes eltoroensis	E		
Flowering Plants	No common name	Daphnopsis hellerana	E		
Flowering Plants	No common name	Cordia bellonis	E		
Flowering Plants	No common name	Chamaecrista glandulosa mirabilis	E		
Flowering Plants	No common name	Calyptanthus thomasiana	E		
Flowering Plants	No common name	Viola oahuensis	E		
Flowering Plants	No common name	Viola lanaiensis	E		
Flowering Plants	No common name	Viola helenae	E		
Flowering Plants	No common name	Vigna o-wahuensis	E		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	No common name	Tetramolopium rockii	T		
Flowering Plants	No common name	Tetramolopium remyi	E		
Flowering Plants	No common name	Tetramolopium lepidotum lepidotum	E		
Flowering Plants	No common name	Tetramolopium filiforme	E		
Flowering Plants	No common name	Tetramolopium arenarium	E		
Flowering Plants	No common name	Stenogyne kanehoana	E		
Flowering Plants	No common name	Stenogyne angustifolia angustifolia	E		
Flowering Plants	No common name	Silene lanceolata	E		
Flowering Plants	No common name	Silene alexandri	E		
Flowering Plants	No common name	Schiedea kaalae	E		
Flowering Plants	No common name	Remya kauaiensis	E		
Flowering Plants	No common name	Phyllostegia glabra lanaiensis	E		
Flowering Plants	No common name	Neraudia sericea	E		
Flowering Plants	No common name	Neraudia angulata	E		
Flowering Plants	No common name	Munroidendron racemosum	E		
Flowering Plants	No common name	Lobelia oahuensis	E		
Flowering Plants	No common name	Lobelia niuhauensis	E		
Flowering Plants	No common name	Hesperomannia lydgatei	E		
Flowering Plants	No common name	Alsiniidendron trinerve	E		
Flowering Plants	No common name	Alsiniidendron obovatum	E		
Flowering Plants	No common name	Abutilon sandwicense	E		
Flowering Plants	No common name	Abutilon eremitopetalum	E		
Flowering Plants	No common name	Schiedea verticillata	E		
Flowering Plants	No common name	Amaranthus brownii	E		
Flowering Plants	nohoanu	Geranium multiflorum	E		
Flowering Plants	oak, Hinckley	Quercus hinckleyi	T		
Flowering Plants	oha	Delissea rivularis	E		
Flowering Plants	oha	Delissea undulata	E		
Flowering Plants	oha	Delissea subcordata	E		
Flowering Plants	oha	Delissea rhytidosperma	E		
Flowering Plants	`oha wai	Clermontia drepanomorpha	E		
Flowering Plants	`oha wai	Clermontia peleana	E		
Flowering Plants	`oha wai	Clermontia oblongifolia brevipes	E		
Flowering Plants	`oha wai	Clermontia samuelii	E		
Flowering Plants	`oha wai	Clermontia oblongifolia mauiensis	E		
Flowering Plants	`oha wai	Clermontia pyrularia	E		
Flowering Plants	`oha wai	Clermontia lindseyana	E		
Flowering Plants	ohai	Sesbania tomentosa	E		
Flowering Plants	`ohe`ohe	Tetraplasandra gymnocarpa	E		
Flowering Plants	olulu	Brighamia insignis	E		
Flowering Plants	onion, Munz's	Allium munzii	E		
Flowering Plants	opuhe	Urera kaalae	E		



Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	orchid, eastern prairie fringed	Platanthera leucophaea	T		
Flowering Plants	orchid, western prairie fringed	Platanthera praeclara	T		
Flowering Plants	orcutt grass, Greene's	Tuctoria greenel	E		
Flowering Plants	orcutt grass, hairy	Orcuttia pilosa	E		
Flowering Plants	orcutt grass, Sacramento	Orcuttia viscida	E		
Flowering Plants	orcutt grass, San Joaquin	Orcuttia inaequalis	T		
Flowering Plants	orcutt grass, slender	Orcuttia tenuis	T		
Flowering Plants	owl's-clover, fleshy	Castilleja campestris succulenta	T		
Flowering Plants	oxytheca, cushenbury	Oxytheca parishii goodmaniana	E		
Flowering Plants	paintbrush, ash-grey	Castilleja cinerea	T		
Flowering Plants	paintbrush, golden	Castilleja levisecta	T		
Flowering Plants	paintbrush, soft-leaved	Castilleja mollis	E		
Flowering Plants	paintbrush, Tiburon	Castilleja affinis neglecta	E		
Flowering Plants	palo colorado	Temstroemia luquillensis	E		
Flowering Plants	palo de jazmin	Styrax portoricensis	E		
Flowering Plants	palo de nigua	Cornutia obovata	E		
Flowering Plants	palo de ramon	Banara vanderbiltii	E		
Flowering Plants	palo de rosa	Ottoschulzia rhodoxylon	E		
Flowering Plants	pamakani	Tetramolopium capillare	E		
Flowering Plants	pamakani	Viola chamissoniana chamissoniana	E		
Flowering Plants	panicgrass, Carter's	Panicum fauriei carteri	E		
Flowering Plants	pau'ala, (=alulu)	Brighamia rockii	E		
Flowering Plants	pawpaw, beautiful	Deeringothamnus pulchellus	E		
Flowering Plants	pawpaw, four-petal	Asimina tetramera	E		
Flowering Plants	pawpaw, Rugel's	Deeringothamnus rugelii	E		
Flowering Plants	pelos del diablo	Aristida portoricensis	E		
Flowering Plants	pennyroyal, Todsen's	Hedeoma todsenii	E		
Flowering Plants	penstemon, blowout	Penstemon haydenii	E		
Flowering Plants	pentachaeta, Lyon's	Pentachaeta lyonii	E		
Flowering Plants	pentachaeta, white-rayed	Pentachaeta bellidiflora	E		
Flowering Plants	peperomia, Wheeler's	Peperomia wheeleri	E		
Flowering Plants	phacelia, clay	Phacelia argillacea	E		
Flowering Plants	phacelia, island	Phacelia insularis insularis	E		
Flowering Plants	phacelia, North Park	Phacelia formosula	E		
Flowering Plants	phlox, Texas trailing	Phlox nivalis texensis	E		
Flowering Plants	pigeon wings	Cliitoria fragrans	T		
Flowering Plants	pilo	Hedyotis mannii	E		
Flowering Plants	pink, swamp	Helonias bullata	T		
Flowering Plants	pinkroot, gentian	Spigella gentianoides	E		
Flowering Plants	piperia, Yadon's	Piperia yadonii	E		
Flowering Plants	pitaya, Davis' green	Echinocereus viridiflorus davisii	E		
Flowering Plants	pitcher-plant, Alabama canebrake	Sarracenia rubra alabamensis	E		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	pitcher-plant, green	Sarracenia oreophila	E		
Flowering Plants	pitcher-plant, mountain sweet	Sarracenia rubra jonesii	E		
Flowering Plants	plum, scrub	Prunus geniculata	E		
Flowering Plants	po'e	Portulaca sclerocarpa	E		
Flowering Plants	pogonia, small whorled	Isotria medeoloides	T		
Flowering Plants	polygala, Lewton's	Polygala lewtonii	E		
Flowering Plants	polygala, tiny	Polygala smallii	E		
Flowering Plants	pondberry	Lindera melissifolia	E		
Flowering Plants	pondweed, Little Aguja Creek	Potamogeton clytocarpus	E		
Flowering Plants	popolo `aiakeakua	Solanum sandwicense	E		
Flowering Plants	popolo ku mai	Solanum incompletum	E		
Flowering Plants	poppy, Sacramento prickly	Argemone plelacantha pinnatisecta	E		
Flowering Plants	poppy-mallow, Texas	Callirhoe scabriuscula	E		
Flowering Plants	potato-bean, Price's	Apios priceana	T		
Flowering Plants	potentilla, Hickman's	Potentilla hickmanii	E		
Flowering Plants	prairie-clover, leafy	Dalea foliosa	E		
Flowering Plants	prickly-apple, fragrant	Cereus eriophorus fragrans	E		
Flowering Plants	prickly-ash, St. Thomas	Zanthoxylum thomasianum	E		
Flowering Plants	primrose, Maguire	Primula maguirei	T		
Flowering Plants	pussypaws, Mariposa	Calyptridium pulchellum	T		
Flowering Plants	pu`uka`a	Cyperus trachysanthos	E		
Flowering Plants	rattleweed, hairy	Baptisia arachnifera	E		
Flowering Plants	reed-mustard, Bameby	Schoenocrambe bamebyi	E		
Flowering Plants	reed-mustard, clay	Schoenocrambe argillacea	T		
Flowering Plants	remya, Maui	Remya mauiensis	E	1809.44	
Flowering Plants	rhododendron, Chapman	Rhododendron chapmanii	E		
Flowering Plants	ridge-cress, Bameby	Lepidium bamebyanum	E		
Flowering Plants	rock-cress, Braun's	Arabis perstellata	E		
Flowering Plants	rock-cress, Hoffmann's	Arabis hoffmannii	E		
Flowering Plants	rock-cress, McDonald's	Arabis mcdonaldiana	E		
Flowering Plants	rock-cress, shale barren	Arabis serotina	E		
Flowering Plants	rockcress, Santa Cruz Island	Sibara filifolia	E		
Flowering Plants	rosemary, Apalachicola	Conradina glabra	E		
Flowering Plants	rosemary, Cumberland	Conradina verticillata	T		
Flowering Plants	rosemary, Etonia	Conradina etonia	E		
Flowering Plants	rosemary, short-leaved	Conradina brevifolia	E		
Flowering Plants	rosroot, Leedy's	Sedum integrifolium leedyi	T	1809.44	
Flowering Plants	rush-pea, slender	Hoffmannseggia tenella	E		
Flowering Plants	rush-rose, island	Helianthemum greenii	T		
Flowering Plants	sand-verbena, large-fruited	Abronia macrocarpa	E		
Flowering Plants	sandalwood, Lanai or `ilihi	Santalum freycinetianum lanaiense	E		
Flowering Plants	sandbur, agrimony or Kamanomano	Cenchrus agrimonioides	E		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	sandlace	<i>Polygonella myriophylla</i>	E		
Flowering Plants	sandwort, Bear Valley	<i>Arenaria ursina</i>	T		
Flowering Plants	sandwort, Cumberland	<i>Arenaria cumberlandensis</i>	E		
Flowering Plants	sandwort, Marsh	<i>Arenaria paludicola</i>	E		
Flowering Plants	schledea, Diamond Head	<i>Schledea adamantis</i>	E		
Flowering Plants	seablite, California	<i>Suaeda californica</i>	E		
Flowering Plants	seagrass, Johnson's	<i>Halophila johnsonii</i>	T		
Flowering Plants	sedge, Navajo	<i>Carex specuicola</i>	T		
Flowering Plants	sedge, white	<i>Carex albida</i>	E		
Flowering Plants	silversword, Haleakala	<i>Argyroxiphium sandwicense macrocephalum</i>	T		
Flowering Plants	silversword, Mauna Kea	<i>Argyroxiphium sandwicense sandwicense</i>	E		
Flowering Plants	silversword, Mauna Loa	<i>Argyroxiphium kauense</i>	E		
Flowering Plants	skullcap, Florida	<i>Scutellaria floridana</i>	T		
Flowering Plants	skullcap, large-flowered	<i>Scutellaria montana</i>	E		
Flowering Plants	snakefoot	<i>Eryngium cuneifolium</i>	E		
Flowering Plants	sneezeweed, Virginia	<i>Helenium virginicum</i>	T		
Flowering Plants	snowbells, Texas	<i>Styrax texanus</i>	E		
Flowering Plants	spineflower, Ben Lomond	<i>Chorizanthe pungens hartwegiana</i>	E		
Flowering Plants	spineflower, Howell's	<i>Chorizanthe howellii</i>	E		
Flowering Plants	spineflower, Monterey	<i>Chorizanthe pungens pungens</i>	T		
Flowering Plants	spineflower, Orcutt's	<i>Chorizanthe orcuttiana</i>	E		
Flowering Plants	spineflower, Robust	<i>Chorizanthe robusta</i>	E		
Flowering Plants	spineflower, slender-horned	<i>Dodecahema leptoceras</i>	E		
Flowering Plants	spineflower, Sonoma	<i>Chorizanthe valida</i>	E		
Flowering Plants	spiraea, Virginia	<i>Spiraea virginiana</i>	T		
Flowering Plants	spurge, deltoid	<i>Chamaesyce deltoidea deltoidea</i>	E		
Flowering Plants	spurge, Garber's	<i>Chamaesyce garberi</i>	T		
Flowering Plants	spurge, Hoover's	<i>Chamaesyce hooveri</i>	T		
Flowering Plants	spurge, telephus	<i>Euphorbia telephioides</i>	T		
Flowering Plants	stonecrop, Lake County	<i>Parvisedum leiocarpum</i>	E		
Flowering Plants	sumac, Michaux's	<i>Rhus michauxii</i>	E		
Flowering Plants	sunburst, Hartweg's golden	<i>Pseudobahia bahiifolia</i>	E		
Flowering Plants	sunburst, San Joaquin adobe	<i>Pseudobahia peirsonii</i>	T		
Flowering Plants	sunflower, Eggert's	<i>Helianthus eggertii</i>	T		
Flowering Plants	sunflower, San Mateo woolly	<i>Eriophyllum latilobum</i>	E		
Flowering Plants	sunflower, Schweinitz's	<i>Helianthus schweinitzii</i>	E		
Flowering Plants	sunray, Ash Meadows	<i>Enceliopsis nudicaulis corrugata</i>	T	1382.4	
Flowering Plants	sunshine, Sonoma	<i>Blennosperma bakeri</i>	E		
Flowering Plants	taraxacum, California	<i>Taraxacum californicum</i>	E		
Flowering Plants	tarplant, Otay	<i>Hemizonia conjugens</i>	T		
Flowering Plants	thelypody, Howell's spectacular	<i>Thelypodium howellii spectabilis</i>	T		
Flowering Plants	thistle, Chorro Creek bog	<i>Cirsium fontinale obispoense</i>	E		

Feder. Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Flowering Plants	thistle, fountain	Cirsium fontinale fontinale	E		
Flowering Plants	thistle, Loch Lomond coyote	Eryngium constancei	E		
Flowering Plants	thistle, Pitcher's	Cirsium pitcheri	T		
Flowering Plants	thistle, Sacramento Mountains	Cirsium vinaceum	T		
Flowering Plants	thistle, Suisun	Cirsium hydrophilum hydrophilum	E		
Flowering Plants	thormint, San Diego	Acanthomintha ilicifolia	T		
Flowering Plants	thormint, San Mateo	Acanthomintha obovata duttonii	E		
Flowering Plants	townsendia, Last Chance	Townsendia aprica	T		
Flowering Plants	trillium, persistent	Trillium persistens	E		
Flowering Plants	trillium, relict	Trillium reliquum	E		
Flowering Plants	twinpod, Dudley Bluffs	Physaria obcordata	T		
Flowering Plants	uhiuhi	Caesalpinia kavaianse	E		
Flowering Plants	uvillo	Eugenia haematocarpa	E		
Flowering Plants	vervain, Red Hills	Verbena californica	T		
Flowering Plants	vech, Hawaiian	Vicia menziesii	E		
Flowering Plants	wallflower, Ben Lomond	Erysimum teretifolium	E		
Flowering Plants	wallflower, Contra Costa	Erysimum capitatum angustatum	E		
Flowering Plants	wallflower, Menzies'	Erysimum menziesii	E		
Flowering Plants	walnut, West Indian or nogal	Juglans jamalcensis	E		
Flowering Plants	warea, wide-leaf	Warea amplexifolia	E		
Flowering Plants	water-plantain, Kral's	Sagittaria secundifolia	T		
Flowering Plants	water-umbel, Huachuca	Lilaeopsis schaffneriana recurva	E		
Flowering Plants	water-willow, Cooley's	Justicia cooleyi	E		
Flowering Plants	watercress, Gambel's	Rorippa gambellii	E		
Flowering Plants	whitlow-wort, papery	Paronychia chartacea	T		
Flowering Plants	wild-buckwheat, clay-loving	Eriogonum pelinophilum	E		
Flowering Plants	wild-buckwheat, gypsum	Eriogonum gypsophilum	T		
Flowering Plants	wild-buckwheat, southern mountain	Eriogonum kennedyi austromontanum	T		
Flowering Plants	wild-rice, Texas	Zizania texana	E		
Flowering Plants	wire-lettuce, Malheur	Stephanomeria malheurenensis	E		
Flowering Plants	wireweed	Polygonella basiramia	E		
Flowering Plants	woodland-star, San Clemente Island	Lithophragma maximum	E		
Flowering Plants	woolly-star, Hoover's	Eriastrum hooveri	T		
Flowering Plants	woolly-star, Santa Ana River	Eriastrum densifolium sanctorum	E		
Flowering Plants	wooly-threads, San Joaquin	Lembertia congdonii	E		
Flowering Plants	ziziphus, Florida	Ziziphus celata	E		
Conifers and Cycads	cypress, Gowen	Cupressus goveniana goveniana	T		
Conifers and Cycads	cypress, Santa Cruz	Cupressus abramsiana	E		
Conifers and Cycads	Torreya, Florida	Torreya taxifolia	E		
Ferns and Allies	diellia, asplenium-leaved	Diellia erecta	E		
Ferns and Allies	fem, Alabama streak-sorus	Thelypteris pilosa alabamensis	T		
Ferns and Allies	fem, Aleutian shield	Polystichum aleuticum	E		

Federal Listed Endangered and Threatened Wildlife and Plants  
As of Fiscal Year 1999 (September 30, 1999)

Kingdom	Inverted Common Name	Scientific Name	Listing Status	General Costs	Land Costs
Ferns and Allies	fern, American hart's-tongue	<i>Asplenium scolopendrium americanum</i>	T	864.48	
Ferns and Allies	fern, Elfin tree	<i>Cyathea dryopteroides</i>	E		
Ferns and Allies	fern, pendant kihi	<i>Adenophorus perlens</i>	E		
Ferns and Allies	ih'ihi	<i>Marsilea villosa</i>	E		
Ferns and Allies	No common name	<i>Asplenium fragile insulare</i>	E		
Ferns and Allies	No common name	<i>Diellia falcata</i>	E		
Ferns and Allies	No common name	<i>Diellia pallida</i>	E		
Ferns and Allies	No common name	<i>Thelypteris yaucoensis</i>	E		
Ferns and Allies	No common name	<i>Thelypteris verecunda</i>	E		
Ferns and Allies	No common name	<i>Thelypteris inabonensis</i>	E		
Ferns and Allies	No common name	<i>Tectaria estremerana</i>	E		
Ferns and Allies	No common name	<i>Polystichum calderonense</i>	E		
Ferns and Allies	No common name	<i>Elaphoglossum serpens</i>	E	864.48	
Ferns and Allies	No common name	<i>Diellia unisora</i>	E		
Ferns and Allies	No common name	<i>Adiantum vivesii</i>	E		
Ferns and Allies	No common name	<i>Diplazium molokaiense</i>	E		
Ferns and Allies	No common name	<i>Pteris lidgatei</i>	E		
Ferns and Allies	pauoa	<i>Ctenitis squamigera</i>	E		
Ferns and Allies	quillwort, black spored	<i>Isoetes melanospora</i>	E		
Ferns and Allies	quillwort, Louisiana	<i>Isoetes louisianensis</i>	E		
Ferns and Allies	quillwort, mat-forming	<i>Isoetes tegetiformans</i>	E		
Ferns and Allies	wawae'iole	<i>Huperzia mannii</i>	E		
Ferns and Allies	wawae'iole, (=ha'iwale)	<i>Phlegmariurus nutans</i>	E		
Lichens	cladonia, Florida perforate	<i>Cladonia perforata</i>	E		
Lichens	lichen, rock gnome	<i>Gymnoderma lineare</i>	E		

FEDERAL ENERGY REGULATORY COMMISSION  
WASHINGTON, D. C. 20426

TO:  
DCER

OFFICE OF ENERGY PROJECTS

JUN 12 2002

Mr. Steve Williams  
Director  
Fish and Wildlife Service  
U.S. Department of the Interior  
Washington, D.C. 20240

Dear Mr. Williams:

This is in response to your September 19, 2001 letter requesting information about the Commission's Fiscal Year's 1999 and 2000 expenditures related to the conservation of endangered and threatened species.

The enclosed lists (a diskette is also enclosed) identify the endangered and threatened species and associated Commission expenditures. The lists represent the activities of the Office of Energy Projects that includes both the Commission's hydroelectric and gas pipeline programs. The expenditures for each species include salaries and related benefits. Travel expenses were included in those cases where they were directly attributable to a species.

I hope this information is helpful. If I can be of further assistance in this or any other Commission matter, please let me know.

Sincerely,



J. Mark Robinson  
Director  
Office of Energy Projects

Enclosures

## 1999 Data Request For Federal Agencies

Kingdom	Inverted Common Name	Scientific Name	Listing Status	Expenditures (\$)
Amphibians	frog, California red-legged	<i>Rana aurora draytonii</i>	T	9,142
Amphibians	salamander, flatwoods	<i>Ambystoma cingulatum</i>	T	588
Amphibians	toad, arroyo	<i>Bufo microscaphus californicus</i>	E	456
Birds	caracara, Audubon's crested	<i>Polyborus plancus audubonii</i>	T	1,944
Birds	condor, California	<i>Gymnogyps californianus</i>	E	1,101
Birds	crane, whooping	<i>Grus americana</i>	E	1,907
Birds	curlew, Eskimo	<i>Numenius borealis</i>	E	826
Birds	eagle, bald	<i>Haliaeetus leucocephalus</i>	T	16,152
Birds	falcon, American peregrine	<i>Falco peregrinus anatum</i>	DM	1,946
Birds	flycatcher, southwestern willow	<i>Empidonax traillii extimus</i>	E	2,197
Birds	gnatcatcher, coastal California	<i>Polioptila californica californica</i>	T	1,547
Birds	jay, Florida scrub	<i>Aphelocoma coerulescens</i>	T	2,048
Birds	kite, Everglade snail	<i>Rostrhamus sociabilis plumbeus</i>	E	504
Birds	murrelet, marbled	<i>Brachyramphus marmoratus marmoratus</i>	T	972
Birds	owl, northern spotted	<i>Strix occidentalis caurina</i>	T	1,030
Birds	Plover, piping	<i>Charadrius melodus</i>	E, T	2,257
Birds	sparrow, Florida grasshopper	<i>Ammodramus savannarum floridanus</i>	E	653
Birds	stork, wood	<i>Mycteria americana</i>	E	1,314
Birds	tern, least	<i>Sterna antillarum</i>	E	1,083
Birds	vireo, least Bell's	<i>Vireo bellii pusillus</i>	E	1,914
Birds	warbler, Bachman's	<i>Vermivora bachmanii</i>	E	33
Birds	woodpecker, ivory-billed	<i>Campephilus principalis</i>	E	33
Birds	woodpecker, red-cockaded	<i>Picoides borealis</i>	E	2,342
Clams	clubshell	<i>Pleurobema clava</i>	E	190
Clams	clubshell, ovate	<i>Pleurobema perovatum</i>	E	481
Clams	clubshell, southern	<i>Pleurobema decisum</i>	E	103
Clams	fanshell	<i>Cyprogenia stegaria</i>	E	41
Clams	higgins eye	<i>Lampsilis higginsii</i>	E	378
Clams	moccasinshell, Gulf	<i>Medionidus penicillatus</i>	E	367
Clams	mucket, pink	<i>Lampsilis abrupta</i>	E	41
Clams	pearlymussel, cracking	<i>Hemistena lata</i>	E	41
Clams	pearlymussel, white wartyback	<i>Plethobasus cicatricosus</i>	E	103
Clams	pigtoe, heavy	<i>Pleurobema taitianum</i>	E	62
Clams	pigtoe, oval	<i>Pleurobema pyriforme</i>	E	70
Clams	pigtoe, rough	<i>Pleurobema plenum</i>	E	103
Clams	pocketbook, finelined	<i>Lampsilis altii</i>	T	103
Clams	pocketbook, shinyrayed	<i>Lampsilis subangulata</i>	E	37
Clams	riffleshell, northern	<i>Epioblasma torulosa rangiana</i>	E	1,408
Clams	ring pink	<i>Obovaria retusa</i>	E	41
Clams	wedgemussel, dwarf	<i>Alasmidonta heterodon</i>	E	2,265
Crustaceans	crayfish, Shasta	<i>Pacifastacus fortis</i>	E	1,864
Crustaceans	fairy shrimp, vernal pool	<i>Branchinecta lynchi</i>	T	551
Crustaceans	tadpole shrimp, vernal pool	<i>Lepidurus packardii</i>	E	734
Ferns and Allies	quillwort, Louisiana	<i>Isoetes louisianensis</i>	E	280
Fishes	darther, slackwater	<i>Etheostoma boschungii</i>	T	567
Fishes	logperch, Roanoke	<i>Percina rex</i>	E	103
Fishes	madtom, Neosno	<i>Noturus placidus</i>	T	58
Fishes	minnow, loach	<i>Tiaroga cobitis</i>	T	184
Fishes	pikeminnow, Colorado	<i>Ptychocheilus lucius</i>	E	155

Fishes	salmon, chinook	<i>Oncorhynchus tshawytscha</i>	E, T	12,903
Fishes	salmon, chum	<i>Oncorhynchus keta</i>	T	1,109
Fishes	salmon, coho	<i>Oncorhynchus kisutch</i>	T	1,079
Fishes	salmon, sockeye	<i>Oncorhynchus nerka</i>	E, T	1,079
Fishes	shiner, Arkansas River	<i>Notropis girardi</i>	T	413
Fishes	smelt, delta	<i>Hypomesus transpacificus</i>	T	659
Fishes	spikedace	<i>Meda fulgida</i>	T	184
Fishes	splittail, Sacramento	<i>Pogonichthys macrolepidotus</i>	T	1,605
Fishes	steelhead	<i>Oncorhynchus mykiss</i>	E, T	8,325
Fishes	sturgeon, Gulf	<i>Acipenser oxyrinchus desotoi</i>	T	343
Fishes	sturgeon, pallid	<i>Scaphirhynchus albus</i>	E	378
Fishes	sturgeon, shortnose	<i>Acipenser brevirostrum</i>	E	7,819
Fishes	sucker, razorback	<i>Xyrauchen texanus</i>	E	889
Fishes	trout, bull	<i>Salvelinus confluentus</i>	T	2,065
Fishes	trout, Lahontan cutthroat	<i>Oncorhynchus clarki henshawi</i>	T	294
Fishes	trout, Little Kern golden	<i>Oncorhynchus aguabonita whitei</i>	T	661
Flowering Plants	barberry, Nevin's	<i>Berberis nevinii</i>	E	39
Flowering Plants	beargrass, Britton's	<i>Nolina brittoniana</i>	E	500
Flowering Plants	blazingstar, scrub	<i>Liatris ohlingerae</i>	E	240
Flowering Plants	bonamia, Florida	<i>Bonamia grandiflora</i>	T	500
Flowering Plants	brodiaea, thread-leaved	<i>Brodiaea filifolia</i>	T	39
Flowering Plants	buckwheat, scrub	<i>Eriogonum longifolium gnaphalifolium</i>	T	659
Flowering Plants	bulrush, Northeastern	<i>Scirpus ancistrochaetus</i>	E	378
Flowering Plants	bush-clover, prairie	<i>Lespedeza leptostachya</i>	T	567
Flowering Plants	butterweed, Layne's	<i>Senecio layneae</i>	T	194
Flowering Plants	cactus, Cochise pincushion	<i>Coryphantha robbinsorum</i>	T	39
Flowering Plants	cactus, Knowlton	<i>Pediocactus knowltonii</i>	E	19
Flowering Plants	cactus, Mesa Verde	<i>Sclerocactus mesae-verdae</i>	T	367
Flowering Plants	cactus, Peebles Navajo	<i>Pediocactus peeblesianus peeblesianus</i>	E	39
Flowering Plants	cactus, Siler pincushion	<i>Pediocactus sileri</i>	T	77
Flowering Plants	cactus, Unita Basin hookless	<i>Sclerocactus glaucus</i>	T	39
Flowering Plants	chaff-flower, round-leaved	<i>Achyranthes splendens rotundata</i>	E	189
Flowering Plants	cliff-rose, Arizona	<i>Purshia subintegra</i>	E	39
Flowering Plants	clover, running buffalo	<i>Trifolium stoloniferum</i>	E	37
Flowering Plants	cycladenia, Jones	<i>Cycladenia humilis jonesii</i>	T	39
Flowering Plants	fringe-tree, pygmy	<i>Chionanthus pygmaeus</i>	E	33
Flowering Plants	harebells, Avon Park	<i>Crotalaria avonensis</i>	E	33
Flowering Plants	hypericum, highlands scrub	<i>Hypericum cumulicola</i>	E	33
Flowering Plants	jewelflower, California	<i>Caulanthus californicus</i>	E	184
Flowering Plants	ladies'-tresses, Ute	<i>Spiranthes diluvialis</i>	T	967
Flowering Plants	lupine, scrub	<i>Lupinus aridorum</i>	E	33
Flowering Plants	milk-vetch, Applegate's	<i>Astragalus applegatei</i>	E	378
Flowering Plants	milk-vetch, Braunton's	<i>Astragalus brauntonii</i>	E	39
Flowering Plants	milk-vetch, Coachella Valley	<i>Astragalus lentiginosus coachellae</i>	E	155
Flowering Plants	milk-vetch, Mancos	<i>Astragalus humillimus</i>	E	39
Flowering Plants	milk-vetch, Sentry	<i>Astragalus cremnophylax cremnophylax</i>	E	39
Flowering Plants	milk-vetch, triple-ribbed	<i>Astragalus tricarinatus</i>	E	309
Flowering Plants	milkweed, Mead's	<i>Asclepias meadii</i>	T	206
Flowering Plants	milkweed, Welsh's	<i>Asclepias welshii</i>	T	39
Flowering Plants	monkshood, northern wild	<i>Aconitum noveboracense</i>	T	900
Flowering Plants	mustard, Carter's	<i>Warea carteri</i>	E	33
Flowering Plants	onion, Munz's	<i>Allium munzii</i>	E	39



Flowering Plants	orchid, eastern prairie fringed	<i>Platanthera leucophaea</i>	T	292
Flowering Plants	orcutt grass, slender	<i>Orcuttia tenuis</i>	T	243
Flowering Plants	pawpaw, beautiful	<i>Deeringothamnus pulchellus</i>	E	33
Flowering Plants	pigeon wings	<i>Clitoria fragrans</i>	T	133
Flowering Plants	plum, scrub	<i>Prunus geniculata</i>	E	137
Flowering Plants	polygala, Lewton's	<i>Polygala lewtonii</i>	E	33
Flowering Plants	potato-bean, Price's	<i>Apios priceana</i>	T	378
Flowering Plants	rosemary, short-leaved	<i>Conradina brevifolia</i>	E	33
Flowering Plants	sandlace	<i>Polygonella myriophylla</i>	E	137
Flowering Plants	spiraea, Virginia	<i>Spiraea virginiana</i>	T	51
Flowering Plants	sunburst, San Joaquin adobe	<i>Pseudobahia peirsonii</i>	T	367
Flowering Plants	warea, wide-leaf	<i>Warea amplexifolia</i>	E	33
Flowering Plants	whitlow-wort, papery	<i>Paronychia chartacea</i>	T	592
Flowering Plants	wireweed	<i>Polygonella basiramia</i>	E	33
Flowering Plants	woolly-star, Santa Ana River	<i>Eriastrum densifolium sanctorum</i>	E	77
Flowering Plants	ziziphus, Florida	<i>Ziziphus celata</i>	E	33
Insects	beetle, American burying	<i>Nicrophorus americanus</i>	E	390
Insects	beetle, valley elderberry longhorn	<i>Desmocerus californicus dimorphus</i>	T	5,033
Insects	butterfly, Kerner blue	<i>Lycaeides melissa samuelis</i>	E	748
Insects	butterfly, Quino checkerspot	<i>Euphydryas editha quino</i>	E	348
Insects	moth, Kern primrose sphinx	<i>Euproserpinus euterpe</i>	T	184
Insects	tiger beetle, Puritan	<i>Cicindela puritana</i>	T	1,840
Lichens	cladonia, Florida perforate	<i>Cladonia perforata</i>	E	500
Mammals	bat, gray	<i>Myotis grisescens</i>	E	612
Mammals	bat, Indiana	<i>Myotis sodalis</i>	E	4,736
Mammals	bat, lesser long-nosed	<i>Leptonycteris curasoae yerbabuena</i>	E	77
Mammals	bear, grizzly	<i>Ursus arctos horribilis</i>	T	75
Mammals	bear, Louisiana black	<i>Ursus americanus luteolus</i>	T	217
Mammals	ferret, black-footed	<i>Mustela nigripes</i>	E	2,456
Mammals	fox, San Joaquin kit	<i>Vulpes macrotis mutica</i>	E	367
Mammals	kangaroo rat, San Bernardino Merriam's	<i>Dipodomys merriami parvus</i>	E	348
Mammals	kangaroo rat, Stephens'	<i>Dipodomys stephensi</i>	E	348
Mammals	kangaroo rat, Tipton	<i>Dipodomys nitratoides nitratoides</i>	E	734
Mammals	manatee, West Indian	<i>Trichechus manatus</i>	E	2,254
Mammals	mouse, Preble's meadow jumping	<i>Zapus hudsonius preblei</i>	T	1,578
Mammals	Mouse, southeastern beach	<i>Peromyscus polionotus niveiventris</i>	T	103
Mammals	panther, Florida	<i>Puma concolor coryi</i>	E	332
Reptiles	crocodile, American	<i>Crocodylus acutus</i>	E	75
Reptiles	lizard, blunt-nosed leopard	<i>Gambelia silus</i>	E	367
Reptiles	lizard, Coachella Valley fringe-toed	<i>Uma inornata</i>	T	425
Reptiles	sea turtle, green	<i>Chelonia mydas</i>	E, T	137
Reptiles	sea turtle, hawksbill	<i>Eretmochelys imbricata</i>	E	137
Reptiles	sea turtle, Kemp's ridley	<i>Lepidochelys kempii</i>	E	137
Reptiles	sea turtle, leatherback	<i>Dermochelys coriacea</i>	E	137
Reptiles	sea turtle, loggerhead	<i>Caretta caretta</i>	T	137
Reptiles	skink, bluetail mole	<i>Eumeces egregius lividus</i>	T	653
Reptiles	skink, sand	<i>Neoseps reynoldsi</i>	T	1,153
Reptiles	snake, Atlantic salt marsh	<i>Nerodia clarkii taeniata</i>	T	103
Reptiles	snake, copperbelly water	<i>Nerodia erythrogaster neglecta</i>	T	378
Reptiles	snake, eastern indigo	<i>Drymarchon corais couperi</i>	T	2,740
Reptiles	snake, giant garter	<i>Thamnophis gigas</i>	T	367
Reptiles	tortoise, desert	<i>Gopherus agassizii</i>	T	3,094

Reptiles	tortoise, gopher	<i>Gopherus polyphemus</i>	T	3,034
Reptiles	turtle, Alabama red-belly	<i>Pseudemys alabamensis</i>	E	103
Reptiles	turtle, bog	<i>Clemmys muhlenbergii</i>	T	2,426
Reptiles	turtle, yellow-blotched map	<i>Graptemys flavimaculata</i>	T	411
Snails	limpet, Banbury Springs	<i>Lanx</i> sp.	E	1,760
Snails	snail, Bliss Rapids	<i>Taylorconcha serpenticola</i>	T	2,051
Snails	snail, Snake River physa	<i>Physa natricina</i>	E	1,760
Snails	snail, Utah valvata	<i>Valvata utahensis</i>	E	1,711
Snails	springsnail, Bruneau Hot	<i>Pyrgulopsis bruneauensis</i>	E	184
Snails	springsnail, Idaho	<i>Fontelicella idahoensis</i>	E	2,051



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

FWS  
(with memo)

November 30, 2001

Mr. Marshall P. Jones, Jr.  
Acting Director  
Fish and Wildlife Service  
U.S. Department of the Interior  
Washington, DC 20240

Dear Mr. Jones:

This is in response to your letter of September 19, 2001 (reference FWS/AES/OPO/004757), requesting reasonably identifiable expenditures for the conservation of threatened and endangered species to be included in your annual report to Congress.

Summarized NRC expenditures in FY 1999 in support of the conservation of threatened and endangered species were:

Bonytail Chub ( <i>Gila elegans</i> )	25,000
Humpback Chub ( <i>Gila cypha</i> )	25,000
Colorado Pikeminnow ( <i>Ptychocheilus lucius</i> )	25,000
Razorback Sucker ( <i>Xyrauchen texanus</i> )	<u>25,000</u>
Total NRC Expenditures	100,000

This information has been forwarded electronically to Martha Balislarsen in the form of a Microsoft Excel spreadsheet as requested in your letter. Questions concerning these expenditures may be directed to Karen Fitch at (301)415-6029, E-mail at [KMF@NRC.GOV](mailto:KMF@NRC.GOV).

Sincerely,

Richard R. Rough, Director  
Division of Budget and Analysis



# Smithsonian Institution

J. Dennis O'Connor  
Under Secretary for Science

January 23, 2002

Mr. Marshall P. Jones, Jr.  
Acting Director  
United States Fish and Wildlife Service  
Department of the Interior  
Washington, D. C. 20240

Dear Mr. Jones:

As required by the Endangered Species Act Amendments of 1988, I am pleased to provide the Smithsonian Institution's annual submission to Congress of all reasonably-identifiable Federal expenditures made by the Institution in the conservation of endangered or threatened species in Fiscal Years 1999 and 2000.

While not a Federal agency, the Smithsonian Institution does expend appropriated funds aimed primarily at the conservation of endangered or threatened species consistent with the requirements of the Endangered Species Act. As a general procedure, the Smithsonian does not maintain Institution-wide information on endangered species projects on a species-by-species basis. However, as in our previous reports to the U. S. Fish and Wildlife Service, we are enclosing findings on Fiscal Years 1999 and 2000 Federal expenditures by the National Zoological Park, the Smithsonian unit with the largest proportion of budget outlays aimed at species conservation.

I hope this information will be of assistance.

Sincerely,

J. Dennis O'Connor

Enclosure

Smithsonian Institution Room 230  
1000 Jefferson Drive, SW  
Washington DC 20560-0009  
202-357-2903 Telephone  
202-633-8942 Fax



Smithsonian  
National Zoological Park

**FEDERAL MONEY SPENT ON ENDANGERED SPECIES FY1999 NATIONAL ZOO**

Parameters used:

- no captive breeding/housing/education costs included unless specifically part of a Recovery Plan/field work for conservation
- field research included only if part of conservation (i.e., efforts to assist lead agencies in their conservation efforts)
- two salary levels used: senior (curator, veterinary, etc.) @ \$100,000 and keeper/tech @ \$50,000; these are rough averages
- average administrative costs (permits, support, etc.) @ \$2,000
- "supplies" includes animal feed, medications, etc. for captive program
- cost of lab supplies not included unless easily identifiable
- no costs included if money came from grants, Federal Agencies, or other outside sources

CHEETAH (health & repro. research)	10% of \$100K x 4, 100% of \$50K . . .	\$90,000
DEER, ELD'S ( " " " )	8% of \$100K, 5% of \$80K x 3, 50% of \$50K x 2, \$4K lab supplies, \$2K admin. .	\$75,000
ELEPHANT, AFRICAN (field research)	10% of \$100K, .5% of 100K, \$2K admin. .	\$12,500
ELEPHANT, ASIAN (field research)	20% of \$100K, 10% of \$100K, 5% of \$100K, 1% of \$50K, \$9K lab supplies, 2K admin. . . . .	\$46,500
FERRET, BLACK-FOOTED (Recovery & captive)	25% of \$100K, 10% of 100K, 5% of \$100K, 100% of \$50K x 2, \$20K supplies, \$2K admin . . .	\$162,000
FOX, SAN JOAQUIN (Recovery)	50% of \$100K, 2% of \$50K, \$3K lab supplies..	\$9,000
MACAQUE, TOQUE (field research)	1% of \$50K, \$2K admin.....	\$2,500
OTTER, SOUTHERN SEA (Recovery)	4% of \$100K . . . . .	\$4,000
PANDA, GIANT (conservation)	20% of \$100K x 4.....	\$80,000
PANTHER, FLORIDA (repro. & pop. research)	5% of \$100K, 2% of \$100K, 1% of \$100K.....	\$8,000
SEAL, HAWAIIN MONK (Recovery)	4% of \$100K. . . . .	\$4,000
OTHER END/TH MARINE MAMMALS (Recovery)	3-4% of \$100K x 3.....	\$10,000
MARINE MAMMAL COMMISSION	5% of 100K . . . . .	\$5,000
SQUIRREL, DELMARVA FOX (Recovery)	15% of \$100K, 2% of \$100K, 1% of \$100K, 2% of \$50K, \$1K lab supplies. . . . .	\$19,500
TAMARIN, GOLDEN LION (field & captive)	50% of \$100K, 20% of \$100K x 2, 5% of \$100K x2, 4% of \$100K, 1% of \$100K, 10% of \$50K, 4% of 50K, \$2K supplies, \$4K lab supplies, \$30K admin.....	\$148,000
TIGER (field research)	25% of \$100K.....	\$25,000
WOLF, RED (captive for Recovery)	2% of \$100K, 25% of \$50K, \$3K supplies.....	\$17,500

**SUBTOTAL FOR MAMMALS \$718,500**

page 2, National Zoo  
1999 Expenditures

CONDOR, CALIFORNIA (Recovery) 1% of \$100K.....	\$1,000
Surrogate Hawaiian birds (captive) 20% of \$100K, 50% of \$50K, \$4K supplies.....	\$49,000
CROW, HAWAIIAN (Recovery) 10% of \$100K, 4% of \$100K, 1% of \$50K, \$3K lab supplies.....	\$17,500
CROW, MARIANA (captive for Recovery) 3% of \$100K, 1% of \$100K, 1% of \$50K. . . . .	\$4,500
FINCH, LAYSAN (Recovery) 1% of \$100 . . . . .	\$1,000
GOOSE, HAWAIIAN (Recovery) 1% of \$100K, \$2K lab supplies.....	\$3,000
KINGFISHER, GUAM (captive for Recovery) 5% of \$100K, 30% of \$50K, \$2K supplies.....	\$22,000
RAIL, GUAM (Recovery & captive) 5% of \$100K, 30% of \$50K, \$4K supplies.....	\$24,000
SPARROW, CAPE SABLE SEASIDE (advisory recovery) 2% of \$100K.....	\$2,000
STARLING, ROTHSCHILD'S (conservation) 8% of \$100K . . . . .	\$8,000
WARBLER, GOLDEN CHEEKED (Recovery) 15% of \$100K . . . . .	\$15,000
<b>SUBTOTAL FOR BIRDS</b>	<b>\$147,000</b>
TORTOISE, DESERT (field & captive), 60% of \$100K, 15% of 100K 50% of \$50K, \$4K admin.....	\$104,000
<b>SUBTOTAL FOR REPTILES</b>	<b>\$104,000</b>
<b><u>GRAND TOTAL \$969,500</u></b>	

EXPENDITURES RELATED TO CONSERVATION  
OF ENDANGERED OR THREATENED SPECIES  
FISCAL YEAR 1999  
TENNESSEE VALLEY AUTHORITY

---

<i>Species</i>	<i>Amount</i> <i>(thousands)</i>
Aster, Ruth's golden	2.0
Bat, Gray	13.2
Bat, Indiana	7.5
Bean, Price's potato	4.0
Beetle, American burying	5.0
Chub, spotfin	0.2
Darter, duskytail	0.5
Darter, snail	14.0
Eagle, bald	15.3
Madtom, smoky	0.5
Madtom, yellowfin	0.5
Prairie clover, leafy	2.0
Shiner, palezone	0.3
Skullcap, large-flowered	10.0
Sunflower, Eggert's	0.5
<b>Total</b>	<b>75.5</b>

---