





Recovery Report to Congress

Fiscal Years 2001-2002









On the Cover: Counter clockwise from the top - Columbia white-tailed deer from the Douglas County, Oregon distinct population segment (DPS), USFWS photo; leaf from the Virginia round-leaf birch, photo courtesy of D. Ogle; Johnston's frankenia, Texas Parks and Wildlife photo; and Eggert's sunflower, B. Bingham, USFWS photo. These species are improving and have reached, or almost reached their recovery goals, as of September 30, 2002.
This report and copies of recovery plans are available electronically at the Service's internet site at: http://endangered.fws.gov/recovery .
Copies of this report are also available from: U.S. Fish and Wildlife Service Endangered Species Program 4401 N. Fairfax Drive, Room 420 Arlington, VA 22203
Further information on the recovery program is available at the Service's website at: http://endangered.fws.gov/recovery/ .
In addition, the Service has actively sought to improve the overall national implementation of the Act and has developed a suite of national policies. This information is available electronically at: http://endangered.fws.gov/policies/ .



United States Department of the Interior



FISH AND WILDLIFE SERVICE Washington, D.C. 20240

Director of the U.S. Fish and Wildlife Service

Over the past few years, we have made significant improvements in the status of many species. The Robbins' cinquefoil and Aleutian Canada goose, for example, have been removed from the List due to recovery and the large-flowered skullcap has been downlisted from endangered to threatened. In addition, 450 species are considered to be stable or improving, some of which are reaching their recovery goals and may be delisted in the near future. We are also making steady progress on the recovery of many other species. For example, 85 percent of listed species have draft or final recovery plans that guide us towards the long-term goal of downlisting or delisting. Significant accomplishments have also been made in implementing on-the-ground recovery actions, which help move species farther along the path of recovery.

Despite these recent successes, however, a substantial amount of recovery work remains

to be undertaken and completed. We need to do more for declining species and species whose overall population status is uncertain. We also need to focus on the big challenge of initiating 5-year reviews under section 4(c)(2)of the Act. The purpose of these reviews is to determine whether a species current classification (threatened or endangered) is still accurate in light of new information. Conducting reviews for over 1,200 species while continuing to develop recovery plans, revise older plans as needed, and implementing high priority recovery actions will be extremely challenging. The Service has asked for a Recovery Program funding increase in the FY 2004 President's Budget to address these needs.

This 2002 report provides an update on the recovery of listed species between October 1, 2001, and September 30, 2002, and chronicles the progress of all partners' collective efforts.

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"Working with others, to conserve, protect and enhance fish, wildlife, and plants and their habitats for the continuing benefit of the American people."

Report to Congress on the Recovery of Threatened and Endangered Species

Background

The primary purpose of the Endangered Species Act of 1973 [16 U.S.C. 1531 et seq.] (Act) is the conservation of endangered and threatened species (listed species) and the ecosystems upon which they depend. The ultimate goal of such conservation efforts is the recovery of these species so that they no longer need the protective measures of the Act.

The Act requires the Secretaries of the Department of the Interior (DOI) and the Department of Commerce (DOC) to develop and implement plans for the conservation and survival of listed species ("recovery plans"). Recovery plans are required under section 4(f)(1) of the Act for all listed species, unless the plans will not promote the conservation of the species (section 7(a)(1)).

The Act also requires that the Secretaries report to Congress every two years on the status of efforts to develop and implement recovery plans, and the status of all species for which recovery plans have been developed. This report satisfies these two requirements. We choose to report the status of listed species without recovery plans in addition to those with recovery plans.

The U.S. Fish and Wildlife Service (Service), under the DOI, and the National Oceanic and Atmospheric Administration Fisheries (NOAA Fisheries) (formerly National Marine Fisheries Service (NMFS)), under the DOC, have been delegated the responsibility of administering the Act. In general, the Service has responsibility for freshwater and terrestrial species, while NOAA Fisheries has responsibility for most marine species and anadromous fish. Currently, the Service and NOAA Fisheries share the responsibility for the following ten listed species: the Atlantic and Pacific populations of both the green and olive ridley sea turtles; the

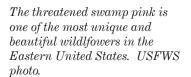
hawksbill, Kemp's ridley, leatherback, and loggerhead sea turtles; the Atlantic salmon; and the gulf sturgeon. Additional information on these joint species may be found in the NOAA Fisheries Office of Protected Resources' "Biennial Report to Congress on the Recovery Program for Threatened and Endangered Species: October 1, 2000 – September 30, 2002."

This report satisfies the Act's reporting requirement for October 1, 2000 to September 30, 2002, (reporting period) for U.S. species solely under the Service's jurisdiction, as well as those managed jointly with NOAA Fisheries.

The term "species" as used in the Act and this report includes any subspecies of fish or wildlife or plants, and any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature.

Introduction

Under the law, any species of fish, wildlife, or plants, except pest insects, can be added to the List of Threatened and Endangered Species (listed) if they are in danger of extinction throughout all or a significant portion of their range (Endangered) or are likely to become an endangered species within the foreseeable future throughout all or a significant portion of their range (Threatened). Species are placed on the threatened and endangered species list due to one or more of the following five factors: (a) the present or threatened destruction, modification, or curtailment of its habitat or range; (b) overutilization for commercial, recreational, scientific, or educational purposes; (c) disease or predation; (d) the inadequacy of existing regulatory mechanisms; and (e) other natural or manmade factors affecting its continued existence.





Recovery Overview

Recovery is the process by which listed species and their ecosystems are restored, and their future is safeguarded to the point that protections of the Act are no longer needed (i.e., the threats are reduced or removed). A variety of actions may be necessary to achieve the goal of recovery, such as creation of new, or restoration of existing, habitat or reintroduction of the species into suitable habitat. "Recovery plans" 1 are central to the recovery of listed species, but are not regulatory documents. Recovery plans (using the best scientific and commercial data available) serve as the road map for the species' recovery, laying out where we need to go, how best to get there, and how long we think it will take. Only under certain circumstances (i.e., a recovery plan will not promote the species conservation) is a species exempt from the requirement to develop a recovery plan.

A recovery outline—the first step in recovery planning—establishes the initial direction for conservation efforts and guides the development of a recovery plan. Draft and final recovery plans are then developed and implemented with stakeholder involvement. The plans organize, prioritize, and guide the recovery process, and establish objective criteria by which to measure progress toward recovery. The plans also identify who the responsible parties are to implement the on-the-ground recovery actions. Recovery plans may be amended, revised, or updated along the way when new information that may impact the species' recovery (new threats or genetic information, etc.) becomes available.

The importance of having a guiding document in recovery of species has been recognized since 1972, when the Service developed its first draft recovery plan. Thirty years later, it has been formally recognized that the longer a species has been listed and the longer that it has had a recovery plan, the better its status (Schultz and Gerber. 2002. Are Recovery Plans Improving With Practice? Ecological Applications 12: 641–647).



The endangered California red-legged frog is the largest native frog in the Western United States, and is believed to be the title character of Mark Twain's famed short story, "The Celebrated Jumping Frog of Calaveras County.". R. Smith, Curator of Reptiles, Los Angeles Zoo photo.



Unlike a common house fly, the endangered Delhi Sands flower-loving fly feeds on nectar and mimics the pollinating behavior of such species as the hummingbird, butterfly, and honey bee. USFWS photo.

¹ Bolded terms in quotation marks correspond to items reported in Appendix 1.

Status of Listed Species

The first priority for the recovery of any listed species is to prevent its extinction. Species with the highest degree of threat have the highest priority for preparing and implementing recovery plans. These critically endangered species need immediate and often intensive intervention just to prevent extinction. These are the species for which captive breeding is sometimes the only measure enabling the species to persist until the threats in the wild are reduced or eliminated and the species can be reintroduced to formally occupied habitat. We assign a "recovery priority **number**" to species to help guide the allocation of resources for recovery planning and implementation among all listed species. The recovery priority number is based on the degree of threat faced by the species, along with the species' potential for recovery and genetic distinctness. A "C" following the number indicates that there is the potential for conflicts between needed recovery actions and economic activities.

Species' declines have often been occurring over the course of decades or centuries prior to their listing. Addressing long-running threats typically requires substantial time and resources. Many of our species also face more recent threats, and some may even be faced with new threats after receiving protection under the Act. Therefore, during a period after listing, most species have declining population numbers. Our progress on reducing or removing threats may be minimal at this time as well. Threats are easily magnified simply by the continued decline in species numbers (for example, disease may have a greater chance of eliminating a smaller population). Unfortunately some threats, such as the threat posed by invasive, nonnative species, may continue to increase for some time following listing. Reaching recovery objectives is therefore likely to be far in the future. So although the rate of decline soon after listing may be the same, greater, or less than prior to listing, the species status during this period is usually reported as "declining."

Information on listed (particularly newly listed) species, including basic information on population numbers and threats is often lacking. The reasons for this lack of information vary and cannot all be easily resolved. Population surveys can be costly, can be quickly outdated and no longer representative of current conditions, have low confidence levels, or can be damaging or lethal to the species and therefore may be implemented sparingly, if at all. Monitoring the effect that a threat is having on a species is an important component to assessing a species status, but this information can also be lacking. Given that some species may need additional survey work before a declining, improving, or stable determination can be made, these species are reported as "uncertain."

To be successful, recovery activities must reverse declines. One indicator that a reversal may be underway is when the decline halts. Improvement may not be occurring or may not yet be detectable. Where the species numbers and threats remain constant, the species is reported as "stable."

Over time, as more information about listed species becomes available from surveys and research, and species begin benefiting from management and protection efforts aimed at reducing and/ or eliminating threats, increasing numbers of listed species are expected. Although the amount of time for response varies depending upon the species, the reduction and removal of threats should ² result in an increase in population numbers. It must be noted, however, that the length of time it takes to see a response in species numbers following the threat reduction or removal is dependant upon some factors (such as the age the species becomes reproductively mature) that are beyond the control of the Act and is often unrelated to the amount of financial resources expended. Species that do show a positive response, however, are reported as "improving".

As recovery progresses, it is often possible to downlist (change listing classification from endangered to threatened) the species. This determination means that the species is no longer in danger of extinction throughout all or a significant portion of its range. Downlisting objectives and criteria for endangered species are outlined in the species' recovery plan.

Delisting results in the removal of regulatory restrictions. To delist a species due to recovery, the Service must determine based on the best scientific and commercial data available, that the species is not in danger of extinction and is not likely to become so in the foreseeable future. The determination is based on a number of factors, such as population size, recruitment, stability of habitat quality and quantity, and control or elimination of the threats that caused the need to list the species. When a species has been recovered and subsequently delisted, the Act requires the Service, in cooperation with the States, to monitor the species status for a minimum of five years.

Despite all our best efforts species may have declined to the point where they occur now only in "captivity," and do not exist anywhere in the wild, or they may be believed to be "extinct," but remain on the list until extinction is confirmed after several years of intensive surveys and completion of formal rule-making to delist. Sometimes species are only in captivity or possibly extinct even before they are listed.

² Some critically endangered species may not respond due to limiting factors such as small population size that has limited or suppressed reproduction. Herculean efforts may be needed before an increase in population may be seen. It may even be that preventing extinction is the best that can be done with the current scientific information, although the future may bring advances enabling the population to improve.

Methods

The Director of the Service has delegated responsibility for recovery of listed species to the Service's seven Regional Directors across the nation. Each listed species is the responsibility of at least one Region. When the distribution of a species crosses regional boundaries, the "lead Region" coordinates decisions regarding the species among other Regions. Regional Directors ensure that recovery plans are developed for those species that need plans, appoint recovery team members if a team is appropriate, direct recovery plan implementation, and coordinate these efforts with our partners and stakeholders. (The boundaries of Service's Regions and the location of Regional Offices are illustrated on the inside back cover page - "Endangered Species Program Contacts".)

As required by the Act, our Field and Regional staff report every two years on their efforts to develop and implement recovery plans and the status of listed species. To make these determinations they use the best available information from recovery planning and implementing efforts, our consultation process with other Federal agencies under section 7 of the Act, our permitting program under section 10 of the Act, our petition process under section 4 of the Act, our coordination with States, and other activities related to listed species.

The results should be viewed only in light of the Act's recovery reporting requirement. These results are not intended to provide status review results such as are available after a 12-month finding or a 5-year review. They are intended only to simplistically represent the relative progress that is being made on listed species. Progress is not solely in the purview of the Service, and therefore, should not be used as the only measure of the effectiveness of the Service's Recovery Program.



Tom Stehn, USFWS Whooping Crane Recovery Coordinator and 2002 Recovery Champion. See "Recovery Initiative" on next page for more information. USFWS photo.



The endangered whooping crane population now has approximately 452 individuals, with a new eastern migratory population started in 2001. USFWS photo.

Status of the Recovery Program 2000-2002

The change in millennium brought both a look back and a look forward for the recovery program. An internal and external review of specific aspects of the recovery program (recovery plans and reporting requirements) was part of the impetus for the recovery initiative launched to take the recovery program into this millennium.

Science and Recovery Plans

A recent partnership to ensure the effectiveness of our recovery plans took the form of a comprehensive three-year study conducted by the Society of Conservation Biology (SCB), with our collaboration, on the science in recovery plans. Academic conservation biologists from universities across the country lead research seminars on recovery planning, which often focused on specific aspects of recovery plans (e.g., single species vs. multi-species recovery plans, revised vs. unrevised plans). SCB worked with us to design and implement a study that would be relevant and responsive to the needs of the Act, policymakers, and recovery biologists. We participated in this study to see how well we have been incorporating scientific principles into recovery plans.

From the analysis of recovery plans for 181 species, the study identified a number of strengths and weaknesses in past and current recovery plans. Among these recommendations are the need to focus more on threats as a unifying theme; focus more on monitoring; and provide clearer and more consistent linkage between the biology of the species and the recovery criteria and actions identified in the recovery plan.

What is Working?

- Species with recovery plans in place for longer time periods show more improvement in status
- Most recovery plans are being implemented to some extent
- High priority recovery actions are more likely to be implemented than lower priority actions

■ Identification of threats in plans builds on listing documents

What has Improved?

- Use of active management is increasing
- Emphasis on monitoring species is increasing
- Recovery criteria are increasing in specificity
- Scientific tools, such as population viability analysis, adaptive management, and metapopulation modelling, are being used more frequently

What Needs More Improvement

- Explicit addressing and monitoring of threats
- Diversity of contributors (while keeping teams small)
- Monitoring of: species trends, threats, implementation, effectiveness of implementation, and recovery criteria
- Internal consistency of plans, i.e., connecting biological information to recovery criteria/actions
- Inclusion of new science and theories
- Elimination of taxonomic biases
- Prioritization of species' plans for implementation and revision
- In multi-species plans, addressing of individual species needs, revisions, and implementation
- Addressing of needs for critical habitat management, where designated

We are addressing many of these short-comings through development of improved recovery planning and implementation guidance.

Recovery Program Audit

The Office of the Inspector General (IG) conducted a review of selected threatened and endangered species

program activities undertaken by the Pacific and Southeast Regions (see Endangered Species Contacts page) from October 1, 1994, through December 31, 2000, including a limited review of internal controls applicable to the biennial reporting requirement and annual expenditures data. The Final Report "Reporting and Recovery Planning and Implementation for Endangered Species, U.S. Fish and Wildlife Service" was issued on April 8, 2003, and provided recommendations for improving the biennial report. We have made significant progress in implementing these recommendations. The recommendations were to 1) perform periodic reviews to ensure the accuracy of the information in this report; 2) improve the guidance to our Regional and field offices to ensure the data in the report are consistent and supported by sufficient evidence; 3) include additional species data in the report to improve its usefulness in measuring the progress of recovery efforts; and 4) provide the report in a more timely fashion.

The following changes have been made to implement these recommendations:

- Additional reporting guidance has been developed to assist the field, Regional, and Washington Offices in inputting data more accurately, and beginning with the FY 2003 reporting cycle, implemented periodic review of recovery information. The Regional Offices reviewed and verified the field office data prior to submission to the Washington Office. The Washington Office then conducted a targeted review of the data, and as appropriate, requested clarification.
- Additional species information has been included in the Appendix I species report, such as the date the species was listed, the date of the species' first final recovery plan, and the date of the species' current recovery plan.

Recovery Initiative

As a way to highlight our ongoing success and acknowledge the work we have left to do, the Recovery Program embarked on a "Recovery Initiative" in FY 2001. The goals of this campaign are to boost recovery accomplishments by: identifying and communicating recovery opportunities throughout Service programs; strengthening the participation of partners, both internal and external; and developing sound guidance for more integrated endangered species recovery activities. To kick off the Initiative, the Program held its first National Workshop in November 2002, bringing together recovery staff from around the country. Focuses of the workshop included encouraging stakeholder participation in recovery planning and implementation; receiving feedback on improved recovery planning guidance; disseminating the latest information on tools and issues; and recognizing our own colleagues through the Recovery Champion awards, for the great work they do day-to-day to achieve recovery for listed species.

Growing Threats

New threats to listed species including introduced disease such as the West Nile virus and exotic, invasive species such as the Chinese snakehead fish (Channa asiatica) appeared during this reporting period. These invasive species, as well as other lesser known ones (at least on a national scale) such as crownvetch (Coronilla varia), pose a tremendous threat to threatened and endangered species and their ability to recover. Communication will play a critical role in addressing these and other threats that have the potential to negatively impact numerous listed species, and their potential to reach recovery, over wide geographic areas.

Partnerships

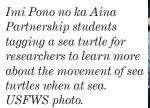
An example of a unique Service partnering project is the Pacific Islands Office's Conservation Partnerships Program (CPP). The CCP is a collection of voluntary habitat restoration programs with the goal of restoring native Pacific Island ecosystems through

collaborative projects. There are five program elements: Hawaii Biodiversity Joint Venture is a public-private conservation effort; Partners for Fish and Wildlife is a cost-sharing and technical assistance program; Pacific Islands Coastal Program identifies important coastal resource problems and solutions, develops partnerships to carry out on-the ground conservation projects, and encourages community action; Hawaii ESA Community Conservation Initiative is a unique Service program designed to engage landowners and community groups in the implementation of conservation actions to benefit listed species; Private Stewardship Grants Program is one of the cost-share opportunities for the high-priority habitat restoration needs of listed and candidate species on private lands; and, under the Watershed Partnership Assistance, the CPP works with watershed partnerships and other multilandowner groups to assist in coordination and implementation of conservation actions over broad landscapes. The CCP partnering project clearly epitomizes the Service's mission -"Working with others, to conserve, protect, and enhance fish, wildlife, and plants and their habitats for the continuing benefit of the American people."

An example of the CCP at work is the Imi Pono no ka 'Aina Partnership. Imi Pono no ka 'Aina means "Seeking Good for the Land." This partnership is an environmental education program in

conjunction with Hawaii Volcanoes National Park, U.S. Army, and the Hawaii Department of Education. The goal of this project is to increase the sense of stewardship and involvement of the public on the island of Hawaii regarding their native ecosystems. To accomplish this, funds were provided to a cooperator to conduct environmental education programs in public schools in the Hilo, Puna, and Hämäkua areas. The program educator establishes field study sites and presents information to students, teachers, and the general public that conveys the value of natural resources and types of challenges facing managers of native Hawaiian ecosystems. The students gain hands on experience in protecting and preserving native species and their habitats by working with resource managers. By teaching Hawaii's children about the fragile nature of their ecosystems, it is hoped that they will grow to appreciate and conserve the native species and their habitats.

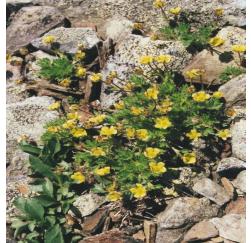
The ecosystems that listed species depend on for food, shelter, and the rearing of offspring often take years or even decades to be restored. It is essential to educate the next generation of decision makers, now, to ensure that our listed species recovery programs continue to make progress. More and more recovery plans include outreach and education as one of the recovery criteria against which recovery progress will be judged.





Species Highlights

The following success stories of the Robbins' cinquefoil, Aleutian Canada goose, and the large-flowered skullcap highlight not only the good news that species are being downlisted and delisted under the Act, but also the unique partnerships that developed during implementation of their respective recovery efforts.



The endangered Robbins' cinque foil was delisted in 2002 due to recovery. S. von Oettingen, USFWS photo.

Robbins' Cinquefoil (Potentilla robbinsiana)

Marking the successful recovery of the Robbins' cinquefoil, a small alpine perennial herb in the rose family (Rosaceae), we published a final rule on August 27, 2002, removing this plant from the list of endangered and threatened species. Its main population now contains more than 14,000 plants, and 2 transplant populations have reached or surpassed minimum population targets.

The Robbins' cinquefoil is endemic to a harsh alpine environment in the White Mountain National Forest of New Hampshire. Its recovery was made possible through collaborative efforts of the Service, U.S. Forest Service, Appalachian Mountain Club, and New England Wildflower Society to reroute a hiking trail and grow plants for transplanting back into the wild. The delisting rule included a proposed 5-year monitoring plan, as required for species that are delisted due to recovery. This plan will include monitoring of population

trends of both natural and transplanted populations through a continuing partnership with the Appalachian Mountain Club's Research Department and the Forest Service.

Aleutian Canada Goose (Branta canadensis leucopareia) The Aleutian Canada goose is a small, island nesting subspecies of the Canada goose. It currently migrates from nesting areas in the Aleutian Islands of Alaska to wintering grounds in California. Its historic range includes portions of Russia and Japan. On March 20, 2001 the Service published a final rule delisting the Aleutian Canada goose due to recovery. The final rule also included the outline of a monitoring plan for the goose, which is required for at least five vears after delisting. The removal of introduced arctic and red foxes from some of the goose's nesting islands, establishment of new colonies of geese on fox-free islands using captive-reared and wild family groups of geese, protection from hunting and disease, and protection and management of migration and wintering habitat were the primary factors that contributed to the goose's recovery.

The State of California, private landowners, and the Russian and Japanese governments have been active partners in the recovery of the Aleutian Canada goose. Wintering habitat in California is primarily agricultural lands where they feed on grass, waste beans, and grain. Most of these agricultural lands are privately owned, some of which have conservation easements. The remainder is State and Service owned. Conservation easements are designed to benefit the species by providing winter foraging habitat for the goose while farming activities continue. Russian and Japanese wildlife agencies have also worked with the Service to reintroduce goose populations into portions of its historic range in those countries. The monitoring plan for the goose calls for monitoring population size on wintering and migration areas, monitoring productivity of the Semidi Islands population segment on the wintering



The endangered Aleutian Canada goose was delisted in 2001 due to recovery. USWFS photo.

grounds, and monitoring the status of breeding birds on nesting islands in Alaska.

Large-flowered Skullcap (Scutellaria montana)

The large-flowered skullcap is a perennial herb of the mint Family (Lamiaceae) found in several counties in Tennessee and Georgia, and flowers from mid-May to early June. On January 14, 2002, the Service published a final rule to reclassify the large-flowered skullcap from endangered to threatened, due to substantial improvement in the species' status.

Since its listing in 1986 when only 10 occurrences (10 populations) were known, an additional 74 occurrences (48 populations) have been discovered, and the total number of plants has increased from approximately 6,700 to over 50,000. The Service is working with the Tennessee Valley Authority, the Tennessee River Gorge Trust, the Georgia Department of Natural Resources, the Tennessee Natural Heritage Program, the Chattahoochee National Forest, private landowners, and others on further recovery of the species.

Results

Appendix 1 shows the following information for each of the 1,254 species under the jurisdiction of the Fish and Wildlife Service (including the 10 species where we have joint jurisdiction with NOAA Fisheries): lead region, listing date, date of first final recovery plan, stage of the recovery plan (under development, draft, final, revision), date of the current plan, listing classification (threatened or endangered, and if there is critical habitat designated), recovery priority number, population status, and recovery achieved. Below under the "Results" section are summarized statistics for these species, including "recovery plan development stage", "population status", and "extent of recovery objectives achieved" (as of September 30, 2002). For purposes of the statistics that follow, all recovery "entities" are referred to as species 3.

Recovery plans organize and prioritize the actions necessary to bring about the species' recovery and provide the criteria that will be used to measure the species' progress toward recovery. Recovery plans may be written for just one species, multiple species, or whole ecosystems. Final plans are published after the

Table 1. Total Number of Recovery Plans For All Listed Species (data as of September 30, 2002)							
Type of Plan # %							
Exemptions from recovery plans	13	1					
Plans in first stages of development	182	15					
Draft plans	48	4					
Final approved recovery plans	1011	81					
Total Species	1254						
Final plans under revision	77	8					

publics' comments have been incorporated. Plans are kept current through updates, amendments, and revisions ⁴.

During October 1, 2000, through September 30, 2002, the Service completed 11 draft, 16 final, and 9 revised recovery plans, which together cover 68 species. Table 1 shows the total number of recovery plans under development, as well as in draft, final, and revised form for all listed species. Despite the 46 species added to the list between October 1, 2000, and September 30, 2002, the Service has maintained a marked improvement in the proportion of species with final recovery plans. For example, in 1994 only 54% of the 893 then listed species had final plans, while by the end of this reporting period 81% of 1,254 listed species had final plans. Eight percent of final recovery plans are currently under revision, highlighting the need to keep plans current for species that have been listed for a number of years, and to reflect new information that would affect recovery.



An endangered Oahu tree snail which is threatened by predation by the introduced carnivorous snail, <u>Euglandia rosea</u>, predation by rats, and loss of habitat due to the spread of non-native vegetation into higher elevations on the island of O'ahu, Hawaii. USWFS photo.

³ For several listed species, multiple recovery "entities" have been established to address specific recovery planning needs. For example, there are three recovery entities of piping plover (Atlantic Coast, Great Lakes, and Northern Great Plains).

⁴ Only revisions to final plans are tracked and reported here.

Recovery Priority

The recovery priority number reflects the degree of threat faced by the species, along with the species' potential for recovery and genetic distinctness (i.e., whether it is a monotypic genus versus a subspecies). A "C" following the number identifies that there is the potential for conflicts between needed recovery actions and economic activities. Ranking ranges from a high of 1C down to 18 (as shown in Table 2).

Recovery priorities do not change often. However, changes to the recovery priority number do sometimes occur because of increasing or decreasing threats and/or resolution of taxonomic questions (e.g., a species has been broken into two subspecies).

Results from the analysis conducted by The Nature Conservancy show that habitat loss and degradation and invasive species are the two leading causes for species decline and imperilment (The Nature Conservancy's *Precious Heritage*, 2000).

- Habitat loss and degradation are the first ranked threat, contributing to the endangerment of 85% of imperiled and federally listed species.
- Alien species is the second-ranked threat, affecting 49% of imperiled and federally listed species.

Table 2. Recovery Priority Number Chart								
$egin{aligned} Degree\ of \\ threat \end{aligned}$	Recovery potential	Taxonomy Priori		Conflict				
High	High	Monotypic genus	1	1C				
High	High	Species	2	2C				
High	High	Subspecies	3	3C				
High	Low	Monotypic genus	4	4C				
High	Low	Species	5	5C				
High	Low	Subspecies	6	6C				
Moderate	High	Monotypic genus	7	7C				
Moderate	High	Species	8	8C				
Moderate	High	Subspecies	9	9C				
Moderate	Low	Monotypic genus	10	10C				
Moderate	Low	Species	11	11C				
Moderate	Low	Subspecies	12	12C				
Low	High	Monotypic genus	13	13C				
Low	High	Species	14	14C				
Low	High	Subspecies	15	15C				
Low	Low	Monotypic genus	-					
Low	Low	Species	17	17C				
Low	Low	Subspecies	18	18C				



The razorback sucker is an example of a 1C species, a species with a high degree of threat and a high potential for recovery, but is in conflict with economic activities. USFWS photo.

Status of Listed Species

All taxonomic groups are vulnerable to threats that lead to their being listed as threatened or endangered (see Table 3).

For the period October 1, 2000, to September 30, 2002, 30% of listed species are reported as stable, 6% as improving, and 21% as declining (see Figure 1). We are uncertain of the status of 39% of the species. Additionally, 1% of listed species are only found in captivity and 3% are believed to be extinct.

This report does not show the success of the Service and its partners in preventing extinction. In an independent study published in the Annual Review of Ecological Systematics in 1999 (M. W. Schwartz), it was estimated that without the Act, 172 species might have been expected to become extinct during the 25-year period from 1973 to 1998, when in fact only seven species were determined to have gone extinct.

Figure 1. Percentage of Listed Species Per Status Categories (data as of September 30, 2002)

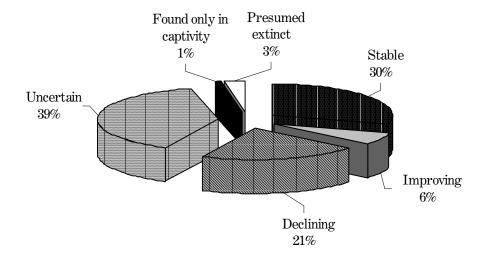


Table 3. Listed Species by Taxonomic Group (data as of September 30, 2002)						
Taxonomic Group	# of Species	$\% \ of \ Total$				
Mammals	65	13				
Birds	94	18				
Reptiles	42	8				
Amphibians	23	4				
Fish	110	21				
Invertebrates	179	35				
Total Animals	513	100				
Flowering Plants	705	95				
Non-flowering Plants	38	5				
Total Plants	743	100				
Total Species	1256					



The endangered Madla's Cave meshweaver is a narrow endemic cave adapted species, meaning it is found in only a handful of caves in Bexar County, Texas. J. Krejca, USFWS photo.

Changes in Species Status Over Time

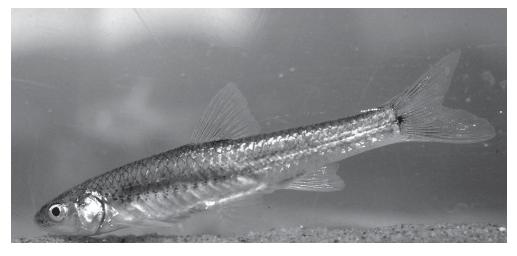
Often times, actions are needed immediately after listing just to prevent a species from becoming extinct. Recovery activities must first halt, then reverse, declines. Addressing the longterm threats that often have occurred over the course of decades or centuries typically requires substantial time and resources. In addition, the response time of a species to the implementation of actions is highly variable, mostly due to their life history (time to maturation, etc.). Therefore, we do not anticipate seeing stable or improving status for a species in the early years following its listing.

During the first few years after listing, most species populations have an uncertain or declining status. As mentioned above, as of September 30, 2002, the status of 39% of listed species is reported as uncertain. Additional information on species population numbers or threats is needed before their status can be determined. Of these species, 30% have been listed for 5 years or less and 41% have been listed for 6 years or more. However, Table 4 does reflect that, in general, the longer a species is listed the better the chance of it being reported as stable or improving.

The high percent of species reported as uncertain which have been listed 6 years or more may be a result of clarification of the definitions used in previous reports and/or the increasing challenge in maintaining up to date species information for an increasing number of listed species. Often the information used for reporting is generated as the result of opportunities that arise from developing Habitat Conservation Plans (HCPs), biological assessments for section 7 consultations, and from the implementation of recovery activities. These opportunities are not equal for all listed species.

Table 4. Changes in Status Over Time (data as of September 30, 2002)								
U.S. Species under jurisdiction of the Service (or jointly with NOAA Fisheries) with status as	% Species listed 5 years or less ¹							
Stable	22	31						
Improving	3	7						
Declining	45	18						
Uncertain	30	41						

¹ Note: totals may not add to 100% because species in captivity and/or possibly extinct are not included.



Planned restoration activities for the threatened Arkansas River shiner include enhancing mixed-grass and prairie stream habitat through altered grazing management, prescribed burning, and cutting of invasive woody species. K. Collins, USFWS photo.



Other common names for the endangered freshwater pink mucket (pearlymussel) include the Ohio mucket, tan mucket and square mucket. USFWS photo.

Downlisting and Delisting Actions

Successful implementation of recovery actions over time leads to improvement in a species status and eventual downlisting (reclassification from endangered to threatened) and delisting. Recovery plan criteria are the measurements by which recovery progress is judged. When an endangered species has successfully met its criteria it is downlisted. During the reporting period October 1, 2000, to September 30, 2002, the large-flowered skullcap was downlisted from endangered to threatened.

The Code of Federal Regulations (50 CFR 424.11) specifies three situations in which the protections of the Act may be completely removed (delisting) for a species: because it has been recovered; and/or because of new information. taxonomic revisions, or other administrative reasons; or because it has gone extinct. Thirty-five of the 1,256 species (3%) in Appendix 1 are believed to be extinct. Reporting species as possibly extinct does not necessarily reflect a failing of the Act as some of these species may already have been extinct at the time of listing. Surveying for species that are in such small populations that they are believed extinct is highly difficult. In the past, species may have been listed without confirmation of presence. Confirmation of extinction can be equally problematic and species may remain reported as possibly extinct for a number of years before sufficient surveys are conducted to confirm extinction and rulemaking to remove them from the list is completed. A species cannot be declared extinct until the rulemaking process (proposed rule public comment - final rule) is completed.

Although downlistings and delistings due to recovery have been infrequent (see Figure 2), they do occur. As of September 30, 2002, 43% (14) of the total number of delistings (33) have been due to recovery, 36% (12) due to new information, taxonomic revisions, or other administrative reasons, and 21% (7) due to extinction (figure 2). The number of delistings due to recovery

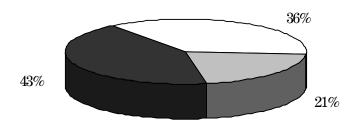
may be on the rise, however. For example, during the reporting period October 1, 2000, to September 30, 2002, two species, the Aleutian Canada goose (*Branta canadensis leucopareia*) and the Robbins' cinquefoil (*Potentilla robbinsiana*) were delisted due to recovery. The final rules announcing the delisting of the Aleutian Canada goose and Robbins' cinquefoil were published in the *Federal Register* on March 20, 2001 (66 FR 15643) and August 27, 2002 (67 FR 54968), respectively.

In addition, five other species were proposed for delisting. These species include three proposed for delisting due to recovery, the Truckee barberry (Berberis (=Mahonia) sonnei), the Douglas County, Oregon population of the Columbian white-tailed deer (Odocoileus virginianus leucurus), and the Hoover's wooly-star (Eriastrum hooveri); and two proposed for delisting due to extinction, the Guam broadbill (Myiagra freycineti) and the Mariana mallard (Anas oustaleti).



There are two populations of piping plover, one endangered and one threatened. This species has been observed on over 90 National Wildlife Refuges or Wildlife Management Areas. Photo courtesy of C.

Figure 2. Summary of Delisting Actions (data as of September 30, 2002)



- $\blacksquare Recovery$
- \square New information, taxonomic revisions, or other administrative reasons
- $\square Extinct$

Recovery Achieved

The goal of all but a few recovery plans is to delist the species ⁵. We know when a species may be ready for downlisting or delisting by measuring their status against the tangible objectives and criteria developed in its recovery plan. For example, the Atlantic coast piping plover recovery plan has two objectives, one of which is to increase breeding pair numbers and productivity, across the Atlantic coast. Achieving a five-year average productivity of 1.5 fledged chicks per pair in each of the four recovery units is one of the five critera by which attainment of the plover's two objectives will be measured. Specific recovery

actions, such as fencing nest sites, support the productivity objective. Both objectives must be met before the goal of recovery can be considered achieved.

The "Recovery Achieved" number discussed below in Figure 3 and Table 5 is reported individually in Appendix 1 for each species. The "Recovery Achieved" category is meant to estimate the extent to which the recovery objectives for each species has been achieved. This percentage is not the proportion of the number of discrete actions in the recovery plan that have been completed (e.g., 33 actions out of 100), and it does not mean that one of four objectives have

been met. Rather, it reflects the overall progress towards the recovery goal of downlisting or delisting. For example, the first species in Appendix I (the gray bat) has a recovery achieved number of three, meaning that it is approaching the criteria set for recovery.

As summarized in Figure 3, most listed species (77%) only had 0 to 25% of their recovery objectives achieved and only 2% of the species had 76-100% of their recovery achieved.

Table 5 takes the same data that was shown in Figure 3, and categorizes it by the length of time these species have been listed, and shows that the percent of recovery achieved generally increases the longer the species have been listed. For example, species such as the gray bat which have been listed for 11 years or more, show a marked increase in the amount of recovery achieved compared to those species listed five years or less. This can be seen by looking at the first column (species listed 5 years or less) and note the zeros in the two bottom rows (51-100% recovery achieved). Now note the last column (species listed 11 years or more) and see that 12% (9% + 3%) fall into the 51 - 100% recovery achieved (last two rows). This 0 to 12% jump illustrates that the longer a species is listed, the more recovery achieved increases.

Figure 3. Summary of Recovery Achieved (data as of September 30, 2002)

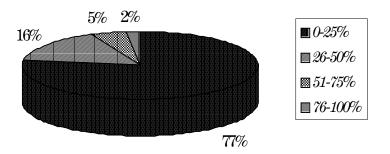


Table 5. Percent Recovery Achieved vs. Time Listed (data as of September 30, 2002)								
Percent of the U.S. Species under jurisdiction of the Service (or jointly with NOAA Fisheries) with "Species listed 5 years or less 6 - 10 years 11 years or mo								
0-25% Recovery Achieved	96	94	64					
26-50% Recovery Achieved	4	5.5	24					
51-75% Recovery Achieved	0	0.25	9					
75-100% Recovery Achieved	0	0.25	3					

⁵ Some endangered species may only be recovered to the point of downlisting them to a threatened classification.

Conclusion

There are conclusions that can be drawn about the Recovery Program, not just from the data presented, but together with the insight we have gained from the SCB study, the IG's review, and our experience in implementing recovery. They are...

Even with increasing workload we have continued to make progress and we must continue to do so.

The percentage of stable or increasing species has remained relatively constant since 1990 (see Figure 1) even though the number of U.S. listed species more than doubled from 558 (in 1990) to 1,256 (in 2002).

We must continue to encourage voluntary conservation partnerships. The majority of the habitat for listed, candidate, and at-risk species is on property owned by non-federal entities. We are currently developing a Recovery Implementation Database to help identify opportunities for partnerships.

We must improve our abilities to reach out to the private sector and garner their support.

We recognize that recovery actions may impact local communities and the people who live and work in them. Educating the public, working in partnership with the private sector, and using creative and innovative measures are essential to putting forward recovery on a national scale.

Federal partners are the key to many species' ultimate recovery success. Many of the Department of Defense installation lands have become the last remaining stronghold of threatened and endangered plants, and even these places are coming under increased pressure from surrounding urban encroachment. Working closely and cooperatively with all of our Federal partners will become increasingly important as financial resources become more limited.

We must continue to work closely with our international partners. Species whose ranges straddle international boundaries are increasingly becoming at risk. Only through cooperative efforts will those species benefit. We must continue to work with our North American partners through the Canada/U.S./Mexico Trilateral Committee for Wildlife and Ecosystem Conservation and Management, the North American Commission for Environmental Cooperation, and the Canada/U.S. Framework for Cooperation in the Protection and Recovery of Wild Species at Risk.

We must continue to support the collection, interpretation of best science on which to base our decisions, and continue to use outside experts.

More and more we need to rely on external sources for information and expertise. Supporting applicable research and encouraging review of information will better the foundation upon which our decisions are made.

We must continue to provide to our staff better guidance and training. To keep up with emerging scientific concepts and the ever-increasing need to support our decisions to withstand legal challenges, we recognize that our staff need continued support. Our current efforts at improving guidance are just one step in meeting this challenge.

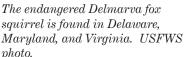
We must continue to listen to our critics. The SCB study and the IG review indicated what has worked in the Recovery Program and where we need improvement. We will continue to implement the suggestions offered by these two groups and look for additional methods to ensure success of species' recovery.

Increase the involvement of conservation organizations, states, and academia in the recovery of listed species.

Daily, we confront the reality that the Service alone cannot achieve recovery of all listed species. Many conservation organization or State programs are already tailored to meet many of the needs of listed species and we must learn to capitalize on their expertise and resources. As well, we should reach out to academia to help meet research goals. All three of these types of groups have potentially large rolls to play in the implementation of recovery activities and could boost the success of species' recovery programs.



The northern population of bog turtle was listed as threatened in 1999. USFWS photo.





Data

Data are presented in Appendix 1 for each U.S. listed species under the jurisdiction of the Service, organized by major taxonomic groupings. Data include:

- lead Service Region;
- date the species was listed;
- the date of the species' first final recovery plan (if there is one);
- the stage of development of the recovery plan;
- the date of the species' most current recovery plan;
- the species' current listing classification;
- the species' recovery priority number;
- species' status trend; and
- a value for the percentage of recovery objective(s) that have been met.

The Act provides for the listing of distinct population segments of vertebrate species, where a significant population segment is threatened or endangered, but there is no need to apply the provisions of the Act across the rest of the species' range. Several species of vertebrates have more than one distinct population segment listed, which may appear individually when they have separate recovery plans and population trends. For others, the distinct population segments may have been combined and listed as one entity based on the recovery planning and implementation needs.

Lead Region

This indicates which Service Region has the lead responsibility for the species (see Map 1). Some species are wide ranging and may be found in more than one region.

Date Listed

This indicates the date the species was added to the list of Endangered and Threatened Species.

Date of First Final Plan

This indicates the date of the first, final recovery plan was approved (signed by the Regional Director or Director). An N/A in this column indicates that the species does not yet have a final recovery plan.

Plan Stage

The status of recovery plan development is reported as indicated below:

F = Final Plan that has been approved ⁶

 F_1 = Final Plan with a draft revision

 F_2 = Final Plan with an approved revision(s)

D = Draft

U = Under Development

Exempt = Species is exempt from needing a recovery plan

Date of Current Plan

This indicates what the date is of the species' most current recovery plan. An "N/A" in this column indicates that a recovery plan for the species is still under development. A "—" in this column indicates that this species is exempt from needing a recovery plan. A date in this column that is different from the date in the Date of First Final Recovery Plan column indicates that the plan has undergone a revision (or is currently undergoing a revision) or that earlier drafts and final plans for some individual species may have been incorporated into later multi-species or ecosystem plans.

Current Listing Classification
The species' listing classification, as of
September 30, 2002, is identified as
threatened (T) or endangered (E). If
critical habitat (CH) is designated, it is
also listed in the table with the species'
status.

Recovery Priority Number

The first step for the conservation of any species is to prevent its extinction. Thus the species with the highest degree of threat have the highest priority for preparing and implementing recovery plans. Additionally, appropriate use of the limited resources available to implement the Act, must be considered. To this end, each species is assigned a

recovery priority from 1 to 18 according to the degree of threats, recovery potential, and taxonomic distinctness. In addition, a species' rank may be elevated by adding a "C" designation to its numerical rank to indicate that it is, or may be, in conflict with construction or other development projects, or other forms of economic activity. Species with a high priority rank (1, 1C, 2, 2C) are those that are the most threatened and have the highest potential for recovery. Species with a low rank (16, 17, 18) are the least threatened and have low recovery potentials. See Table 2 on page 13 or 48 FR 43102 (Sept. 21, 1983) for additional information on this prioritization system.



The endangered Carson wandering skipper feeds on flower nectar and lays its eggs exclusively on salt grass. USFWS photo.

⁶ Approved means the plan/revision has been signed by the Regional Director or Director, as appropriate.

Population Status
The status of each species is identified
as:

I = Improving: species whose numbers have increased and whose threats have either been constant or reduced over the reporting period; or, a species whose numbers have been constant and whose threats have been reduced over the reporting period.

S = Stable: species whose numbers and threats have been constant over the reporting period. A designation as stable means that there has been no change for the species' numbers and threats since the last reporting period. Stable, as used for this purpose, does not mean secure. For example, a species that has very low numbers and severe threats would be reported as stable if its numbers and threats have been constant since the last reporting period.

D = Declining: species known to be decreasing in numbers and/or whose threats to their continued existence are increasing in the wild.

U = Uncertain: species where additional survey work is required to determine the current trend in their status.

C = Captivity: species known only to currently survive in captivity (e.g., zoos, botanical gardens, or in other controlled conditions); species not currently known to exist in the wild.

E = Possibly Extinct: species that are currently believed to be extinct. Species presumed extinct may be retained on the lists for a number of years because of the potential that an unknown remnant population remains in the wild. This is particularly true for species occurring in areas that are difficult to survey thoroughly.

Recovery Achieved

The percentage of species recovery objective(s) achieved is indicated with a value of 1 to 4 as defined below:

1 = 0%-25% achieved

2 = 26%-50% achieved

3 = 51%-75% achieved

4 = 76%-100% achieved

Note: This number does not necessarily correspond with the percentage of recovery tasks achieved. For example, stabilization of a formerly declining species through completion of two or three of the most important tasks may be considered achievement of more than 25% of the recovery objective.



Lake Erie watersnake is a threatned species that is close to recovering, but is still faced with human perscution. Dr. Richard King, Northern Illinois University - De Kalb, photo.



The endangered Mexican long-nosed but helps pollinate agave plants which are used in making tequila. This individual is about to be radio tagged as part of a study to find additional roosting sites in Big Bend National Park. K. Gifford, USFWS photo.

Appendix 1 - Data as of September 30, 2002

GENERAL SPECIES INFORMATION			RECOVE	RY PLAI	N STATUS	Sl	SPECIES/RECOVERY STATUS			
Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved	
Mammals										
Bat, gray	3	1976	1982	F	1982	E	8	I	3	
Bat, Hawaiian hoary	1	1970	1998	\mathbf{F}	1998	\mathbf{E}	9	U	1	
Bat, Indiana	3	1967	1983	F_1	1999	E, CH	8	D	2	
Bat, lesser long-nosed	2	1988	1997	\mathbf{F}	1997	\mathbf{E}	8	I	1	
Bat, little Mariana fruit	1	1984	1990	F	1990	E	5	E	1	
Bat, Mariana fruit (=Mariana flying fox)	1	1984	1990	F	1990	E	3	D	1	
Bat, Mexican long-nosed	2	1988	1994	F	1994	E	5	U	1	
Bat, Ozark big-eared	2	1979	1984	F	1995	E	3	S	1	
Bat, Virginia big-eared	5	1979	1984	F_1	1984	E, CH	9	I	3	
Bear, grizzly	6	1967	1982	F_2	1993	${f T}$	3c	S	2	
Bear, Louisiana black	4	1992	1995	F	1995	T	9	I	2	
Caribou, woodland	1	1983	1985	F_2	1994	E	3c	D	1	
Deer, Columbian white-tailed	1	1967	1976	F_2	1983	E	9c	I	4	
Deer, key	4	1967	1980	F	1999	E	6c	I	3	
Ferret, black-footed	6	1967	1978	F	1988	E	2	I	1	
Fox, San Joaquin kit	1	1967	1983	F	1998	E	3c	D	1	
Jaguar	2	1972	N/A	U	N/A	E	6	U	1	
Jaguarundi, Gulf Coast	2	1976	1990	F	1990	E	6	U	1	
Kangaroo rat, Fresno	1	1985	1998	F	1998	E, CH	3c	U	1	
Kangaroo rat, giant	1	1987	1998	F	1998	E	2c	D	2	
Kangaroo rat, Morro Bay	1	1970	1982	F_1	2000	E, CH	6c	U	1	
Kangaroo rat, San Bernardino Merriam's	1	1998	N/A	U	N/A	E, CH	3c	D	1	
Kangaroo rat, Stephens'	1	1988	N/A	D	1997	E	2c	D	3	
Kangaroo rat, Tipton	1	1988	1998	\mathbf{F}	1998	E	3c	D	1	
Lynx, Canada (lower 48 States)	6	2000	N/A	U	N/A	T	15	U	1	

 $^{^{\}ast}\,$ Earlier drafts and final plans for some individual species may have become incorporated into later multi-species or ecosystem plans

Appendix 1 - Data as of September 30, 2002

GENERAL SPECIES INFORMATION			RECOVE	RY PLAN	N STATUS	SPECIES/RECOVERY STATUS			
Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved
Manatee, West Indian (Florida pop.)	4	1967	1980	F_2	2001	E, CH	5c	U	2
Manatee, West Indian (Puerto Rico pop. of the West Indian (Antillean) Manatee)	4	1967	1986	F	1986	E, CH	5c	U	1
Mountain beaver, Point Arena	1	1991	1998	\mathbf{F}	1998	E	9c	U	1
Mouse, Alabama beach	4	1985	1987	F	1987	E, CH	3c	I	2
Mouse, Anastasia Island beach	4	1989	1993	F	1993	E	6c	\mathbf{S}	2
Mouse, Choctawhatchee beach	4	1985	1987	F	1987	E, CH	3c	I	2
Mouse, Key Largo cotton	4	1983	1999	F	1999	E	3c	D	2
Mouse, Pacific pocket	1	1994	1999	F	1999	E	3c	D	1
Mouse, Perdido Key beach	4	1985	1987	F	1987	E, CH	3c	I	1
Mouse, Preble's meadow jumping	6	1998	N/A	U	N/A	Т	9c	D	1
Mouse, salt marsh harvest	1	1970	1984	F	1984	E	2c	U	1
Mouse, southeastern beach	4	1989	1993	\mathbf{F}	1993	T	9c	U	1
Mouse, St. Andrew beach	4	1998	N/A	U	N/A	E	3c	\mathbf{S}	1
Ocelot	2	1972	1990	\mathbf{F}	1990	E	5	D	1
Otter, southern sea	1	1977	1982	F_1	2000	T	9c	S	1
Panther, Florida	4	1967	1981	\mathbf{F}	1995	\mathbf{E}	6c	S	1
Prairie dog, Utah	6	1973	1991	\mathbf{F}	1991	T	8c	S	2
Pronghorn, Sonoran	2	1967	1982	F_2	1998	E	3	D	1
Puma (=cougar), eastern	5	1973	1982	\mathbf{F}	1982	E	18	E	1
Rabbit, Lower Keys marsh	4	1990	1994	\mathbf{F}	1999	E	6c	S	1
Rabbit, pygmy	1	2001	N/A	U	N/A	EmE	3	D	1
Rabbit, riparian brush	1	2000	1998	F	1998	E	6c	D	1
Rice rat	4	1991	1999	F	1999	E, CH	3c	U	1
Sheep, bighorn (CA Peninsular Ranges pop.)	1	1998	2000	F	2000	E, CH	3c	I	1
Sheep, bighorn (Sierra Nevada pop.)	1	1999	N/A	U	N/A	E	3	I	2
Shrew, Buena Vista Lake ornate	1	2002	1998	F	1998	E	3c	D	1

 $^{^{\}ast}\,$ Earlier drafts and final plans for some individual species may have become incorporated into later multi-species or ecosystem plans

Appendix 1 - Data as of September 30, 2002

GENERAL SPECIES INFORMAT	ION		RECOVE	RY PLAN	N STATUS	SPECIES/RECOVERY STATUS				
Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved	
Squirrel, Carolina northern flying	4	1985	1990	F	1990	E	6c	S	2	
Squirrel, Delmarva Peninsula fox	5	1967	1979	F_2	1993	E	9c	S	3	
Squirrel, Mount Graham red	2	1987	1993	F	1993	E, CH	3c	D	1	
Squirrel, northern Idaho ground	1	2000	N/A	D	2002	T	3c	S	1	
Squirrel, Virginia northern flying	5	1985	1990	F	1990	E	9c	S	2	
Vole, Amargosa	1	1984	1997	F	1997	E, CH	6	U	1	
Vole, Florida salt marsh	4	1991	1997	F	1997	E	6	U	1	
Vole, Hualapai Mexican	2	1987	1991	F	1991	\mathbf{E}	3	U	1	
Wolf, gray (Eastern Timber)	3	1967	1978	F_2	1992	E, CH	8c	I	4	
Wolf, gray (Mexican)	2	1967	1978	\mathbf{F}	1982	E	3c	I	1	
Wolf, gray (Northern Rocky Mountain)	6	1967	1978	F_2	1987	E	3c	I	4	
Wolf, red	4	1967	1982	F_2	1990	\mathbf{E}	5c	I	3	
Woodrat, Key Largo	4	1983	1999	F	1999	E	3c	D	1	
Woodrat, riparian (=San Joaquin Valley)	1	2000	1998	F	1998	\mathbf{E}	6c	D	1	
Birds										
Akepa, Hawaii (honeycreeper)	1	1970	1983	F	1983	\mathbf{E}	8	S	2	
Akepa, Maui (honeycreeper)	1	1970	1984	F	1984	E	6	E	1	
Akialoa, Kauai (honeycreeper)	1	1967	1983	F	1983	\mathbf{E}	5	E	1	
Akiapola'au (honeycreeper)	1	1967	1983	F	1983	E	2	S	2	
Albatross, short-tailed	7	1970	N/A	U	N/A	\mathbf{E}	8	I	1	
Blackbird, yellow-shouldered	4	1976	1983	F_2	1996	E, CH	2	I	2	
Bobwhite, masked (quail)	2	1967	1978	F_2	1995	\mathbf{E}	6	S	2	
Broadbill, Guam	1	1984	1990	\mathbf{F}	1990	${f E}$	5	E	1	
Caracara, Audubon's crested (Florida pop.)	4	1987	1989	F	1999	T	9c	S	1	
Condor, California	1	1967	1975	F_2	1996	E, CH	4c	I	2	
Coot, Hawaiian	1	1970	1978	F_1	1999	E	14	S	3	

 $^{^{\}ast}\,$ Earlier drafts and final plans for some individual species may have become incorporated into later multi-species or ecosystem plans

Appendix 1 - Data as of September 30, 2002

GENERAL SPECIES INFORMATION	N		RECOVE	RY PLAN	N STATUS	Sl	PECIES/REC	COVERY STAT	rus
Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved
Crane, Mississippi sandhill	4	1973	1976	F_2	1991	E, CH	6c	S	1
Crane, whooping	2	1967	1980	F	1994	E, CH	2c	S	2
Creeper, Hawaii	1	1975	1983	F	1983	E	8	S	2
Creeper, Molokai	1	1970	1984	F	1984	E	5	E	1
Creeper, Oahu	1	1970	N/A	U	N/A	E	5	E	1
Crow, Hawaiian (='alala)	1	1967	1982	F	1982	E	2c	D	1
Crow, Mariana	1	1984	1990	F	1990	E	2	D	1
Curlew, Eskimo	7	1967	N/A	Exempt	N/A	E	5	E	1
Duck, Hawaiian	1	1967	1985	F_1	1999	E	2	S	2
Duck, Laysan	1	1967	1982	F	1982	E	2	S	3
Eagle, bald	3	1967	1982	F	1989	Т	14c	I	4
Eider, Steller's	7	1997	2002	F	2002	T, CH	9	U	2
Eider, spectacled	7	1993	1996	F	1996	T, CH	5	S	2
Elepaio, Oahu	1	2000	N/A	U	N/A	E, CH	3	D	2
Falcon, northern aplomado	2	1986	1990	F	1990	E	3	I	2
Finch, Laysan (honeycreeper)	1	1967	1984	F	1984	\mathbf{E}	8	S	3
Finch, Nihoa (honeycreeper)	1	1967	1984	F	1984	E	8	U	3
Flycatcher, southwestern willow	2	1995	2002	F	2002	E, CH	3c	U	1
Gnatcatcher, coastal California	1	1993	N/A	Exempt	N/A	T, CH	3c	D	1
Goose, Hawaiian	1	1967	1983	F	1983	E	2	S	2
Hawk, Hawaiian	1	1967	1984	F	1984	\mathbf{E}	14	S	4
Hawk, Puerto Rican broad-winged	4	1994	1997	F	1997	E	6	U	1
Hawk, Puerto Rican sharp-shinned	4	1994	1997	F	1997	E	3	U	1
Honeycreeper, crested (='akohekohe)	1	1967	1984	F	1984	E	7	S	2
Jay, Florida scrub	4	1987	1990	F	1990	Т	2c	D	2
Kingfisher, Guam Micronesian	1	1984	1990	F	1990	E	3	С	1

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GENERAL SPECIES INFORMAT	ON		RECOVE	RY PLAN	N STATUS	SPECIES/RECOVERY STATUS				
Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved	
Kite, Everglade snail	4	1967	1983	F	1999	E, CH	3c	S	2	
Mallard, Mariana	1	1977	N/A	Exempt	N/A	E	5	E	1	
Megapode, Micronesian	1	1970	1998	F	1998	E	9	U	2	
Millerbird, Nihoa (old world warbler)	1	1967	1984	F	1984	E	8	U	3	
Monarch, Tinian (old world flycatcher)	1	1970	N/A	Exempt	N/A	T	14	S	4	
Moorhen, Hawaiian common	1	1967	1978	F_1	1999	\mathbf{E}	9	S	2	
Moorhen, Mariana common	1	1984	1991	F	1991	E	9c	S	1	
Murrelet, marbled	1	1992	1997	F	1997	T, CH	3	D	1	
Nightjar, Puerto Rican	4	1973	1984	F	1984	E	5c	S	2	
Nukupu`u (honeycreeper)	1	1967	1983	F	1984	\mathbf{E}	5	D	1	
O`o, Kauai (honeyeater)	1	1967	1983	F	1983	E	4	E	1	
O`u (honeycreeper)	1	1967	1983	F	1983	\mathbf{E}	4	E	1	
Owl, Mexican spotted	2	1993	1995	F	1995	T, CH	9c	U	2	
Owl, northern spotted	1	1990	N/A	D	1992	T, CH	3	D	1	
Palila (honeycreeper)	1	1967	1978	F_2	1986	E, CH	1	S	3	
Parrot, Puerto Rican	4	1967	1982	\mathbf{F}_{1}	1999	\mathbf{E}	2	D	1	
Parrotbill, Maui (honeycreeper)	1	1967	1984	F	1984	E	1	S	1	
Pelican, brown (CA, OR, WA populations)	1	1970	1983	F	1983	\mathbf{E}	9	S	3	
Pelican, brown (Puerto Rico/Virgin Islands pop.)	4	1970	1983	F	1986	E	9	U	1	
Petrel, Hawaiian dark-rumped	1	1967	1983	F	1983	\mathbf{E}	2	U	2	
Pigeon, Puerto Rican plain	4	1970	1982	F	1982	\mathbf{E}	3c	D	3	
Plover, piping (Atlantic Coast pop.)	5	1985	1988	F_2	1996	T, CH	2c	S	3	
Plover, piping (Great Lakes)	3	1985	1988	F_1	2002	E, CH	2c	I	2	
Plover, piping (Northern Plains)	6	1985	1988	F_1	1994	T, CH	2c	D	2	
Plover, western snowy	1	1993	N/A	D	2001	T, CH	3c	D	1	
Po`ouli (honeycreeper)	1	1975	1984	F	1984	E	4	D	1	

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GENERAL SPECIES INFORMATION	N		RECOVE	RY PLAN	N STATUS	SI	PECIES/REC	COVERY STAT	rus
Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved
Prairie-chicken, Attwater's greater	2	1967	1983	F_2	1993	E	3	D	1
Pygmy-owl, cactus ferruginous	2	1997	N/A	U	N/A	E, CH	3c	D	1
Rail, California clapper	1	1970	1984	F	1984	E	3c	U	1
Rail, Guam	1	1984	1990	F	1990	E	2	U	1
Rail, Yuma clapper	2	1967	1983	F	1983	E	6	S	3
Rail, light-footed clapper	1	1970	1979	F_2	1985	E	6	S	2
Shearwater, Newell's Townsend's	1	1975	1983	F	1983	Т	3	D	1
Shrike, San Clemente loggerhead	1	1977	1984	F	1984	E	9	I	2
Sparrow, Cape Sable seaside	4	1967	1983	F	1999	E, CH	3c	D	2
Sparrow, Florida grasshopper	4	1986	1999	F	1999	E	9	S	2
Sparrow, San Clemente sage	1	1977	1984	F	1984	Т	9	S	2
Stilt, Hawaiian	1	1970	1978	F_1	1999	E	9	S	3
Stork, wood	4	1984	1986	F_2	1997	E	5c	I	3
Swiftlet, Mariana gray	1	1984	1991	F	1991	E	9	S	1
Tern, California least	1	1970	1980	F_2	1985	E	3c	D	3
Tern, least	3	1985	1990	F	1990	E	3c	U	1
Tern, roseate (Caribbean Population)	5	1987	1989	F	1993	Т		U	
Tern, roseate (NE U.S./Canada)	5	1987	1989	F_2	1998	E	3	U	2
Thrush, Molokai	1	1970	1984	F	1984	E	5	E	1
Thrush, large Kauai	1	1970	1983	F	1983	E	5	E	1
Thrush, small Kauai (=puaiohi)	1	1967	1983	F	1983	E	2	S	1
Towhee, Inyo California	1	1987	1998	F	1998	T, CH	9c	U	1
Vireo, black-capped	2	1987	1991	F	1991	E	2c	D	1
Vireo, least Bell's	1	1986	N/A	D	1998	E, CH	3c	I	3
Warbler (=wood), Bachman's	4	1967	N/A	Exempt	N/A	E	5	E	1
Warbler (=wood), Kirtland's	3	1967	1978	F	1978	E	2c	S	3

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GENERAL SPECIES INFORMATION	N		RECOVE	RY PLAN	N STATUS	SPECIES/RECOVERY STATUS				
Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved	
Warbler (=wood), golden-cheeked	2	1990	1992	F	1992	E	2c	D	1	
Warbler, nightingale reed (old world warbler)	1	1970	1998	F	1998	E	8	D	1	
White-eye, bridled	1	1984	1990	F	1990	E	6	E	1	
Woodpecker, ivory-billed	4	1967	N/A	Exempt	N/A	E	17	E	1	
Woodpecker, red-cockaded	4	1970	1979	F_1	2000	E	8c	I	1	
Reptiles										
Anole, Culebra Island giant	4	1977	1983	F	1983	E, CH	5	U	1	
Boa, Mona	4	1978	1984	F	1984	T, CH	3	I	1	
Boa, Puerto Rican	4	1970	1986	F	1986	E	11c	D	1	
Boa, Virgin Islands tree	4	1970	1986	F	1986	E	3c	I	3	
Crocodile, American	4	1975	1979	F	1999	E, CH	2c	I	3	
Gecko, Monito	4	1982	1986	F	1986	E, CH	5	U	2	
Iguana, Mona ground	4	1978	1984	F	1984	T, CH	3	S	3	
Lizard, blunt-nosed leopard	1	1967	1980	\mathbf{F}	1998	E	2c	D	1	
Lizard, Coachella Valley fringe-toed	1	1980	9//11/85	\mathbf{F}	9//11/85	T, CH	5c	D	2	
Lizard, Island night	1	1977	1984	\mathbf{F}	1984	T	8	S	2	
Lizard, St. Croix ground	4	1977	1984	\mathbf{F}	1984	E, CH	2c	U	1	
Rattlesnake, New Mexican ridge-nosed	2	1978	1985	F	1985	T, CH	3	S	3	
Sea turtle, green (U.S. Atlantic populations and individuals foraging in U.S. territorial waters)	4	1978	1984	F_2	1991	E	1e	I	1	
Sea turtle, green (U.S. East Pacific populations on the west coasts of the U.S., Central America and Mexico)	4	1978	1998	F	1998	E	1e	D	1	
Sea turtle, green (U.S. Pacific populations in Hawaii, Guam, Northern Mariana Islands, American Samoa and other unincorporated U.S. Pacific islands/atolls)	4	1978	1998	F	1998	Т, СН	1e	D	1	
Sea turtle, hawksbill (Atlantic pops.)	4	1970	1984	F_2	1993	E, CH	1c	D	1	

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GENERAL SPECIES INFORMATION	N		RECOVE	RY PLAI	N STATUS	SPECIES/RECOVERY STATUS				
Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved	
Sea turtle, hawksbill (U.S. Pacific pops.)	4	1970	1998	F	1998	E, CH	1c	D	1	
Sea turtle, Kemp's ridley	2	1970	1984	F_2	1992	E	2c	I	3	
Sea turtle, leatherback (U.S. Atlantic pops.)	4	1970	1984	F_2	1992	E, CH	1	D	1	
Sea turtle, leatherback (U.S. Pacific pops.)	4	1970	1998	\mathbf{F}	1998	E, CH	1	D	1	
Sea turtle, loggerhead (U.S. Atlantic pops.)	4	1978	1984	\mathbf{F}	1991	T	7c	U	1	
Sea turtle, loggerhead (U.S. Pacific pops.)	4	1978	1998	\mathbf{F}	1998	T	7c	U	1	
Sea turtle, olive ridley (Lepidochelys olivacea) (U.S. Pacific pops.)	4	1978	1984	F	1998	E	8c	I	2	
Skink, bluetail mole	4	1987	1993	F	1999	T	3	U	1	
Skink, sand	4	1987	1993	F	1999	T	1	U	1	
Snake, Atlantic salt marsh	4	1977	1993	F	1993	T	12	U	1	
Snake, eastern indigo	4	1978	1982	\mathbf{F}	1982	T	12c	U	1	
Snake, Concho water	2	1986	1993	\mathbf{F}	1993	T, CH	9c	S	1	
Snake, copperbelly water	3	1997	N/A	U	N/A	T	3c	D	1	
Snake, giant garter	1	1993	N/A	D	1999	T	2c	U	1	
Snake, Lake Erie water	3	1999	N/A	U	N/A	Т	3c	D	1	
Snake, San Francisco garter	1	1967	1985	F	1985	E	3c	D	1	
Tortoise, desert (Mojave population)	1	1980	1998	\mathbf{F}	1998	T, CH	8c	U	1	
Tortoise, gopher	4	1987	1990	F	1990	T	9	D	1	
Turtle, Alabama red-belly	4	1987	1990	\mathbf{F}	1990	E	5	U	1	
Turtle, bog (=Muhlenberg)	5	1997	2001	\mathbf{F}	2001	T	6c	D	1	
Turtle, flattened musk	4	1987	1990	\mathbf{F}	1990	Т	14	S	1	
Turtle, Plymouth redbelly	5	1980	1981	F_2	1994	E, CH	9	I	2	
Turtle, ringed map	4	1986	1988	\mathbf{F}	1988	Т	14	S	2	
Turtle, yellow-blotched map	4	1991	1993	F	1993	T	14	U	1	
Whipsnake (=striped racer), Alameda	1	1997	N/A	U	N/A	T, CH	9c	D	1	

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GENERAL SPECIES INFORMATIO	N		RECOVE	RY PLAN	N STATUS	SPECIES/RECOVERY STATUS			
Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved
Amphibians									
Coqui, golden	4	1977	1984	F	1984	T, CH	5c	U	1
Frog, California red-legged	1	1996	2002	F	2002	T, CH	6c	D	1
Frog, Chiricahua leopard	2	2002	N/A	U	N/A	T	3	D	1
Frog, Mississippi gopher	4	2001	N/A	U	N/A	E	6	D	1
Frog, mountain yellow-legged	1	2002	N/A	U	N/A	E	6	D	1
Guajon	4	1997	N/A	U	N/A	T	11	U	1
Salamander, Barton Springs	2	1997	N/A	U	N/A	E	2c	D	1
Salamander, California tiger (U.S.A. (CA - Santa Barbara County))	1	2000	N/A	U	N/A	E	3	D	1
Salamander, California tiger (U.S.A. (CA - Sonoma County))	1	2000	N/A	U	N/A	EmE	5c	D	1
Salamander, Cheat Mountain	5	1989	1991	F	1991	T	8c	S	2
Salamander, desert slender	1	1973	1982	F	1982	E	8	S	1
Salamander, flatwoods	4	1999	N/A	U	N/A	T	8	D	1
Salamander, Red Hills	4	1976	1983	F	1983	Т	7	S	1
Salamander, San Marcos	2	1980	1985	F_2	1996	T, CH	2c	D	1
Salamander, Santa Cruz long-toed	1	1967	1977	F_1	1999	E	6c	D	1
Salamander, Shenandoah	5	1989	1994	F	1994	E	8	U	1
Salamander, Sonoran tiger	2	1997	2002	F	2002	E	3	U	1
Salamander, Texas blind	2	1967	1985	F_2	1996	E	5	D	1
Toad, arroyo (=arroyo southwestern)	1	1994	1999	F	1999	E, CH	8	D	1
Toad, Houston	2	1970	1984	F	1984	E, CH	2c	D	1
Toad, Puerto Rican crested	4	1987	1992	F	1992	Т	2c	S	2
Toad, Wyoming	6	1984	1991	F	1991	E	2	D	1

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GENERAL SPECIES INFORMATIO	N		RECOVE	RY PLAI	N STATUS	SPECIES/RECOVERY STATUS				
Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved	
Fish										
Catfish, Yaqui	2	1984	1995	F	1995	T, CH	8	D	1	
Cavefish, Alabama	4	1977	1982	F_2	1990	E, CH	1	S	1	
Cavefish, Ozark	4	1984	1986	\mathbf{F}	1986	T	8	S	2	
Chub, bonytail	6	1980	1984	F_2	2002	E, CH	5c	U	1	
Chub, Borax Lake	1	1980	1987	\mathbf{F}	1987	E, CH	2	S	4	
Chub, Chihuahua	2	1983	1986	\mathbf{F}	1986	T	2	I	1	
Chub, humpback	6	1967	1979	F_2	2002	E, CH	2c	S	3	
Chub, Hutton tui	1	1985	1998	\mathbf{F}	1998	T	9	S	2	
Chub, Mohave tui	1	1970	1984	\mathbf{F}	1984	E	9	S	1	
Chub, Oregon	1	1993	1998	\mathbf{F}	1998	E	8	S	2	
Chub, Owens tui	1	1985	1998	F	1998	E, CH	9	U	1	
Chub, Pahranagat roundtail	1	1970	1986	F	1998	E	3c	D	1	
Chub, slender	4	1977	1983	\mathbf{F}	1983	T, CH	5	D	1	
Chub, Sonora	2	1986	1992	F	1992	T, CH	2c	S	1	
Chub, spotfin	4	1977	1983	\mathbf{F}	1983	T, CH	11	U	1	
Chub, Virgin River	6	1989	1992	\mathbf{F}	1995	E, CH	2c	S	1	
Chub, Yaqui	2	1984	1995	F	1995	E, CH	5	S	1	
Cui-ui	1	1967	1978	F	1992	E	8	I	4	
Dace, Ash Meadows speckled	1	1982	1990	F	1990	E, CH	9	S	2	
Dace, blackside	4	1987	1988	F	1988	Т	11	S	1	
Dace, Clover Valley speckled	1	1989	1998	F	1998	E	9c	U	1	
Dace, desert	1	1967	1997	F	1997	T, CH	7e	U	2	
Dace, Foskett speckled	1	1985	1998	F	1998	Т	9	S	2	
Dace, Independence Valley speckled	1	1989	1998	F	1998	E	6c	U	2	
Dace, Kendall Warm Springs	6	1970	1982	F	1982	E	12	S	3	

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GENERAL SPECIES INFOR	MATION		RECOVE	RY PLAI	N STATUS	Sl	PECIES/REC	COVERY STAT	rus
Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved
Dace, Moapa	1	1967	1983	F_2	1996	E	1	S	2
Darter, amber	4	1985	1986	\mathbf{F}	1986	E, CH	5	S	1
Darter, bayou	4	1975	1983	F_2	1990	${f T}$	8c	S	1
Darter, bluemask (=jewel)	4	1993	1997	\mathbf{F}	1997	E	5	S	1
Darter, boulder	4	1988	1989	\mathbf{F}	1989	\mathbf{E}	5	S	1
Darter, Cherokee	4	1994	2000	\mathbf{F}	2000	T	2c	D	1
Darter, duskytail	4	1993	1994	\mathbf{F}	1994	E	2	I	1
Darter, Etowah	4	1994	2000	\mathbf{F}	2000	E	2	S	1
Darter, fountain	2	1970	1985	F_2	1996	E, CH	2c	D	1
Darter, goldline	4	1992	2000	F	2000	T	8	S	1
Darter, leopard	2	1978	1984	\mathbf{F}	1993	T, CH	11c	D	2
Darter, Maryland	5	1967	1982	F	1982	E, CH	5	U	1
Darter, Niangua	3	1985	1989	\mathbf{F}	1989	T, CH	8	S	2
Darter, Okaloosa	4	1973	1981	F_2	1998	E	11	S	3
Darter, relict	4	1993	N/A	D	1994	\mathbf{E}	5	S	1
Darter, slackwater	4	1977	1984	F	1984	T, CH	8	D	1
Darter, snail	4	1975	1983	F	1983	Т	11	S	1
Darter, vermilion	4	2001	N/A	U	N/A	E	2	S	1
Darter, watercress	4	1970	1980	F_2	1993	E	2	I	1
Gambusia, Big Bend	2	1967	1984	\mathbf{F}	1984	E	2	U	2
Gambusia, Clear Creek	2	1967	1982	F	1982	E	2	U	2
Gambusia, Pecos	2	1970	1985	F	1985	E	2	D	2
Gambusia, San Marcos	2	1980	1985	F_2	1996	E, CH	2c	E	1
Goby, tidewater	1	1994	N/A	U	N/A	E, CH	7c	S	3
Logperch, Conasauga	4	1985	1986	\mathbf{F}	1986	E, CH	5	S	1
Logperch, Roanoke	5	1989	1992	F	1992	\mathbf{E}	5c	U	1

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GENERAL SPECIES INFORMAT	ON		RECOVE	RY PLAN	N STATUS	Sl	PECIES/REC	COVERY STAT	rus
Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved
Madtom, Neosho	6	1990	1991	F	1991	T	11c	D	1
Madtom, pygmy	4	1993	1994	F	1994	E	5	U	1
Madtom, Scioto	3	1975	N/A	Exempt	N/A	E	5	E	1
Madtom, smoky	4	1984	1985	F	1985	E, CH	5	I	2
Madtom, yellowfin	4	1977	1983	F	1983	T, CH	11	S	1
Minnow, Devils River	2	1999	N/A	U	N/A	T	2	S	1
Minnow, loach	2	1986	1991	F	1991	T, CH	4c	D	1
Minnow, Rio Grande silvery	2	1994	7/8/99/	F	1999	E, CH	2c	D	1
Pikeminnow (=squawfish), Colorado	6	1967	1978	F_2	2002	E, CH	8c	I	3
Poolfish, Pahrump	1	1967	1980	F	1980	E	11	S	2
Pupfish, Ash Meadows Amargosa	1	1982	1990	F	1990	E, CH	15	I	4
Pupfish, Comanche Springs	2	1967	1981	F	1981	E	2	D	1
Pupfish, desert	2	1986	1993	F	1993	E, CH	2c	S	1
Pupfish, Devils Hole	1	1967	1980	F	1990	E	11	D	2
Pupfish, Leon Springs	2	1980	1985	F	1985	E, CH	2	\mathbf{S}	2
Pupfish, Owens	1	1967	1984	F	1998	E	2	S	1
Pupfish, Warm Springs	1	1970	1976	F	1990	E	9	D	2
Salmon, Atlantic	5	2000	N/A	U	N/A	E	3c	D	1
Sculpin, pygmy	4	1989	1991	F	1991	T	8	S	1
Shiner, Arkansas River	2	1998	N/A	U	N/A	T, CH	5c	D	1
Shiner, beautiful	2	1984	1995	F	1995	T, CH	2	U	1
Shiner, blue	4	1992	1995	F	1995	T	8	D	1
Shiner, Cahaba	4	1990	1992	F	1992	E	2	I	1
Shiner, Cape Fear	4	1987	1988	F	1988	E, CH	5	S	2
Shiner, Pecos bluntnose	2	1987	1992	F	1992	T, CH	3	U	2
Shiner, palezone	4	1993	1997	F	1997	\mathbf{E}	5	S	1

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GENERAL SPECIES INFORMATION	ON		RECOVE	RY PLAN	N STATUS	SPECIES/RECOVERY STATUS				
Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved	
Shiner, Topeka	6	1998	N/A	U	N/A	E	8c	D	1	
Silverside, Waccamaw	4	1987	1993	F	1993	T, CH	8	S	1	
Smelt, delta	1	1993	1996	F	1996	T, CH	2c	U	1	
Spikedace	2	1986	1991	F	1991	T, CH	4c	D	1	
Spinedace, Big Spring	1	1985	1994	F	1994	T, CH	3	\mathbf{S}	1	
Spinedace, Little Colorado	2	1967	1998	F	1998	T, CH	2	D	1	
Spinedace, White River	1	1985	1994	F	1994	E, CH	2c	S	2	
Splittail, Sacramento	1	1999	1996	F	1996	T	1c	U	1	
Springfish, Hiko White River	1	1985	1998	F	1998	E, CH	3c	S	1	
Springfish, Railroad Valley	1	1986	1997	F	1997	T, CH	2c	D	1	
Springfish, White River	1	1985	1998	F	1998	E, CH	3c	U	1	
Stickleback, unarmored threespine	1	1970	1977	F_2	1985	E	3	D	1	
Sturgeon, Alabama	4	2000	N/A	U	N/A	E	5	U	1	
Sturgeon, gulf	4	1991	1995	F	1995	T	12	S	2	
Sturgeon, pallid	6	1990	1993	F	1993	E	2c	D	1	
Sturgeon, white	1	1994	1999	F	1999	E, CH	3c	D	1	
Sucker, June	6	1986	1999	F	1999	E, CH	5c	D	1	
Sucker, Lost River	1	1988	1993	F	1993	E	4c	U	1	
Sucker, Modoc	1	1985	N/A	Exempt	N/A	E, CH	8	I	3	
Sucker, razorback	6	1991	1998	F_2	2002	E, CH	1c	U	1	
Sucker, Santa Ana	1	2000	N/A	U	N/A	T	8	S	1	
Sucker, shortnose	1	1988	1993	F	1993	E	8c	U	1	
Sucker, Warner	1	1985	1998	F	1998	T, CH	2c	U	1	
Topminnow, Gila (incl. Yaqui) (Gila topminnow only)	2	1967	1984	F_1	1999	E	9c	D	1	
Topminnow, Gila (incl. Yaqui) (Yaqui topminnow only)	2	1967	1984	F	1995	E	8	S	2	
Trout, Apache	2	1967	1979	F_2	1983	T	8	I	3	

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GENERAL SPECIES INFORM	ATION		RECOVE	RY PLAN	N STATUS	SPECIES/RECOVERY STATUS				
Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved	
Trout, bull	1	1998	N/A	U	N/A	T	9c	S	1	
Trout, Gila	2	1967	1979	F_1	2002	E	2	S	3	
Trout, greenback cutthroat	6	1967	1977	F_2	1998	T	15	D	2	
Trout, Lahontan cutthroat	1	1970	1995	F	1995	T	3c	D	1	
Trout, Little Kern golden	1	1978	N/A	Exempt	N/A	T, CH	9	U	2	
Trout, Paiute cutthroat	1	1967	1985	F	1985	T	9	S	2	
Woundfin	6	1970	1979	F_2	1995	E, CH	1	D	1	
Clams										
Acornshell, southern	4	1993	2000	F	2000	E	5	E	1	
Bankclimber, purple	4	1998	N/A	D	1999	T	11	U	1	
Bean, Cumberland	4	1976	1984	F	1984	E	5c	D	1	
Bean, purple	4	1997	N/A	D	2003	E	5	D	1	
Blossom, green (pearlymussel)	4	1976	1984	F	1984	E	6	E	1	
Blossom, tubercled (pearlymussel)	4	1976	1985	F	1985	E	6	E	1	
Blossom, turgid (pearlymussel)	4	1976	1985	F	1985	\mathbf{E}	5	E	1	
Blossom, yellow (pearlymussel)	4	1976	1985	F	1985	E	6	E	1	
Catspaw (=purple cat's paw pearlymussel)	3	1990	1992	F	1992	E	6	D	1	
Catspaw, white (pearlymussel)	3	1976	1990	F	1990	E	6c	D	1	
Clubshell	5	1993	1994	F	1994	E	5	U	1	
Clubshell, black	4	1987	1989	F	1989	E	5c	E	1	
Clubshell, ovate	4	1993	2000	F	2000	\mathbf{E}	5	S	1	
Clubshell, southern	4	1993	2000	F	2000	E	5	S	1	
Combshell, Cumberlandian	4	1997	N/A	U	N/A	E	5	D	1	
Combshell, southern	4	1987	1989	F	1989	E	2c	S	1	
Combshell, upland	4	1993	2000	F	2000	E	5	E	1	
Elktoe, Appalachian	4	1994	1996	F	1996	\mathbf{E}	5	S	1	

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GENERAL SPECIES INFOR	MATION		RECOVE	RY PLAI	N STATUS	SPECIES/RECOVERY STATUS				
Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved	
Elktoe, Cumberland	4	1997	N/A	U	N/A	E	5	U	1	
Fanshell	4	1990	1991	F	1991	E	5	D	1	
Fatmucket, Arkansas	4	1990	1992	F	1992	T	8	U	1	
Heelsplitter, Alabama (=inflated)	4	1990	1993	F	1993	T	8c	S	1	
Heelsplitter, Carolina	4	1993	1997	F	1997	E	5c	D	1	
Higgins eye (pearlymussel)	3	1976	1983	F_1	1998	E	5c	D	2	
Kidneyshell, triangular	4	1993	2000	F	2000	E	5	S	1	
Lampmussel, Alabama	4	1976	1985	F	1985	E	5	D	1	
Lilliput, pale (pearlymussel)	4	1976	1984	F	1984	E	5	S	1	
Mapleleaf, winged (mussel)	3	1991	1997	F	1997	E	2c	D	1	
Moccasinshell, Alabama	4	1993	2000	F	2000	T	8	S	1	
Moccasinshell, Coosa	4	1993	2000	F	2000	E	5	D	1	
Moccasinshell, Gulf	4	1998	N/A	D	1999	E	5	U	1	
Moccasinshell, Ochlockonee	4	1998	N/A	D	1999	E	5	U	1	
Monkeyface, Appalachian (pearlymussel)	4	1976	1984	F	1984	E	5	D	1	
Monkeyface, Cumberland (pearlymussel)	4	1976	1984	F	1984	E	5c	D	1	
Mucket, orangenacre	4	1993	2000	F	2000	T	8	S	1	
Mucket, pink (pearlymussel)	4	1976	1985	F	1985	E	5	U	1	
Mussel, oyster	4	1997	N/A	U	N/A	E	5	D	1	
Mussel, scaleshell	3	2001	N/A	U	N/A	E	2	D	1	
Pearlshell, Louisiana	4	1988	1990	F	1990	T	8	U	2	
Pearlymussel, birdwing	4	1976	1984	F	1984	E	4c	D	1	
Pearlymussel, cracking	4	1989	1991	F	1991	E	4	D	1	
Pearlymussel, Curtis	3	1976	1986	F	1986	E	6	D	1	
Pearlymussel, dromedary	4	1976	1984	F	1984	E	4c	D	1	
Pearlymussel, littlewing	4	1988	1989	F	1989	E	4	D	1	

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GENERAL SPECIES INFORMATIO	N		RECOVE	RY PLA	N STATUS	SI	PECIES/REC	COVERY STAT	rus
Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved
Pigtoe, Cumberland	4	1991	1992	F	1992	E	5	S	1
Pigtoe, dark	4	1993	2000	F	2000	E	5	S	1
Pigtoe, finerayed	4	1976	1984	F	1984	E	5	U	1
Pigtoe, flat	4	1987	1989	F	1989	E	5	E	1
Pigtoe, heavy	4	1987	1989	F	1989	E	5c	S	1
Pigtoe, oval	4	1998	N/A	D	1999	E	5	D	1
Pigtoe, rough	4	1976	1984	F	1984	E	5	U	1
Pigtoe, shiny	4	1976	1984	F	1984	E	5	U	1
Pigtoe, southern	4	1993	2000	F	2000	E	5	S	1
Pimpleback, orangefoot (pearlymussel)	4	1976	1984	F	1984	E	5	U	1
Pocketbook, Ouachita rock	2	1991	N/A	D	2002	E	4c	D	1
Pocketbook, fat	4	1976	1985	F_2	1989	E	8	I	2
Pocketbook, finelined	4	1993	2000	F	2000	Т	8	S	1
Pocketbook, shinyrayed	4	1998	N/A	D	1999	E	5	U	1
Pocketbook, speckled	4	1989	1992	F	1992	E	5	S	2
Rabbitsfoot, rough	4	1997	N/A	U	N/A	E	6	U	1
Riffleshell, northern	5	1993	1994	F	1994	E	6	D	1
Riffleshell, tan	4	1977	1984	F	1984	E	5	U	1
Ring pink (mussel)	4	1989	1991	F	1991	E	5	U	1
Slabshell, Chipola	4	1998	N/A	D	1999	T	11	U	1
Spinymussel, James	5	1988	1990	\mathbf{F}	1990	E	5	U	1
Spinymussel, Tar River	4	1985	1987	F_2	1992	E	5	U	2
Stirrupshell	4	1987	1989	F	1989	E	5	E	1
Three-ridge, fat (mussel)	4	1998	N/A	D	1999	E	5	U	1
Wartyback, white (pearlymussel)	4	1976	1984	\mathbf{F}	1984	E	5	U	1
Wedgemussel, dwarf	5	1990	1993	F	1993	E	5	S	2

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GENERAL SPECIES INFORMAT	TION		RECOVE	RY PLAN	N STATUS	SPECIES/RECOVERY STATUS				
Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved	
Snails										
Ambersnail, Kanab	6	1991	1995	F	1995	E	6c	U	2	
Campeloma, slender	4	2000	N/A	U	N/A	\mathbf{E}	5	U	1	
Cavesnail, Tumbling Creek	3	2001	N/A	U	N/A	E	4	D	1	
Elimia, lacy (snail)	4	1998	N/A	U	N/A	T	8	S	1	
Limpet, Banbury Springs	1	1992	1995	\mathbf{F}	1995	E	8	S	1	
Lioplax, cylindrical (snail)	4	1998	N/A	U	N/A	\mathbf{E}	8	S	1	
Marstonia, royal (snail)	4	1994	1995	\mathbf{F}	1995	E	5	S	2	
Pebblesnail, flat	4	1998	N/A	U	N/A	\mathbf{E}	5	S	1	
Riversnail, Anthony's	4	1994	1997	\mathbf{F}	1997	E	5	S	1	
Rocksnail, painted	4	1998	N/A	U	N/A	T	8	S	1	
Rocksnail, plicate	4	1998	N/A	U	N/A	E	5c	S	1	
Rocksnail, round	4	1998	N/A	U	N/A	T	8	S	1	
Shagreen, Magazine Mountain	4	1989	1994	\mathbf{F}	1994	T	8	S	4	
Snail, armored	4	2000	N/A	U	N/A	\mathbf{E}	5	U	1	
Snail, Bliss Rapids	1	1992	1995	F	1995	T	7e	S	1	
Snail, Chittenango ovate amber	5	1978	1983	F	1997	T	5	D	1	
Snail, flat-spired three-toothed	5	1978	1983	F	1983	T	8	S	3	
Snail, Iowa Pleistocene	3	1978	1984	F	1984	E	14	S	3	
Snail, Morro shoulderband (=Banded dune)	1	1994	1998	F	1998	E, CH	8c	S	1	
Snail, Newcomb's	1	2000	N/A	U	N/A	T, CH	1	U	1	
Snail, noonday	4	1978	1984	F	1984	T	9	S	1	
Snail, painted snake coiled forest	4	1978	1982	F	1982	Т	8	U	1	
Snail, Snake River physa	1	1992	1995	F	1995	E	5c	D	1	
Snail, Stock Island tree	4	1978	1983	F	1999	Т	3	U	1	
Snail, tulotoma	4	1991	2000	F	2000	\mathbf{E}	8	I	3	

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Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved	
Snail, Utah valvata	1	1992	1995	F	1995	E	5c	S	1	
Snail, Virginia fringed mountain	5	1978	1983	F	1983	E	4	S	1	
Snails, Oahu tree	1	1981	1992	\mathbf{F}	1992	E	2	U	1	
Springsnail, Alamosa	2	1991	1994	\mathbf{F}	1994	E	14	S	1	
Springsnail, Bruneau Hot	1	1993	2002	\mathbf{F}	2002	E	2c	D	1	
Springsnail, Idaho	1	1992	1995	F	1995	E	5c	S	1	
Springsnail, Socorro	2	1991	1994	F	1994	E	14	U	1	
Insects										
Beetle, American burying	5	1989	1991	F	1991	E	5c	S	2	
Beetle, Coffin Cave mold	2	1988	1994	F	1994	E	2c	D	1	
Beetle, Comal Springs dryopid	2	1997	N/A	U	N/A	E	1c	D	1	
Beetle, Comal Springs riffle	2	1997	N/A	U	N/A	E	2c	D	1	
Beetle, delta green ground	1	1980	1985	F	1985	T, CH	8	U	2	
Beetle, Hungerford's crawling water	3	1994	N/A	U	N/A	E	5	U	1	
Beetle, Kretschmarr Cave mold	2	1988	1994	F	1994	E	2c	D	1	
Beetle, Mount Hermon June	1	1997	1998	F	1998	E	8c	D	1	
Beetle, Tooth Cave ground	2	1988	1994	\mathbf{F}	1994	E	2c	D	1	
Beetle, valley elderberry longhorn	1	1980	1984	F	1984	T, CH	9	U	1	
Butterfly, bay checkerspot	1	1987	1998	F	1998	T, CH	3c	D	1	
Butterfly, Behren's silverspot	1	1997	N/A	U	N/A	E	3c	U	1	
Butterfly, callippe silverspot	1	1997	N/A	U	N/A	E	9c	U	1	
Butterfly, El Segundo blue	1	1976	1998	\mathbf{F}	1998	E	12	S	1	
Butterfly, Fender's blue	1	2000	N/A	U	N/A	E	3	D	1	
Butterfly, Karner blue	3	1992	N/A	D	2001	E	5	S	2	
Butterfly, Lange's metalmark	1	1976	1980	F_2	1984	E	9	D	3	
Butterfly, lotis blue	1	1976	1985	\mathbf{F}	1985	E	6c	U	1	

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Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved	
Butterfly, mission blue	1	1976	1984	F	1984	E	9	U	2	
Butterfly, Mitchell's satyr	3	1991	1998	\mathbf{F}	1998	E	3	S	2	
Butterfly, Myrtle's silverspot	1	1992	1998	F	1998	E	9	U	1	
Butterfly, Oregon silverspot	1	1980	1982	F_2	2001	T, CH	3c	D	2	
Butterfly, Palos Verdes blue	1	1980	1984	F	1984	E, CH	6	D	1	
Butterfly, Quino checkerspot	1	1997	N/A	D	2001	E, CH	3c	D	1	
Butterfly, Saint Francis' satyr	4	1994	1996	F	1996	E	3	S	1	
Butterfly, San Bruno elfin	1	1976	1984	F	1984	E	9	U	2	
Butterfly, Schaus swallowtail	4	1976	1982	F	1999	E	3c	D	2	
Butterfly, Smith's blue	1	1976	1984	F	1984	E	9	U	1	
Butterfly, Uncompahgre fritillary	6	1991	1994	\mathbf{F}	1994	\mathbf{E}	8c	S	4	
Dragonfly, Hine's emerald	3	1995	2001	F	2001	E	5	D	1	
Fly, Delhi Sands flower-loving	1	1993	1997	\mathbf{F}	1997	\mathbf{E}	6c	D	1	
Grasshopper, Zayante band-winged	1	1997	1998	\mathbf{F}	1998	E, CH	5	D	1	
Mold beetle, Helotes	2	2000	N/A	U	N/A	\mathbf{E}	2c	D	1	
Moth, Blackburn's sphinx	1	2000	N/A	U	N/A	E	2c	U	1	
Moth, Kern primrose sphinx	1	1980	1984	F	1984	T	2	U	1	
Naucorid, Ash Meadows	1	1985	1990	F	1990	T, CH	8	S	2	
Rhadine exilis [NCN]	2	2000	N/A	U	N/A	\mathbf{E}	2c	D	1	
Rhadine infernalis [NCN]	2	2000	N/A	U	N/A	E	2c	D	1	
Skipper, Carson wandering	1	2001	N/A	U	N/A	E	3c	U	1	
Skipper, Laguna Mountains	1	1997	N/A	U	N/A	E	3c	D	1	
Skipper, Pawnee montane	6	1987	1998	F	1998	T	9c	D	1	
Tiger beetle, northeastern beach	5	1990	1994	F	1994	T	6	S	1	
Tiger beetle, Ohlone	1	2001	N/A	U	N/A	E	2	D	1	
Tiger beetle, Puritan	5	1990	1993	F	1993	T	5	S	1	

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Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved	
Archnids										
Harvestman, Bee Creek Cave	2	1988	1994	F	1994	E	2c	D	1	
Harvestman, Bone Cave	2	1988	1994	F	1994	E	2c	D	1	
Harvestman, Robber Baron Cave	2	2000	N/A	U	N/A	E	2c	D	1	
Pseudoscorpion, Tooth Cave	2	1988	1994	F	1994	E	2c	D	1	
Spider, Government Canyon cave	2	2000	N/A	U	N/A	E	2c	D	1	
Spider, Kauai cave wolf or pe'e pe'e maka 'ole	1	2000	N/A	U	N/A	E	1c	S	1	
Spider, Madla's cave	2	2000	N/A	U	N/A	E	2c	D	1	
Spider, Robber Baron Cave	2	2000	N/A	U	N/A	E	2c	D	1	
Spider, spruce-fir moss	4	1995	1998	F	1998	E, CH	5	U	1	
Spider, Tooth Cave	2	1988	1994	F	1994	E	2c	D	1	
Spider [NCN]	2	2000	N/A	U	N/A	E	2c	D	1	
Spider, Vesper cave	2	2000	N/A	U	N/A	E	2c	D	1	
Crustaceans										
Amphipod, Hay's Spring	5	1982	N/A	Exempt	N/A	\mathbf{E}	5	S	3	
Amphipod, Illinois cave	3	1998	2002	F	2002	E	2	D	2	
Amphipod, Kauai cave	1	2000	N/A	U	N/A	E	1c	S	1	
Amphipod, Peck's cave	2	1997	N/A	U	N/A	E	2c	D	1	
Crayfish, cave (Cambarus aculabrum)	4	1993	1996	F	1996	E	5	S	1	
Crayfish, cave (Cambarus zophonastes)	4	1987	1988	F	1988	E	5	S	1	
Crayfish, Nashville	4	1986	1987	F_2	1989	E	11c	S	1	
Crayfish, Shasta	1	1988	1998	F	1998	E	5	D	1	
Fairy shrimp, Conservancy	1	1994	N/A	U	N/A	E	8	U	1	
Fairy shrimp, longhorn	1	1994	N/A	U	N/A	E	8	U	1	
Fairy shrimp, Riverside	1	1993	1998	F	1998	E, CH	6c	S	1	
Fairy shrimp, San Diego	1	1997	1998	F	1998	E, CH	2c	S	1	

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Fairy shrimp, vernal pool	1	1994	N/A	U	N/A	Т	2c	D	1	
Isopod, Lee County cave	5	1992	1997	F	1997	E	8	U	1	
Isopod, Madison Cave	5	1982	1996	F	1996	T	4	S	2	
Isopod, Socorro	2	1978	1982	F	1982	\mathbf{E}	2	S	4	
Shrimp, Alabama cave	4	1988	1997	F	1997	E	5	S	1	
Shrimp, California freshwater	1	1988	1998	F	1998	E	8c	U	1	
Shrimp, Kentucky cave	4	1983	1988	F	1988	E, CH	5	U	1	
Shrimp, Squirrel Chimney Cave	4	1990	N/A	Exempt	N/A	T	5c	U	1	
Tadpole shrimp, vernal pool	1	1994	N/A	U	N/A	E	2c	D	1	
Flowering Plants										
A`e (Zanthoxylum dipetalum var. tomentosum)	1	1996	1998	F	1998	E	6	U	1	
A`e (Zanthoxylum hawaiiense)	1	1994	1996	F	1996	E	2	U	1	
Abutilon eremitopetalum [NCN]	1	1991	1995	F	1995	E	2	U	1	
Abutilon sandwicense [NCN]	1	1991	1995	F	1998	E	8	U	1	
Achyranthes mutica [NCN]	1	1996	1999	F	1999	E	2	U	1	
Agave, Arizona	2	1984	N/A	U	N/A	E	17	U	1	
Ahinahina (Argyroxiphium sandwicense ssp. macrocephalum)	1	1992	1997	F	1997	Т	9	S	3	
Ahinahina (Argyroxiphium sandwicense ssp. sandwicense)	1	1986	1993	F	1993	E	6	S	2	
Aiakeakua, popolo (Solanum sandwicense)	1	1994	1995	F	1995	\mathbf{E}	2	U	1	
Aiea (Nothocestrum breviflorum)	1	1994	1996	F	1996	E	5	U	1	
Aiea (Nothocestrum peltatum)	1	1994	1995	F	1995	E	5	U	1	
Akoko (Chamaesyce celastroides var. kaenana)	1	1991	1995	F	1998	E	9	U	1	
Akoko (Chamaesyce deppeana)	1	1994	1996	F	1998	E	5	I	1	
Akoko (Chamaesyce herbstii)	1	1996	1998	F	1998	E	8	U	1	

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Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved	
Akoko (Chamaesyce kuwaleana)	1	1991	1995	F	1998	E	8	U	1	
Akoko (Chamaesyce rockii)	1	1996	1998	F	1998	E	8	U	1	
Akoko (Euphorbia haeleeleana)	1	1996	1999	F	1999	E	5	U	1	
Akoko, Ewa Plains (Chamaesyce skottsbergii var. kalaeloana)	1	1982	N/A	D	1993	E	6	S	1	
Alani (Melicope adscendens)	1	1994	1997	F	1997	E	5	U	1	
Alani (Melicope balloui)	1	1994	1997	F	1997	E	5	E	1	
Alani (Melicope haupuensis)	1	1994	1995	F	1995	E	5	U	1	
Alani (Melicope knudsenii)	1	1994	1995	F	1995	E	5	U	1	
Alani (Melicope lydgatei)	1	1994	1996	F	1998	E	5	U	1	
Alani (Melicope mucronulata)	1	1992	1997	F	1997	E	5	U	1	
Alani (Melicope munroi)	1	1999	2002	F	2002	E	5	U	1	
Alani (Melicope ovalis)	1	1994	1997	F	1997	E	5	U	1	
Alani (Melicope pallida)	1	1994	1995	F	1995	E	5	U	1	
Alani (Melicope quadrangularis)	1	1994	1995	F	1995	E	5	E	1	
Alani (Melicope reflexa)	1	1992	1996	F	1996	\mathbf{E}	8	U	1	
Alani (Melicope saint-johnii)	1	1996	1998	F	1998	E	8	U	1	
Alani (Melicope zahlbruckneri)	1	1996	1998	F	1998	\mathbf{E}	2	S	1	
Allocarya, Calistoga	1	1997	N/A	U	N/A	E	2c	U	1	
Alopecurus, Sonoma	1	1997	N/A	U	N/A	\mathbf{E}	9	S	1	
Alsinidendron obovatum [NCN]	1	1991	1995	F	1998	E	5	C	1	
Alsinidendron trinerve [NCN]	1	1991	1995	F	1998	E	5	U	1	
Alsinidendron viscosum [NCN]	1	1996	1998	F	1998	E	2	U	1	
Amaranth, seabeach	4	1993	1996	F	1996	T	8c	S	1	
Amaranthus brownii [NCN]	1	1996	1998	F	1998	E	5	U	1	
Ambrosia, San Diego	1	2002	N/A	U	N/A	E	5	D	1	

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GENERAL SPECIES INFORMAT	ION		RECOVE	RY PLAI	N STATUS	SPECIES/RECOVERY STATUS				
Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved	
Ambrosia, south Texas	2	1994	N/A	U	N/A	E	8	D	2	
Amole, purple	1	2000	N/A	U	N/A	T	8	U	1	
Amphianthus, little	4	1988	1993	F	1993	T	13	S	1	
Anaunau (Lepidium arbuscula)	1	1996	1998	F	1998	E	8	U	1	
Anunu (Sicyos alba)	1	1996	1998	F	1998	E	2	U	1	
Aristida chaseae [NCN]	4	1993	1995	F	1995	E	5c	S	1	
Arrowhead, bunched	4	1979	1983	F	1983	E	2c	D	1	
Aster, decurrent false	3	1988	1990	F	1990	Т	8	S	3	
Aster, Florida golden	4	1986	1988	F	1988	E	5	I	1	
Aster, Ruth's golden	4	1985	1992	F	1992	E	5c	S	2	
Auerodendron pauciflorum [NCN]	4	1994	1997	F	1997	E	5	S	1	
Aupaka (Isodendrion hosakae)	1	1991	1994	F	1994	E	5	U	1	
Aupaka (Isodendrion laurifolium)	1	1996	1999	F	1999	E	8	U	1	
Aupaka (Isodendrion longifolium)	1	1996	1999	F	1999	Т	8	U	1	
Avens, spreading	4	1990	1993	F	1993	E	2	S	1	
Awikiwiki (Canavalia molokaiensis)	1	1992	1996	F	1996	E	2	U	1	
Awiwi (Centaurium sebaeoides)	1	1991	1995	F	1999	E	2	U	1	
Awiwi (Hedyotis cookiana)	1	1994	1995	F	1995	E	5	U	1	
Ayenia, Texas	2	1994	N/A	U	N/A	E	5	S	1	
Baccharis, Encinitas	1	1996	N/A	U	N/A	Т	5c	D	1	
Barberry, island	1	1997	2000	F	2000	E	2	D	1	
Barberry, Truckee	1	1979	1984	F	1984	E	14	S	4	
Barberry, Nevin's	1	1998	N/A	U	N/A	E	2	S	1	
Bariaco	4	1988	1991	F	1991	E	11	S	1	
Beaked-rush, Knieskern's	5	1991	1993	F	1993	T	14	S	2	
Bear-poppy, dwarf	6	1979	1985	\mathbf{F}	1985	E	5c	D	1	

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GENERAL SPECIES INFORM	IATION		RECOVE	RY PLAI	N STATUS	SPECIES/RECOVERY STATUS				
Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved	
Beardtongue, Penland	6	1989	1992	F	1992	E	14	U	1	
Beargrass, Britton's	4	1993	1996	F_2	1996	E	8	S	2	
Beauty, Harper's	4	1979	1983	F	1983	E	7	I	1	
Bedstraw, El Dorado	1	1996	2002	F	2002	E	6c	U	1	
Bedstraw, island	1	1997	2000	F	2000	E	2	U	1	
Bellflower, Brooksville	4	1989	1994	F	1994	E	8	U	1	
Birch, Virginia round-leaf	5	1978	1982	F_2	1990	T	14	I	4	
Bird's beak, palmate-bracted	1	1986	1998	F	1998	E	2c	S	1	
Bird's-beak, Pennell's	1	1995	1998	F	1998	E	6	U	1	
Bird's-beak, salt marsh	1	1978	1985	F	1985	E	6	S	2	
Bird's-beak, soft	1	1997	N/A	U	N/A	E	9c	S	1	
Birds-in-a-nest, white	4	1992	1994	F	1994	Т	8	U	1	
Bittercress, small-anthered	4	1989	1991	F	1991	E	5	U	1	
Bladderpod, Dudley Bluffs	6	1990	1993	F	1993	T	14	S	2	
Bladderpod, lyrate	4	1990	1996	F	1996	T	8	S	1	
Bladderpod, Missouri	3	1987	1988	F	1988	E	8	I	3	
Bladderpod, San Bernardino Mountains	1	1994	N/A	D	1997	E	9	D	1	
Bladderpod, Spring Creek	4	1996	N/A	U	N/A	E	2	S	1	
Bladderpod, Zapata	2	1999	N/A	U	N/A	E, CH	5c	I	2	
Bladderpod, kodachrome	6	1993	N/A	U	N/A	E	11	S	2	
Bladderpod, white	2	1987	1992	F	1992	E	2	S	1	
Blazingstar, Ash Meadows	1	1985	1990	F	1990	T, CH	8	U	2	
Blazingstar, Heller's	4	1987	1989	F_2	2000	T	8	I	2	
Blazingstar, scrub	4	1989	1990	F	1999	E	2	S	2	
Blue-star, Kearney's	2	1989	1993	F	1993	E	2	S	1	
Bluecurls, Hidden Lake	1	1998	N/A	U	N/A	Т	9	S	1	

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GENERAL SPECIES INFOR	MATION		RECOVE	RY PLAI	N STATUS	SPECIES/RECOVERY STATUS				
Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved	
Bluegrass, Hawaiian	1	1992	1995	F	1995	E	5	U	1	
Bluegrass, Mann's	1	1994	1995	\mathbf{F}	1995	\mathbf{E}	5	U	1	
Bluegrass, Napa	1	1997	N/A	U	N/A	E	2c	U	1	
Bluegrass, San Bernardino	1	1998	N/A	U	N/A	E	2	D	1	
Bluet, Roan Mountain	4	1990	1996	F	1996	E	6	S	1	
Bonamia, Florida	4	1987	1990	F_2	1996	T	8	I	3	
Bonamia menziesii [NCN]	1	1994	1999	F	1999	E	5	U	1	
Boxwood, Vahl's	4	1985	1987	F	1987	E	5	S	2	
Brodiaea, Chinese Camp	1	1998	N/A	U	N/A	T	2c	U	1	
Brodiaea, thread-leaved	1	1998	N/A	U	N/A	Т	2	D	1	
Broom, San Clemente Island	1	1977	1984	F	1984	E	9	I	2	
Buckwheat, cushenbury	1	1994	N/A	D	1997	E	3	D	1	
Buckwheat, Ione (incl. Irish Hill)	1	1999	N/A	U	N/A	E	2c	U	1	
Buckwheat, scrub	4	1993	1996	F_2	1996	T	15	S	2	
Buckwheat, steamboat	1	1986	1995	F	1995	E	6c	U	1	
Bulrush, Northeastern	5	1991	1993	F	1993	E	14	S	3	
Bush-clover, prairie	3	1987	1988	F	1988	T	8	S	4	
Bush-mallow, San Clemente Island	1	1977	1984	F	1984	E	8	S	2	
Bush-mallow, Santa Cruz Island	1	1997	2000	F	2000	\mathbf{E}	3	S	1	
Buttercup, autumn	6	1989	1991	F	1991	E	5	D	2	
Butterfly plant, Colorado	6	2000	N/A	U	N/A	T	15	U	1	
Butterweed, Layne's	1	1996	2002	F	2002	Т	5c	U	1	
Butterwort, Godfrey's	4	1993	1994	\mathbf{F}	1994	T	14	S	1	
Button, Mohr's Barbara	4	1988	1991	F	1991	Т	14	S	2	
Button-celery, San Diego	1	1993	1998	\mathbf{F}	1998	E	3c	S	1	
Cactus, Arizona hedgehog	2	1979	N/A	U	N/A	E	3	S	1	

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Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved	
Cactus, Bakersfield	1	1990	1998	F	1998	E	3c	S	1	
Cactus, black lace	2	1979	1987	\mathbf{F}	1987	E	3	U	1	
Caetus, Brady pincushion	2	1979	1985	F	1985	E	2	U	1	
Cactus, Chisos Mountain hedgehog	2	1988	1993	F	1993	${f T}$	9	U	1	
Cactus, Cochise pincushion	2	1986	1993	F	1993	T	8	D	1	
Cactus, Key tree	4	1984	1986	F	1999	E	5c	S	2	
Caetus, Knowlton	2	1979	1985	F	1985	E	2	S	2	
Cactus, Kuenzler hedgehog	2	1979	1985	F	1985	E	3	S	2	
Cactus, Lee pincushion	2	1979	1986	F	1986	T	3	S	2	
Cactus, Lloyd's Mariposa	2	1979	1990	F	1990	Т	2	U	1	
Cactus, Mesa Verde	2	1979	1984	F	1984	Т	8c	U	1	
Cactus, Nellie cory	2	1979	1984	F	1984	E	2	U	1	
Cactus, Nichol's Turk's head	2	1979	1986	F	1986	E	3	U	1	
Cactus, Peebles Navajo	2	1979	1984	F	1984	\mathbf{E}	3	D	1	
Cactus, Pima pineapple	2	1993	N/A	U	N/A	E	3	U	1	
Cactus, San Rafael	6	1987	N/A	D	1995	E	11	S	1	
Cactus, Siler pincushion	2	1979	1986	F	1986	T	8	U	1	
Cactus, Sneed pincushion	2	1979	1986	F	1986	E	9	S	2	
Caetus, star	2	1993	N/A	D	2002	E	2c	I	2	
Cactus, Tobusch fishhook	2	1979	1987	F	1987	\mathbf{E}	2	D	1	
Cactus, Uinta Basin hookless	6	1979	1990	F	1990	Т	14	S	4	
Cactus, Winkler	6	1998	N/A	D	1995	Т	11	D	1	
Cactus, Wright fishhook	6	1979	1985	F	1985	E	17	S	3	
Calyptranthes thomasiana [NCN]	4	1994	1997	F	1997	E	11	U	1	
Campion, fringed	4	1991	N/A	D	1996	E	8	S	1	
Capa rosa	4	1992	1995	F	1995	E	11	S	1	

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Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved	
Catesbaea melanocarpa [NCN]	4	1999	N/A	U	N/A	E	5	U	1	
Catchfly, Spalding's	1	2001	N/A	U	N/A	T	8c	D	1	
Cat's-eye, Terlingua Creek	2	1991	1994	F	1994	E	5c	D	1	
Ceanothus, Pine Hill	1	1996	2002	F	2002	E	5c	U	1	
Ceanothus, Vail Lake	1	1998	N/A	U	N/A	T	2	U	1	
Ceanothus, coyote	1	1995	1998	F	1998	E	14	U	1	
Centaury, spring-loving	1	1985	1990	F	1990	T, CH	14	S	4	
Chaff-flower, round-leaved	1	1986	N/A	D	1993	E	3	U	1	
Chaffseed, American	5	1992	1995	F	1995	E	7	S	1	
Chamaecrista glandulosa var. mirabilis [NCN]	4	1990	1994	F	1994	E	2c	U	1	
Chamaesyce halemanui [NCN]	1	1992	1995	F	1995	E	5	U	1	
Checker-mallow, Keck's	1	2000	N/A	U	N/A	E	8	U	2	
Checker-mallow, Kenwood Marsh	1	1997	N/A	U	N/A	E	3c	U	1	
Checker-mallow, Nelson's	1	1993	1998	F	1998	Т	5	D	1	
Checker-mallow, pedate	1	1984	1998	F	1998	E	5c	D	1	
Checker-mallow, Wenatchee Mountains	1	1999	N/A	U	N/A	E, CH	3	I	1	
Chupacallos	4	1994	1998	F	1998	E	8	S	1	
Clarkia, Pismo	1	1994	1998	F	1998	E	3c	U	1	
Clarkia, Presidio	1	1995	1998	F	1998	E	5	U	1	
Clarkia, Springville	1	1998	N/A	U	N/A	T	8	U	1	
Clarkia, Vine Hill	1	1997	N/A	U	N/A	E	5	U	1	
Cliff-rose, Arizona	2	1984	1995	\mathbf{F}	1995	E	2	U	1	
Clover, Monterey	1	1998	N/A	D	2002	E	5c	U	1	
Clover, running buffalo	3	1987	1989	F	1989	E	2	I	3	
Clover, showy Indian	1	1997	N/A	U	N/A	E	2	S	1	
Cobana negra	4	1990	1996	F	1996	Т	5	S	2	

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Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved	
Coneflower, smooth	4	1992	1995	F	1995	E	5	U	1	
Coneflower, Tennessee purple	4	1979	1983	\mathbf{F}	1989	E	8	S	3	
Cordia bellonis [NCN]	4	1997	1999	F	1999	E	5	S	1	
Cory cactus, bunched	2	1979	1990	F	1990	Т	8	D	1	
Cranichis ricartii [NCN]	4	1991	1996	F	1996	E	5	U	1	
Crownbeard, big-leaved	1	1996	N/A	U	N/A	Т	3c	D	1	
Crownscale, San Jacinto Valley	1	1998	N/A	U	N/A	E	3	D	1	
Cyanea (=Rollandia) crispa [NCN]	1	1994	1998	F	1998	E	5	U	1	
Cycladenia, Jones	6	1986	N/A	U	N/A	Т	8	S	1	
Daisy, lakeside	3	1988	1990	F	1990	Т	8	S	3	
Daisy, Maguire	6	1985	1995	F	1995	Т	14	S	3	
Daisy, Parish's	1	1994	N/A	D	1997	Т	8	D	1	
Daisy, Willamette	1	2000	N/A	U	N/A	E	3	D	1	
Daphnopsis hellerana [NCN]	4	1988	1992	F	1992	E	5	U	1	
Dawn-flower, Texas prairie	2	1986	1990	F	1990	E	5c	S	1	
Delissea rhytidosperma [NCN]	1	1994	1995	F	1995	E	5	U	1	
Delissea undulata [NCN]	1	1996	1996	F	1996	E	5	U	1	
Desert-parsley, Bradshaw's	1	1988	1993	F	1993	E	2	S	2	
Dogweed, ashy	2	1984	1988	F	1988	E	5	I	1	
Dropwort, Canby's	4	1986	1990	F	1990	E	5	D	2	
Dudleya, Conejo	1	1997	1999	F	1999	Т	3c	U	1	
Dudleya, marcescent	1	1997	1999	F	1999	Т	9	U	1	
Dudleya, Santa Clara Valley	1	1995	1998	F	1998	E	2c	D	1	
Dudleya, Santa Cruz Island	1	1997	2000	\mathbf{F}	2000	Т	8	S	1	
Dudleya, Verity's	1	1997	1999	\mathbf{F}	1999	Т	2c	D	1	
Dudleyea, Santa Monica Mountains	1	1997	1999	F	1999	Т	6	U	1	

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Dwarf-flax, Marin	1	1995	1998	F	1998	T	8c	U	1	
Erubia	4	1988	1992	\mathbf{F}	1992	E	2c	S	2	
Eugenia woodburyana [NCN]	4	1994	1998	\mathbf{F}	1998	E	5	S	1	
Evening-primrose, Antioch Dunes	1	1978	1980	F_2	1984	E, CH	9	S	1	
Evening-primrose, Eureka Valley	1	1978	1982	\mathbf{F}	1982	E	9	S	2	
Evening-primrose, San Benito	1	1985	N/A	D	1999	T	5	S	1	
Fiddleneck, large-flowered	1	1985	1997	\mathbf{F}	1997	E, CH	5	D	2	
Flannelbush, Mexican	1	1998	N/A	U	N/A	E	2	S	1	
Flannelbush, Pine Hill	1	1996	2002	F	2002	E	6c	U	1	
Fleabane, Zuni	2	1985	1988	F	1988	T	8	S	2	
Four-o'clock, MacFarlane's	1	1979	1985	F_2	2000	T	2	S	2	
Frankenia, Johnston's	2	1984	1988	\mathbf{F}	1988	E	5	I	4	
Fringe-tree, pygmy	4	1987	1990	\mathbf{F}	1999	E	2	U	2	
Fringepod, Santa Cruz Island	1	1997	2000	\mathbf{F}	2000	E	2	D	1	
Fritillary, Gentner's	1	1999	N/A	D	2002	E	5	D	1	
Gahnia lanaiensis [NCN]	1	1991	1995	F	1995	E	5	U	1	
Gardenia (=Na`u), Hawaiian	1	1985	1993	F	1993	E	2	U	1	
Geocarpon minimum [NCN]	4	1987	1993	F	1993	T	13	S	1	
Geranium, Hawaiian red-flowered	1	1992	1997	F	1997	E	2	U	1	
Gerardia, sandplain	5	1988	1989	F_1	1989	E	5c	S	2	
Gesneria pauciflora [NCN]	4	1995	1998	F	1998	T	11	U	1	
Gilia, Hoffmann's slender-flowered	1	1997	2000	F	2000	E	8	S	1	
Gilia, Monterey	1	1992	1998	F	1998	E	9	S	2	
Goetzea, beautiful	4	1985	1987	F	1987	E	5	S	2	
Goldenrod, Blue Ridge	4	1985	1987	F	1987	T	8	S	1	
Goldenrod, Houghton's	3	1988	1997	\mathbf{F}	1997	${f T}$	8c	S	2	

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Goldenrod, Short's	4	1985	1988	F	1988	E	8	S	2	
Goldenrod, white-haired	4	1988	1993	\mathbf{F}	1993	T	8	S	2	
Goldfields, Burke's	1	1991	N/A	U	N/A	E	2c	D	1	
Goldfields, Contra Costa	1	1997	N/A	U	N/A	E	5c	D	1	
Gooseberry, Miccosukee	4	1985	N/A	Exempt	N/A	T	14	S	1	
Gouania hillebrandii [NCN]	1	1984	1990	F	1990	E, CH	8	U	1	
Gouania meyenii [NCN]	1	1991	1995	F	1998	E	8	U	1	
Gouania vitifolia [NCN]	1	1994	1995	F	1998	E	5	U	1	
Gourd, Okeechobee	4	1993	1999	F	1999	E	3	S	1	
Grass, Colusa	1	1997	N/A	U	N/A	T	2c	D	1	
Grass, Eureka Dune	1	1978	1982	F	1982	E	7	S	1	
Grass, Solano	1	1978	1985	F	1985	E	2	D	1	
Grass, Tennessee yellow-eyed	4	1991	1994	F	1994	E	8	S	1	
Ground-plum, Guthrie's (=Pyne's)	4	1991	N/A	U	N/A	E	2	S	2	
Groundsel, San Francisco Peaks	2	1983	1987	F	1987	T, CH	8	U	1	
Gumplant, Ash Meadows	1	1985	1990	F	1990	T, CH	14	S	4	
Ha`iwale (Cyrtandra crenata)	1	1994	1996	F	1998	E	5	E	1	
Ha`iwale (Cyrtandra dentata)	1	1996	1998	F	1998	E	8	U	1	
Ha`iwale (Cyrtandra giffardii)	1	1994	1996	F	1996	E	2	U	1	
Ha`iwale (Cyrtandra limahuliensis)	1	1994	1995	F	1995	Т	14	U	1	
Ha`iwale (Cyrtandra munroi)	1	1992	1995	F	1995	E	5	U	1	
Ha`iwale (Cyrtandra polyantha)	1	1994	1996	F	1998	E	5	I	1	
Ha`iwale (Cyrtandra subumbellata)	1	1996	1998	F	1998	E	8	U	1	
Ha`iwale (Cyrtandra tintinnabula)	1	1994	1996	F	1996	E	5	U	1	
Ha`iwale (Cyrtandra viridiflora)	1	1996	1998	F	1998	E	5	U	1	
Haha (Cyanea acuminata)	1	1996	1998	F	1998	E	11	U	1	

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Haha (Cyanea asarifolia)	1	1994	1995	F	1995	E	5	U	1	
Haha (Cyanea copelandii ssp. copelandii)	1	1994	1996	F	1996	${f E}$	6	E	1	
Haha (Cyanea copelandii ssp. haleakalaensis)	1	1999	2002	F	2002	E	6	U	1	
Haha (Cyanea dunbarii)	1	1996	1998	F	1998	E	5	U	1	
Haha (Cyanea glabra)	1	1999	2002	F	2002	E	5	U	1	
Haha (Cyanea grimesiana ssp. grimesiana)	1	1996	1999	F	1999	${f E}$	6	U	1	
Haha (Cyanea grimesiana ssp. obatae)	1	1994	1995	F	1998	E	6	U	1	
Haha (Cyanea hamatiflora carlsonii)	1	1994	1996	F	1996	E	6	U	1	
Haha (Cyanea hamatiflora ssp. hamatiflora)	1	1999	2002	F	2002	E	6	D	1	
Haha (Cyanea humboldtiana)	1	1996	1998	F	1998	E	5	U	1	
Haha (Cyanea koolauensis)	1	1996	1998	F	1998	E	5	U	1	
Haha (Cyanea lobata)	1	1992	1997	F	1997	E	5	U	1	
Haha (Cyanea longiflora)	1	1996	1998	F	1998	E	11	U	1	
Haha (Cyanea macrostegia ssp. gibsonii)	1	1991	1995	F	1995	E	6	U	1	
Haha (Cyanea mannii)	1	1992	1996	F	1996	E	2	U	1	
Haha (Cyanea mceldowneyi)	1	1992	1997	F	1997	\mathbf{E}	2	U	1	
Haha (Cyanea pinnatifida)	1	1991	1995	F	1998	E	5	\mathbf{C}	1	
Haha (Cyanea platyphylla)	1	1996	1998	F	1998	E	2	U	1	
Haha (Cyanea procera)	1	1992	1996	F	1996	\mathbf{E}	5	U	1	
Haha (Cyanea recta)	1	1996	1998	F	1998	T	2	U	1	
Haha (Cyanea remyi)	1	1996	1998	F	1998	E	2	U	1	
Haha (Cyanea shipmannii)	1	1994	1996	F	1996	E	2	U	1	
Haha (Cyanea st-johnii)	1	1996	1998	F	1998	E	5	U	1	
Haha (Cyanea stictophylla)	1	1994	1996	F	1996	E	2	U	1	
Haha (Cyanea superba)	1	1991	1995	F	1998	E	5	S	1	
Haha (Cyanea truncata)	1	1994	1996	F	1998	\mathbf{E}	5	U	1	

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GENERAL SPECIES INFORMATION	ON		RECOVE	RY PLAI	N STATUS	SPECIES/RECOVERY STATUS				
Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved	
Haha (Cyanea undulata)	1	1991	1994	F	1994	E	11	U	1	
Hala pepe (Pleomele hawaiiensis)	1	1996	1998	F	1998	E	2	U	1	
Harebells, Avon Park (Crotalaria avonensis)	4	1993	1999	F	1999	E	2c	U	1	
Harperella (Ptilimnium nodosum)	5	1988	1991	F	1991	E	8	D	2	
Hau kuahiwi (Hibiscadelphus giffardianus)	1	1996	1998	F	1998	E	5	\mathbf{C}	1	
Hau kuahiwi (Hibiscadelphus hualalaiensis)	1	1996	1998	F	1998	E	5	\mathbf{C}	1	
Hau kuahiwi (Hibiscadelphus woodii)	1	1996	1998	F	1998	E	5	D	1	
Heartleaf, dwarf-flowered	4	1989	N/A	U	N/A	Т	14	I	4	
Heather, mountain golden	4	1980	1983	F	1983	T, CH	8	I	3	
Heau	1	1994	1995	F	1995	E	5	U	1	
Hedyotis degeneri [NCN]	1	1991	1995	F	1998	E	5	U	1	
Hedyotis, Na Pali beach	1	1991	1995	F	1995	E	8	U	1	
Hedyotis parvula [NCN]	1	1991	1995	F	1998	E	5	U	1	
Hesperomannia arborescens [NCN]	1	1994	1996	F	1998	E	5	U	1	
Hesperomannia arbuscula [NCN]	1	1991	1995	F	1998	E	5	U	1	
Hesperomannia lydgatei [NCN]	1	1991	1994	F	1994	E	11	U	1	
Hibiscus, Clay's	1	1994	1995	F	1995	E	5	U	1	
Higo, chumbo	4	1990	1996	F	1996	Т	14	S	2	
Higuero de sierra	4	1987	1991	F	1991	E	5	S	1	
Holei	1	1994	1996	F	1996	E	5	E	1	
Holly, Cook's	4	1987	1991	F	1991	E	5	U	1	
Honohono	1	1979	N/A	D	1993	E	2	S	1	
Howellia, water	6	1994	N/A	D	1996	T	7	I	4	
Hypericum, highlands scrub	4	1987	1990	\mathbf{F}	1999	E	2	U	2	
Iagu, Hayun (=Guam), Tronkon guafi (Rota))	1	1987	1994	F	1994	E	2	U	1	
Ilex sintenisii [NCN]	4	1992	1995	F	1995	\mathbf{E}	11	S	1	

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GENERAL SPECIES INFORMATI	ON		RECOVE	RY PLAI	N STATUS	Sl	PECIES/REC	COVERY STA	rus
Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved
Iliau, dwarf	1	1992	1995	F	1995	E	2	U	1
Indian paintbrush, San Clemente Island	1	1977	1984	F	1984	E	8	S	1
Ipomopsis, Holy Ghost	2	1994	2002	F	2002	E	5	S	1
Iris, dwarf lake	3	1988	N/A	U	N/A	${f T}$	8c	S	2
Irisette, white	4	1991	1995	F	1995	E	8	U	1
Ischaemum, Hilo	1	1994	1996	F	1996	E	5	U	1
Ivesia, Ash Meadows	1	1985	1990	F	1990	T, CH	8	S	3
Jacquemontia, beach	4	1993	1996	F	1999	E	2	S	2
Jewelflower, California	1	1990	1998	F	1998	E	2	S	2
Jewelflower, Metcalf Canyon	1	1995	1998	F	1998	E	3c	D	1
Jewelflower, Tiburon	1	1995	1998	F	1998	E	5c	U	1
Joint-vetch, sensitive	5	1992	1995	F	1995	T	2	U	1
Kamakahala (Labordia cyrtandrae)	1	1996	1998	F	1998	E	5	U	1
Kamakahala (Labordia lydgatei)	1	1991	1994	F	1994	E	11	U	1
Kamakahala (Labordia tinifolia var. lanaiensis)	1	1999	2002	F	2002	E	6	U	1
Kamakahala (Labordia tinifolia var. wahiawaensis)	1	1996	1998	F	1998	E	6	U	1
Kamakahala (Labordia triflora)	1	1999	2002	F	2002	E	5	U	1
Kamanomano	1	1996	1999	F	1999	E	5	U	1
Kauai hau kuahiwi	1	1986	1996	F	1996	E	2	U	1
Kauila	1	1994	1996	F	1996	E	5	U	1
Kaulu	1	1994	1995	F	1995	E	8	U	1
Kio`ele	1	1992	1997	F	1997	E	2	U	1
Kiponapona	1	1996	1998	F	1998	E	2	U	1
Ko`oko`olau (Bidens micrantha ssp. kalealaha)	1	1992	1997	F	1997	E	9	U	1
Ko`oko`olau (Bidens wiebkei)	1	1992	1996	F	1996	E	2	U	1
Ko`oloa`ula (Abutilon menziesii)	1	1986	1995	F	1995	E	2	U	1

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GENERAL SPECIES INFORMATIO	N		RECOVE	RY PLAN	N STATUS	SPECIES/RECOVERY STATUS				
Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved	
Kohe malama malama o kanaloa	1	1999	2002	F	2002	E	1	S	1	
Koki`o (Kokia drynarioides)	1	1984	1994	\mathbf{F}	1994	E, CH	2	\mathbf{S}	1	
Koki`o (Kokia kauaiensis)	1	1996	1998	F	1998	E	5	U	1	
Koki`o, Cooke's	1	1979	1998	F	1998	E	5	\mathbf{C}	1	
Koki`o ke`oke`o (Hibiscus arnottianus ssp. immaculatus)	1	1992	1996	\mathbf{F}	1996	E	3	U	1	
Koki`o ke`oke`o (Hibiscus waimeae ssp. hannerae)	1	1996	1998	\mathbf{F}	1998	E	3	U	1	
Kolea (Myrsine juddii)	1	1996	1998	F	1998	E	8	U	1	
Kolea (Myrsine linearifolia)	1	1996	1998	F	1998	Т	2	U	1	
Kopa	1	1999	2002	F	2002	E	6	D	1	
Kuahiwi laukahi (Plantago hawaiensis)	1	1994	1996	F	1996	E	5	U	1	
Kuahiwi laukahi (Plantago princeps)	1	1994	1999	F	1999	E	5	U	1	
Kuawawaenohu	1	1996	1998	F	1998	E	2	I	1	
Kula wahine noho	1	1994	1996	F	1996	E	2	S	1	
Kulu`i	1	1991	1995	F	1998	\mathbf{E}	8	U	1	
Ladies'-tresses, Canelo Hills	2	1997	N/A	U	N/A	E	2c	S	1	
Ladies'-tresses, Navasota	2	1982	1984	F	1984	E	2	D	1	
Ladies'-tresses, Ute	6	1992	N/A	D	1995	Т	2c	U	1	
Larkspur, Baker's	1	2000	N/A	U	N/A	E	5	D	1	
Larkspur, San Clemente Island	1	1977	1984	F	1984	\mathbf{E}	8	S	2	
Larkspur, yellow	1	2000	N/A	U	N/A	E	8c	D	1	
Lau `ehu	1	1996	1999	F	1999	E	2	U	1	
Laulihilihi	1	1996	1998	F	1998	E	2	U	1	
Layia, beach	1	1992	1998	F	1998	E	8	U	1	
Lead-plant, Crenulate	4	1985	1988	\mathbf{F}	1999	E	5c	D	1	
Leather flower, Alabama	4	1986	1989	F	1989	E	2	S	2	
Leather flower, Morefield's	4	1992	1994	F	1994	E	5	S	1	

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GENERAL SPECIES INFORMA	TION		RECOVE	RY PLAI	N STATUS	SPECIES/RECOVERY STATUS				
Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved	
Lepanthes eltoroensis [NCN]	4	1991	1996	F	1996	E	5	S	2	
Leptocereus grantianus [NCN]	4	1993	1995	\mathbf{F}	1995	\mathbf{E}	5c	S	1	
Lessingia, San Francisco	1	1997	N/A	D	2001	E	2c	D	1	
Liliwai	1	1992	1997	\mathbf{F}	1997	\mathbf{E}	5	\mathbf{E}	1	
Lily, Minnesota dwarf trout	3	1986	1987	\mathbf{F}	1987	E	8c	S	4	
Lily, Pitkin Marsh	1	1997	N/A	U	N/A	\mathbf{E}	5c	U	1	
Lily, Western	1	1994	1998	\mathbf{F}	1998	E	2	U	1	
Lipochaeta venosa [NCN]	1	1979	1994	\mathbf{F}	1994	\mathbf{E}	5	U	1	
Liveforever, Laguna Beach	1	1998	N/A	U	N/A	T	8	S	1	
Liveforever, Santa Barbara Island	1	1978	1985	F	1985	E	8	S	2	
Lobelia gaudichaudii ssp. Koolauensis [NCN]	1	1996	1998	F	1998	E	6	U	1	
Lobelia monostachya [NCN]	1	1996	1998	\mathbf{F}	1998	\mathbf{E}	5	U	1	
Lobelia niihauensis [NCN]	1	1991	1995	\mathbf{F}	1998	E	8	U	1	
Lobelia oahuensis [NCN]	1	1994	1996	\mathbf{F}	1998	\mathbf{E}	5	U	1	
Locoweed, Fassett's	3	1988	1991	F	1991	${f T}$	9	S	2	
Loosestrife, rough-leaved	4	1987	1995	F	1995	E	8	S	1	
Lo`ulu (Pritchardia affinis)	1	1994	1996	F	1996	E	5	\mathbf{C}	1	
Lo`ulu (Pritchardia kaalae)	1	1996	1998	F	1998	E	5	U	1	
Lo`ulu (Pritchardia munroi)	1	1992	1996	F	1996	E	5	U	1	
Lo`ulu (Pritchardia napaliensis)	1	1996	1998	\mathbf{F}	1998	E	5	U	1	
Lo`ulu (Pritchardia remota)	1	1996	1998	F	1998	E	2	U	1	
Lo`ulu (Pritchardia schattaueri)	1	1996	1998	\mathbf{F}	1998	E	5	S	1	
Lo`ulu (Pritchardia viscosa)	1	1996	1998	F	1998	E	5	U	1	
Lousewort, Furbish	5	1978	1983	F	1991	E	14	S	3	
Love grass, Fosberg's	1	1996	1998	F	1998	E	5	E	1	
Lupine, clover	1	1992	1998	F	1998	E	5	S	1	

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GENERAL SPECIES INFORMA	ATION		RECOVE	RY PLAI	N STATUS	SPECIES/RECOVERY STATUS				
Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved	
Lupine, Kincaid's	1	2000	N/A	U	N/A	T	9	S	1	
Lupine, Nipomo Mesa	1	2000	N/A	U	N/A	\mathbf{E}	5	U	1	
Lupine, scrub	4	1987	1990	F_2	1996	E	2c	S	2	
Lyonia truncata var. proctorii [NCN]	4	1993	1995	F	1995	E	6	S	2	
Lysimachia filifolia [NCN]	1	1994	1995	F	1995	E	2	U	1	
Lysimachia lydgatei [NCN]	1	1992	1997	F	1997	E	2	U	1	
Lysimachia maxima [NCN]	1	1996	1998	F	1998	E	5	U	1	
Mahoe	1	1992	1997	F	1997	E	5	U	1	
Makou	1	1994	1995	F	1995	T	8	U	1	
Malacothrix, island	1	1997	2000	F	2000	E	2	S	1	
Malacothrix, Santa Cruz Island	1	1997	2000	F	2000	E	2	U	1	
Mallow, Kern	1	1990	1998	F	1998	E	2	U	2	
Mallow, Peter's Mountain	5	1986	1990	F	1990	E	5	S	3	
Manaca, palma de	4	1990	1992	F	1992	Т	8	S	2	
Manioc, Walker's	2	1991	1993	F	1993	E	5	I	2	
Manzanita, Del Mar	1	1996	N/A	U	N/A	E	3c	D	1	
Manzanita, Ione	1	1999	N/A	U	N/A	T	5c	D	1	
Manzanita, Morro	1	1994	1998	F	1998	Т	2c	U	1	
Manzanita, pallid	1	1998	N/A	U	N/A	T	11c	U	1	
Manzanita, Presidio	1	1979	N/A	D	2001	E	12	D	1	
Manzanita, Santa Rosa Island	1	1997	2000	F	2000	E	2	S	1	
Ma`o hau hele, (=native yellow hibiscus)	1	1994	1999	F	1999	E	2	U	1	
Ma`oli`oli (Schiedea apokremnos)	1	1991	1995	F	1995	E	8	U	1	
Ma`oli`oli (Schiedea kealiae)	1	1996	1998	\mathbf{F}	1998	E	8	U	1	
Mapele	1	1996	1998	\mathbf{F}	1998	E	2	U	1	
Mariposa lily, Tiburon	1	1995	1998	F	1998	${f T}$	17	U	1	

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Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved	
Mariscus fauriei [NCN]	1	1994	1996	F	1996	E	14	U	1	
Mariscus pennatiformis {NCN]	1	1994	1999	F	1999	E	5	U	1	
Meadowfoam, Butte County	1	1992	N/A	U	N/A	E	2c	D	1	
Meadowfoam, Sebastopol	1	1991	N/A	U	N/A	E	2c	D	1	
Meadowrue, Cooley's	4	1989	1994	F	1994	E	2	S	2	
Mehamehame	1	1994	1999	F	1999	E	5	U	1	
Mesa-mint, Otay	1	1993	1998	F	1998	E	2c	D	1	
Mesa-mint, San Diego	1	1978	1984	F	1998	E	5	S	1	
Milk-vetch, Applegate's	1	1993	1998	F	1998	E	5	D	2	
Milk-vetch, Ash meadows	1	1985	1990	F	1990	T, CH	8	D	2	
Milk-vetch, Braunton's	1	1997	1999	F	1999	E	8	D	1	
Milk-vetch, Clara Hunt's	1	1997	N/A	U	N/A	E	5c	U	1	
Milk-vetch, Coachella Valley	1	1998	N/A	U	N/A	E	6	D	1	
Milk-vetch, coastal dunes	1	1998	N/A	D	2002	E	6c	S	1	
Milk-vetch, Cushenbury	1	1994	N/A	D	1997	E	2	D	1	
Milk-vetch, Deseret	6	1999	N/A	U	N/A	T	8	U	1	
Milk-vetch, Fish Slough	1	1998	1998	F	1998	T	6c	D	1	
Milk-vetch, heliotrope	6	1987	N/A	D	1995	T, CH	8	U	3	
Milk-vetch, Holmgren	6	2001	N/A	U	N/A	E	5c	D	1	
Milk-vetch, Jesup's	5	1987	1989	F	1989	E	12	S	1	
Milk-vetch, Lane Mountain	1	1998	N/A	U	N/A	E	2c	U	1	
Milk-vetch, Mancos	2	1985	1989	F	1989	E	5c	S	2	
Milk-vetch, Osterhout	6	1989	1992	F	1992	E	2	U	1	
Milk-vetch, Peirson's	1	1998	N/A	U	N/A	Т	3	U	1	
Milk-vetch, Sentry	2	1990	N/A	D	1993	E	3	S	1	
Milk-vetch, Shivwitz	6	2001	N/A	U	N/A	E	5	D	1	

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Milk-vetch, triple-ribbed	1	1998	N/A	U	N/A	E	2	D	1	
Milk-vetch, Ventura Marsh	1	2001	N/A	U	N/A	E	6c	D	1	
Milkpea, Small's	4	1985	1988	F	1999	E	5c	U	1	
Milkweed, Mead's	3	1988	N/A	U	N/A	T	8	D	1	
Milkweed, Welsh's	6	1987	1992	F	1992	T, CH	11	S	2	
Mint, Garrett's	4	1985	1999	F	1999	E	2c	U	1	
Mint, Lakela's	4	1985	1999	F	1999	E	2c	S	2	
Mint, longspurred	4	1985	1987	\mathbf{F}	1987	E	2c	U	1	
Mint, scrub	4	1985	1999	F	1999	E	2	U	1	
Mitracarpus maxwelliae [NCN]	4	1994	1998	F	1998	E	5	S	1	
Mitracarpus polycladus [NCN]	4	1994	1998	F	1998	E	5	S	1	
Monardella, willowy	1	1998	N/A	U	N/A	E	6	D	1	
Monkey-flower, Michigan	3	1990	1997	F	1997	E	9c	S	2	
Monkshood, northern wild	3	1978	1983	F	1983	T	8	D	3	
Morning-glory, Stebbins'	1	1996	2002	F	2002	E	5c	U	1	
Mountain balm, Indian Knob	1	1994	1998	F	1998	E	8c	U	2	
Mountain-mahogany, Catalina Island	1	1997	N/A	U	N/A	E	2	S	1	
Munroidendron racemosum [NCN]	1	1994	1995	F	1995	E	5	U	1	
Mustard, Carter's	4	1987	1990	F	1999	E	2	U	1	
Mustard, Penland alpine fen	6	1993	N/A	U	N/A	T	11c	S	1	
Mustard, slender-petaled	1	1984	1998	F	1998	E	5c	D	1	
Myrcia paganii [NCN]	4	1994	1997	F	1997	E	8	U	1	
Na`ena`e (Dubautia herbstobatae)	1	1991	1995	F	1998	E	8	U	1	
Na`ena`e (Dubautia latifolia)	1	1992	1995	\mathbf{F}	1995	E	5	U	1	
Na`ena`e (Dubautia pauciflorula)	1	1991	1994	\mathbf{F}	1994	E	8	U	1	
Na`ena`e (Dubautia plantaginea ssp. humilis)	1	1999	2002	F	2002	E	8	D	1	

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Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved	
Nani wai`ale`ale	1	1996	1998	F	1998	E	6	U	1	
Nanu	1	1996	1998	F	1998	E	5	U	1	
Naupaka, dwarf	1	1986	1997	F	1997	E	2	U	1	
Navarretia, few-flowered	1	1997	N/A	U	N/A	E	3	U	1	
Navarretia, many-flowered	1	1997	N/A	U	N/A	E	3	U	1	
Navarretia, spreading	1	1998	1998	F	1998	Т	2	D	1	
Nehe (Lipochaeta fauriei)	1	1994	1995	F	1995	E	5	U	1	
Nehe (Lipochaeta kamolensis)	1	1992	1997	F	1997	E	2	U	1	
Nehe (Lipochaeta lobata var. leptophylla)	1	1991	1995	F	1998	E	3	U	1	
Nehe (Lipochaeta micrantha)	1	1994	1995	F	1995	E	8	U	1	
Nehe (Lipochaeta tenuifolia)	1	1991	1995	F	1998	E	8	U	1	
Nehe (Lipochaeta waimeaensis)	1	1994	1995	F	1995	E	2	U	1	
Neraudia angulata [NCN]	1	1991	1995	F	1998	E	5	U	1	
Neraudia ovata [NCN]	1	1996	1998	F	1998	\mathbf{E}	5	U	1	
Neraudia sericea [NCN]	1	1994	1999	F	1999	E	5	U	1	
Nioi	1	1994	1996	F	1998	E	5	U	1	
Niterwort, Amargosa	1	1985	1990	F	1990	E, CH	8	U	1	
Nohoanu	1	1992	1997	F	1997	E	8	U	1	
Oak, Hinckley	2	1988	1992	F	1992	T	8	U	1	
Oha (Delissea rivularis)	1	1996	1998	F	1998	E	5	U	1	
Oha (Delissea subcordata)	1	1996	1998	F	1998	E	5	U	1	
Ohai (Sesbania tomentosa)	1	1994	1999	\mathbf{F}	1999	E	8	U	1	
Ohe`ohe (Tetraplasandra gymnocarpa)	1	1994	1998	F	1998	E	5	U	1	
Olulu	1	1994	1995	F	1995	E	2	U	1	
Onion, Munz's	1	1998	N/A	U	N/A	E	2	D	1	
Opuhe	1	1991	1995	F	1998	\mathbf{E}	5	U	1	

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Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved	
Orchid, eastern prairie fringed	3	1989	1999	F	1999	T	8	S	1	
Orchid, western prairie fringed	3	1989	1996	\mathbf{F}	1996	T	8c	S	2	
Orcutt grass, California	1	1993	1998	F	1998	E	5c	D	1	
Orcutt grass, hairy	1	1997	N/A	U	N/A	E	2c	D	1	
Orcutt grass, Sacramento	1	1997	N/A	U	N/A	E	5c	D	1	
Orcutt grass, San Joaquin	1	1997	N/A	U	N/A	T	8	S	1	
Orcutt grass, slender	1	1997	N/A	U	N/A	T	8	\mathbf{S}	1	
Owl's-clover, fleshy	1	1997	N/A	U	N/A	T	9	D	1	
Oxytheca, cushenbury	1	1994	N/A	D	1997	E	3c	D	1	
Paintbrush, ash-grey	1	1998	N/A	U	N/A	T	8	D	1	
Paintbrush, golden	1	1997	2000	F	2000	T	2	D	1	
Paintbrush, soft-leaved	1	1997	2000	F	2000	E	2	\mathbf{S}	1	
Paintbrush, Tiburon	1	1995	1998	F	1998	E	9c	U	1	
Palo colorado	4	1992	1995	F	1995	E	11	\mathbf{S}	1	
Palo de jazmin	4	1992	1995	F	1995	E	5	\mathbf{S}	1	
Palo de nigua	4	1988	1992	F	1992	E	5	\mathbf{S}	1	
Palo de ramon	4	1987	1991	F	1991	E	5	U	1	
Palo de rosa	4	1990	1994	F	1994	E	8	\mathbf{S}	2	
Pamakani (Tetramolopium capillare)	1	1994	1997	F	1997	E	2	U	1	
Pamakani (Viola chamissoniana ssp. chamissoniana)	1	1991	1995	F	1998	E	3	U	1	
Panicgrass, Carter's	1	1983	1994	F	1994	E, CH	9	U	1	
Pawpaw, beautiful	4	1986	1999	\mathbf{F}	1999	E	2	U	1	
Pawpaw, four-petal	4	1986	1999	\mathbf{F}	1999	E	11	S	2	
Pawpaw, Rugel's	4	1986	1988	F	1988	E	2	U	1	
Pelos del diablo	4	1990	1994	F	1994	E	5c	U	1	
Penny-cress, Kneeland Prairie	1	2000	N/A	U	N/A	E	2c	S	1	

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GENERAL SPECIES INFORMATIO	N		RECOVE	RY PLAN	N STATUS	SPECIES/RECOVERY STATUS				
Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved	
Pennyroyal, Todsen's	2	1981	1985	F_2	2001	E, CH	8	S	2	
Penstemon, blowout	6	1987	1992	F	1992	E	11c	I	3	
Pentachaeta, Lyon's	1	1997	1999	F	1999	E	2c	D	1	
Pentachaeta, white-rayed	1	1995	1998	F	1998	E	8	U	1	
Peperomia, Wheeler's	4	1987	1990	F	1990	E	5	S	1	
Phacelia, clay	6	1978	1982	F	1982	E	2	D	1	
Phacelia, island	1	1997	2000	F	2000	E	3	S	1	
Phacelia, North Park	6	1982	1986	F	1986	E	5	U	2	
Phlox, Texas trailing	2	1991	1995	F	1995	E	3	S	1	
Phlox, Yreka	1	2000	N/A	U	N/A	E	5c	U	1	
Phyllostegia glabra var. lanaiensis [NCN]	1	1991	1995	F	1995	E	6	E	1	
Phyllostegia hirsuta [NCN]	1	1996	1998	F	1998	E	5	U	1	
Phyllostegia kaalaensis [NCN]	1	1996	1998	F	1998	E	5	U	1	
Phyllostegia knudsenii [NCN]	1	1996	1998	F	1998	E	5	U	1	
Phyllostegia mannii [NCN]	1	1992	1996	F	1996	E	5	U	1	
Phyllostegia mollis [NCN]	1	1991	1995	F	1998	E	5	U	1	
Phyllostegia parviflora [NCN]	1	1996	1999	F	1999	E	5	U	1	
Phyllostegia velutina [NCN]	1	1996	1998	F	1998	E	2	U	1	
Phyllostegia waimeae [NCN]	1	1994	1995	F	1995	E	5	\mathbf{C}	1	
Phyllostegia warshaueri [NCN]	1	1996	1998	F	1998	E	5	U	1	
Phyllostegia wawrana [NCN]	1	1996	1998	F	1998	E	5	U	1	
Pigeon wings	4	1993	1999	\mathbf{F}	1999	Т	14	U	1	
Pilo	1	1992	1996	\mathbf{F}	1996	E	5	U	1	
Pink, swamp	5	1988	1991	F	1991	Т	1c	S	1	
Pinkroot, gentian	4	1990	N/A	U	N/A	E	2	D	1	
Piperia, Yadon's	1	1998	N/A	D	2002	E	2c	S	1	

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GENERAL SPECIES INFORMA	ATION		RECOVE	RY PLAI	N STATUS	SPECIES/RECOVERY STATUS				
Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved	
Pitaya, Davis' green	2	1979	1984	F	1984	E	3	U	1	
Pitcher-plant, Alabama canebrake	4	1989	1992	\mathbf{F}	1992	${f E}$	6	S	2	
Pitcher-plant, green	4	1979	1983	F_2	1994	E	8	S	2	
Pitcher-plant, mountain sweet	4	1988	1990	F	1990	E	3	U	1	
Platanthera holochila [NCN]	1	1996	1999	F	1999	E	5	U	1	
Plum, scrub	4	1987	1990	F_2	1996	E	2	S	3	
Poa siphonoglossa [NCN]	1	1992	1995	F	1995	E	5	U	1	
Po`e	1	1994	1996	F	1996	E	2	U	1	
Pogonia, small whorled	5	1982	1985	F_2	1992	Т	14	I	3	
Polygala, Lewton's	4	1993	1999	F	1999	E	8	U	1	
Polygala, tiny	4	1985	1988	F	1999	E	5c	S	2	
Pondberry	4	1986	1993	F	1993	E	8	D	1	
Pondweed, Little Aguja Creek	2	1991	1994	F	1994	E	5	I	1	
Popcornflower, rough	1	2000	N/A	U	N/A	\mathbf{E}	2	S	2	
Popolo ku mai	1	1994	1999	F	1999	E	5	U	1	
Poppy, Sacramento prickly	2	1989	1994	F	1994	E	3	D	2	
Poppy-mallow, Texas	2	1981	1985	F	1985	E	5c	D	1	
Potato-bean, Price's	4	1990	1993	F	1993	Т	8	I	2	
Potentilla, Hickman's	1	1998	N/A	D	2002	\mathbf{E}	5c	D	1	
Prairie-clover, leafy	4	1991	1996	F	1996	E	5	S	2	
Prickly-apple, fragrant	4	1985	1988	F	1999	E	3	S	1	
Prickly-ash, St. Thomas	4	1985	1988	\mathbf{F}	1988	E	2c	S	1	
Primrose, Maguire	6	1985	1990	\mathbf{F}	1990	T	5	S	3	
Pua `ala	1	1992	1999	\mathbf{F}	1999	E	2	U	1	
Pu`uka`a	1	1996	1996	\mathbf{F}	1996	E	5	U	1	
Pussypaws, Mariposa	1	1998	N/A	U	N/A	Т	8	D	1	

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GENERAL SPECIES INFORMATION	N		RECOVE	RY PLAI	N STATUS	SPECIES/RECOVERY STATUS				
Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved	
Rattleweed, hairy	4	1978	1984	F	1984	E	8	S	1	
Reed-mustard, Barneby	6	1992	1994	\mathbf{F}	1994	\mathbf{E}	11	S	1	
Reed-mustard, clay	6	1992	1994	F	1994	T	17	U	1	
Reed-mustard, shrubby	6	1987	1994	F	1994	E	4c	D	1	
Remya kauaiensis [NCN]	1	1991	1995	F	1995	E	5	U	1	
Remya, Maui	1	1991	1997	F	1997	E	5	U	1	
Remya montgomeryi [NCN]	1	1991	1995	F	1995	E	5	U	1	
Rhododendron, Chapman	4	1979	1983	F	1983	E	8c	S	1	
Ridge-cress, Barneby	6	1990	1993	F	1993	E	5c	U	1	
Rock-cress, Braun's	4	1995	1997	F	1997	E	5	S	1	
Rock-cress, Hoffmann's	1	1997	2000	\mathbf{F}	2000	E	2	S	1	
Rock-cress, McDonald's	1	1978	1984	\mathbf{F}	1984	\mathbf{E}	14c	U	1	
Rock-cress, shale barren	5	1989	1991	\mathbf{F}	1991	E	11	S	2	
Rockcress, Santa Cruz Island	1	1997	N/A	U	N/A	\mathbf{E}	2	S	1	
Rosemary, Apalachicola	4	1993	1994	F	1994	\mathbf{E}	8	S	2	
Rosemary, Cumberland	4	1991	1996	\mathbf{F}	1996	T	8	S	1	
Rosemary, Etonia	4	1993	1994	\mathbf{F}	1994	E	2c	S	1	
Rosemary, short-leaved	4	1993	1999	\mathbf{F}	1999	\mathbf{E}	8c	U	1	
Roseroot, Leedy's	3	1992	1998	\mathbf{F}	1998	T	9	S	1	
Rush-pea, slender	2	1985	1988	\mathbf{F}	1988	\mathbf{E}	2	S	3	
Rush-rose, island	1	1997	2000	F	2000	${f T}$	8	S	1	
Sand-verbena, large-fruited	2	1988	1992	F	1992	E	2	S	1	
Sandalwood, Lanai (=`iliahi)	1	1986	1995	F	1995	E	3	U	1	
Sandlace	4	1993	1999	\mathbf{F}	1999	E	8	U	2	
Sandwort, Bear Valley	1	1998	N/A	U	N/A	T	8	D	1	
Sandwort, Cumberland	4	1988	1996	\mathbf{F}	1996	${f E}$	8	I	2	

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Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved	
Sandwort, Marsh	1	1993	1998	F	1998	E	5	S	1	
Sanicula mariversa [NCN]	1	1991	1995	\mathbf{F}	1998	E	5	U	1	
Sanicula purpurea [NCN]	1	1996	1999	F	1999	E	5	U	1	
Schiedea, Diamond Head	1	1984	1994	\mathbf{F}	1994	E	5	U	1	
Schiedea haleakalensis [NCN]	1	1992	1997	F	1997	E	2	U	1	
Schiedea helleri [NCN]	1	1996	1998	\mathbf{F}	1998	E	5	U	1	
Schiedea hookeri [NCN]	1	1996	1999	F	1999	E	8	U	1	
Schiedea kaalae [NCN]	1	1991	1995	F	1998	E	2	U	1	
Schiedea kauaiensis [NCN]	1	1996	1998	F	1998	E	5	U	1	
Schiedea lydgatei [NCN]	1	1992	1996	F	1996	E	8	U	1	
Schiedea membranacea [NCN]	1	1996	1998	\mathbf{F}	1998	E	2	U	1	
Schiedea nuttallii [NCN]	1	1996	1999	F	1999	E	5	U	1	
Schiedea sarmentosa [NCN]	1	1996	1998	\mathbf{F}	1998	E	8	U	1	
Schiedea spergulina var. leiopoda [NCN]	1	1994	1995	\mathbf{F}	1995	E	6	U	1	
Schiedea spergulina var. spergulina [NCN]	1	1994	1995	F	1995	${f T}$	9	U	1	
Schiedea verticillata [NCN]	1	1996	1998	F	1998	E	2	U	1	
Schoepfia arenaria [NCN]	4	1991	1992	F	1992	T	5c	U	1	
Seablite, California	1	1994	N/A	U	N/A	E	8	U	1	
Sedge, golden	4	2002	N/A	U	N/A	E	5	U	1	
Sedge, Navajo	2	1985	1987	F	1987	T, CH	8	D	1	
Sedge, white	1	1997	N/A	U	N/A	E	5c	U	1	
Silene alexandri [NCN]	1	1992	1996	F	1996	E	5	С	1	
Silene hawaiiensis [NCN]	1	1994	1996	F	1996	T	8	U	1	
Silene lanceolata [NCN]	1	1992	1996	F	1996	E	2	U	1	
Silene perlmanii [NCN]	1	1991	1995	F	1998	E	5	С	1	
Silversword, Mauna Loa (=Ka'u)	1	1993	1995	\mathbf{F}	1995	E	2	I	2	

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Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved	
Skullcap, Florida	4	1992	1994	F	1994	Т	2	U	1	
Skullcap, large-flowered	4	1986	1996	\mathbf{F}	1996	${f T}$	8	I	2	
Snakeroot	4	1987	1990	F	1999	E	2	S	2	
Sneezeweed, Virginia	5	1998	N/A	D	2000	${f T}$	2	\mathbf{S}	1	
Snowbells, Texas	2	1984	1987	F	1987	E	2	S	1	
Spermolepis hawaiiensis [NCN]	1	1994	1999	F	1999	E	5	U	1	
Spineflower, Ben Lomond	1	1994	1998	F	1998	E	9	U	1	
Spineflower, Howell's	1	1992	1998	F	1998	E	8	U	1	
Spineflower, Monterey	1	1994	1998	F	1998	T, CH	15	S	2	
Spineflower, Orcutt's	1	1996	N/A	U	N/A	E	2	D	1	
Spineflower, Robust (incl. Scotts Valley) (Chorizanthe robusta (incl. vars. robusta and hartwegii)) (Chorizanthe robusta var. hartwegii only)	1	1994	1998	F	1998	Е, СН	3c	U	1	
Spineflower, Robust (incl. Scotts Valley) (Chorizanthe robusta (incl. vars. robusta and hartwegii)) (Chorizanthe robusta var. robusta only)	1	1994	N/A	D	2000	Е, СН	3	S	1	
Spineflower, slender-horned	1	1987	N/A	U	N/A	E	1c	D	1	
Spineflower, Sonoma	1	1992	1998	F	1998	E	5	S	1	
Spiraea, Virginia	5	1990	1992	F	1992	Т	8	D	3	
Spurge, deltoid	4	1985	1988	\mathbf{F}	1999	E	6c	U	2	
Spurge, Garber's	4	1985	1988	F	1999	Т	8	U	2	
Spurge, Hoover's	1	1997	N/A	U	N/A	Т	2c	D	1	
Spurge, telephus	4	1992	1994	F	1994	Т	2	U	1	
Stenogyne angustifolia var. angustifolia [NCN]	1	1979	N/A	D	1993	E	2	U	1	
Stenogyne bifida [NCN]	1	1992	1996	F	1996	E	2	U	1	
Stenogyne campanulata [NCN]	1	1992	1995	F	1995	E	5	U	1	

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Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved	
Stenogyne kanehoana [NCN]	1	1992	1995	F	1998	E	5	U	1	
Stickseed, showy	1	2002	N/A	U	N/A	\mathbf{E}	5	S	1	
Stonecrop, Lake County	1	1997	N/A	U	N/A	E	2c	U	1	
Sumac, Michaux's	4	1989	1993	F	1993	E	2	S	1	
Sunburst, Hartweg's golden	1	1997	N/A	U	N/A	E	2	U	1	
Sunburst, San Joaquin adobe	1	1997	N/A	U	N/A	T	2	U	1	
Sunflower, Eggert's	4	1997	1999	F	1999	T	14	I	4	
Sunflower, Pecos (=puzzle, =paradox)	2	1999	N/A	U	N/A	T	8	U	1	
Sunflower, San Mateo woolly	1	1995	1998	F	1998	\mathbf{E}	11	U	1	
Sunflower, Schweinitz's	4	1991	1994	F	1994	E	5	S	1	
Sunray, Ash Meadows	1	1985	1990	F	1990	T, CH	15	S	4	
Sunshine, Sonoma	1	1991	N/A	U	N/A	E	5c	D	1	
Taraxacum, California	1	1998	N/A	U	N/A	\mathbf{E}	5	D	1	
Tarplant, Gaviota	1	2000	N/A	U	N/A	${f E}$	3	U	1	
Tarplant, Otay	1	1998	N/A	U	N/A	T	5	D	1	
Tarplant, Santa Cruz	1	2000	N/A	U	N/A	Т	8	D	1	
Ternstroemia subsessilis [NCN]	4	1992	1995	F	1995	E	5	S	1	
Tetramolopium arenarium [NCN]	1	1994	1996	F	1996	E	5	U	1	
Tetramolopium filiforme [NCN]	1	1991	1995	F	1998	\mathbf{E}	2	U	1	
Tetramolopium lepidotum ssp. Lepidotum [NCN]	1	1991	1995	F	1998	E	3	U	1	
Tetramolopium remyi [NCN]	1	1991	1995	F	1995	E	2	U	1	
Tetramolopium rockii [NCN]	1	1992	1996	F	1996	T	14	U	1	
Thelypody, Howell's spectacular	1	1999	2002	F	2002	T	8	S	1	
Thistle, Chorro Creek bog	1	1994	1998	F	1998	E	9	S	2	
Thistle, fountain	1	1995	1998	F	1998	E	6	U	1	
Thistle, La Graciosa	1	2000	N/A	U	N/A	E	2	I	1	

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Thistle, Loch Lomond coyote	1	1985	N/A	U	N/A	E	14	D	2	
Thistle, Pitcher's	3	1988	2002	F	2002	T	8c	S	1	
Thistle, Sacramento Mountains	2	1987	1993	F	1993	T	2	S	2	
Thistle, Suisun	1	1997	N/A	U	N/A	E	3c	D	1	
Thornmint, San Diego	1	1998	N/A	U	N/A	T	2	S	1	
Thornmint, San Mateo	1	1985	1998	F	1998	\mathbf{E}	6c	D	1	
Trematolobelia singularis [NCN]	1	1996	1998	F	1998	E	5	U	1	
Townsendia, Last Chance	6	1985	1993	F	1993	Т	11c	S	2	
Trillium, persistent	4	1978	1984	F	1984	\mathbf{E}	8	S	2	
Trillium, relict	4	1988	1991	F	1991	E	8	U	2	
Tuctoria, Greene's	1	1997	N/A	U	N/A	E	2c	D	1	
Twinpod, Dudley Bluffs	6	1990	1993	F	1993	Т	14	S	2	
Uhiuhi	1	1986	1994	F	1994	E	2	U	1	
Uvillo	4	1994	1998	F	1998	${f E}$	8	S	1	
Vernonia proctorii [NCN]	4	1993	1995	F	1995	E	5c	S	2	
Vigna o-wahuensis [NCN]	1	1994	1999	F	1999	E	5	U	1	
Viola helenae [NCN]	1	1991	1994	F	1994	\mathbf{E}	2	U	1	
Viola lanaiensis [NCN]	1	1991	1995	F	1995	E	2	U	1	
Viola oahuensis [NCN]	1	1996	1998	F	1998	E	5	U	1	
Vervain, Red Hills	1	1998	N/A	U	N/A	T	8	U	1	
Vetch, Hawaiian	1	1978	1984	F	1984	E	2c	U	1	
Wahane	1	1996	N/A	Exempt	N/A	E	5	U	1	
Wallflower, Ben Lomond	1	1994	1998	F	1998	E	8	U	1	
Wallflower, Contra Costa	1	1978	1980	F_2	1984	E, CH	6	D	1	
Wallflower, Menzies'	1	1992	1998	F	1998	E	2c	S	1	
Walnut, West Indian or nogal	4	1997	1999	F	1999	E	5	U	1	

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Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved	
Warea, wide-leaf	4	1987	1993	F	1993	E	2c	U	1	
Water-plantain, Kral's	4	1990	1991	F	1991	T	5	S	1	
Water-umbel, Huachuca	2	1997	N/A	U	N/A	E, CH	3c	S	1	
Water-willow, Cooley's	4	1989	1994	F	1994	E	8	U	1	
Watercress, Gambel's	1	1993	1998	F	1998	E	2	U	1	
Whitlow-wort, papery	4	1987	1990	F	1999	T	8	I	4	
Wild-buckwheat, clay-loving	6	1984	1988	F	1988	E, CH	5	D	2	
Wild-buckwheat, gypsum	2	1981	1984	\mathbf{F}	1984	T, CH	8	S	2	
Wild-buckwheat, southern mountain	1	1998	N/A	U	N/A	T	3	D	1	
Wild-rice, Texas	2	1978	1985	F_2	1996	E, CH	2c	D	1	
Wire-lettuce, Malheur	1	1982	1991	F	1991	E, CH	2	S	2	
Wireweed	4	1987	1990	F	1999	E	2	I	3	
Woodland-star, San Clemente Island	1	1997	N/A	U	N/A	E	2	S	1	
Woolly-star, Hoover's	1	1990	1998	F	1998	T	2	S	3	
Woolly-star, Santa Ana River	1	1987	N/A	U	N/A	E	6c	D	1	
Wooly-threads, San Joaquin	1	1990	1998	F	1998	E	1	S	1	
Xylosma crenatum [NCN]	1	1992	1995	F	1995	E	5	U	1	
Yellowhead, desert	6	2002	N/A	U	N/A	Т	7	S	1	
Yerba santa, Lompoc	1	2000	N/A	U	N/A	E	2	S	1	
Ziziphus, Florida	4	1989	1990	\mathbf{F}	1999	E	5	S	2	
Non-Flowering Plants										
Adiantum vivesii [NCN]	4	1993	1995	F	1995	E	5	S	1	
Asplenium fragile var. insulare [NCN]	1	1994	1998	\mathbf{F}	1998	E	6	U	1	
Cladonia, Florida perforate	4	1993	1999	F	1999	E	2	U	1	
Cypress, Gowen	1	1998	N/A	D	2002	T	9c	S	1	
Cypress, Santa Cruz	1	1987	1998	F	1998	E	14	S	2	

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Appendix 1 - Data as of September 30, 2002

GENERAL SPECIES INFORMA	ΓΙΟΝ		RECOVE	RY PLAI	N STATUS	SPECIES/RECOVERY STATUS				
Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved	
Diellia, asplenium-leaved	1	1994	1999	F	1999	E	2	U	1	
Diellia falcata [NCN]	1	1991	1995	F	1998	\mathbf{E}	8	U	1	
Diellia pallida [NCN]	1	1994	1995	F	1995	E	5	U	1	
Diellia unisora [NCN]	1	1994	1995	F	1998	E	11	U	1	
Diplazium molokaiense [NCN]	1	1994	1998	F	1998	E	5	U	1	
Elaphoglossum serpens [NCN]	4	1993	1995	F	1995	E	5	U	1	
Fern, Alabama streak-sorus	4	1992	1996	F	1996	T	9	S	1	
Fern, Aleutian shield	7	1988	1992	F	1992	E	8	S	1	
Fern, American hart's-tongue	4	1989	1993	F	1993	T	9	S	2	
Fern, Elfin tree	4	1987	1991	F	1991	E	5	U	1	
Fern, pendant kihi	1	1994	1999	F	1999	E	11	U	1	
Ihi`ihi	1	1992	1996	F	1996	E	8	D	1	
Lichen, rock gnome	4	1995	1997	F	1997	E	5	U	1	
Oha wai (Clermontia drepanomorpha)	1	1996	1998	F	1998	E	2	U	1	
Oha wai (Clermontia lindseyana)	1	1994	1996	F	1996	E	2	U	1	
Oha wai (Clermontia oblongifolia ssp. brevipes)	1	1992	1996	F	1996	E	6	U	1	
Oha wai (Clermontia oblongifolia ssp. mauiensis)	1	1992	1997	F	1997	E	6	U	1	
Oha wai (Clermontia peleana)	1	1994	1996	F	1996	E	5	\mathbf{C}	1	
Oha wai (Clermontia pyrularia)	1	1994	1996	F	1996	E	2	U	1	
Oha wai (Clermontia samuelii)	1	1999	2002	F	2002	\mathbf{E}	5	D	1	
Pauoa	1	1994	1998	F	1998	E	5	U	1	
Polystichum calderonense [NCN]	4	1993	1995	F	1995	E	5	U	1	
Pteris lidgatei [NCN]	1	1994	1998	F	1998	E	5	U	1	
Quillwort, Louisiana	4	1992	1996	F	1996	E	14	I	2	
Quillwort, black spored	4	1988	1993	F	1993	E	5	S	1	
Quillwort, mat-forming	4	1988	1993	F	1993	\mathbf{E}	8	S	1	

 $^{^{\}ast}$ Earlier drafts and final plans for some individual species may have become incorporated into later multi-species or ecosystem plans

Appendix 1 - Data as of September 30, 2002

GENERAL SPECIES INFORMATION	N		RECOVE	RY PLAN	N STATUS	SPECIES/RECOVERY STATUS				
Common Name	Lead Region	Date Listed	Date of First Final Plan	Plan Stage*	Date of Current Plan	Current Listing Classifi- cation	Recovery Priority Number	Population Status	Recovery Achieved	
Tectaria estremerana [NCN]	4	1993	1995	F	1995	E	8	S	1	
Thelypteris inabonensis [NCN]	4	1993	1995	\mathbf{F}	1995	E	5	U	1	
Thelypteris verecunda [NCN]	4	1993	1995	F	1995	E	5	U	1	
Thelypteris yaucoensis [NCN]	4	1993	1995	F	1995	E	5	U	1	
Torreya, Florida	4	1984	1986	F	1986	E	5	D	1	
Wawae`iole (Huperzia mannii)	1	1992	1997	\mathbf{F}	1997	E	2	U	1	
Wawae`iole (Lycopodium (=Phlegmariurus) nutans)	1	1994	1996	F	1998	E	5	U	1	

 $^{^{\}ast}\,$ Earlier drafts and final plans for some individual species may have become incorporated into later multi-species or ecosystem plans

Endangered Species Program Contacts

Washington D.C. Office

Endangered Species Program 4401 N. Fairfax Drive, Room 420 Arlington, VA 22203 http://endangered.fws.gov

Chief, Division of Conservation and Classification: Christine Nolin, 703/358-2171

Chief, Division of Consultation, HCPs, Recovery, and State Grants: Patrick Leonard, 703/358-2171

Chief, Division of Partnerships and Outreach: Claire Cassel, 703/358-2390

Region One — Pacific

Eastside Federal Complex 911 N.E. 11th Avenue Portland OR 97232-4181 http://pacific.fws.gov/ecoservices/

Chief, Division of Endangered Species: Wendi Weber, 503/231-6158

Jurisdiction: Hawaii, Idaho, Oregon, Washington, American Samoa, Commonwealth of the Northern Mariana Islands, Guam, and the Pacific Trust Territories

California Nevada Operations Office (CNO)

2800 Cottage Way Room W-2606 Sacramento, CA 95825-1846 http://pacific.fws.gov/cno.htm

Endangered Species Program Manager: Michael Fris 916/414-6464

Jurisdiction: California and Nevada

Region Two — Southwest

P.O. Box 1306, Rm 4012 Albuquerque, NM 87102 http://ifw2es.fws.gov/EndangeredSpecies

 $\begin{array}{c} \textit{Chief, Division of Endangered Species:} \\ \textit{Stuart Leon, } 505/248\text{-}6657 \end{array}$

Jurisdiction: Arizona, New Mexico, Oklahoma, and Texas

Region Three — Great Lakes, Big Rivers

Bishop Henry Federal Building One Federal Drive Ft. Snelling, MN 55111-4056 http://midwest.fws.gov//endangered/

Chief, Ecological Services Operations: T.J. Miller, 612/713-5334

Jurisdiction: Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio, and Wisconsin

Region Four — Southeast

1875 Century Boulevard, Suite 200 Atlanta, GA 30345 http://southeast.fws.gov/es/

Chief, Endangered Species: Gloria Bell, 404/679-7100

Jurisdiction: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Puerto Rico, and the U.S. Virgin Islands

Region Five — Northeast

300 Westgate Center Drive Hadley, MA 01035-9589 http://northeast.fws.gov/ ecologicalservices Chief, Division of Endangered Species: Marty Miller, 413/253-8615

Jurisdiction: Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Virginia, and West Virginia

Region Six — Mountain Prairie

134 Union Boulevard Lakewood CO 80228 http://mountain-prairie.fws.gov/endspp

Division of Ecological Services Jill Parker, 303/236-4255

Jurisdiction: Colorado, Kansas, Montana, Nebraska, North Dakota, South Dakota, Utah, and Wyoming

Region Seven — Alaska

1011 E. Tudor Road Anchorage, AK 99503-6199 http://alaska.fws.gov/es/te.cfm

Division of Endangered Species: Sue Detwiler, 907/786-3868

Jurisdiction: Alaska



U.S. Fish and Wildlife Service Endangered Species Program

http://endangered.fws.gov

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