

February 3, 1999

Dear Species Specialist:

You were contacted recently about a series of CALFED workshops regarding species and habitat conservation. Your attendance is requested for the species review workshop on February 10, 1999 in Sacramento. Your participation in this workshop will provide you the opportunity to give expert technical input into species and habitat conservation aspects of the CALFED Bay-Delta Program, a program of activities that encompasses much of California's great Central Valley. Your assistance will provide CALFED with valuable information with which to plan future actions to support species and habitat conservation and recovery.

The California Department of Fish and Game (DFG), U.S. Fish and Wildlife Service (USFWS), and National Marine Fisheries Service (NMFS) are working on the CALFED Conservation Strategy, which will establish goals for conservation of 205 target species and a number of vegetation types/natural communities. The goals for these species include achieving full or nearly full recovery, contributing to recovery, and sustaining existing populations without compromising future recovery efforts. The CALFED Conservation Strategy Team will be hosting three species review workshops. The workshop in which you will be participating focuses on wetland and agricultural communities and associated target species.

Our starting point is based on existing species recovery plans, the proposed CALFED Ecosystem Restoration Program, staff expertise, and existing internal information. We also recognize the need for input from a number of individuals who collectively represent a large body of knowledge and expertise with the species and communities we are addressing in the Conservation Strategy.

The enclosed materials are for your review before the workshop. These materials include:

- the meeting agenda,
- the CALFED Ecosystem Restoration Program focus area map,
- descriptions of natural community types covered by the Conservation Strategy,

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- a list of species evaluated in the Conservation Strategy that are associated with wetland and agricultural communities for which recovery or contribution to recovery is a goal ("R" and "r" species),
- a list of species evaluated in the Conservation Strategy that are associated with wetland and agricultural communities for which sustaining existing populations is a goal ("m" species), and
- definitions of "R", "r", and "m" species goals.

We will distribute additional materials at the workshop with information on CALFED targets for habitat restoration and on habitats affected by CALFED actions. We will also have data generated from geographic information systems (GIS) for your use at the workshop.

At the workshop you will work with a team of other expert biologists/ecologists to review information on the effects of CALFED actions on habitats and to do the following:

- verify or modify CALFED's proposed goals for species,
- determine "prescriptions" for species (i.e., the conditions, such as acres of habitat or number of populations, that should be met to achieve species goals),
- determine if CALFED actions and conservation measures are sufficient to meet species goals,
- recommend changes or additions to conservation measures needed to achieve species goals, and
- identify data gaps and monitoring needs.

These tasks and this aspect of CALFED will be more fully explained at the workshop.

Jones & Stokes Associates is providing environmental consulting expertise to the CALFED Conservation Strategy and will hold the workshop at the JSA office. Workshop logistics are:

- **The workshop will be held on Wednesday, February 10, 1999, 9:00 a.m. to 4:30 p.m. at Jones & Stokes Associates, 2600 V Street, Sacramento, CA.**
- **Our building is the historic old brick schoolhouse between 26th Street and 27th Street, and V Street and W Street. (See enclosed map for directions.)**

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- **There is ample street parking in front of the building on V Street and on 26th and 27th Streets.**
- **Check in with the receptionist when you enter.**
- **Lunch will be provided.**

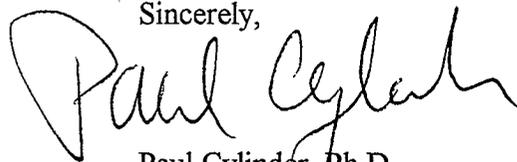
If you are unable to attend the workshop, your written comments would be greatly appreciated. We will have additional materials the day of the meeting and, if you wish to provide recommendations for species and natural communities within your area of expertise, we will send these materials to you. Please contact us before February 10, 1999.

If you have questions regarding the workshop, please contact either us or one of the following agency staff:

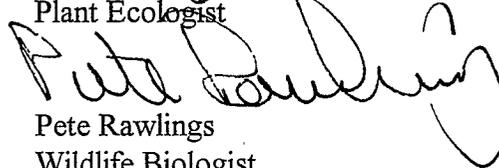
Mike Fris - USFWS - 916/979-2710  
Jeff Single - DFG - 559/243-4014  
Karl Halupka - NMFS - 707/575-6057  
Marti Kie - CALFED - 916/654-4558

Your input into development of the CALFED Conservation Strategy is greatly appreciated. USFWS, NMFS, and DFG are deeply committed to the formulation of a strong conservation strategy that ensures benefits to a large number of species and natural communities. You can help in the achievement of that goal. We hope that you will take this opportunity to provide timely input into one of the largest ecosystem restoration programs undertaken.

Sincerely,



Paul Cylinder, Ph.D.  
Plant Ecologist



Pete Rawlings  
Wildlife Biologist

PC:PR:pa  
Attachments

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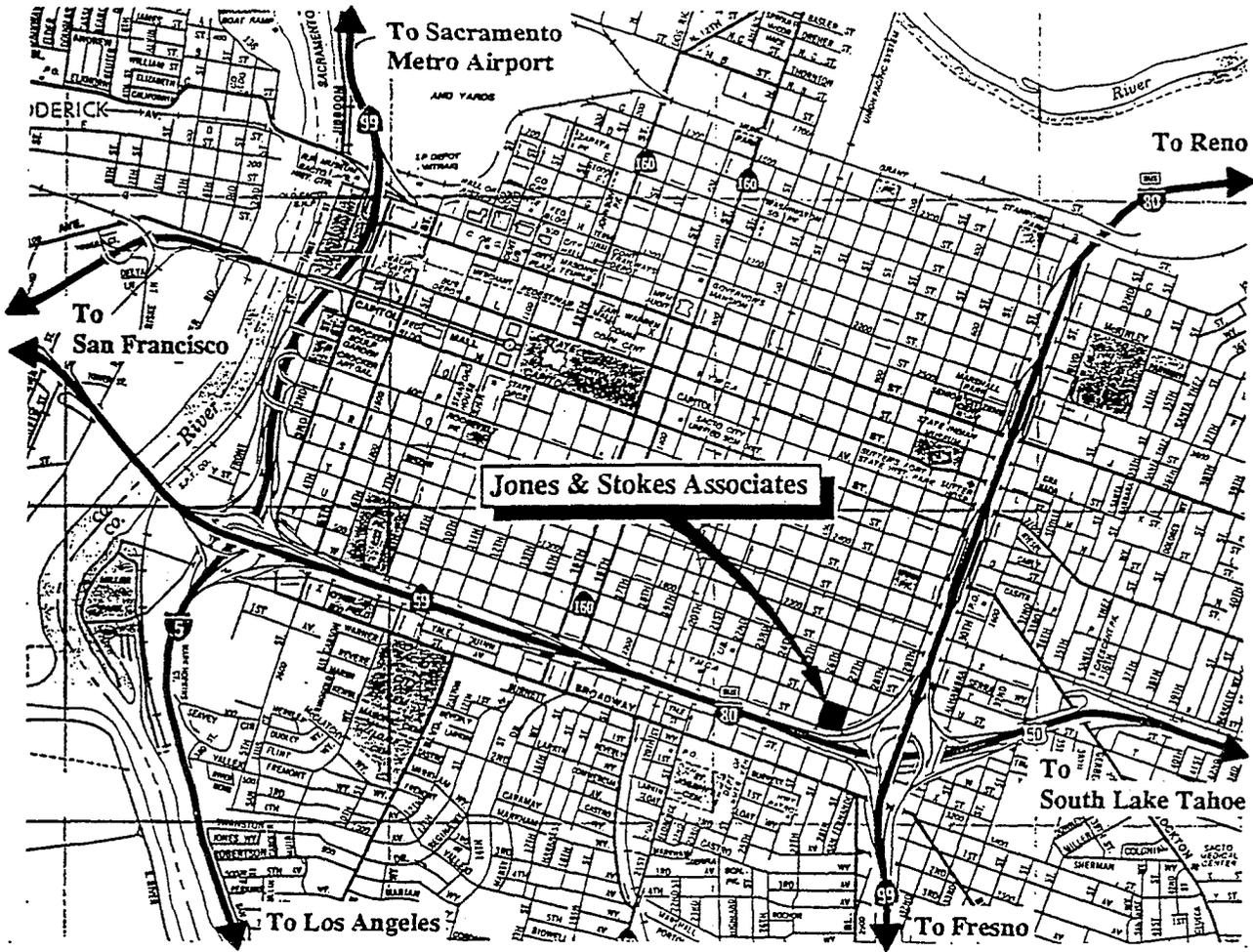
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Wetland Plants to Be Included in the CALFED Conservation Strategy

Scientific Name	Common Name	Goals	Status		
			Federal	State	Other
<i>Agrostis hendersonii</i>	Henderson's bent grass	m	-	-	3/SC
<i>Alopecurus aequalis</i> var. <i>sonomensis</i>	Sonoma alopecurus	m	E	-	1B
<i>Aster lentus</i>	Suisun Marsh aster	R	-	-	1B/SC
<i>Astragalus tener</i> var. <i>ferrisiae</i>	Ferris' milkvetch	m	-	-	1B/SC
<i>Astragalus tener</i> var. <i>tener</i>	Alkali milkvetch	r	-	-	1B/SC
<i>Atriplex depressa</i>	Brittlescale	m	-	-	1B/SC
<i>Atriplex joaquiniana</i>	San Joaquin spearscale	m	-	-	1B/SC
<i>Atriplex minuscula</i>	Lesser saltscale	m	-	-	1B/SC
<i>Atriplex vallicola</i>	Lost Hills crownscale	m	-	-	1B/SC
<i>Blennosperma bakeri</i>	Sonoma sunshine	m	E	CE	1B
<i>Brodiaea pallida</i>	Chinese Camp brodiaea	m	T	CE	1B
<i>Carex albida</i>	White sedge	m	E	CE	1B
<i>Carex comosa</i>	Bristly sedge	r	-	-	2
<i>Castilleja campestris</i> ssp. <i>succulenta</i>	Succulent owl's-clover	m	T	CE	1B
<i>Chamaesyce hooveri</i>	Hoover's spurge	m	T	-	1B
<i>Cirsium crassicaule</i>	Slough thistle	m	-	-	1B/SC
<i>Cirsium hydrophilum</i> var. <i>hydrophilum</i>	Suisun thistle	R	E	-	1B
<i>Cordylanthus maritimus</i> ssp. <i>palustris</i>	Point Reyes bird's-beak	m	-	-	1B/SC
<i>Cordylanthus mollis</i> ssp. <i>hispidus</i>	Hispid bird's-beak	m	-	-	1B/SC
<i>Cordylanthus mollis</i> ssp. <i>mollis</i>	Soft bird's-beak	R	E	R	1B
<i>Cordylanthus palmatus</i>	Palmate-bracted bird's-beak	m	E	CE	1B
<i>Eleocharis quadrangulata</i>	Four-angled spikerush	m	-	-	2
<i>Eryngium constancei</i>	Loch Lomond button-celery	m	E	CE	1B
<i>Eryngium spinosepalum</i>	Spiny-sepaled button-celery	m	-	-	1B/SC
<i>Gratiola heterosepala</i>	Boggs Lake hedge-hyssop	m	-	CE	1B
<i>Hibiscus lasiocarpus</i>	Rose-mallow	m	-	-	2
<i>Juglans californica</i> var. <i>hindsii</i>	Northern California black walnut (native stands)	r	-	-	1B/SC
<i>Juncus leiospermus</i> var. <i>ahartii</i>	Ahart's dwarf rush	m	-	-	1B/SC
<i>Lasthenia conjugens</i>	Contra Costa goldfields	m	E	-	1B
<i>Lathyrus jepsonii</i> var. <i>jepsonii</i>	Delta tule pea	r	-	-	1B/SC
<i>Legenere limosa</i>	Legenere	m	-	-	1B/SC
<i>Lembertia congdonii</i>	San Joaquin woollythreads	m	E	-	1B
<i>Lilaeopsis masonii</i>	Mason's lilaeopsis	R	-	R	1B/SC
<i>Lilium pardalinum</i> ssp. <i>pitkinense</i>	Pitkin Marsh lily	m	E	CE	1B
<i>Limnanthes floccosa</i> ssp. <i>californica</i>	Butte County meadowfoam	m	E	CE	1B
<i>Limnanthes vinculans</i>	Sebastopol meadowfoam	m	E	CE	1B
<i>Limosella subulata</i>	Delta mudwort	r	-	-	2
<i>Navarretia leucocephala</i> ssp. <i>pauciflora</i>	Few-flowered navarretia	m	E	CT	1B
<i>Navarretia leucocephala</i> ssp. <i>plieantha</i>	Many-flowered navarretia	m	E	CT	1B
<i>Navarretia myersii</i>	Pincushion navarretia	m	-	-	1B
<i>Neostapfia colusana</i>	Colusa grass	m	T	CE	1B
<i>Orcuttia inaequalis</i>	San Joaquin Valley orcutt grass	m	T	CE	1B
<i>Orcuttia pilosa</i>	Hairy orcutt grass	m	E	CE	1B
<i>Orcuttia tenuis</i>	Slender orcutt grass	m	T	CE	1B
<i>Orcuttia viscida</i>	Sacramento orcutt grass	m	E	CE	1B
<i>Plagiobothrys strictus</i>	Calistoga popcornflower	m	E	CT	1B
<i>Pleuropogon hooverianus</i>	North Coast semaphore grass	m	-	R	1B/SC
<i>Poa napensis</i>	Napa blue grass	m	E	CE	1B
<i>Polygonum marinense</i>	Marin knotweed	m	-	-	3/SC
<i>Potamogeton zosteriformis</i>	Eel-grass pondweed	m	-	-	2
<i>Rhynchospora californica</i>	California beaked-rush	m	-	-	1B/SC
<i>Sagittaria sanfordii</i>	Sanford's arrowhead	m	-	-	1B/SC
<i>Scutellaria lateriflora</i>	Mad-dog skullcap	m	-	-	2
<i>Sidalcea oregana</i> ssp. <i>hydrophila</i>	Marsh checkerbloom	m	-	-	1B/SC
<i>Sidalcea oregana</i> ssp. <i>valida</i>	Kenwood Marsh checkerbloom	m	E	CE	1B
<i>Suaeda californica</i>	California seablite	m	E	-	1B
<i>Trifolium amoenum</i>	Showy Indian clover	m	E	-	1B
<i>Tuctoria greenei</i>	Greene's tuctoria	m	E	R	1B
<i>Tuctoria mucronata</i>	Crampton's tuctoria	r	E	CE	1B

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**From the Sacramento Airport, San Francisco, or Los Angeles**

- Take Business 80 (Capital City Freeway) east and exit on 15th Street
- As you exit, keep left and follow "X" Street parallel to the freeway to 26th Street
- Turn left onto 26th Street, go underneath the freeway, proceeding to "V" Street
- Turn right onto "V" Street and park in front of the main entrance

**From South Lake Tahoe**

- Take U.S. 50 west and exit on 26th Street; merge right immediately
- Turn right onto 26th Street and proceed 1 block to "V" Street
- Turn right onto "V" Street and park in front of the main entrance



**Jones & Stokes Associates**  
 2600 V Street  
 Sacramento, CA 95818  
 (916) 737-3000

**From Fresno**

- Take State Route 99 north and exit on Broadway
- Turn left onto Broadway and proceed to 26th Street
- Turn right onto 26th Street, go underneath the freeway, proceeding to "V" Street
- Turn right onto "V" Street and park in front of the main entrance

**From Reno**

- Take Business 80 (Capital City Freeway) west and exit on "P" Street
- As you exit, keep left and follow 29th Street parallel to the freeway, then merge right
- Keep right and stay on 29th Street as it curves to the right
- Turn right onto 26th Street and proceed 1 block to "V" Street
- Turn right onto "V" Street and park in front of the main entrance

**Conservation Strategy Team  
Species Expert Review  
Workshop Agenda**

**Jones & Stokes Associates - Boardroom  
February 10, 1999  
9:00 am-4:30 pm**

1. Introduction - Paul Cylinder (9:00-9:15)
2. Overview of the Conservation Strategy - Mike Fris and Jeff Single (9:15-9:45)
3. Introduction to Review Materials - Pete Rawlings (9:45-10:00)
4. Breakout Group Work Sessions - All (10:00-12:00)
  - Break - (11:00-11:10)
5. Lunch - (12:00-12:30)
6. Breakout Group Work Sessions - All (12:30-4:00)
  - Break - (3:00-3:10)
7. Wrap-Up - Mike Fris and Jeff Single (4:00-4:30)

### NCCP Habitat Type Descriptions

NCCP Habitat Type	Habitat Description
Tidal perennial aquatic	Tidal perennial aquatic habitat is defined as deep water (greater than 3 meters in depth from mean low low tide) aquatic, shallow (less than or equal to 3 meters in depth from mean low low tide) aquatic, and unvegetated intertidal (i.e., tideflats) zones of estuarine bays, river channels, and sloughs.
Lacustrine	Lacustrine habitat is defined as permanent bodies of water that do not support emergent vegetation and are not subject to tidal exchange, including lakes, ponds, oxbows, gravel pits, and flooded islands.
Saline emergent	Saline emergent habitat is defined to include portions of San Francisco, San Pablo, and Suisun Bays and the Delta that support emergent wetland plant species that are tolerant of saline or brackish conditions within the intertidal zone or on lands that historically were subject to tidal exchange (i.e., diked wetlands).
Tidal freshwater emergent	Tidal freshwater emergent habitat is defined to include portions of the intertidal zones of the Delta that support emergent wetland plant species that are not tolerant of saline or brackish conditions.
Nontidal freshwater permanent emergent	Nontidal freshwater permanent emergent habitat is defined to include permanent (natural and managed) wetlands, including meadows, dominated by wetland plant species that are not tolerant of saline or brackish conditions.

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Natural seasonal wetland	Natural seasonal wetland habitat is defined to include vernal pools and other non-managed seasonal wetlands with natural hydrology that are dominated by herbaceous vegetation and annually pond surface water or maintain saturated soils at the ground surface for a portion of the year of sufficient duration to support facultative or obligate wetland plant species.
Managed seasonal wetland	Managed seasonal wetland habitat is defined to include wetlands dominated by native or non-native herbaceous plants, excluding croplands farmed for profit (e.g., corn and rice), that are flooded and drained by land managers during specific periods to enhance habitat values for specific wildlife species. Ditches and drains associated with managed seasonal wetlands are included in this habitat type.
Valley riverine aquatic	Valley riverine aquatic habitat is defined to include the water column of flowing streams and rivers in low-gradient channel reaches below approximately 300 feet in elevation that are not tidally influenced, including associated shaded riverine aquatic, pool, riffle, run, and unvegetated channel substrate (including seasonally exposed channel bed) habitat features, and sloughs, backwaters, overflow channels, and flood bypasses hydrologically connected to stream and river channels.
Montane riverine aquatic	Montane riverine aquatic habitat is defined to include the water column of flowing streams and rivers above approximately 300 feet in elevation, including associated shaded riverine aquatic, pool, riffle, run, and unvegetated channel substrate (including seasonally exposed channel bed) habitat features, and sloughs, backwaters, and overflow channels hydrologically connected to stream and river channels.

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Valley/foothill riparian	Valley/foothill riparian habitat is defined to include all successional stages of woody vegetation generally dominated by willow, Fremont cottonwood, valley oak, or sycamore within the active and historical floodplains of low-gradient reaches of streams and rivers generally below 300 feet in elevation.
Montane riparian	Montane riparian habitat is defined to include all successional stages of woody vegetation such as willow, black cottonwood, white alder, birch, and dogwood within the active floodplains of moderate to high gradient reaches of streams and rivers generally above 300 feet in elevation.
Grassland	Grassland habitat is defined to include upland vegetation communities dominated by introduced and native annual and perennial grasses, including unirrigated and irrigated pasture lands.
Inland dune scrub	Inland dune scrub habitat consists of vegetated stabilized sand dunes associated with river and estuarine systems.
Upland scrub	Upland scrub habitat is defined to include habitat areas that are dominated by shrubs characteristic of coastal scrub and chaparral communities.
Valley/foothill woodland and forest	Valley/foothill woodland and forest habitat is defined to include non-riparian forest, woodland, and savanna below 300 feet in elevation. These vegetation communities are commonly dominated by valley oak, blue oak, interior live oak, coast live oak, and/or foothill pine.
Montane woodland and forest	Montane woodland and forest habitat is defined to include non-riparian forest and woodland above 300 feet in elevation. These vegetation communities are commonly dominated by pine, fir, cedar, and/or black oak.

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Upland cropland	Upland cropland habitat is defined to include agricultural lands farmed for grain, field, truck, and other crops that are not seasonally flooded.
Seasonally flooded agriculture	Seasonally flooded agriculture habitat is defined to include agricultural lands farmed for grain, field, truck, rice, and other crops that require seasonal flooding for durations of a least 1 week as a management practice (e.g., pest control and irrigation) or are purposefully flooded seasonally to enhance habitat values for specific wildlife species (e.g., duck clubs). Agricultural ditches and drains associated with maintaining seasonally flooded agriculture are included in this habitat type.

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Evaluation Species Associated with Wetland and Agricultural NCCP Habitats  
with Proposed "R" and "r" Species Goals

Evaluation Species	Proposed Species Goal		NCCP Habitat Type <sup>1</sup>																		
	"R"	"r"	Wetland and Agricultural Habitats							Aquatic Habitats				Upland and Riparian Habitats							
			SE	TFE	NFPE	NSW	MSW	UC	SFA	TPA	VR	MRA	L	VF	MR	G	IDS	US	VF	MW	
Salt marsh harvest mouse		X	X																		
San Pablo California vole		X	X					X													
Suisun ornate shrew	X		X																		
California clapper rail		X	X																		
Greater sandhill crane		X			X	X	X	X	X									X			
California black rail		X	X	X	X																
Swainson's hawk		X				X	X	X	X								X		X	X	X
Alameda song sparrow		X	X																		
Saltmarsh common yellowthroat		X	X																		
San Pablo song sparrow		X	X																		
Suisun song sparrow	X		X	X																	
Western least bittern		X			X																
Giant garter snake		X		X	X	X	X		X												
Central Valley steelhead Evolutionarily Significant Unit (ESU)	X		X	X							X	X	X								
Delta smelt	X		X	X							X										
Winter-run chinook salmon	X		X	X							X	X	X								
Sacramento splittail	X		X	X							X	X									
Central Valley fall-run chinook salmon	X		X	X							X	X	X								
Central Valley spring-run chinook salmon	X		X	X							X	X	X								
Sacramento perch		X	X	X	X						X	X		X							
Longfin smelt	X		X	X							X										
Green sturgeon	X			X							X	X									
Delta green ground beetle		X				X															
Crampton's tuctoria		X				X															
Soft bird's-beak	X		X																		

**CALFED CONSERVATION STRATEGY**

February 3, 1999

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Evaluation Species	Proposed Species Goal		NCCP Habitat Type <sup>1</sup>																		
	"R"	"r"	Wetland and Agricultural Habitats							Aquatic Habitats				Upland and Riparian Habitats							
			SE	TFE	NFPE	NSW	MSW	UC	SFA	TPA	VRA	MRA	L	VFR	MR	G	IDS	US	VFW	MWF	
Suisun thistle	X		X																		
Mason's lilaeopsis	X		X	X																	
Alkali milkvetch		X				X															
Bristly sedge		X			X																
Delta mudwort		X	X	X																	
Delta tule pea		X	X	X																	
Suisun Marsh aster	X		X	X																	

<sup>1</sup>TPA = Tidal perennial aquatic  
 VRA = Valley riverine aquatic  
 MRA = Montane riverine aquatic  
 L = Lacustrine  
 SE = Saline emergent

TFE = Tidal freshwater emergent  
 NFPE = Nontidal freshwater permanent emergent  
 NSW = Natural seasonal wetlands  
 MSW = Managed seasonal wetlands  
 VFR = Valley/foothill riparian

MR = Montane riparian  
 G = Grassland  
 IDS = Inland dune scrub  
 US = Upland scrub  
 VFW = Valley/foothill woodland

MWF = Montane woodland and forest  
 UC = Upland cropland  
 SFA = Seasonally flooded agriculture

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Evaluation Species Associated with Wetland and Agricultural NCCP Habitats  
with Proposed "m" Species Goals

Evaluation Species	NCCP Habitat Types <sup>1</sup>																	
	Wetland and Agricultural Habitats							Aquatic Habitats				Riparian and Upland Habitats						
	SE	TFE	NFPE	NSW	MSW	UC	SFA	TPA	VRA	MRA	L	VFR	MR	G	IDS	US	VFW	MWF
<b>Birds</b>																		
California least tern								X										
Western snowy plover					X			X										
American peregrine falcon	X	X	X	X	X			X			X							
Bald eagle					X			X	X	X	X	X	X					X
Aleutian Canada goose	X	X	X		X	X	X	X			X							
California brown pelican								X										
Bank swallow									X			X						
California gull	X	X	X	X	X	X	X	X			X							
Long-billed curlew	X		X	X	X	X	X	X						X				
Osprey								X	X	X	X	X	X				X	X
<b>Reptiles</b>																		
Western pond turtle			X						X	X	X	X						
<b>Amphibians</b>																		
California red-legged frog			X	X	X				X	X	X	X	X	X				
California tiger salamander				X							X			X				
Foothill yellow-legged frog									X	X		X	X					
<b>Fish</b>																		
Central Coast steelhead Evolutionarily Significant Unit (ESU)	X	X						X	X	X								
Tidewater goby	X	X						X										

Evaluation Species Associated with Wetland and Agricultural NCCP Habitats  
with Proposed "m" Species Goals

Evaluation Species	NCCP Habitat Types <sup>1</sup>																	
	Wetland and Agricultural Habitats							Aquatic Habitats				Riparian and Upland Habitats						
	SE	TFE	NFPE	NSW	MSW	UC	SFA	TPA	VRA	MRA	L	VFR	MR	G	IDS	US	VFW	MWF
<b>Invertebrates</b>																		
California freshwater shrimp									X									
<b>Plants</b>																		
Eel-grass pondweed			X					X	X	X								

<sup>1</sup>TPA = Tidal perennial aquatic  
VRA = Valley riverine aquatic  
MRA = Montane riverine aquatic  
L = Lacustrine  
SE = Saline emergent

TFE = Tidal freshwater emergent  
NFPE = Nontidal freshwater permanent emergent  
NSW = Natural seasonal wetlands  
MSW = Managed seasonal wetlands  
VFR = Valley/foothill riparian

MR = Montane riparian  
G = Grassland  
IDS = Inland dune scrub  
US = Upland scrub  
VFW = Valley/foothill woodland

MWF = Montane woodland and forest  
UC = Upland cropland  
SFA = Seasonally flooded agriculture

### Definitions of "R", "r", and "m" Goals

**Recovery ("R"):** For those species designated "R," the CALFED Program has established a goal to recover the species within the CALFED ERP Ecological Zones. A goal of "Recovery" was generally assigned to those species whose range is entirely or nearly entirely within the area affected by the CALFED Program and for which CALFED could reasonably be expected to undertake all or most of the actions necessary to recover the species. The term recover generally means the decline of a species is arrested or reversed, threats to the species are neutralized, and thus, the species' long-term survival in nature is assured. In the case of most species listed under the Federal ESA, recovery is equivalent, *at a minimum*, to the requirements of delisting. For certain species, such as anadromous fish, with threats outside the geographic scope or purview of the CALFED Program, CALFED may not be capable of completely recovering the species, but will implement all necessary recovery actions within the ERP Ecological Zones. For other species, CALFED may choose a goal that aims to achieve more than would be required for delisting (e.g., restoration of a species and/or its habitat to a level beyond delisting requirements). The effort required to achieve the goal of "Recovery" may be highly variable between species. In sum, a goal of "Recovery" implies that CALFED will undertake all actions within the ERP Ecological Zones and program scope necessary to recover the species.

**Contribute to Recovery ("r"):** For those species designated "r," the CALFED Program will make specific contributions toward the recovery of the species. The goal "Contribute to Recovery" was generally assigned to those species for which CALFED Program actions affect only a limited portion of the species range and/or CALFED Program actions have limited effects on the species. In the case of a species with a recovery plan, this may mean implementing some of the measures identified in the plan. For species without a recovery plan, this would mean implementing specific measures that would benefit the species. In sum, a goal of contributing to a species' recovery implies that CALFED will undertake *some* of the actions within its geographic and program scope necessary to recover the species.

**Maintain ("m"):** For those species designated "m," the CALFED Program will undertake actions to maintain the species (this category is less rigorous than Contribute to Recovery). The goal "Maintain" was generally assigned to species expected to be minimally affected by CALFED actions. For this category, CALFED will ensure that any adverse effects to the species are addressed commensurate with the level of effect on the species; thus, actions may not actually contribute to the recovery of the species, but would be expected, *at a minimum*, to not contribute to the need to list an unlisted species or degrade the status of an already listed species. CALFED will also maximize beneficial effects on these species to the extent practicable.

**Table 1. CALFED Conservation Measures for Species with Different Goals in Different Locations**

CALFED Scope	Species Goal		
	"R"	"r"	"m"
Problem Area (Delta and Suisun Marsh)	Implement all recovery plan measures.	Implement all recovery plan measures.	Avoid, minimize, compensate, and conserve as appropriate and commensurate with Program effects.
Solution Area (14 Ecological Management Zones)	Implement all recovery plan measures.	Implement some recovery plan measures.	Avoid, minimize, compensate, and conserve as appropriate and commensurate with Program effects.

Please Sign in

Name	Affiliation	Address	Phone Number	E-mail	Fax Number
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