A PETITION TO THE STATE OF CALIFORNIA FISH AND GAME COMMISSION

For action pursuant to Section 670.1, Title 14, California Code of Regulations (CCR) and Sections 2072 and 2073 of the Fish and Game Code relating to listing and delisting endangered and threatened species of plants and animals.

I. SPECIES BEING PETITIONED:				
Common Name:				
Scientific Name: (
II. RECOMMENDED ACTION: (Check appropriate categories)				
a. List D D. Change Status D				
As Endangered from				
As Threatened to				
Or Delist				
III. AUTHOR OF PETITION:				
Name:				
Address:				
Phone Number:				
I hereby certify that, to the best of my knowledge, all statements made in the petition are true and complete.				
Signature:				
Date:				

-2-

PETITION TO THE STATE OF CALIFORNIA FISH AND GAME COMMISSION SUPPORTING INFORMATION FOR

Common Name Scientific Name

EXECUTIVE SUMMARY

Provide a brief statement explaining why the petitioned action is being recommended. Include a brief summary of each section of the petition. If a species is being petitioned for listing, state why its survival is threatened by any one or a combination of the following factors (listed in Section 670.1, Title 14, CCR):

- (1) present or threatened modification or destruction of its habitat;
- (2) overexploitation;
- (3) predation;
- (4) competition;
- (5) disease; or
- (6) other natural occurrences or human-related activities.

If a species is being recommended for delisting, indicate why State-listing is no longer warranted, and state why any one or a combination of the aforementioned factors no longer threatens its existence.

1. **POPULATION TRENDS**

Describe current population trends (with numbers and rate) and relate these to viable population numbers. Explain survey methodology used to arrive at numbers or estimates and what assumptions, if any, were involved.

2. RANGE AND DISTRIBUTION

In the text, indicate the percentage of historic distribution that is in existence and the rate of loss. If appropriate, indicate the number of extant occurrences, populations or portions of populations in California. Indicate whether the rate of loss is accelerating, and estimate when extinction would occur if current trends continue. Discuss the relationship between historic and current acreage and degree of habitat fragmentation. Describe the quality of the existing habitats in terms of ability to maintain viable populations with or without enhancement. For delisting, indicate how current distribution reflects the recovery of the species since its listing.

3. **ABUNDANCE**

Provide available historic and current population estimates/trends, densities, vigor, sex and age structures, and explain population changes relative to human-caused impacts or natural events. Compare current and historic abundance in terms of overall population size or size of occurrences, populations or portions of populations, as appropriate. Describe current population trends (with numbers and rate) and relate these to viable population numbers. Explain survey methodology used to arrive at numbers or estimates and what assumptions, if any, were involved.

4. LIFE HISTORY (SPECIES DESCRIPTION, BIOLOGY, AND ECOLOGY)

Include pertinent information that is available on species identification, taxonomy and systematics, seasonal activity of phenology, reproductive biology, mortality/natality, longevity, growth rate, growth form, food habits, habitat relationships and ecological niche or ecological attributes, interactions with other species or special habitat requirements that may increase vulnerability of the species to certain natural or human-caused adverse impacts (e.g., obligate wetland or riparian habitat species, low birthrate, colonial species).

5. KIND OF HABITAT NECESSARY FOR SURVIVAL

Describe habitat features that are thought to be important to the species' ability to maintain viable population levels. Any or all of the following features may be included, as appropriate:

Plant community; edaphic conditions; climate; light; topography/microtopography; natural disturbance; interactions with other plants or animals; associated species; elevation; migration or movement corridors; wintering habitat; breeding habitat; foraging habitat; other habitat features.

For aquatic organisms, the following features may be included in addition to the above:

Water temperature; water flow patterns; stream gradient; water chemistry (dissolved oxygen, salinity, etc.); water depth; bottom type; cover type and availability; fish assemblage/community; aquatic plant abundance; other habitat features.

FACTORS AFFECTING ABILITY TO SURVIVE AND REPRODUCE

Discuss the basis for the threats to the species or subspecies, or to each population, occurrence or portion of range (as appropriate) due to one or more of the following factors:

(1) present or threatened modification or destruction of its habitat;

-4-

- (2) overexploitation;
- (3) predation;
- (4) competition;
- (5) disease; or
- (6) other natural events or human-related activities.

Identify the direct, indirect, and cumulative adverse impacts and discuss how these are contributing to the decline of the species. Indicate whether the species is wilnerable to random catastrophic events.

For delisting, state why any one or a combination of the aforementioned factors no longer threatens the existence of the species.

7. DEGREE AND IMMEDIACY OF THREAT

Indicate the immediacy of the threat and the magnitude of loss or rate of decline that has occurred to the present or is expected to occur without protective measures.

8. IMPACT OF EXISTING MANAGEMENT EFFORTS

Describe any ongoing protective measures or existing management plans for the species or its habitat. Information on species or land management activities that are impacting populations or portions of the range and information on proposed land-use changes should be included. This may be best accomplished by discussing populations or portions of the range. A chart may be useful.

Include available information on any or all of the following:

- (1) property ownership/jurisdiction for known populations or portions of the range;
- (2) current land use;
- (3) protective measures being taken, if any, and effectiveness of current management activities;
- (4) current research on the species;
- (5) existing management/recovery plans and the extent of their implementation;

- (6) proposed land-use changes (include knowledge of forthcoming California Environmental Quality Act documents that may or should address impacts, and lead agencies involved); or
- (7) county general plans, federal and State agency plans/actions or other plans/actions that address or should address the species.

9. **SUGGESTIONS FOR FUTURE MANAGEMENT**

Describe activities that may be necessary to ensure future survival of the species after listing or delisting. Include recommendations for any or all of the following:

- (1) activities that would protect existing populations (site maintenance, preserve design establishment, etc.);
- (2) monitoring programs and studies;
- (3) needed amendments to existing management and land-use plans, including county general plans,
- (4) agencies/organizations that should be involved in planning and implementing management and recovery actions;
- other activities that would help protect existing habitat or ensure survival of the species;
- (6) how other sensitive species (listed and unlisted) may benefit from protection of this species;
- (7) how other species/habitats may be impacted by management and recovery activities for this species; or
- (8) at what point this species would be considered stable and sustainable.

10. AVAILABILITY AND SOURCES OF INFORMATION

Cite literature, available specimen collection records, and other pertinent reference materials. Attach documents critical to the recommended action. Be sure to include recent status surveys. List names, addresses, and telephone numbers of persons providing unpublished information and list those supporting the recommended action.

11. DETAILED DISTRIBUTION MAP

Delineate on appropriate maps the historic and present distribution (estimated if not known). Include one map of California showing general distribution, and U.S. Geological Survey topographical maps (or equivalent) of appropriate scale, for more detailed distribution information, including locations of

-6-

occurrences, populations or portions of populations, as appropriate. Include historic and current distribution as documented by literature, museum records, Natural Diversity Data Base and other Department of Fish and Game records, and testimony of knowledgeable individuals. All maps must be suitable for black and white reproduction and fully labeled, including borders, base map name, map scale and species name, and should not exceed 11" x 14" in size.



<u>Instructions to the California Endangered Species Act Petitioners</u>

The California Fish and Game Commission (Commission) requires that petitions to list, change the status of, or delist a species of plant or animal pursuant to the California Endangered Species Act (CESA) must use the official petition form FGC 670.1 (9/24) (page 6 of this document). Pages 2 through 5 of this document are provided to assist you in preparing a petition that includes specific kinds of information used by the California Department of Fish and Wildlife (Department) and by the Commission in evaluating the proposed action.

We understand that all the questions in this document may not be addressed, and that different issues are important for different species, but we believe that using this document will ensure you include the basic information necessary to the process. We encourage you to include suggestions for management and recovery activities that would improve the status of the species involved.

Certain sections of the California Fish and Game Code (F&G Code) pertain to the petition and listing process. The most pertinent information can be found in sections 2062, 2067, 2072.3, 2074.6, and 2074.8 of F&G Code and Section 670.1, Title 14, California Code of Regulations.

We hope that this information, along with the petition form, will facilitate the petition writing process and result in a complete document. Additional information on rare, threatened, and endangered species is available from the Department. For further information, please contact Branch Chief, Habitat Conservation Planning Branch, California Department of Fish and Wildlife, P.O. Box 944209, Sacramento, CA 94244-2090, or by phone at (916) 376-8660.

Please mail the petition to:

Attn: Executive Director
California Fish and Game Commission
P.O. Box 944209
Sacramento, CA 94244-2090

Or email the petition to: fgc@fgc.ca.gov

Or hand deliver the petition to:

Attn: Executive Director

California Fish and Game Commission

715 P Street, 16th Floor

Sacramento, CA 95815

Information to be Included in the Petition

1. Executive Summary

Provide a brief statement explaining why the petitioned action is being recommended. Include a brief summary of each section of the petition. If a species is being petitioned for listing, state why its survival is threatened by any one or a combination of the following factors (listed in Section 670.1, Title 14, CCR):

- (1) <u>present or threatened modification or destruction of its habitat;</u>
- (2) overexploitation;
- (3) predation;
- (4) competition;
- (5) <u>disease; or</u>
- (6) other natural occurrences or human-related activities.

If a species is being recommended for delisting, indicate why state-listing is no longer warranted, and state why any one or a combination of the aforementioned factors no longer threatens its existence.

2. Population Trends

<u>Describe current population trends (with numbers and rate) and relate these to viable population numbers.</u> Explain survey methodology used to arrive at numbers or <u>estimates and what assumptions, if any, were involved.</u>

3. Range and Distribution

Indicate the percentage of historic distribution that is in existence and the rate of loss. If appropriate, indicate the number of extant occurrences, populations or portions of populations in California. Indicate whether the rate of loss is accelerating and estimate when extinction would occur if current trends continue. Discuss the relationship between historic and current acreage and degree of habitat fragmentation. Describe the quality of the existing habitats in terms of ability to maintain viable populations with or without enhancement. For delisting, indicate how current distribution reflects the recovery of the species since its listing.

4. Abundance

Provide available historic and current population estimates/trends, densities, vigor, sex and age structures, and explain population changes relative to human-caused impacts or natural events. Compare current and historic abundance in terms of overall population size or size of occurrences, populations or portions of populations, as appropriate. Describe current population trends (with numbers and rate) and relate

these to viable population numbers. Explain survey methodology used to arrive at numbers or estimates and what assumptions, if any, were involved.

5. Life History (Species Description, Biology, and Ecology)

Include pertinent information that is available on species identification, taxonomy and systematics, seasonal activity or phenology, reproductive biology, mortality/natality, longevity, growth rate, growth form, food habits, habitat relationships and ecological niche or ecological attributes, interactions with other species or special habitat requirements that may increase vulnerability of the species to certain natural or human-caused adverse impacts (e.g., obligate wetland or riparian habitat species, low birthrate, colonial species).

6. Kind of Habitat Necessary for Survival

Describe habitat features that are thought to be important to the species' ability to maintain viable population levels. Any or all the following features may be included, as appropriate:

Plant community; edaphic conditions; climate; light; topography/microtopography; natural disturbance; interactions with other plants or animals; associated species; elevation; migration or movement corridors; wintering habitat; breeding habitat; foraging habitat; other habitat features.

For aquatic organisms, the following features may be included in addition to the above:

Water temperature; water flow patterns; stream gradient; water chemistry (dissolved oxygen, salinity, etc.); water depth; bottom type; cover type and availability; fish assemblage/community; aquatic plant abundance; other habitat features.

7. Factors Affecting Ability to Survive and Reproduce

<u>Discuss the basis for the threats to the species or subspecies, or to each population, occurrence or portion of range (as appropriate) due to one or more of the following factors:</u>

- (1) <u>present or threatened modification or destruction of its habitat:</u>
- (2) <u>overexploitation</u>;
- (3) predation;
- (4) competition;
- (5) <u>disease; or</u>
- (6) other natural events or human-related activities.

Identify the direct, indirect, and cumulative adverse impacts and discuss how these are contributing to the decline of the species. Indicate whether the species is vulnerable to random catastrophic events.

For delisting, state why any one or a combination of the aforementioned factors no longer threatens the existence of the species.

8. Degree and Immediacy of Threat

Indicate the immediacy of the threat and the magnitude of loss or rate of decline that has occurred to the present or is expected to occur without protective measures.

9. Impact of Existing Management Efforts

Describe any ongoing protective measures or existing management plans for the species or its habitat. Information on species or land management activities that are impacting populations or portions of the range and information on proposed land-use changes should be included. This may be best accomplished by discussing populations or portions of the range. A chart may be useful.

<u>Include available information on any or all the following:</u>

- (1) <u>property ownership/jurisdiction for known populations or portions of the range;</u>
- (2) current land use;
- (3) <u>protective measures being taken, if any, and effectiveness of current management activities;</u>
- (4) current research on the species;
- (5) existing management/recovery plans and the extent of their implementation;
- (6) <u>proposed land-use changes (including knowledge of forthcoming California Environmental Quality Act documents that may or should address impacts, and lead agencies involved);</u> or
- (7) <u>county general plans, federal and state agency plans/actions or other plans/actions that address or should address the species.</u>

10. Suggestions for Future Management

<u>Describe activities that may be necessary to ensure future survival of the species after listing or delisting. Include recommendations for any or all the following:</u>

- (1) <u>activities that would protect existing populations (site maintenance, preserve design establishment, etc.);</u>
- (2) <u>monitoring programs and studies;</u>
- (3) <u>needed amendments to existing management and land-use plans, including county general plans;</u>

- (4) <u>agencies/organizations that should be involved in planning and implementing</u> management and recovery actions;
- (5) <u>other activities that would help protect existing habitat or ensure survival of the species;</u>
- (6) <u>how other sensitive species (listed and unlisted) may benefit from protection of this species;</u>
- (7) <u>how other species/habitats may be impacted by management and recovery activities for this species; or</u>
- (8) at what point this species would be considered stable and sustainable.

11. Availability and Sources of Information

Cite literature, available specimen collection records, and other pertinent reference materials. Attach documents critical to the recommended action. Be sure to include recent status surveys. List names, addresses, and telephone numbers of persons providing unpublished information and list those supporting the recommended action.

12. Detailed Distribution Map

Delineate on appropriate maps the historic and present distribution (estimated if not known). Include one map of California showing general distribution, and U.S. Geological Survey topographical maps (or equivalent) of appropriate scale, for more detailed distribution information, including locations of occurrences, populations or portions of populations, as appropriate. Include historic and current distribution as documented by literature, museum records, Natural Diversity Data Base and other Department of Fish and Wildlife records, and testimony of knowledgeable individuals. All maps must be suitable for black and white reproduction and fully labeled, including borders, base map name, map scale and species name, and should not exceed 11" x 14" in size.

Petition to the State of California Fish and Game Commission

(Submit this page with your petition)

For action pursuant to Section 670.1, Title 14, California Code of Regulations (CCR) and Sections 2072 and 2073 of the Fish and Game Code relating to listing and delisting endangered and threatened species of plants and animals.

I.	SPECIES BEING PETITIONED:		
	Common Name:		
	Scientific Name: ().
II.	RECOMMENDED ACTION:		
	(Check appropriate categories)		
	a. <u>List</u>	b.	Change Status
	As Endangered		From:
	As Threatened		<u>To:</u>
	As Threatened or Endangered		or Delist
II.	AUTHOR OF PETITION:		
	Name:		
	Address:		
	Phone Number:		
	Email Address:		
	hereby certify that, to the best of my knowled re true and complete.	<u>lge,</u>	all statements made in this petition
	Signature:		
	Date:		