

Table . Prescriptions and Conservation Measures for Species with "r" Management Goals

Goal Prescription	Conservation Measures
<b>Northern California Black Walnut (<i>Juglans californica</i> var. <i>hindsii</i>) (native stands)</b>	
Protect and maintain the remaining stands, and establish 5-10 naturally regenerating black walnut stands within its historic range.	1. Conduct research into values provided by walnut stands to determine the role of northern California black walnut in the ecosystem.
	2. Protect, manage, and maintain existing stands.
	3. Research species ecology (e.g., dispersal mechanisms) to formulate restoration, protection and management strategies for contributing to recovery.
<b>Bristly sedge (<i>Carex comosa</i>)</b>	
Research habitat requirements and use knowledge gained to develop recovery measures.	1. Identify and implement opportunities to restore suitable wetland habitat within ERP nontidal freshwater marsh restoration actions.
	2. Research habitat requirements and potential conservation measures. Design and implement conservation measures based on results of research.
<b>SPECIES PROPOSED FOR m =&gt; r by USFWS Point Reyes bird's-beak (<i>Cordylathus maritimus</i> ssp. <i>palustris</i>)</b>	
Maintain, enhance and restore suitable high marsh and high marsh-upland transition habitat around San Pablo Bay.	1. Maintain, enhance and restore Point Reyes bird's-beak habitat around San Pablo Bay.
	2. Identify and implement restoration of suitable habitat in high marsh and marsh/upland transition areas. Incorporate high marsh and margin suitable habitat in ERP salt marsh restoration actions.
	3. Prepare and implement a management plan to control and reduce non-native weeds near existing and new populations.
<b>Crampton's tuctoria (<i>Tuctoria mucronata</i>)</b>	

Review and update recovery plan targets, protect all extant occurrences, and manage habitat to benefit Delta green ground beetle (e.g., manage grazing).	1. Establish three new selfsustaining Delta green ground beetle populations.
	2. Maintain existing populations.
	3. Expand Jepson Prairie Preserve west to Travis Air Force Base boundary.
	4. Identify and implement opportunities for CALFED to support and facilitate protection of the Davis Antenna Site (with occurrences of Crampton's tuctoria, Colusa grass, vernal pool tadpole shrimp, and vernal pool fairy shrimp).
<b>Delta mudwort (<i>Limosella subulata</i>) and Delta tule pea (<i>Lathyrus jepsonii</i> var. <i>jepsonii</i>)</b>	
Protect at least 90% of occupied habitat including 90% of high quality habitat throughout range of species to protect geographic diversity; expand suitable habitat by 100 linear miles.	1. Maintain processes that support the dynamic habitat of Delta mudwort and Delta tule pea throughout the species range and associated with existing source populations.
	2. Research the extent and physical and biological qualities of existing habitat and populations prior to levee or restoration actions.
	3. Create unvegetated, exposed substrate at tidal margins of restored and created tidal fresh emergent wetland and riparian habitat.
	4. Maintain and restore habitat and populations throughout the species geographic ranges and expand the species ranges to the historical and ecological ranges based on hydrological, salinity and other habitat attributes.
	5. For each linear foot of occupied habitat lost, create 5-10 linear feet of suitable habitat, of equal or higher habitat quality, within one year of loss.
	6. Monitoring existing populations and their habitat at five year intervals and design and implement a remediation plan if the prescription is not met.
	7. Incorporate suitable habitat for these species into levee designs.
	8. Incorporate sufficient edge habitat to support the species in levee set back and channel island habitat resoration designs.

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	9. Maximize sinuosity of restored and created slough channels to increase water-land edge habitat.
<b>Delta coyote-thistle (<i>Eryngium racemosum</i>)</b>	
Protect and maintain the 2 known existing populations and establish 2 additional self-sustaining occurrences.	1. Research the species' ecology to formulate strategies for recovery.
	2. Restore and protect suitable open floodplain habitat along the San Joaquin River.
	3. Monitor the colonization of suitable restored habitat at two-year intervals and evaluate the need for active reintroduction, and reintroduce the species to restored protected habitat when no natural colonization occurs.
	4. Prior to implementation of CALFED floodplain actions, suitable habitat within the historic range of the species should be surveyed for unknown populations.
	5. Monitor existing populations at a two-year interval and design and implement mitigation measures when a declining trend in the population size is observed.
	6. Protect and manage the China Island population of Delta coyote thistle.
<b>Alkali milkvetch (<i>Astragalus tener</i> var. <i>tener</i>)</b>	
Protect extant populations in each vernal pool region, throughout the range of habitat conditions and genetic variability, and reintroduce species near extirpated populations.	1. Protect extant populations in each vernal pool region, throughout the range of habitat conditions and genetic variability, and reintroduce species near extirpated populations.
	2. Conduct surveys to locate additional populations of alkali milkvetch.
	3. Monitor extant populations and design and implement conservation measures if a decline in population size or vigor is observed.
	4. Research reintroduction techniques and apply the results to reintroduction of populations to portions of the historic range where the plant is extirpated.


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