

NORTHERN CALIFORNIA CLIMATE ADAPTATION PROJECT

Focal resources identified during March 2016 workshops in Eureka and Redding

EUREKA: Focal Resources (Habitats + Species Groups/Species)

Habitat Groups/Sub-Habitats (Coarse Filter)	Species (Fine Filter)
<p>Coastal</p> <ul style="list-style-type: none"> • Northern Foredune Grassland • Coastal Dune Forest • Coastal Dunes • Tidal Wetlands • Non-tidal Wetlands • Estuaries and Lagoons • Coastal/Bluff Scrub 	<ul style="list-style-type: none"> • Raptors • Beach pine • Sitka spruce • Grand fir • Dune mat • Anadromous fish (salmonids, lamprey, sturgeon) • Shorebirds/Wading birds • Migratory waterfowl • Geophytes • Amphibians (including N. Cal red-legged frog) • Mountain beaver (Point Arena, others) • Carnivores (bobcats, mountain lion)
<p>Woodland</p> <ul style="list-style-type: none"> • Black Oak Woodland • Oregon White Oak Savanna • Serpentine Mixed Conifer Woodland • Non-serpentine Mixed Conifer Woodland • Blue Oak Woodland 	<ul style="list-style-type: none"> • Permanent resident oak cavity nesting birds • Native ungulates (e.g., Roosevelt elk, deer) • Porcupine • Band-tailed pigeon • Native perennial bunchgrasses (oak savanna/mixed grasslands) • Geophytes
<p>Shrub/Grassland</p> <ul style="list-style-type: none"> • Chaparral (Serp + Non-Serp) • Mixed Grasslands • Serpentine Grassland • Shrub Steppe • Coastal Prairies 	<ul style="list-style-type: none"> • Kingsnake/Other reptiles (Rubber boa) • Brush rabbit • Migratory birds (chaparral/shrub steppe) • Serpentine endemics • Foredune rare/endangered/endemic plants
<p>Forest</p> <ul style="list-style-type: none"> • Coastal Redwood • Mixed Evergreen • Moist Mixed Conifer • Dry Mixed Conifer • True Fir Forest • Subalpine 	<ul style="list-style-type: none"> • Port Orford cedar • Serpentine cypress species • Salamanders (Pacific Giant, endemic terrestrial) • Marbled murrelet • Northern spotted owl • Marten

<ul style="list-style-type: none"> • Serpentine Forest • North Coast Mixed Conifer • Lassics • Mendocino Pygmy Forest • Bishop Pine 	<ul style="list-style-type: none"> • Fisher • Enriched conifers • Neotropical migrant birds
Freshwater <ul style="list-style-type: none"> • Rivers, Streams, Non-meadow Riparian Habitat • Wet Meadows, Other Wetlands • Headwater Seeps/Springs • Lakes, Ponds • Riparian Vegetation 	<ul style="list-style-type: none"> • Foothill yellow-legged frog • Cascade frog • Beaver • Freshwater mussels

REDDING: Focal Resources (Habitats + Species Groups/Species)

Habitat Groups/Sub-Habitats (Coarse Filter)	Species (Fine Filter)
Woodland <ul style="list-style-type: none"> • Oak Woodlands • Woodland/Forest Edges 	<ul style="list-style-type: none"> • Non-game predators (mammals, raptors) • Game animals (elk, deer, bear, quail, turkey) • Non-timber woodland, forest products (chanterelles, pine nuts, acorns, bay laurel)
Shrub/Grassland <ul style="list-style-type: none"> • Chaparral (Serp + Non-Serp) • Sage Steppe • Alpine Grassland, Shrubland • Non-Alpine Grassland 	<ul style="list-style-type: none"> • Pollinators, Native Bees • Grassland nesting birds • Chamise • Chaparral post-fire species
Forest <ul style="list-style-type: none"> • Coastal Redwood • Coastal Conifer Hardwood, Coastal Pine Forest • Mixed Conifer, Ponderosa, Klamath Enriched Species • True Firs • Subalpine 	<ul style="list-style-type: none"> • Aspen • Terrestrial salamanders • Marbled murrelet • Edge specialists (Great grey owl) • Fur-bearers (Marten, Fisher) • Rare trees (spruce, cedar, alpine spp., cypress, enriched conifers) • Cavity nesters
Endemic <ul style="list-style-type: none"> • Gaps • Rock Outcrops, Cliffs, Talus, Caves • Special Substrates 	<ul style="list-style-type: none"> • Shasta huckleberry • Shasta snow wreath • Host-dependent invertebrates (longhorn beetle, freshwater mussels, cypress affiliates)

	<ul style="list-style-type: none"> • Water howellia
Freshwater <ul style="list-style-type: none"> • Rivers, Streams, Floodplain • Riparian Vegetation • Lakes • Marshes, Vernal Pools • Seeps, Springs, Groundwater, Fens 	<ul style="list-style-type: none"> • Riparian nesting birds • Red bat • Salmonids • Other anadromous (lamprey) • Warm-water native residents (sucker, hardhead) • Cottonwood • Beaver

Ecosystem Service	Habitat Group
Provisioning Services	
Food	Freshwater, Forest, Woodland, Coastal, Grassland/Shrubland, Endemic
Fiber/Forest Products	Woodland, Forest, Coastal, Freshwater
Fuel	Woodland, Forest
Genetic resources	Woodland, Grassland/Shrubland, Forest, Endemic, Freshwater
Biochemicals & natural medicines	Forest, Freshwater
Ornamental resources	Woodland, Coastal, Grassland, Forest
Fresh water	Freshwater, Forest
Cultural Services	
Spiritual & religious values	Woodland, Freshwater, Coastal, Grassland, Forest, Endemic
Knowledge systems	Coastal, Grassland, Forest, Freshwater
Educational values	Coastal, Grassland, Forest, Freshwater
Inspiration	Freshwater, Coastal, Grassland, Forest
Aesthetic values	Freshwater, Woodland, Coastal, Grassland, Forest, Endemic
Social relations	Coastal, Grassland, Forest, Freshwater

Sense of place	Freshwater, Woodland, Coastal, Grassland, Forest
Cultural heritage values	Freshwater, Woodland, Forest, Coastal, Grassland/Shrubland, Endemic
Recreation & ecotourism	Freshwater, Woodland, Coastal, Grassland/Shrubland, Forest
Supporting Services	
Primary production	Coastal, Grassland
Oxygen production	Forest
Soil formation & retention	Forest, Woodland, Grassland/Shrubland, Endemic
Nutrient cycling	Forest, Woodland, Coastal, Freshwater
Water cycling	Forest, Endemic, Freshwater
Regulating Services	
Carbon storage/Climate regulation	Forest, Woodland, Coastal, Grassland/Shrubland
Water regulation	Freshwater, Forest, Coastal, Grassland, Endemic
Erosion/sedimentation control	Freshwater, Woodland, Coastal, Grassland/Shrubland, Forest
Water purification	Forest, Coastal, Freshwater
Disease regulation	Freshwater
Pollination	Forest, Coastal, Grassland/Shrubland, Endemic, Freshwater
Natural hazard regulation	Woodland (fire), Coastal (SLR), Grassland/Shrubland (fire), Freshwater
Habitat	Forest
Fire	Forest, Woodland