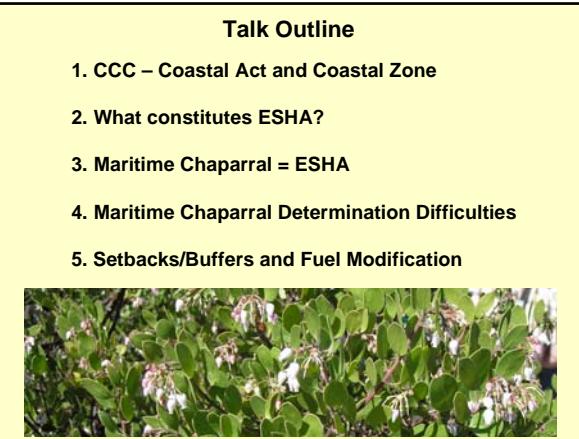


Maritime chaparral in the context of the Coastal Act

Jonna D. Engel, PhD
Ecologist, California Coastal Commission



Talk Outline

1. CCC – Coastal Act and Coastal Zone
 2. What constitutes ESHA?
 3. Maritime Chaparral = ESHA
 4. Maritime Chaparral Determination Difficulties
 5. Setbacks/Buffers and Fuel Modification

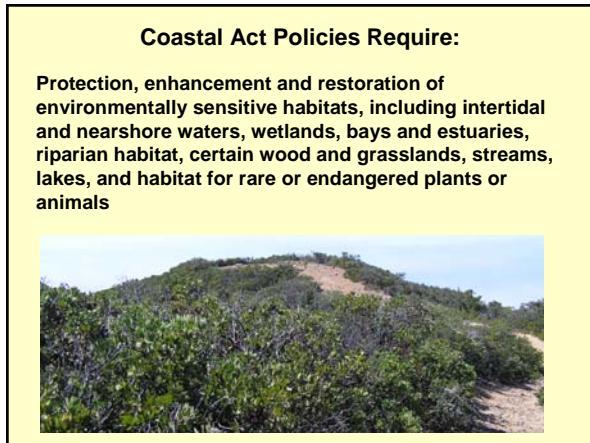


CCC Established in 1972, Coastal Act signed into law, 1976

Del Norte
Humboldt
Mendocino
Sonoma
Marin
San Francisco
San Mateo
Santa Cruz
Monterey
San Luis Obispo
Santa Barbara
Ventura
Los Angeles
Orange
San Diego

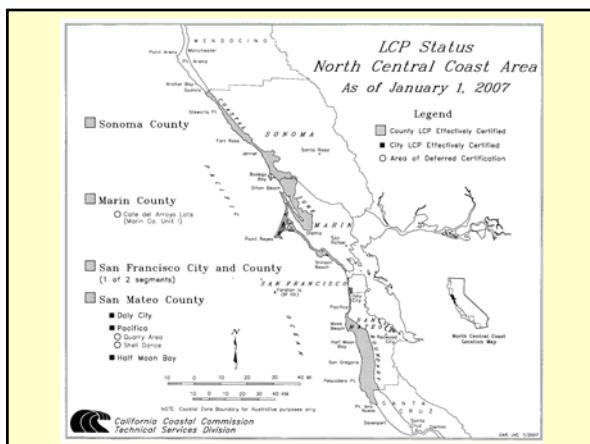
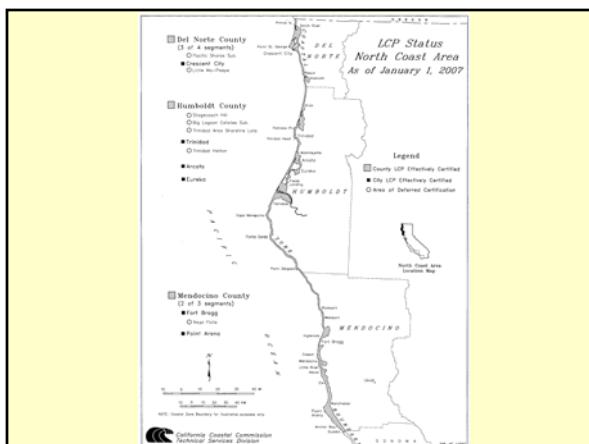


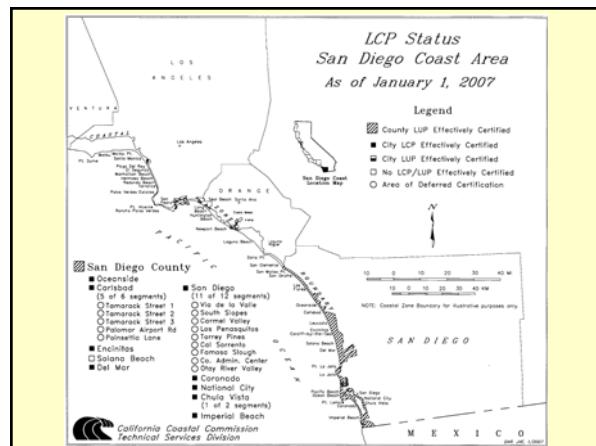
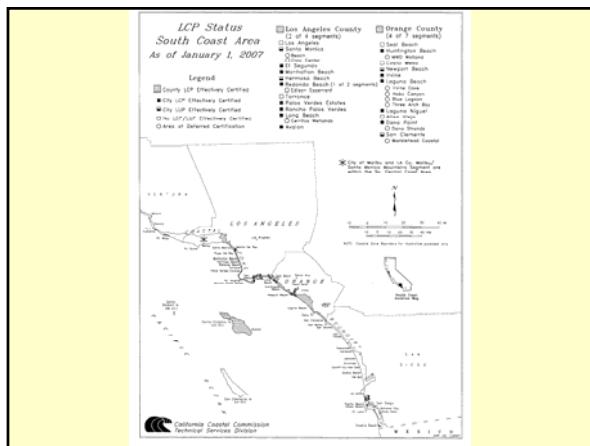
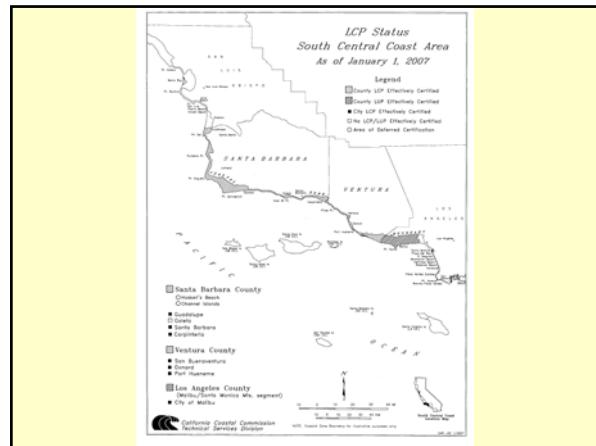
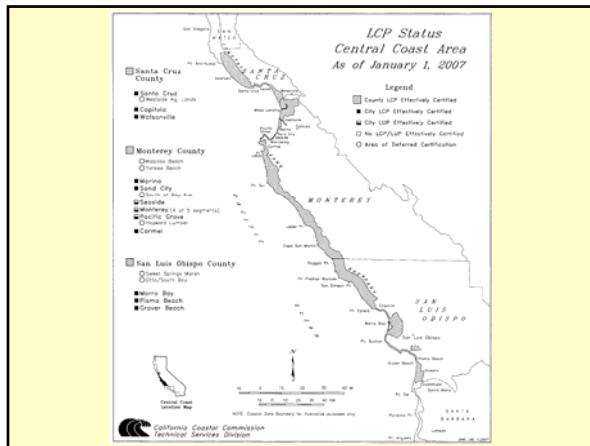
Coastal Zone – 15 Counties



Coastal Act Policies Require:

Protection, enhancement and restoration of environmentally sensitive habitats, including intertidal and nearshore waters, wetlands, bays and estuaries, riparian habitat, certain wood and grasslands, streams, lakes, and habitat for rare or endangered plants or animals





Coastal Act - Chapter 3 Policies

Section 30107.5: Environmentally Sensitive Area

"Environmentally sensitive area" (ESHA) means any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments.

[Equivalent to Environmentally Sensitive Habitat Area in Section 30240]

Section 30240: Environmentally Sensitive Habitat Areas; Adjacent Developments

(a) Environmentally sensitive habitat areas (ESHA) shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas (ESHA) and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

(Amended by Ch. 285, Stats. 1991.)

Section 30106: "Development" means, on land, in or under water, the placement or erection of any solid material or structure; discharge or disposal of any dredged material or of any gaseous, liquid, solid, or thermal waste; grading, removing, dredging, mining, or extraction of any materials; change in the density or intensity of use of land, including, but not limited to, subdivision pursuant to the Subdivision Map Act and any other division of land, including lot splits, except where the land division is brought about in connection with the purchase of such land by a public agency for public recreational use; change in the intensity of use of water, or of access thereto; construction, reconstruction, demolition, or alteration of the size of any structure, including any facility of any private, public, or municipal utility; and the removal or harvesting of major vegetation other than for agricultural purposes, kelp harvesting, and timber operations which are in accordance with a timber harvesting plan submitted pursuant to the provisions of the Z'berg-Nejedly Forest Practice Act of 1973. As used in this section, "structure" includes, but is not limited to, any building, road, pipe, flume, conduit, siphon, aqueduct, telephone line, and electrical power transmission and distribution line.

What constitutes ESHA?

1. CDFG Rare Plant Communities
2. Federal and State Listed Species
3. CNPS 1B Listed Plant Species
4. Habitats that support listed species

Standard of review? City or County LCP's or Coastal Act

Maritime Chaparral = ESHA

CDFG – Biogeographic Data Branch: Vegetation Classification:
Terrestrial Section

(*indicates a series or association considered rare and worthy of consideration by CNDDDB) September 2003

*37.308.00 Woollyleaf Manzanita Chaparral [*Arctostaphylos tomentosa* spp. *tomentosa*]

*37.308.01 Northern Maritime Chaparral {37C10}

*37.308.02 Central Maritime Chaparral {37C20}

37.102.00 Chamise - Black Sage Chaparral [*Adenostoma fasciculatum*-*Salvia mellifera*]

*37.102.01 Southern Maritime Chaparral {37C30}

Coastal zone counties where maritime chaparral identified in CNDDDB

Northern Maritime Chaparral

Marin County
San Mateo County
Santa Cruz

Central Maritime Chaparral

Monterey County
San Luis Obispo County
Santa Barbara County

Southern Maritime Chaparral

San Diego County

CNDDDB Federal and State Manzanita & Ceanothus Listings

Arctostaphylos confertiflora, Santa Rosa Island Manzanita – Fed End
Arctostaphylos glandulosa ssp. *crassifolia*, Del Mar manzanita – Fed End
Arctostaphylos hookeri ssp. *hearstiorum*, Hearst's manzanita – State End
Arctostaphylos hookeri ssp. *ravenii*, Presidio manzanita – Fed and State End

Arctostaphylos imbricata, San Bruno Mountain manzanita – State End
Arctostaphylos morroensis, Moro manzanita – Fed Threatened



Ceanothus hearstiorum, Hearst's ceanothus – State rare
Ceanothus maritimus, maritime ceanothus – State rare
Ceanothus masonii, Mason's ceanothus – State rare

Conservation and Ecology of California's Maritime Chaparral Workshop Follow-up Questions and Answers

Answers edited by Grey Hayes, PhD
Coastal Training Program
Elkhorn Slough National Estuarine Research Reserve
5/29/03

- Appendix 1: Sensitive plant species associated with maritime chaparral in Monterey County
- Appendix 2 Sensitive plant species associated with maritime chaparral in Santa Cruz County
- Appendix 3: Sensitive plant species associated with maritime chaparral in San Luis Obispo County
- Appendix 4: Sensitive plant species associated with maritime chaparral in San Mateo County
- Appendix 5: Sensitive plant species associated with maritime chaparral in California's central coast region
- Appendix 6:Sensitive animal species associated with maritime chaparral in California's central coast region

CNPS Listed Manzanita



Arctostaphylos andersonii Santa Cruz manzanita List 1B.2
Arctostaphylos bakeri ssp. *bakeri* Baker's manzanita List 1B.1
Arctostaphylos canescens ssp. *sonomensis* Sonoma manzanita List 1B.2
Arctostaphylos crassifolia Arroyo de la Cruz manzanita List 1B.2
Arctostaphylos edmundsii Little Sur manzanita List 1B.2
Arctostaphylos glandulosa ssp. *crassifolia* Del Mar manzanita List 1B.1
Arctostaphylos hookeri ssp. *franciscana* Franciscan manzanita List 1A
Arctostaphylos hookeri ssp. *hearstiorum* Hearst's manzanita List 1B.2
Arctostaphylos hookeri ssp. *hookeri* Hooker's manzanita List 1B.2
Arctostaphylos hookeri ssp. *montana* Mt. Tamalpais manzanita List 1B.3
Arctostaphylos hookeri ssp. *ravenii* Presidio manzanita List 1B.1
Arctostaphylos imbricata San Bruno Mountain manzanita List 1B.1
Arctostaphylos klamathensis Klamath manzanita List 1B.2
Arctostaphylos luciana Santa Lucia manzanita List 1B.2
Arctostaphylos mendocinoensis pygmy manzanita List 1B.2
Arctostaphylos montaraensis Montara manzanita List 1B.2
Arctostaphylos montereyensis Monterey manzanita List 1B.2
Arctostaphylos morroensis Morro manzanita List 1B.1

Arctostaphylos myrtifolia lone manzanita List 1B.2
Arctostaphylos pacifica Pacific manzanita List 1B.2
Arctostaphylos pajaroensis Pajaro manzanita List 1B.1
Arctostaphylos pallida Pallid manzanita List 1B.1
Arctostaphylos pilosula Santa Margarita manzanita List 1B.2
Arctostaphylos pumila sandmat manzanita List 1B.2
Arctostaphylos purissima La Purisima manzanita List 1B.1
Arctostaphylos refugioensis Refugio manzanita List 1B.2
Arctostaphylos silvicola Bonny Doon manzanita List 1B.2
Arctostaphylos stanfordiana ssp. *decumbens* Rincon manzanita List 1B.1
Arctostaphylos stanfordiana ssp. *raichei* Raiche's manzanita List 1B.1
Arctostaphylos tomentosa ssp. *dacticola* dacite manzanita List 1B.1
Arctostaphylos tomentosa ssp. *eastwoodiana* Eastwood's manzanita List 1B.1
Arctostaphylos virgata Marin manzanita List 1B.2
Arctostaphylos wellsii Wells' manzanita List 1B.1

CNPS Listed Ceanothus



Ceanothus confusus Rincon Ridge ceanothus List 1B.1
Ceanothus cuneatus var. *fascicularis* Lompoc ceanothus List 4.2
Ceanothus cuneatus var. *rigidus* Monterey ceanothus List 4.2
Ceanothus cyaneus Lakeside ceanothus List 1B.2_1
Ceanothus divergens Calistoga ceanothus List 1B.2_1
Ceanothus ferrisiae Coyote ceanothus List 1B.1_1
Ceanothus foliosus var. *vineatus* Vine Hill ceanothus List 1B.1_1
Ceanothus fresnensis Fresno ceanothus List 4.3_1
Ceanothus gloriosus var. *exaltatus* glory brush List 4.3_1
Ceanothus gloriosus var. *gloriosus* Point Reyes ceanothus List 4.3_1
Ceanothus gloriosus var. *porrectus* Mt. Vision ceanothus List 1B.3
Ceanothus hearstiorum Hearst's ceanothus List 1B.2
Ceanothus maritimus maritime ceanothus List 1B.2

Maritime Chaparral Determination Difficulties:

1. Disturbed/degraded areas (problem areas)
2. Edge populations
3. Transitional populations – chaparral/pine forest/oak woodland (community exists in form of a seed bank)
4. Evolving definition
5. Dominance vs. presence
6. Boundary determinations/delineations
6. LCP's vs CA

Other issues involving maritime chaparral:

Appropriate Setbacks/Buffers

Fuel Modification



Photo from Odum and Tyler 2002 paper