The San Francisco Littoral Cell CRMSP Status of the Ecological Assessment

Stakeholder Advisory Group
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ABAG

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Status of the Ecological Assessment

- Summary of Sources and Collected Data
- Methods for Screening Indicator Habitats and Species
- Historical and Current Resource Distribution
- Management Opportunities and Costs for Indicator Habitats and Species

Data Review and Screening

The analysis doesn't include every habitat type and every species

- Vegetation
  - Sensitive Communities
  - Wetlands
  - Rare Plants
  - Kelp Beds
- Fish (Salmonids), Amphibians, & Reptiles
- Birds
- Marine Mammals

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Vegetation Data Resources:

GGNRA GOGA Data

CDFG Kelp Canopy

CNDDB

NWI Wetland Data

CDFG Gap Data Analysis

USWFS Critical Habitat (S.F. Lessingia)

Historic Maps

Staff Experts

Findings:

GGNRA Vegetation Maps Cover Most Coastal Areas

20 Vegetation Types, Thousand of Polygons

No CDFG Mapped Kelp in Study Area

Historic Maps Offer Useful Insights into Vegetation Distribution

Data Screening for Vegetation

- Selected Habitats:
  - Wetland and Wetland Associated Vegetation- 4 types
  - Beaches
  - Dune Indicators – 3 types
- Excluded Habitats
  - Urban & Built-Up Areas
  - Non-native Dominants (e.g., ice plant, broom, eucalyptus)
  - Scrub and Grassland Dominant

Historic Coastal Setting

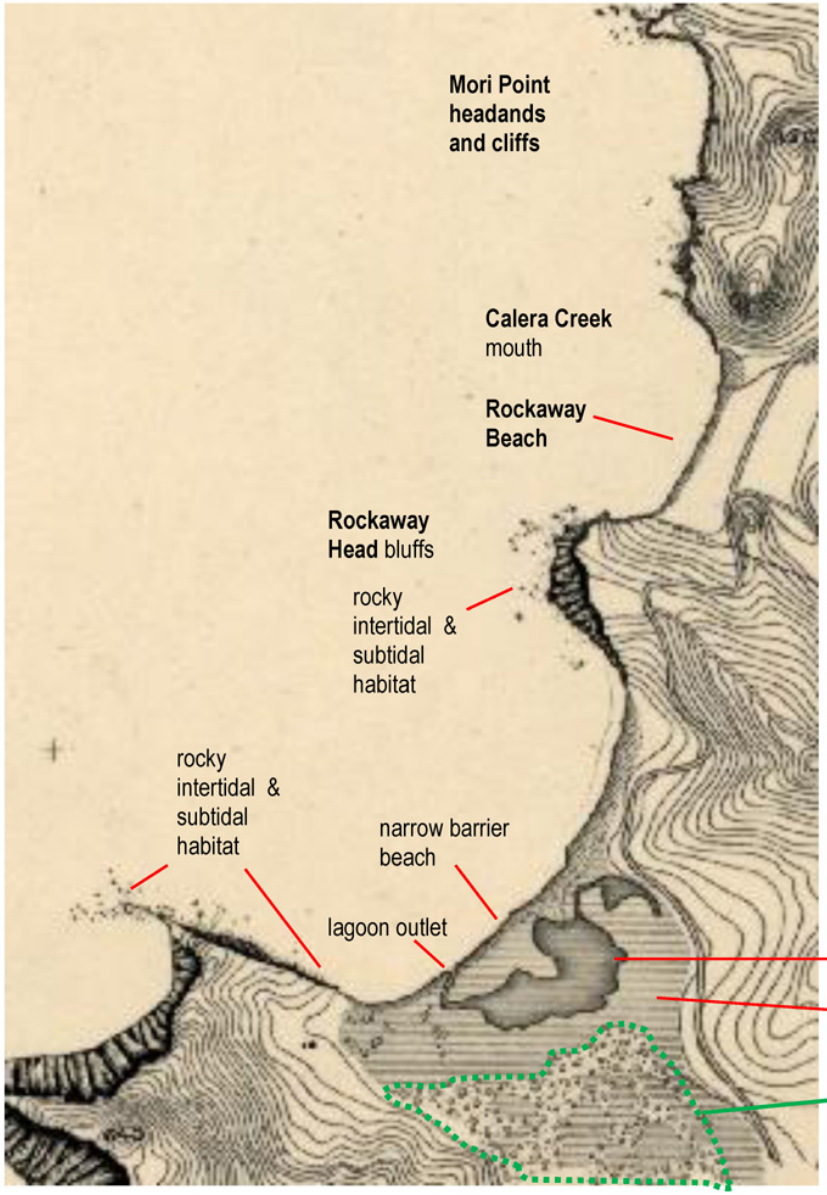

Figure 4. Pacifica coastline, Mori Point to San Pedro Valley (Linda Mar) 1869 (composite U.S. Coast Survey T sheets 1850s topography): high coastal bluff scarp (coastal bluff scrub), coastal scrub, barrier beach and non-tidal freshwater lagoon, marsh, and swamp

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Pre-Screening
N
0 0.125 0.25 0.5 0.75 1
Miles


Post-Screening
N
0 0.125 0.25 0.5 0.75 1
Miles

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Wildlife Data Resources:

CNDDB – Standard and "Suppressed" Data

GGNRA GIS Data Sets

GGNRA Management Guidance Docs
WSP / Bank Swallow

Pacific Shorebird Alliance

PRBO Publications
WSP Monitoring

Scientific Publications and Studies; Newsletters

Data Screening for Wildlife

- Wildlife
  - Includes State/Federal regulated wildlife species and special-status species
  - Marine mammal analysis focuses on those that use terrestrial habitat in the CRSMP:
    - Harbor seal and California sea lion = yes
    - Humpback whale, etc.= no

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Fish, Amphibians, and Reptiles

- San Pedro Creek (Pacifica)
  - Steelhead
- Sharp Park & Mori Point
  - S.F. garter snake
  - CA red-legged frog (also ‘extant’ in S.F.)
- Open Ocean
  - Loggerhead sea turtle Critical Habitat - foraging

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Avian Management Areas

- Pt. Lobos (Seal Rocks), San Pedro Rock, and Other Rock Outcrops
  - Brant's cormorant and other bird nesting and roosting
- Ocean Beach & Pacifica State Beach
  - Western snowy plover wintering areas
- Mainland cliffs: Fort Funston bluffs
  - Bank swallow

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Marine Mammal Resources:

Marine Cadastre Dataset

Gulf of the Farallones NMS Online Beachwatch Dataset

CNDDB (No records)

Historic and Published Accounts

Important Species for CRSMP Implementation:

- California sea lion
- Harbor seal

Data sources provide a snapshot of marine mammal use, both onshore and offshore

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Marine Mammals

- **Regular Use of Pt. Lobos (Seal Rocks) by CA sea lion;**
- **Pedro Point - harbor seal rookery**
- **Intermittent use of shoreline throughout study area**

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Pt. Lobos, SF (~1940)

Management Opportunities and Costs

…for Areas with Implementation Options	
General Management Themes	Examples:
1. Where sensitive species are present, CRSMP Implementation Options offset or slow natural habitat loss for sensitive plants & wildlife	Beach nourishment and shorebird habitat / WSP Erosion vs. bank swallow nesting Shoreline stabilization at Sharp Park
2. CRSMP Options will have short-term marine effects	Dredging and beach nourishment will have local, temporary impacts on marine invertebrate abundance and food chain support. Effects perhaps one year long with minor marine and shorebird foraging effects

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Management Opportunities and Costs

…for Areas with Implementation Options	
General Management Themes	Examples:
3. Some marine resources will be affected to a small, but unknown degree and associated impacts to these resources will be undetected	Marine impacts: sand dollar beds; macroalgae (e.g., kelp) beds; marine invertebrates
4. When faced with diminishing habitat (e.g., retreating beaches), habitat use or species presence is at risk without beach protection or nourishment	WSP, bank swallow Rare plants, for example: Beach saltbush: O/B, Linda Mar Beach wildrye: O/B, Linda Mar, Salada Beach Dune tansy: Fort Funston

Management Opportunities and Costs

…for Areas without Implementation Options	
General Management Themes 1. Non-managed areas are generally stable (e.g., bedrock) and at low risk for impacts to plants and wildlife	Examples: China Beach/Baker Beach are relatively stable areas Bedrock outcrops are stable as are associated biological resources (e.g., Pt. Lobos, Mori Point, San Pedro Rock)