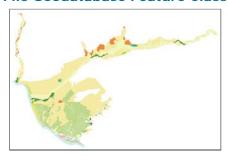
Historical Habitats

File Geodatabase Feature Class



Tags

Historical ecology, Ventura, Oxnard, Saticoy, Montalvo, El Rio, Santa Paula, Fillmore, Bardsdale, Camulos, Port Hueneme, Casitas Springs, Oak View, Meiners Oaks, Camarillo, Somis, Ventura River, Santa Clara River, Calleguas Creek, Santa Paula Creek, Sespe Creek, Piru Creek, Castaic Creek, Revolon Slough, Mugu Lagoon, Oxnard Plain, Saticoy Springs, Ormond Beach, Mandalay Beach, Pierpont Bay, McGrath Lake, Ventura County, Los Angeles County, California, USA, creek, channel, river, slough, barranca, tidal, habitat, meadow, willow, riparian, pond, panne, marsh, alkali, lagoon, lake, wetland, salt flat, cienega, dune, beach, oak, sycamore, cottonwood, sage scrub, grassland, historical condition, ecology, landscape ecology, pre Euro-American

Summary

Geospatial data describing the historical conditions of the lower Santa Clara River, Ventura River, Oxnard Plain, and Ventura County Shoreline were developed to provide information for flood protection, watershed management, habitat restoration, local education, and research.

Description

This dataset represents a reconstruction of the historical landscape patterns (including channel and habitat distribution) of the lower Santa Clara River, Ventura River, Oxnard Plain, and Ventura County Shoreline prior to extensive Euro-American modification. It integrates many sources of data describing the historical features of the study area. Extensive supporting information, including bibliographic references and research methods, can be found in the project report: (report can be accessed at http://www.sfei.org/projects/VenturaHE)

Beller, EE, RM Grossinger, MN Salomon, SJ Dark, ED Stein, BK Orr, PW Downs, TR Longcore, GC Coffman, AA Whipple, RA Askevold, B Stanford, JR Beagle, 2011. *Historical ecology of the lower Santa Clara River, Ventura River, and Oxnard Plain: an analysis of terrestrial, riverine, and coastal habitats*. Prepared for the State Coastal Conservancy. A report of SFEI's Historical Ecology Program, SFEI Publication #641, San Francisco Estuary Institute, Oakland, CA.

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Paired with the project report, this dataset provides detailed information about early geomorphic and ecological characteristics of this region. A geographic information system (GIS) was used to collect, catalog, and analyze the spatial components of the study area. Historical maps and aerial photography were georeferenced, allowing us to compare historical layers to each other and to contemporary aerial photography and maps. Additionally, the georeferenced maps were used as means to geographically locate information gathered from surveyor notes, early explorers' journals, travelers' accounts, and newspaper articles. The GIS was used to capture a synthesis of the historical landscape.

By integrating hundreds of georeferenced maps and photographs combined with narrative sources, we constructed a synthesis layer representing the historical landscape. Polygon, line, and point layers were developed to depict features in the historical landscape. These layers include

Historical Habitats, Historical Channels, Historical Distributaries, Historical Springs, and Historical Outer River Banks. Our classification system is described in further detail below.

Historical Habitats mapped as polygons include:

- Alkali Meadow
- Alkali Meadow/Flat
- Beach
- Dune
- Grassland/Coastal Sage Scrub
- High Marsh Transition Zone
- Non-Tidal Lagoon
- Oaks and Sycamores
- Ocean
- Other In-Channel Riparian
- Perennial Freshwater Pond
- · Salt Flat/Seasonal Pond
- Salt/Brackish Marsh
- Seasonally Tidal Marsh
- Tidal Flat
- Tidal Lagoon (mostly open)
- Tidal Lagoon (seasonally open)
- Tidal Marsh
- Tidal Marsh Panne
- Valley Freshwater Marsh
- Wet Meadow
- Willow Thicket
- Willow-Cottonwood Forested Wetland

Historical Channels and **Distributaries** were mapped as polyline features. River and creek names were included in the attribute table. Channels were coded as follows:

- Fluvial Channel
- Tidal Channel

Fluvial channels were further classified by flow regime:

- P (perennial flow)
- I (intermittent or ephemeral flow)

Historical Distributary points were mapped to mark the endpoints of historically discontinuous channels.

Historical Outer River Banks were mapped as polygons from a variety of historical sources that depicted the outer banks of the Ventura and Santa Clara Rivers. A simplified polyline version of this data was also generated for cartographic visualization purposes, as a simple overlay for the historical habitat and channel data.

Historical Springs were mapped as point features.

This geodatabase provides direct information about **historical data sources**, **certainty levels**, **and notes** pertaining to different areas and features. These allow the user to intelligently assess the applicability of the data for the chosen technical question.

Primary and Secondary Source (Primary_Source, Secondary_Source):

The major source materials used to map the feature are listed using, to the extent possible, standard textual citation form. Full bibliographic information can be obtained from the corresponding record in the Endnote bibliographic database and/or report bibliography. When a source directly contributed to the location of a feature, it was listed as a Primary Source; when it indirectly helped locate a feature, it was listed as a Secondary Source. Not all features have secondary sources.

Certainty Attributes(InterpCert, Shape_Cert, Loc_Cert):

Three distinct kinds of certainty are recorded: the certainty of our **interpretation**of the feature, its **size/shape**, and **its location**.

Certainty of Interpretation

The following certainty level codes are used in the feature class attribute (InterpCert):

- High (H): Feature definitely representative of conditions circa 1769-1850.
- Medium (M): Feature probably representative of conditions circa 1769-1850.
- Low (L): Feature possibly representative of conditions circa 1769-1850.

Certainty of Size and Shape

The following certainty level codes are used in the feature class attribute (Shape_Cert):

• High (H): Accurate source material that probably closely follows actual shape; estimated to be within ±10% of actual area.

- Medium (M): Less accurate source material that probably generally follows actual shape; estimated to be between 50%-200% of actual area.
- Low (L): Inaccurate source material that may not follow actual shape; estimated to be between 25%-400% of actual area.

Certainty of Location

The following certainty level codes are used in the feature class attribute (Loc_Cert):

- High (H): Expected maximum horizontal displacement less than 50 meters.
- Medium (M): Expected maximum horizontal displacement less than 150 meters.
- Low (L): Expected maximum horizontal displacement less than 500 meters.

Notes

Direct and indirect quotes from data sources are included in this field when they were available. Other clarifying notes relating to evidence and methodology are included in this field as well

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As with any map or GIS layer, confidence or certainty varies geographically due to differences in source data or methods. For more detail about methods refer to:

Grossinger, RM, Striplen CJ, Askevold R, Brewster E, Beller EE. 2007. Historical landscape ecology of an urbanized California valley: wetlands and woodlands in the Santa Clara Valley. Landscape Ecology.: 103-120.

Technical users are strongly encouraged to read Grossinger et al. 2007 and the Ventura historical ecology report (Beller et al. 2011) to gain a stronger understanding of the strengths and limitations of the dataset.

For additional information about this project refer to: http://www.sfei.org/projects/VenturaHE

Credits

San Francisco Estuary Institute 2011

Access and use limitations

Confidence or certainty varies geographically due to differences in source data or methods. For more detail about methods refer to: Grossinger, RM, Striplen CJ, Askevold R, Brewster E, Beller EE. 2007. Historical landscape ecology of an urbanized California valley: wetlands and woodlands in the Santa Clara Valley. Landscape Ecology.:103-120. Technical users are strongly encouraged to read Grossiger et al. 2007 and the Ventura historical ecology report (Beller et al. 2011) to gain a stronger understanding of the strengths and limitations of the dataset.

ArcGIS Metadata ▼

FGDC Metadata ▼