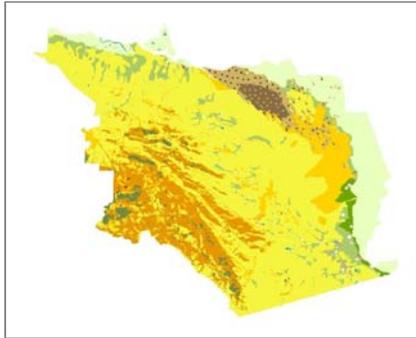


Historical_Habitats

File Geodatabase Feature Class



Tags

Historical ecology, San Francisco Bay, Sacramento-San Joaquin Delta, Mount Diablo, Byron Hot Springs, Contra Costa County, Antioch, Pittsburg, Oakley, Byron, Brentwood, Knightsen, Discovery Bay, West Pittsburg, Clayton, Los Medanos, Los Meganos, Los Vaqueros, Marsh Creek, Deer Creek, Briones Creek, Dry Creek, Sand Creek, Kirker Creek, Kellogg Creek, Brushy Creek, Frisk Creek, West Antioch Creek, Markley Canyon Creek, Lawlor Ravine, East Antioch Creek, Mount Diablo Creek, Curry Canyon, Round Valley Creek, Willow Creek, Irish Canyon, Mitchell Creek, California, USA, bay, creek, channel, slough, tidal, habitat, meadow, savanna, riparian, pond, marsh, alkali, sink scrub, lake, wetland, alkali flat, interior dune scrub, chaparral, oak, woodland, grassland, historical condition, ecology, landscape ecology, pre Euro-American

Summary

Geospatial data describing historical (mid-1800s) characteristics of East Contra Costa County and adjacent tidal marshlands were developed to provide information for flood protection, watershed management, habitat restoration, local education, and research. Study area boundaries match the 2006 HCP/NCCP, with the addition of 13,276 acres of historical tidal marsh to the north and east.

Description

This geodatabase contains several feature classes representing a reconstruction of the historical landscape and prevailing conditions of East Contra Costa County prior to Euro-American modification. This dataset integrates many sources of data describing the historical features of East Contra Costa County.

Extensive supporting information, including bibliographic references, analyses, and research methods, can be found in the East Contra Costa County report: (Stanford B, Grossinger RM, Askevold RA, et al. 2011. East Contra Costa County historical ecology study. Prepared for Contra Costa County and the Contra Costa Watershed Forum. A report of SFEI's Historical Ecology program, SFEI Publication # 648. San Francisco Estuary Institute, Oakland, CA)

A geographic information system 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 a means to geographically locate information gathered from surveyor notes, early explorers' journals, travelers' accounts, and newspaper articles.

The GIS was also used to capture a synthesis of the historical landscape as GIS vector layers. By using the various georeferenced maps and photographs combined with narrative sources, we constructed a synthesis layer representing the historical landscape. Polygons, lines, and point layers were developed to depict features in the historical landscape. The layers making up the historical habitat map include Historical_Habitats, Historical_Creeks, Historical_Distributaries,

Historical_Tidal_Channels, and Historical_Springs.

Historical habitats mapped as polygons include Alkali Meadow, Alkali Sink Scrub, Alkali Flat, Alkali Marsh, Perennial Alkali Pond, Tidal Marsh, Tidal Pond, Tidal Slough, Valley Freshwater Marsh, Wet Meadow, Perennial freshwater Pond, Seep Wetland, Woodland, Oak Savanna, Chaparral, Grassland, Interior Dune Scrub, Interior Dune (veg. undef.), Rock Outcrop. See the East Contra Costa County Historical Ecology Study for a detailed description of the historical habitats and the methods that were used to map them.

Historical creeks and their distributaries were mapped as polyline features in two distinct layers. Distributary channels mark the endpoints of historically discontinuous channels. Historical springs were mapped from a limited number of sources, and as a result the layer does not show all springs that were historically present.

Habitats attribute table fields:

Habitat Type: land cover type. Symbolize on this layer to see our land cover type.

Habitat Class: allows habitat types to be grouped into wetland, dryland, alkali, and tidal marshland.

Primary Source: data used to digitize a feature.

Secondary Source: data used to support mapping of a feature – additional evidence

Interp Cert: coded H (high): feature definitely present before Euro-American modification; M (medium): feature probably present before Euro-American modification; or L (low): feature possibly present before Euro-American modification.

Shape Cert: coded H (high): mapped feature expected to be 90%-110% of actual feature size; M (medium): expected to be 50%-200% of actual size; L (low): expected to be 25%-400% of actual size.

Loc Cert: H (high): expected maximum horizontal displacement less than 50 m; M (medium): less than 150 m; L (low): less than 500 m.

Wieslander Plus: if yes, the feature was mapped using the adjusted Wieslander dataset. See report p. 73.

Credits

San Francisco Estuary Institute 2011

Access and use limitations

As with any map or GIS layer, confidence or certainty varies geographically due to differences in source data or methods. This geodatabase provides direct information about the certainty level of different areas and features to allow the user to intelligently assess the applicability of the data for the chosen technical question. The Interp Cert, Shape Cert, and Loc Cert fields provide information about the certainty of classification type (feature existence), size/shape, and location, rated as high, medium, or low. 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 the full study report (Stanford et al. 2011 – available at www.sfei.org/HEEastContraCosta) to gain a stronger understanding of the strengths and limitations of the dataset. In no event shall the creators, custodians, or distributors of this information be liable for any damages arising out of its use (or the inability to use it). These data are not legal documents or of survey quality and are not intended to be used as such. Although extensive effort has been made to produce error-free and complete data, all geographic information has limitations

due to the scale, resolution, date and interpretation of the original source materials. Users should consult available data documentation (metadata) for these particular data to determine limitations and the precision to which the data depict distance, direction, location or other geographic characteristics. Data may be subject to change without prior notification. If this data is modified, changes should be documented in a metadata record that should accompany all redistributed data. If data is transmitted or provided in any form to another user, the data must be accompanied by a copy of this disclaimer and all documentation provided with the original data set, including the full metadata record. SFEI requests that the use of these data in any map, publication, or report should cite the data source(s) used and give proper attribution and credit to the originators of the data.

ArcGIS Metadata ▼

FGDC Metadata ▼