EMPOWER | INNOVATION | CHAMPIONS

2014 INNOVATION FAIR

DIVISION OF ENVIRONMENTAL PLANNING & ENGINEERING

DISTRICT 4

ABOVE AND BELOW: STORIES FROM OUR CHANGING BAY

About the Division

Caltrans formed the Division of Environmental Planning & Engineering in 1970s in response to the enactment of the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). The Division is obligated for managing Caltrans' responsibilities under all applicable federal and state environmental laws and regulations. The Division consists of an interdisciplinary team of planners, engineers, archaeologists, architectural historians, biologists, and landscape architects. Their mission plays an integral role in the Project Development process.

Background

On October 17, 1989, the Loma Prieta earthquake rocked the San Francisco Bay Area, causing significant damage throughout the region, including the failure of a portion of the San Francisco-Oakland Bay Bridge. After a protracted process that took nearly ten years, the decision was made to replace the East Span with a new structure. Consultation under Section 106 of the National Historic Preservation Act resulted in a finding of adverse effect – several historic properties would be impacted as part of the replacement project, including the historic San Francisco-Oakland Bay Bridge. To mitigate adverse effects, the consulting parties entered into a Memorandum of Agreement outlining dozens of stipulations to be implemented. One required Caltrans to create an exhibit relating to the history and engineering of the major bridges of the San Francisco Bay. Above & Below: Stories From Our Changing Bay, presented at the Oakland Museum of California, the "OMCA," is the result.

Project Description

Caltrans partnered with the Oakland Museum of California to present the museum exhibition titled Above and Below: Stories From Our Changing Bay, which ran from September 2013 until February 2014. and reached approximately 62,000 visitors. The exhibition explored the historically layered hybrid landscapes in which human engineering and natural processes have come together over time to shape and re-shape the land and water around the San Francisco Bay. The goal was for visitors to see the Bay and its history in the current landscape and to better understand how our lives are continually shaped by the natural world of the Bay, and how we in turn shape it.

The exhibition was visually appealing and rich with historical artifacts from throughout the Bay Area. Evidence of human interaction with the environment over time is etched in traces and scars upon the natural environment. Sunken ship hulls, cannon balls and other human detritus covered with blooming marine life helped tell the story. Salvaged parts from the Bay Bridge were displayed as well, including the 12 foot tall neon clock and "stop pay toll" sign which once graced the Oakland toll plaza. Video and audio clips made from around the San Francisco Bay augmented the complicated story. Technology played an important role throughout the exhibition.

Innovation

The mitigation was innovative for a number of reasons:

1) The scale of the exhibition was much larger than anything previously undertaken by Caltrans, within District 4 as well as across the state. The exhibition filled three exhibit halls at the Oakland Museum of California.

2) Holistic approach, contextualizing the unique cultural resources within framework of the entire Bay, allowing us to present a range of topics in an interconnected network, while focusing on the unique engineering achievement that is the original San Francisco-Oakland Bay Bridge.

3) Partnership with the Oakland Museum of California allowed for us to leverage their strengths, using various technologies, social media and oral histories.

ABOVE AND BELOW
STORIES FROM OUR CHANGING BAY

Oral Histories

A separate mitigation measure required the completion of oral history interviews focused on men and women who spent their careers working on the San Francisco-Oakland Bay Bridge. The Regional Oral History Office, part of Bancroft Library at University of California, Berkeley, was contracted to complete interviews and contribute the results to Above and Below. Twelve oral histories, totaling approximately 30 hours, were conducted. Video recordings of interview are interspersed throughout the exhibition adding richness and a personal dimension. Additionally, the transcripts and video clips are posted on the web accessible to students, scholars, and the public interested in the San Francisco Bay.
http://bancroft.berkeley.edu/ROHO/projects/baybridge/about.html

New Technology

A combination of historic photography combined with the recreated landscape helped guide the recreation of A 14-foot-high, 3D projection of Emeryville Shellmound, the location of Native American habitation site. Visitors passed under an arbor of willow and tule to enter "behind" and "in" the mound. A timeline mural with dense graphics and text along the back wall explored the complex accretion of history at this particular shellmound site.