A photograph of a wooden trestle bridge crossing a wetland area. The bridge is made of weathered wooden planks and metal supports, extending from the foreground into the distance. The wetland is filled with water and dense, golden-brown reeds. In the background, a tall metal transmission tower stands against a clear sky. The overall scene is bright and clear, suggesting a sunny day.

Alameda County Flood Control & Water Conservation District

**Alameda LAFCO Regular Meeting
January 15, 2015**

Protecting Alameda County since 1949



Long History of Successful Flood Control

Much of Alameda County was in a flood plain. Until the 1950s and 1960s, many areas of the county flooded repeatedly.



Hayward/San Leandro area in the 1950's, before flood control (above) and after (right).



ACFCD does important work and we do it well – *efficiently & economically*

By way of pump stations, erosion control structures, and hundreds of miles of pipeline, channels, levees and creeks, we:

- ▶ Protect lives and property from flooding
- ▶ Protect water resources- prevent water waste and diminished water supply
- ▶ Preserve and enhance natural environment

Protection from damage caused by flooding

The District was formed by the Alameda County Flood Control and Water Conservation District Act 205 of the California Uncodified Water Code. The Act authorizes the District to provide protection for all waterways, watersheds, harbors, public highways, lives and property, from damage caused by flood and stormwaters.



Protection from damage caused by flooding

Total facilities:

- 91 miles of earthen channels
- 36 miles of concrete channels
- 240 miles of underground pipe
- 13 miles of improved channels
- 24 pump stations
- 5 reservoirs
- 3 dams
- 200 miles of natural creeks



Protection from damage caused by flooding

In 1999, many people living in Alameda County were required by FEMA to secure expensive flood insurance.

Thanks to ACFCD efforts, far fewer people need to buy flood insurance today.

- ▶ FEMA flood maps in 1999 showed areas where property owners would have to buy flood insurance
- ▶ FEMA flood maps today show 14,000 fewer parcels in a Flood Hazard Area due to errors corrected as a result of our detailed and thorough review of FEMA's work
- ▶ CTP with FEMA because of excellent and proactive work

Capital improvement program reduces flooding

\$89.3 Million of constructed projects over the last 5 years.

\$19.7 Million allocated for projects scheduled for construction in FY 2015-2016.



We support Alameda County's quality of life and sustainability

ACFCD is committed to protection of life and property, habitat restoration, recreation and enjoyment of Alameda County residents.



Peralta Creek before (above) and after (right). Project completed in 2008-2009.

Economics– demonstration of fiduciary responsibility

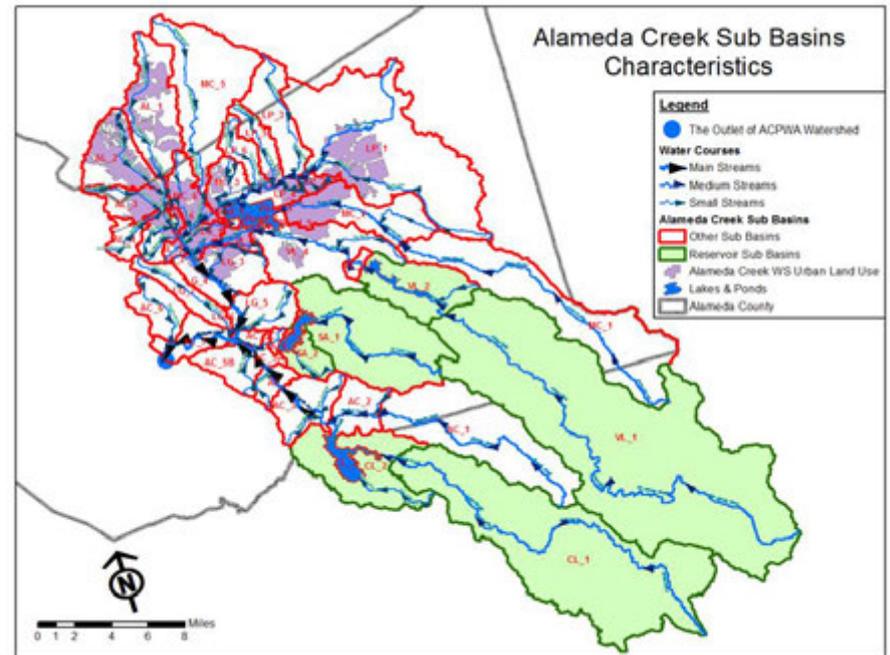
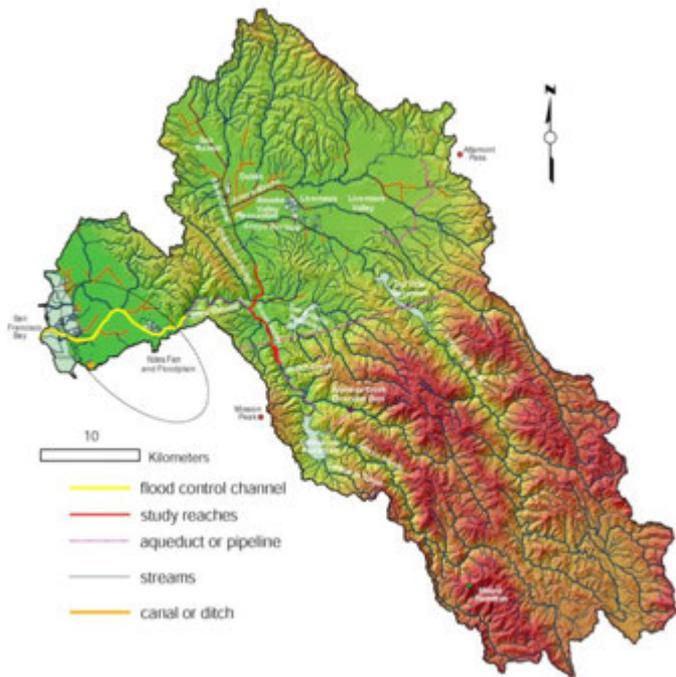
The District develops a Capital Improvement Program that maximizes sensible flood control.

- ▶ Projects are funded on a pay-as-you-go basis
- ▶ Significant monies are reserved each year to fund very expensive, future projects
- ▶ Each of the Zones maintains it's own budget. Revenue generated within the zone is to be spent only within that zone.
- ▶ The District has published an Annual Report since the year 2000.

Efficiency – full service staff and in-house expertise

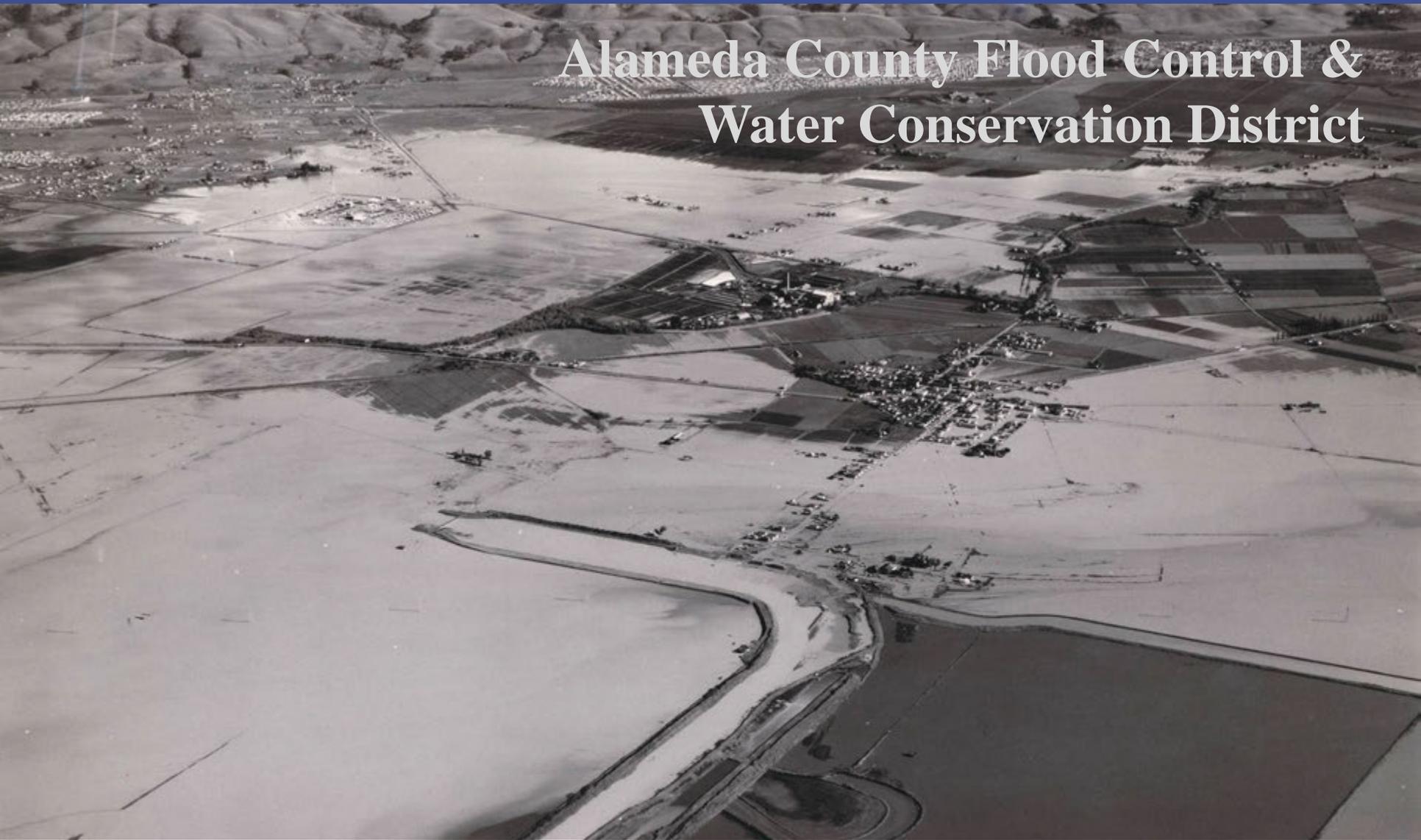
- ▶ **Maintenance and Operations** staff (M&O) operate and maintain all flood control facilities
- ▶ **Engineering** staff uses technology to design upgrades to old facilities and new infrastructure
- ▶ **Construction and Development** staff reviews design documents, issues permits, conducts lab testing and performs contract administration tasks

Proper management of Alameda Creek is mission-critical



Lower Alameda Creek ... Then and Now





**Alameda County Flood Control &
Water Conservation District**

Before Construction of Alameda Creek Federal Project large areas of Fremont, Union City and Hayward used to flood.

An aerial photograph of Alameda County, California, showing a mix of urban development and agricultural land. A prominent feature is a large, winding canal or flood control structure that runs through the center of the image, separating different land uses. The surrounding areas are densely packed with buildings and roads, indicating significant urbanization. The top of the image shows hilly terrain with some vegetation. The text "Alameda County Flood Control & Water Conservation District" is overlaid in white at the top right.

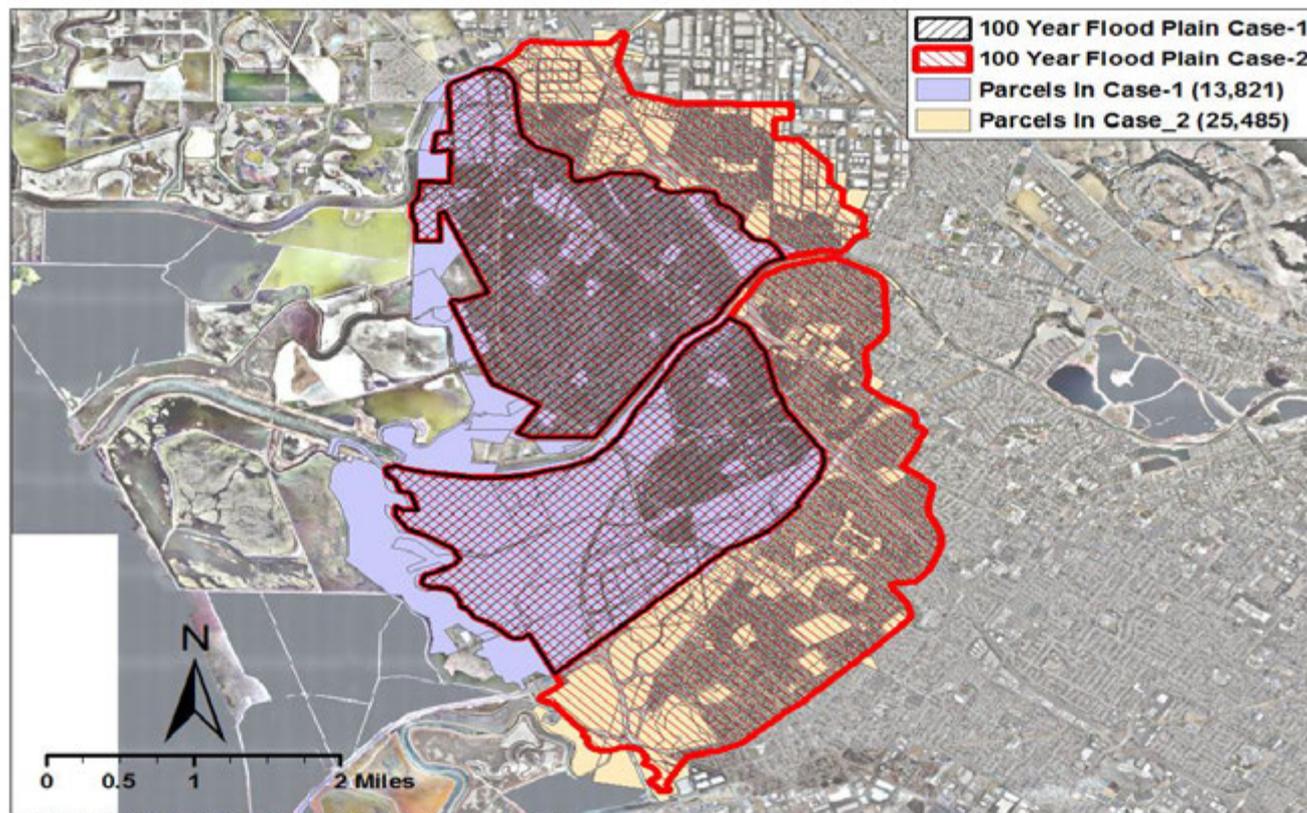
Alameda County Flood Control &
Water Conservation District

Alameda Creek Federal Project allowed major urbanization in Western Alameda County cities

Portion of 100 Year Floodplain for East County



Alameda Creek simulation ("what if")



Alameda Creek – ACWD Inflatable Dam



Critical Components of Alameda Creek Watershed Management

- ▶ Maintain District Oversight
- ▶ Development Regulation
- ▶ Regulation Zones
- ▶ Floodplain Mitigation Without Downstream Impacts
- ▶ Sediment Management
- ▶ Maintenance of Quarry Lakes Flood Storage Volume
- ▶ Future Flood Control Projects Design and Review
- ▶ Future Coordination of Reservoir Operations

Strong collaboration and leadership has enabled us to do great work

In addition to collaborating with local organizations like the Alameda Creek Alliance and the Friends of Sausal Creek, ACFCD works closely with Federal, State and County Agencies



Collaboration with Union City funded Castro Valley Creek Restoration



Castro Valley Creek before



Castro Valley Creek after



Tule Ponds provides flood control and educational opportunities

Located in Fremont, this 14-acre district-owned parcel has been transformed into scenic wetlands and ponds providing flood protection and pollution control for stormwater flowing to the Bay. It also serves as a migratory bird habitat.



Recreation

ACFCD has license agreements with the following cities and municipal entities to provide recreational opportunities on Flood Control properties: The cities of Emeryville, Oakland, San Leandro, Hayward, Union City and Fremont; and with EBRPD and HARD

- ▶ **Emeryville**
- ▶ **Oakland**
- ▶ **San Leandro**
- ▶ **Hayward**
- ▶ **Union City**
- ▶ **Fremont**
- ▶ **HARD (Hayward Area Recreation and Park District)**
- ▶ **EBRPD (East Bay Regional Park District)**

Salt Ponds Restoration improves habitat and quality of life



Commercial salt ponds like Eden Landing near Hayward are being reverted to natural marsh, mudflat and other managed wetland habitats.



Collaboration and leadership to address sea level rise and extreme tides



Concluding : *Our challenges*

Challenge 1: Land use and climate change

Challenge 2: Limited resources

Challenge 3: Permitting

“Biggest problem with flood control in the state is dividing up watersheds” - Department of Water Resources

***Alameda County Flood Control &
Water Conservation District***

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