

# Zone 7's Regional Flood Protection Program

Getting from here...





LAFCo Meeting, January 15, 2015

#### Zone 7 Highlights

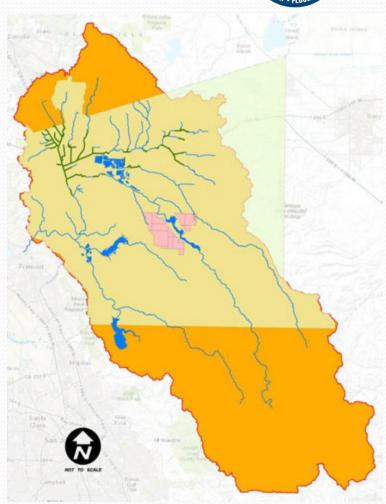
- Service Area: 425 Square Miles
- Regional flood control and stream management services
- Local water resource management (local run-off and groundwater)
- Wholesale treated drinking water to retailers serving over 200,000 people in Pleasanton, Livermore, Dublin and the Dougherty Valley of San Ramon
- Untreated water supplier to irrigate about 3,500 acres, primarily South Livermore Valley vineyards (\$200 million annual industry in Valley)
- Imports 80% of water supply from the State Water Project (South Bay Aqueduct)



## Zone 7's Flood Protection Programs



- Regional Flood Protection Planning
- Hydrologic and Hydraulic Modeling
- Capital Improvement Program
- Facility Maintenance
- Watershed Protection
- Emergency Response
- Collaboration with Local Agencies
- Integration of Water Resources



# Leadership in Flood Protection



- Bay Area Integrated Regional Water Management Plan (IRWMP):
  - Zone 7 currently represents the Flood Protection/Stormwater Management Functional Area for the entire Bay Area, and
  - Zone 7 represents Alameda County for the BAIRWMP Eastern Subregion
- Bay Area Flood Protection Agencies Association (BAFPAA):
  - Both the County and Zone 7 participate, representing respective zones, and
  - Zone 7 previously acted as chair
  - Zone 7 started annual meetings which have become very successful

### Zone 7's Flood Protection Leadership, e.g., BAFPAA

- BAFPAA's First Annual Workshop, held Feb 21, 2013 at Zone 7
- Very successful; annual workshops have expanded and continue
- 2015 Annual Workshop on Sea Level Rise is being co-hosted by BAFPAA and CHARG



# **Integrating Water Resources**



Flood Control Channels are multi-purpose facilities:

- Flood flows
- Sediment management
- Habitat corridors

- Linear trails
- Water Recharge
- Water Quality

Future Chain of Lakes will also serve multiple purposes such as:

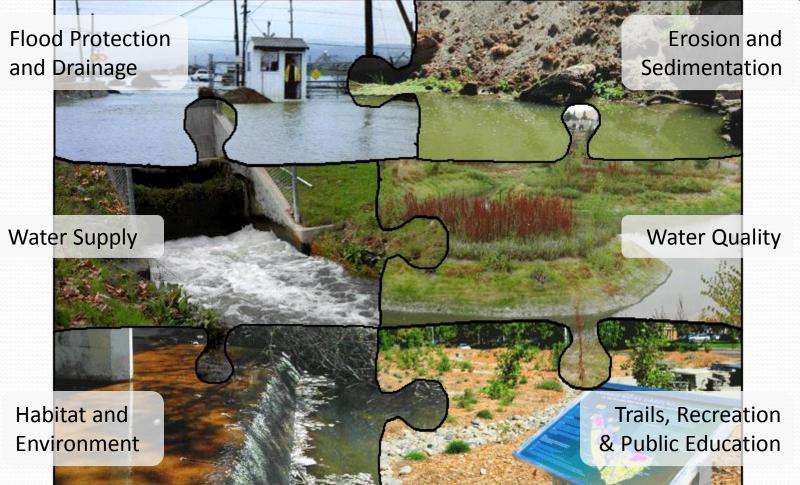
- Peak storm flow detention
- Groundwater recharge
- Salt-loading abatement

- Habitat corridors
- Regional trail connectivity

Examples include Zone 7's Stream Management Master Plan, Lake Use Plan and Water Supply Evaluation

## **SMMP: Effective Integration**







### **Integration: Chain of Lakes' Primary Uses**

#### PRIMARY USES

Surface water storage and conveyance

Stormwater detention

Groundwater recharge

0 0.5 1 mile



### **Integration: Chain of Lakes' Secondary Uses**

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#### SECONDARY USES



Habitat/ Conservation

Active recreation



Education/ Passive recreation



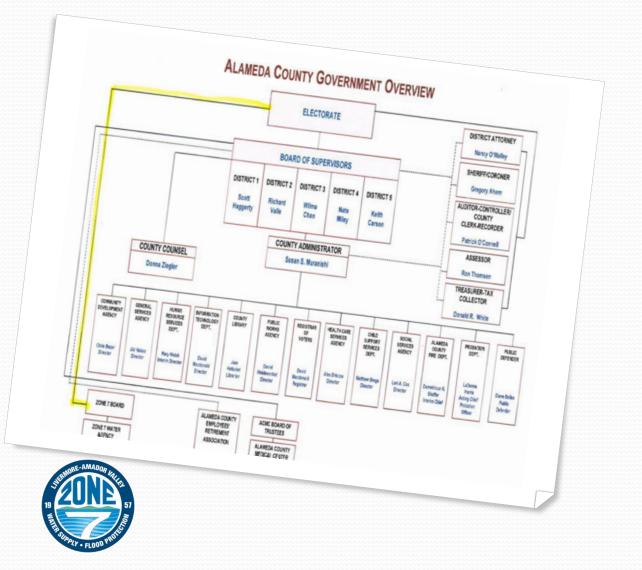
Recycled water storage

0 0.5 1 mile

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# Working with the Other Flood Zones

- Thanks to County's initial help, Zone 7 has a very effective, stand-alone flood protection program
- Zone 7 does its own planning, design and, through contract services, construction of flood assets





## **Collaborating on Grants**

- Zone 7 collaborated with the City of Dublin on two Urban Greening grant applications for low-impact development technologies, groundwater quality monitoring, and stream restoration
- Zone 7 has collaborated with others such as the City of Livermore and EBRPD in seeking funding for linear trails along Zone 7's flood facilities
- Zone 7 collaborated with the RCD/NRCS on pilot projects for slope stability through biotechnical engineering
- Zone 7's Living Arroyos Program is a public-private partnership with City of Livermore and Urban Creeks Council, facilitating volunteer days



## Maintenance Activities: Opportunities to Improve and Integrate

- Completed 33 bank repairs, four biotech brush walls, 2,019 linear feet of access roadway and drainage renovation
- Planning, permitting, design and construction management was performed by Zone 7 staff
- Summarized integrated water resource activities in annual flood report presented to the board in May 2014 and posted on the Zone 7 website
- Emergency repairs including failed utility crossings







Before

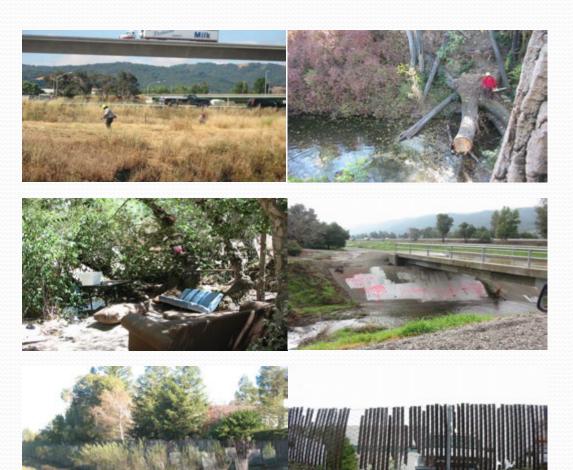
After





## **Routine Maintenance Activities**

- Debris removal
- Vegetation management
- Graffiti abatement
- Fence & gate repair
- Planting and erosion control
- Homeless encampment cleanup



# **Questions?**



Sign up for Zone 7's e-Newsletters, http://www.zone7water.com/news/enewsletter-a-signups