



Zone 7's Regional Flood Protection Program

Getting from here...



...to 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)

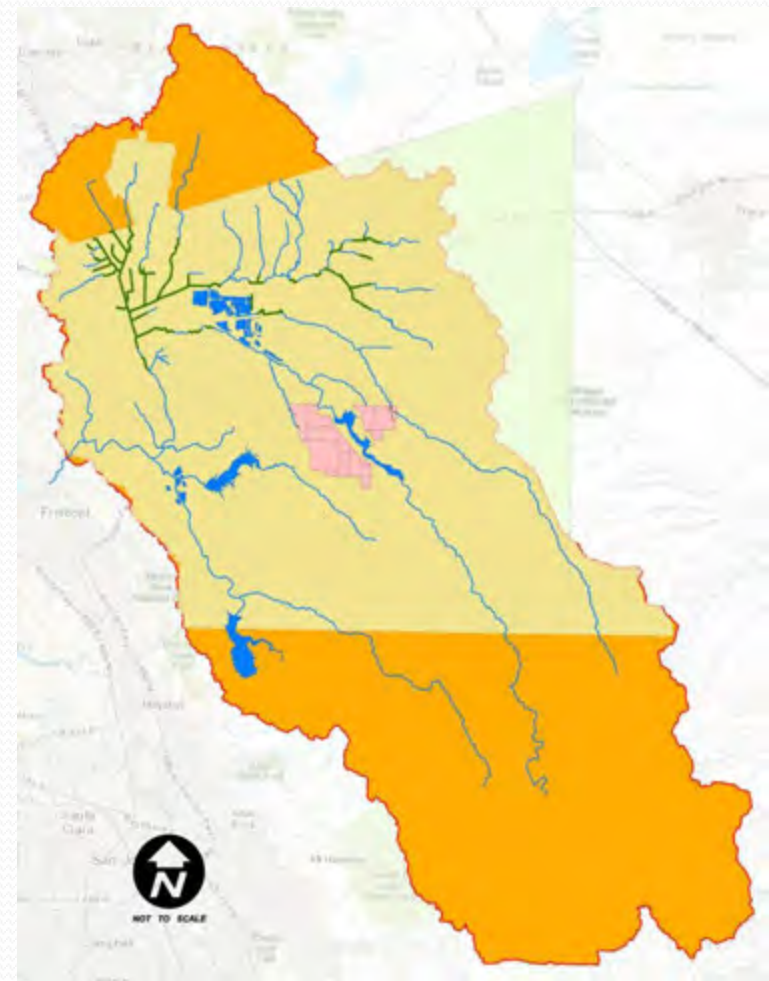
Zone 7 Service Area



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



Flood Protection
and Drainage

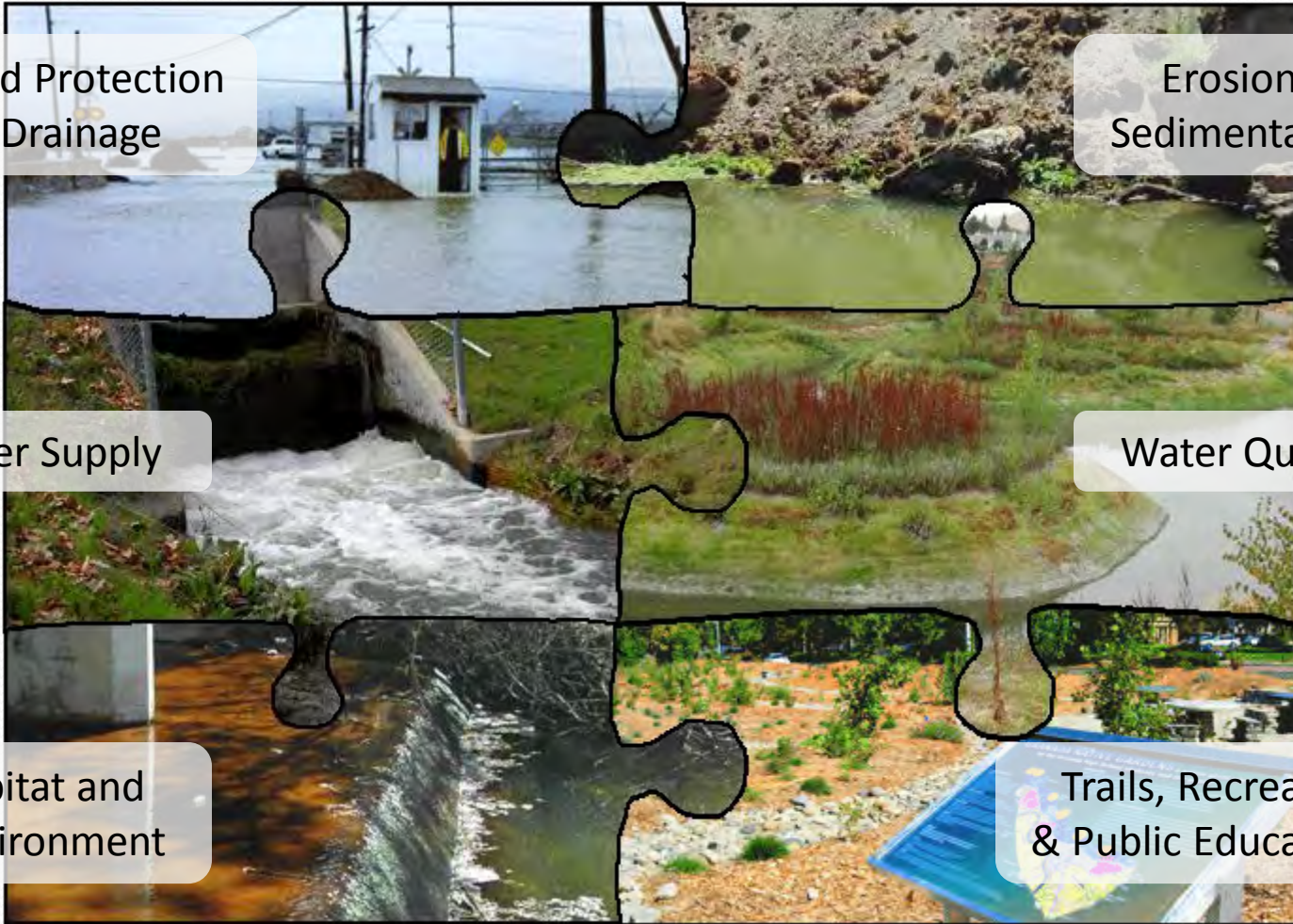
Erosion and
Sedimentation

Water Supply

Water Quality

Habitat and
Environment

Trails, Recreation
& Public Education



Integration: Chain of Lakes' Primary Uses



PRIMARY USES



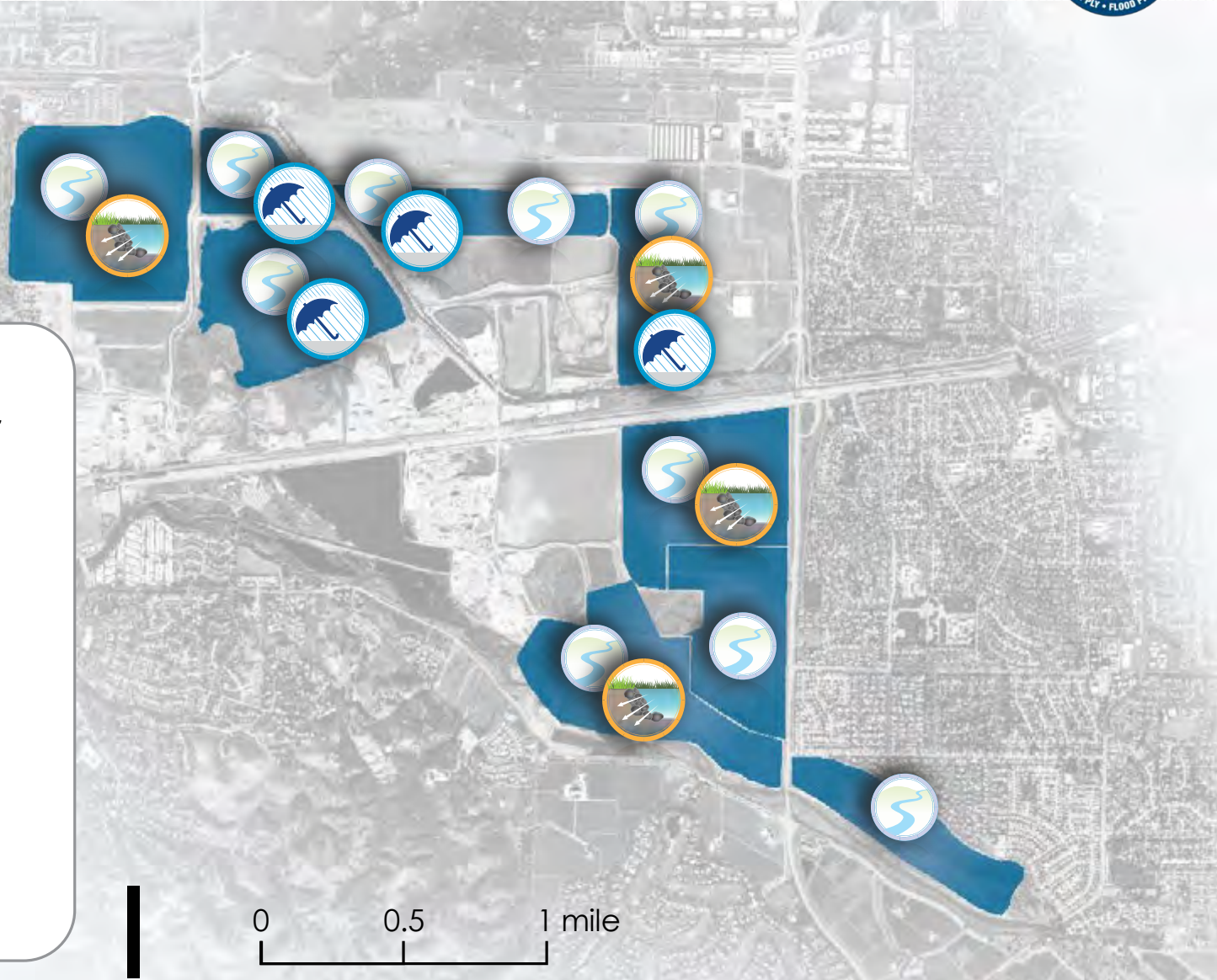
**Surface water
storage and
conveyance**



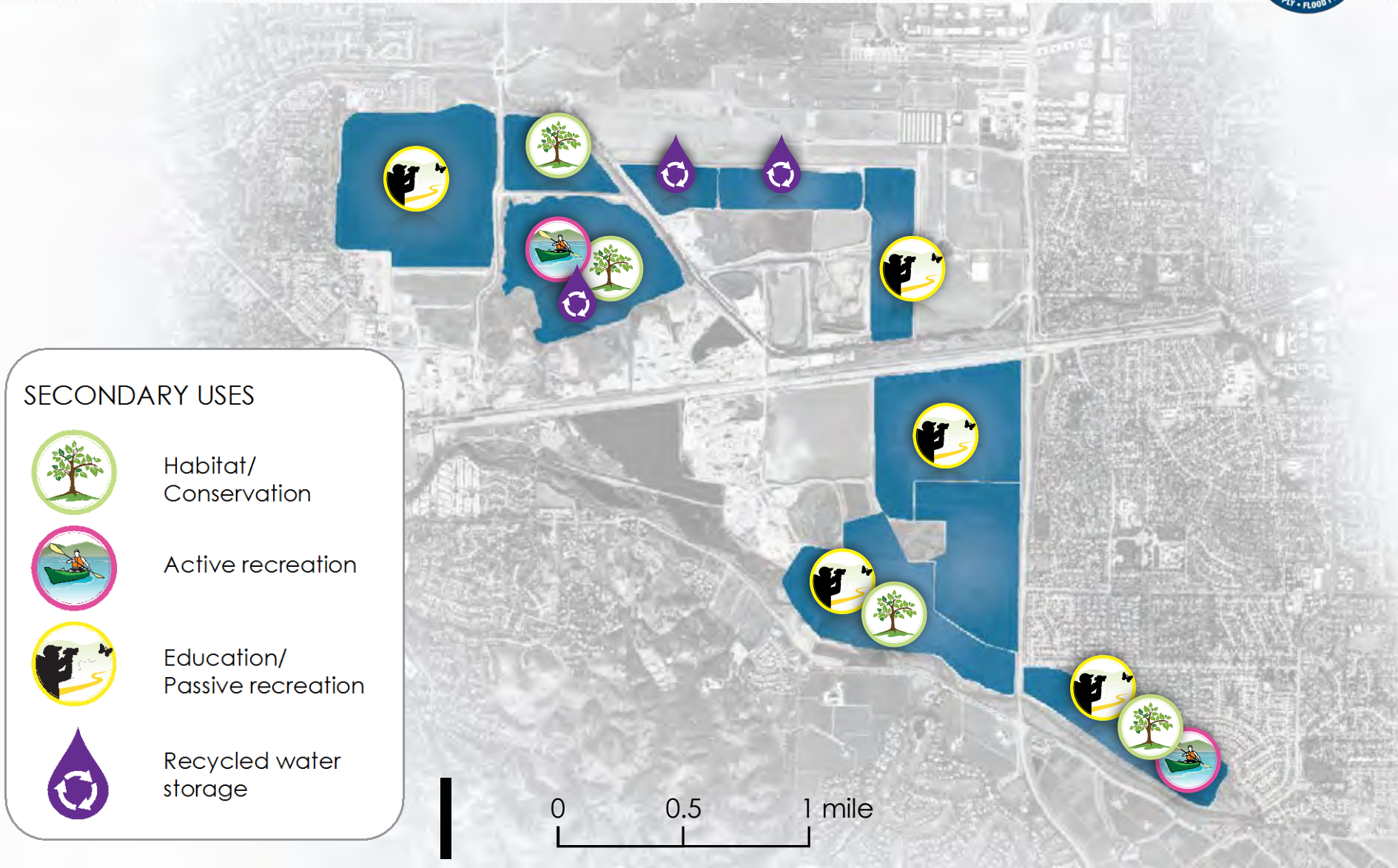
**Stormwater
detention**



**Groundwater
recharge**

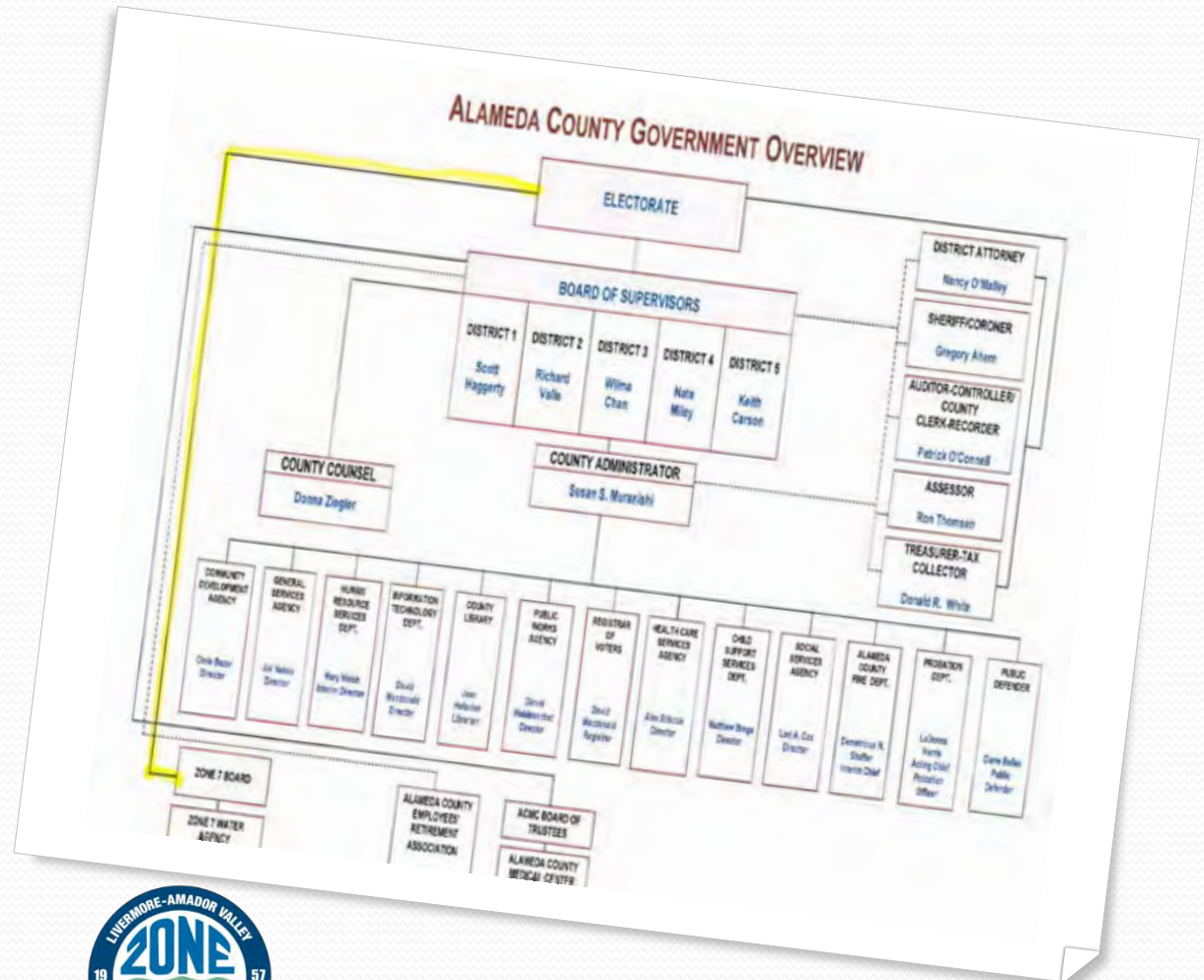


Integration: Chain of Lakes' Secondary Uses



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>