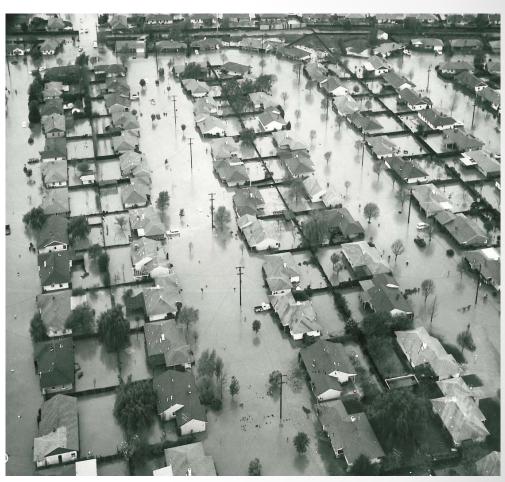
Bay Area Flood Protection Agencies Association

6th Annual Meeting February 21, 2013

By Mitch Avalon
Deputy Chief Engineer
Contra Costa County Flood Control District

Overview

- Needs Assessment
- Seal Level Rise
- Sediment
- Delta
- Stormwater Quality
- Legislation
- BAFPAA Role



Grayson Creek Flooding
April 1958

Flood Protection Needs Assessment

- DWR Report
- Where do we go from here?
- Flood Protection System Needs
 - Capital Replacement
 - Upgrade inadequate system components
 - System expansion
- Promotion opportunity for Flood Control



Pine Creek Flooding April 2, 1958

Aging Infrastructure

Capital Replacement

Funding

50 Year Plan

Disadvantaged communities

Unequal funding resources countywide

San Ramon Drop Structure

Level of Service

100? 200? Less?

Community Design vs. Funding Capacity

 Reduction over time (Pinole Creek)



Ellinwood Creek (Walnut Creek remnant) •

Federal Partnership

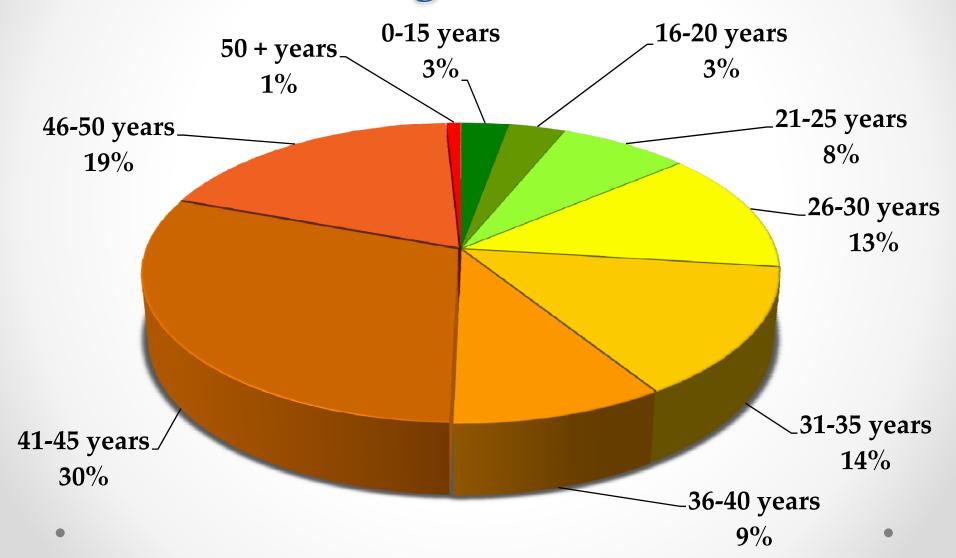
- Federal participation essential
- Is the current partnership working?
- Deauthorization of Lower Walnut Creek
- Need a new Corps/NRCS program / process



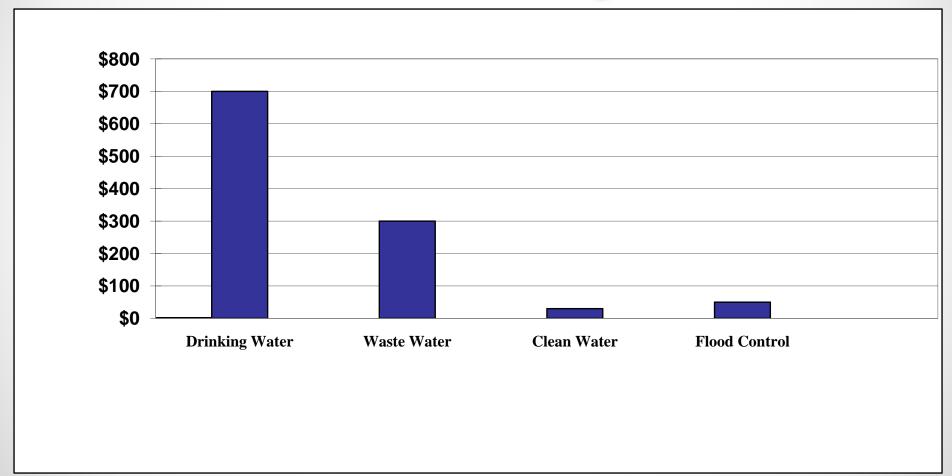
Grayson Creek Channel

Infrastructure

Value and Age in 2010 Dollars



Contra Costa Stormwater Payments



Average annual residential cost for water-related services

Sea Level Rise and Low Lying Communities

- Low energy/low gradient reach will expand
- System expansion with Sea Walls?
- Community Design and Reasonable Protection
- BCDC projects
- Handy Dandy Handout



Alhambra Creek Beaver Dam

 Multi-agency approach

Sediment

- More research
- Impacts from the Delta
- Delta outflows/Bay inflows
- Conflicting policy objective (good sediment/bad sediment)



Lower Pinole Creek

Delta Impact

BDCP alternative

IRWMP impacts

- Water Bond
 - Outside Delta Projects
 - Local Roads/Local Drainage



Marsh Creek Reservoir

Stormwater Quality Issues

- Receiving Water Limitations
- Los Angeles NPDES Permit
- Permit Reissuance
- North Richmond Stormwater Pump Station



San Ramon Creek Bypass @ Walnut Creek Civic Park, January 2006

Legislation/Funding Opportunities

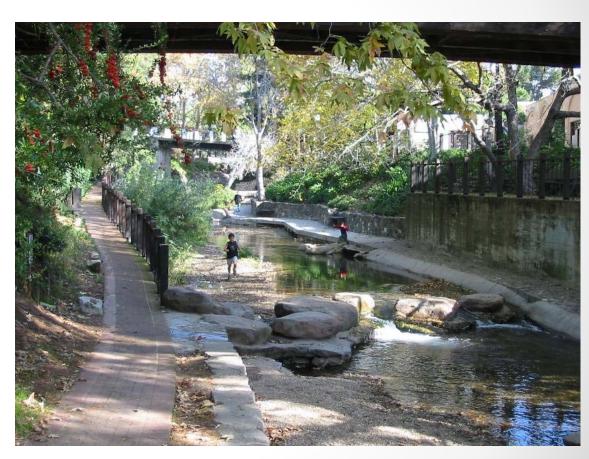
- Stormwater Fee
- County Engineers Association of California
- San Francisco
 Bay Restoration
 Authority and
 JPC



San Ramon Creek @ Livorna Rd, Alamo January 2006

Marketing

- Who we are
- What we do
- Develop our champions
- Media moments/ opportunities
- Regional message?

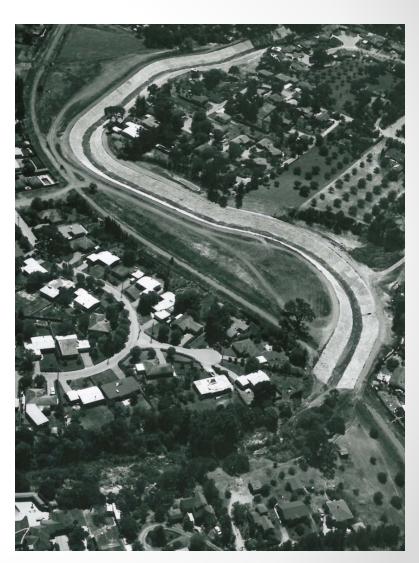


Downtown San Luis Obispo

BAFPAA Role

- Sea Level Rise information exchange
- San Francisco Bay Restoration Authority
- CEAC Vice Chair

Marketing



Las Trampas Creek 1960°