



Community Stewardship for Clean Water Workshop

Fire Prevention and Water Pollution Prevention



*November 3, 2007
Livermore Public Library*



Workshop Pre-Survey





Welcome

- Thank you for attending today's workshop!
- Today's speakers
 - Chris Morgan, CalFire
 - Barbara Silva, City of Fremont
- Workshop Organizers
 - South Bay Aqueduct Watershed Workgroup
- Financial Support
 - Proposition 13 Non-point Source Pollution Control Grant from the State Water Resources Control Board for the CALFED Bay-Delta Program





Harvey O. Banks Pumping Plant

Campbell



Bethany Reservoir



Lake Del Valle, Livermore



ACWD Water Treatment Plant No. 2

ALAMEDA CREEK WATERSHED

Northern
Eastern

The Alameda Creek Watershed covers over 1,000 square miles extending from Mt. Diablo in the north to the San Francisco Bay Area in the south. The watershed is divided into several sub-watersheds and includes the cities of Alameda, Fremont, Newark, and Union City.

EMERGENCY PLANNING

The Alameda Creek Watershed is a complex system with many sub-watersheds. The Alameda Creek Watershed is a complex system with many sub-watersheds. The Alameda Creek Watershed is a complex system with many sub-watersheds.



Water and sediment runoff from the watershed can cause erosion and sedimentation in the Bay Area. The Alameda Creek Watershed is a complex system with many sub-watersheds.

WATER QUALITY AND PROTECTION

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Livermore

Lake Del Valle

Del Valle Watershed

Fire Prevention & Water Pollution Prevention

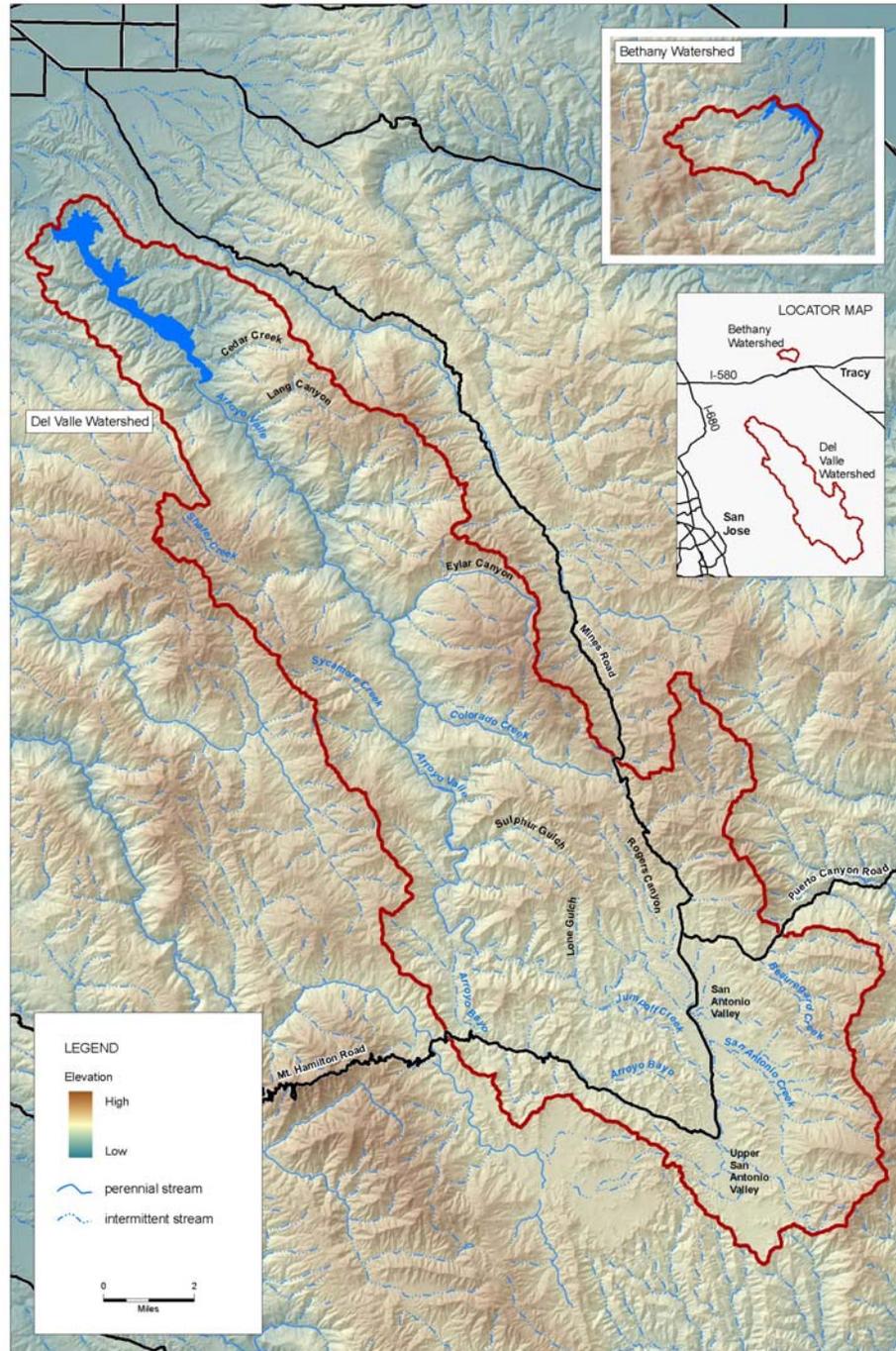
➤ Using the tools we learn about today will protect local waterways and benefit:

- Recreation
- Environment
- Agriculture
- Water Quality
- Drinking Water



Lake Del Valle, Livermore



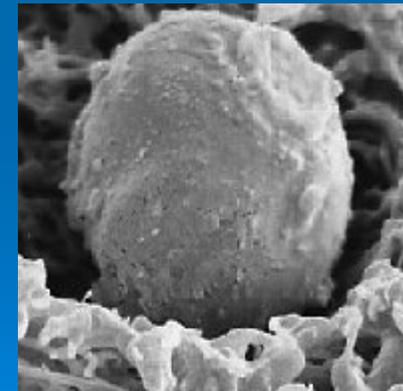
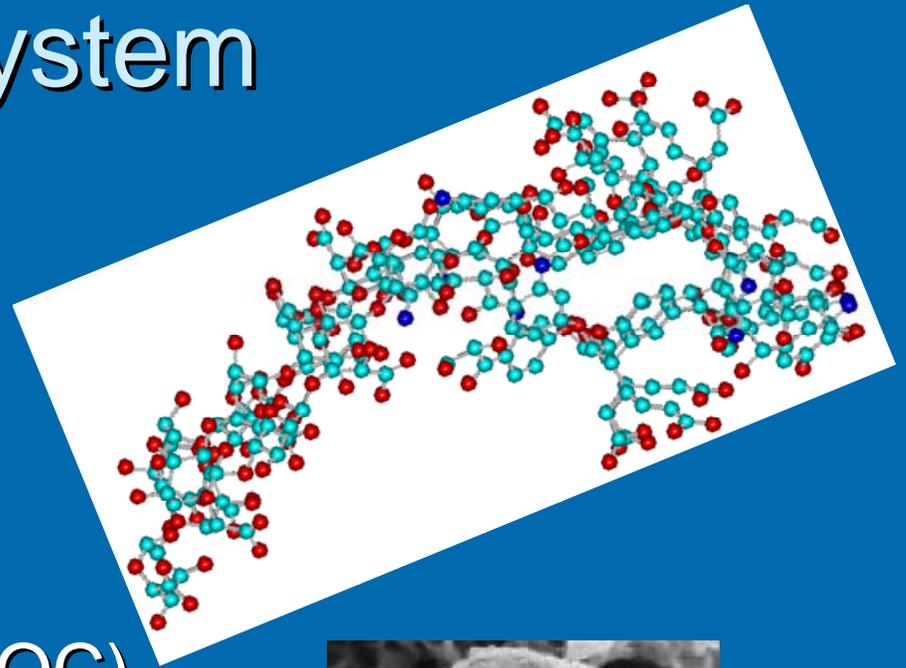


SOURCES: Topography: National Elevation Dataset, USGS, 2005
Hydrography: California Spatial Information Library, 2005

SBA Watershed Protection Program Plan - 205076
Figure 3-6
Streams and Watersheds

Contaminants of Concern in the SBA System

- Bacteria: *E. coli*, Total coliform, Fecal coliform
- Protozoa: *Giardia*, *Cryptosporidium*
- Bromide
- Total Organic Carbon (TOC)
- Total Solids (Dissolved & Suspended)
- Nutrients: Nitrate, Nitrite & Phosphorous





Community Stewardship for Clean Water Workshop

Fire Prevention
and
Water Pollution
Prevention



TODAY! 10:30 a.m. –
12 p.m.

Community Room A



Stormwater Pollution Prevention



Barbara Silva

Environmental Specialist with the City of Fremont

Resident of Livermore



History

- 1972 Clean Water Act
 - Goal: to restore the biological, physical, and chemical integrity of our nation's water. Fishable and Swimmable.
 - Section 402 of CWA established the National Pollutant Discharge Elimination System (NPDES)

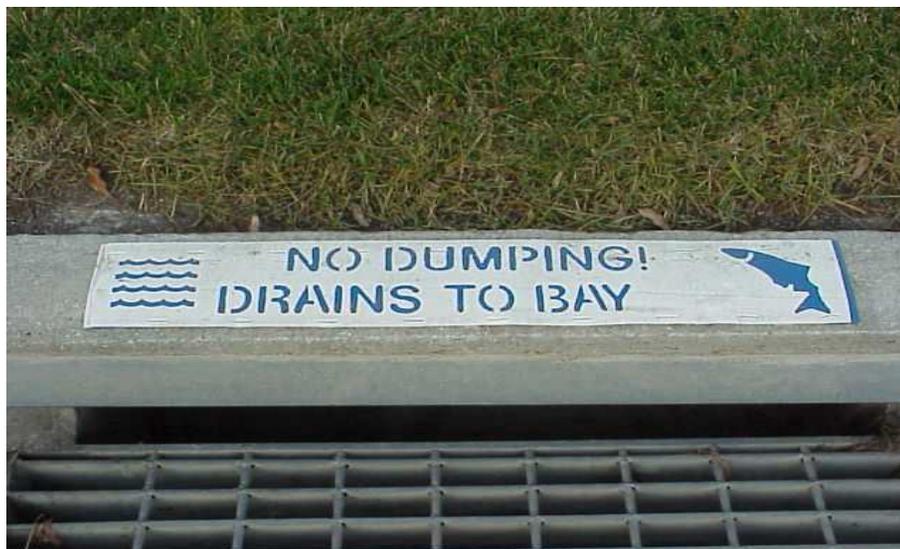


History part II

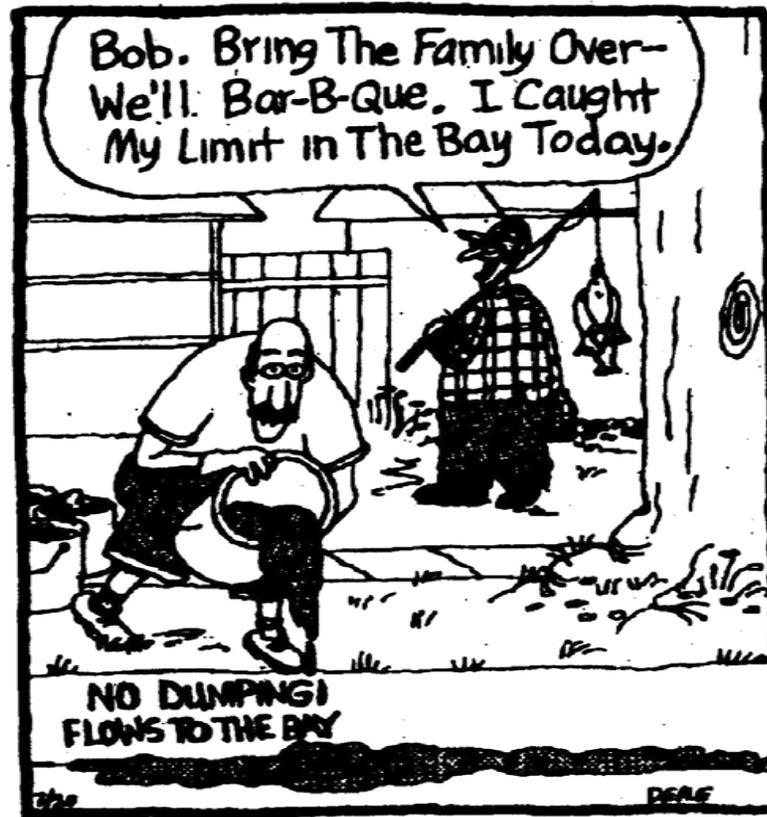
- 1987 amendments required municipal stormwater discharges obtain NPDES permit coverage.
- Effectively prohibit non-stormwater discharges to the storm drain system and toreduce pollutants in stormwater to the maximum extent practicable.

Only Rain Down the Drain !

“Only clean water may be discharged to the City’s storm drain system.”



PRETZEL LOGIC | Frank Deale



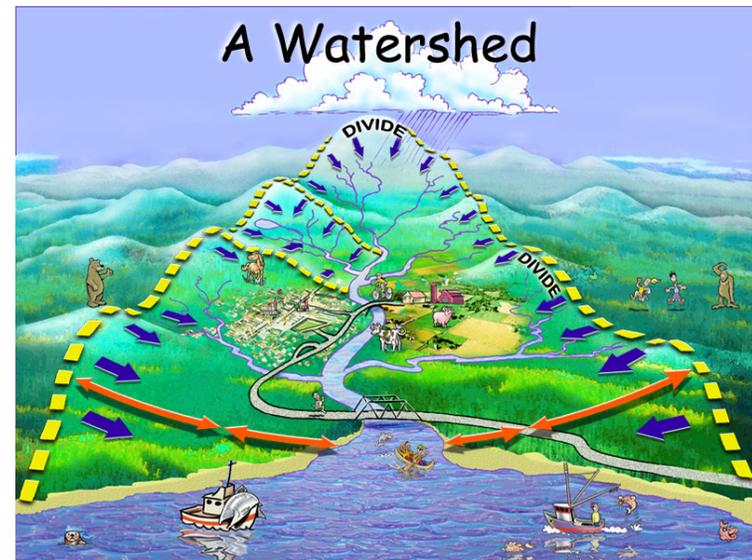


Different Pipeline Systems

- **Storm Drain System** – **untreated**, directly to the S.F. Bay. (outside)
- **Sanitary Sewer System** – *treated* at wastewater treatment plant. (inside)
- **Drinking Water System** – **untreated to treated drinking water.** (outside to inside)

What is a Watershed?

- A region, drainage basin, or area bounded peripherally by a divide and draining ultimately to a particular watercourse or body of water.



Alameda Creek Watershed



Roughly 633 sq miles, from Mt. Diablo (North) to Mt. Hamilton (South) Altamont Pass (East)

Pop. ~200,000 covering 5 cities (Dublin, Danville, San Ramon, Livermore, Pleasanton plus unincorporated areas)

What is Stormwater Runoff?

- It is what occurs when precipitation from rain flows over the ground.
- Impervious surfaces like driveways, sidewalks, and streets prevent stormwater from naturally soaking into the ground.





Why is Stormwater runoff a problem?

- It picks up debris, chemicals, dirt and other pollutants as it flows into a storm drain system or directly to other waterways.
- Anything that enters a storm drain systems is discharged untreated into waterbodies that eventually are used for swimming, fishing, and/or provide drinking water.

Pathway for Pollutants to enter..

■ Waterways and the S.F. Bay

- Pesticides & other chemicals
- Litter
- Oil & grease
- Pet Waste

Outfall



The Effects of Stormwater Pollution

- Excess nutrients – algae blooms
- Bacteria and other pathogens – create health hazards (swimming areas, beach closures)
- Debris – plastic bags, six-pack rings, cigarette butts, bottles



The Effects of Stormwater Pollution

■ Dirt / Sediment



Clouds water making it difficult for aquatic plants to grow. It also can destroy aquatic habitats.

and

High velocity water from nearby impervious surfaces devastates the stream banks

Effects con't

- Household hazardous wastes – insecticides, pesticides, paint, solvents, used motor oil and other auto fluids – poison aquatic life, and can contaminate drinking water sources.



What YOU can do...



What YOU can do

- ✓ Outdoors - Clean up spills with a broom, not a hose.
- ✓ Never apply chemicals when rain is in the forecast.
- ✓ If you must use chemicals, use them sparingly.



Too much fertilizer mean extra algae & aquatic plant growth. As algae decays it uses up oxygen in the water that fish and other wildlife need.

Our Water Our World products

- Use Less-Toxic products for home and lawn & garden care.
- Look for *Our Water Our World* logo on products. Sold at OSH



Got Bugs? Get Answers!

Choose less toxic products for a healthy home and garden.

visit www.ourwaterourworld.org

Look for this symbol before you buy

The advertisement features a large, smiling yellow flower character with a face, positioned on the left. To its right is a laptop displaying the 'Our Water Our World' website. The website content includes sections for 'Finding Pesticide Alternatives', 'Where To Buy Products', 'Hiring A Pest Control Company', 'Pesticide Residues In Food', 'Pesticides And Water Quality', 'Biopesticides', 'Diseases', and 'Control For our Garden Our World'. A ladybug is shown on a green leaf at the bottom right. The 'Our Water Our World' logo, which consists of a globe with a water droplet and the text 'our water' above and 'our world' below, is located at the bottom center.

What YOU can do

- ✓ Take your car a commercial car wash or wash it w/o soap, or over the lawn.
- ✓ Biodegradable soaps pollute creeks & Bay



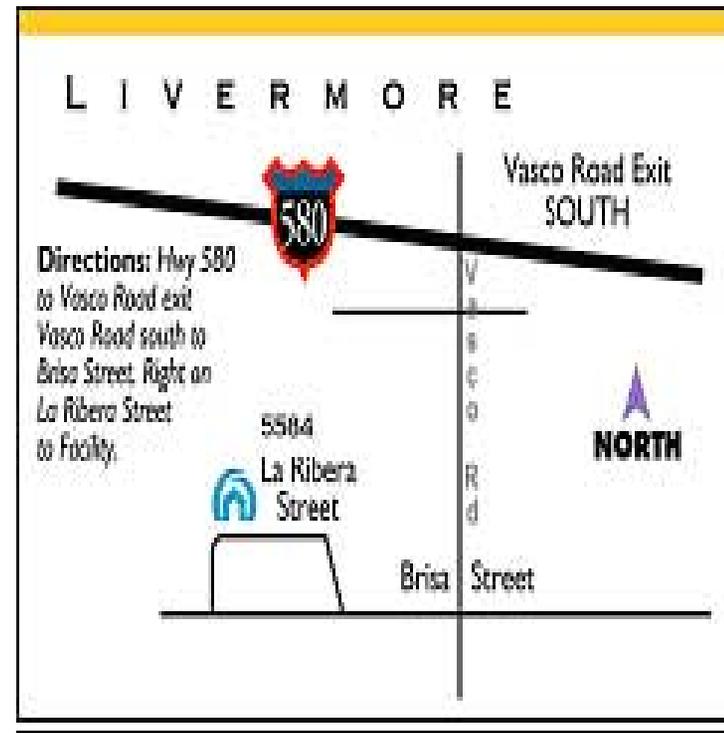
What YOU can do

- ✓ Pick up pet waste
- ✓ Dispose in garbage or toilet.
- ✓ Why? Pet waste is full of bacteria that can make people sick if it enters our water.



What YOU can do

- Dispose of your Household Hazardous Waste at Livermore facility (e.g paint, pesticides, batteries, motor oil, fluorescent)
- [www. Stopwaste.org](http://www.Stopwaste.org)
- 1-877-STOPWASTE



5584 La Ribera Street, Livermore

What YOU can do

- Pick up trash and debris
- Participate in a creek clean up event e.g Coastal Clean Up, Earth Day, Make-A-Difference Day.





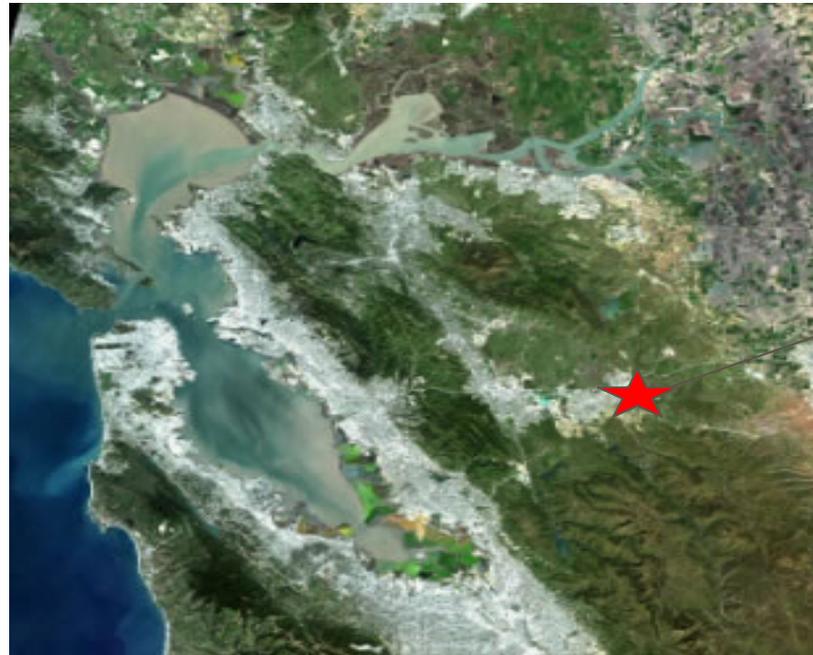
Creek Group- Alameda Creek Alliance

**Livermore, Pleasanton, Dublin, San Ramon,
Sunol, Fremont, Union City, and Newark**
*Streams: Alameda Creek (includes Arroyo de la
Laguna, Arroyo del Valle, Arroyo Mocho, Sinbad
Creek, and Stonybrook Creek)*

Alameda Creek Alliance

Jeff Miller, 510-845-4675
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www.alamedacreek.org

“We have not inherited the world from our forefathers –
we have borrowed it from our children.”
- Kashmiri proverb



Livermore



Q & A

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