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
Cities served:
Zone 7
Dublin
Livermore
Pleasanton
ACWD
Fremont
Newark
Union City
SCVWD
Campbell
Cupertino
Los Altos
Los Altos Hills
Los Gatos
Milpitas
Monte Sereno
Mountain View
San Jose
Santa Clara
Saratoga
Sunnyvale

The South Bay Aqueduct (SBA) System
Harvey O. Banks Pumping Plant
Bethany Reservoir
Lake Del Valle, Livermore
ACWD Water Treatment Plant No. 2
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
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
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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 Swimable.
- 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 to ....reduce 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.”
Bob, bring the family over—
We'll Bar-B-Que. I caught
My limit in the bay today.

No dumping flows to the bay
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
What YOU can do

✓ Take your car to 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
- 1-877-STOPWASTE

5584 La Ribera Street, Livermore
What YOU can do

- Pick up trash and debris
- Participate in a creek 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
alamedacreek@hotmail.com
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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