Design Standards

• Local storm drains are designed to convey the runoff from a 10-year storm.

• 10-year storm has a 10% chance of occurring in any given year.
Design Standards

• Creeks and regional flood control facilities are designed to convey the runoff from a 100-year storm.

• 100-year storm has a 1% chance of occurring in any given year.
Creek Design

- 1% Design Standard for Creeks
  - Nationwide standard established by FEMA.
  - Creeks and regional flood control facilities have much higher potential to produce catastrophic flooding, property damage, and personal injury and/or death.
Creek Design

• Designed to accommodate 100-year runoff from entire watershed area, based on land use patterns identified in municipal General Plans.

• In urban areas, storm drains are assumed to convey runoff from 10-year storm.

• Runoff in excess of 10-year storm flows overland to creeks or ponds in streets/gutters.
Impacts of Storm Drain System Upgrade

• Upgraded storm drains will not induce creek flooding:
  – All creeks in Palo Alto can accommodate 10-year runoff.
  – Upgraded storm drains can’t convey more than the 10-year runoff to the creeks.
  – In larger storms, majority of extra runoff to creeks is from upper watershed areas.
Impacts of Storm Drain System Upgrade

- Upgraded storm drains will not induce creek flooding:
  - City will coordinate with SCVWD on storm drain upgrades.
  - Pump station design will include controls to limit pumping when creek levels are high.
Impacts of Storm Drain System Upgrade

- Upgraded storm drains will not prevent creek flooding caused by larger storm events similar to February 1998.
- Upgraded storm drains will allow quicker dewatering of flooded areas following the storm.
SCVWD Jurisdiction

Santa Clara Valley Water District (SCVWD) has jurisdiction over all creeks in Santa Clara County with a tributary area over 320 acres.

- San Francisquito Creek
- Matadero Creek
- Barron Creek
- Arastradero Creek
- Adobe Creek
- Deer Creek
- Los Trancos Ck.
Creek Maintenance

• SCVWD has responsibility for creek maintenance only in reaches where it has right-of-way or easement rights.

• In other reaches, the property owner is responsible for creek maintenance.
Flood Control Improvements

• Upcoming SCVWD projects
  – Adobe Creek at El Camino Real
  – Adobe Creek Erosion Control Repairs
    (El Camino Real to Foothill Expwy.)
    (2003)
  – Matadero Creek Remediation Project
    (Palo Alto Flood Basin to Alma Street)
    (2003-2004)
San Francisquito Creek JPA

• Joint Powers Authority formed in 1999 to address flooding and other watershed-wide issues

• Five member agencies:
  – City of Palo Alto
  – City of East Palo Alto
  – City of Menlo Park
  – Santa Clara Valley Water District
  – San Mateo County Flood Control District
San Francisquito Creek JPA

- Vice-Mayor Dena Mossar is Palo Alto’s representative to JPA Board.
- Cynthia D’Agostoa is JPA Executive Director.
  - Phone: 251-8830
  - E-mail: ckdagosta@menlopark.org
- JPA Board meets bi-monthly on fourth Thursday of the month.
San Francisquito Creek JPA

• Current year (FY 2001-02) City funding:
  – $60,000 (1/5 share of JPA administrative costs).
  – $50,000 (one-time project cost for joint levee restoration project).
  – Existing storm drainage staff acts as City liaison to JPA.
San Francisquito Creek JPA

Primary Roles of the JPA:

• To facilitate and perform bank stabilization, channel clearing, and other Creek maintenance.

• To plan flood control measures for the San Francisquito Creek watershed.

• To take actions necessary to preserve and enhance environmental values and instream uses of San Francisquito Creek.
San Francisquito Creek JPA

- Flood control for San Francisquito Creek is a long-term project.
  - 10+ years before construction begins
  - Up to $100 million project
  - Need assistance & funding from the US Army Corps of Engineers
  - Project will be holistic, implemented from a watershed-wide perspective
San Francisquito Creek JPA

- **Short-Term Activities:**
  - Bank Stabilization/Revegetation Master Plan
  - Bank Stabilization Demonstration Projects
  - Fish Barrier Removal
  - Levee Restoration Project
  - Sediment Studies
Storm Drain Committee

Questions

and

Answers