California's Flood Future: **Santa Clara County**

California is at risk. We must take action now.

The California Department of Water Resources and the U.S. Army Corps of Engineers developed *California's Flood Future: Recommendations for Managing the State's Flood Risk*.

The report is a look at flooding throughout the State, and outlines the challenges, opportunities and recommendations for improving flood management.

The impacts of a major flood would be devastating to California and to the nation. More than 7 million people and $580 billion in assets including crops, buildings and public infrastructure are exposed to the hazards of flooding in the state. In addition to tragic loss of life, catastrophic flooding would have unprecedented impact on the State's economy and environmental resources.

California's Flood Future

California's Flood Future will help inform local, State and Federal decisions about policies and financial investments to improve public safety, foster environmental stewardship and support economic stability.

More than 140 public agencies responsible for flood management across the state submitted information used in the report. Locally, that included:

- Santa Clara Valley Water District
- San Francisquito Creek Joint Powers Authority

Efforts to reduce future flood risk will require unprecedented cooperation among public agencies, landowners and other stakeholders.

Flood management will need to be implemented from an I*ntegrated Water Management* perspective – an approach that looks at flood, water supply and ecosystem needs, and includes multiple benefits across a region.

Recommendations for Managing Flood Risk

These RECOMMENDATIONS are being considered for *California's Flood Future* as opportunities to achieve improved flood management using an integrated approach:

1) Conduct regional flood risk assessments to better understand statewide flood risk.
2) Increase public and policymaker awareness about flood risks to facilitate informed decisions.
3) Increase support for flood emergency preparedness, response and recovery programs to reduce flood impacts.
4) Encourage land use planning practices that reduce the consequences of flooding.
5) Implement flood management from regional, systemwide and statewide perspectives to provide multiple benefits.
6) Increase collaboration among public agencies to improve flood management planning, policies and investments.
7) Establish sufficient and stable funding mechanisms to reduce flood risk.

California's Flood Future: **Santa Clara County**

Santa Clara County Statistics	
Total Acreage	835,231
Total Population	1.7 million
Total Structures	488,100
Total Value of Structures and Contents	$185.7 billion
Total Agricultural Acreage	71,313
Total Value of Agricultural Land	$127.1 million

Santa Clara County Flood Risk		
	100-yr Event	500-yr Event
Exposed Area (Acres)	60,869	145,236
Percent of Area Exposed	7%	17%
Population Exposed	132,577	664,061
Percent of Population Exposed	8%	39%
Exposed Structures	37,069	201,571
Value of Exposed Structures and Contents	$15.2 billion	$84.3 billion
Exposed Agricultural Land (acres)	20,072	32,232
Value of Exposed Agricultural Land	$50.5 million	$68.4 million

100-Year and 500-Year Flood Events

Two flood event levels are commonly used for insurance and planning purposes.*

500-Year Flood is a shorthand expression for a flood that has a 1 in 500 probability of occurring in any given year. This may also be expressed as the 0.2 percent annual chance flood.

100-Year Flood has a 1 in 100 (or 1 percent) probability of occurring in any given year.

**These levels indicate a percentage of probability and severity. It does not mean a flood only happens every 100 or 500 years.*

Types of Flooding in Santa Clara County

Slow Rise

Slow-rise flooding is the gradual flooding that occurs when rivers, streams and lakes overflow their banks. This includes flooding caused by levee failure and channel erosion, when such failures are a foreseeable consequence of weather conditions.

Duration of Flood: Weeks / Time to Peak: Days

Flash

Flash floods are the number one weather-related killer in the U.S. because they can roll boulders, tear out trees, and destroy buildings and bridges quickly. A flash flood is a sudden, rapid flooding of low-lying areas typically caused by intense rainfall.

Duration of Flood: Hours / Time to Peak: Hours

Debris Flow

Debris flow floods are made up of water, liquefied mud and debris and can form and accelerate quickly, reaching high velocities and traveling great distances. Debris flow is commonly caused by heavy, localized rainfall on hillsides where vegetation has been destroyed by fire.

Duration of Flood: Hours / Time to Peak: Hours

Stormwater

Stormwater flooding refers to localized flooding that occurs in urban areas during or after a storm. Any storm, particularly slow-moving, steady rain storms, can overwhelm drainage systems. When the system backs up, pooling water can flood streets, yards and even the lower floors of homes and businesses.

Duration of Flood: Hours / Time to Peak: Hours