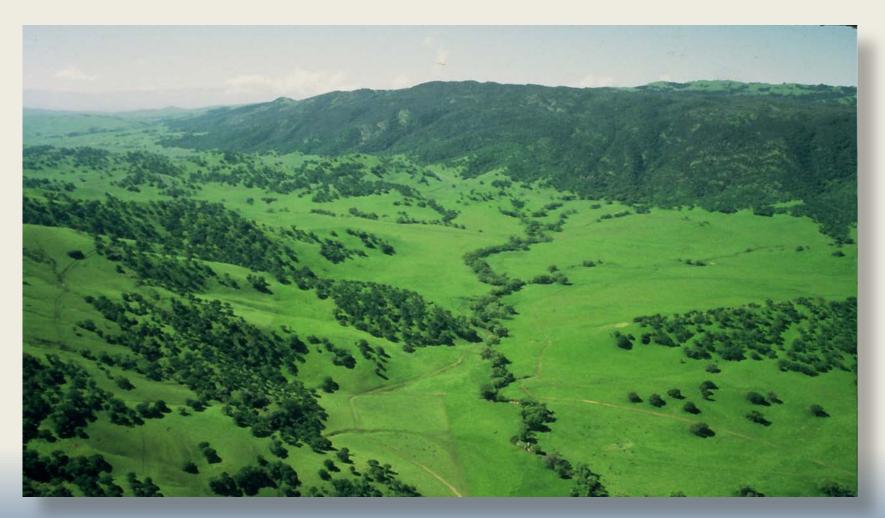
#### Communication What? Are you talking to me????

Permeable Pavement Workshop November 14, 2017 By Mike Carlson Deputy Chief Engineer

Pine Creek Flooding, Concord 1958

#### What is a Watershed?





#### This is a Watershed!





## What is a Green Street to Stormwater People?





#### This is a Green Street to Pavement People!





## What is a Permeable Pavement to Stormwater People?





## This is Permeable Pavement to Pavement People!





#### You are just not listening to me What You Say **\$** What They Hear

Stormwater People	Pavement People
Its required by the permit	What permit, we don't need stinking permits
Green Infrastructure Plan	For public roads, that's only for the developers
Inspections	Sure during construction, afterwards are you crazy?
You have to budget for it	ReallyI have no funding source for your bugs and bunny's, I need to use our funding for our pavements.



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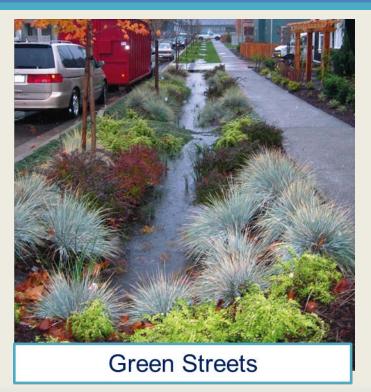


- The Contra Costa Clean Water program formed in 1992
- First efforts were on site controls
- Next on water quality features for new development
- Current permit is focusing on built environment





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- Lack of research we did the best with what we had
- Long term cost how can we ensure we designing for success and minimal maintenance
- Need to think outside the box we are not creating more land
- Deal with it, it is here to stay









#### Stormwater Retention and Infiltration





**Community Drainage** 



#### **Regional Flood Protection**



Stormwater Quality

#### Flexible funding structure for...

#### System Maintenance

#### Watershed Monitoring

#### Aging Infrastructure



Clean Water Features

Creek Clean Ups

## What will your Clean Water "Green Streets" become......



