

C/CAG WATER COMMITTEE PRESENTATION BAYFRONT CANAL



Erika Powell, P.E.
Flood Resilience Program Manager

September 20, 2017




AGENDA

- ♧ Project History & Consequences
- ♧ How do we work together?
- ♧ The Project
- ♧ Planning and Design
- ♧ Construction and O&M
- ♧ Floods in the news!

Project History and Consequences

Past

- 60 years of repetitive flooding
- 40 significant events (1951-2017)
- Nuisance flooding (2-3 events/year)



Bay Road, Redwood City
December 2014

Present


- Storm frequency and severity
- Increasingly high tides

Impact

- Public health and safety
- Street closures
- Property damages (private & commercial)
- Necessary for future projects

3

The Evidence



Atherton Channel at Haven Avenue and
Marsh Road in Menlo Park
February 7, 2017

4

What's at Stake?

Economically Challenged Communities



Medical Facilities



Emergency Access



Recreation



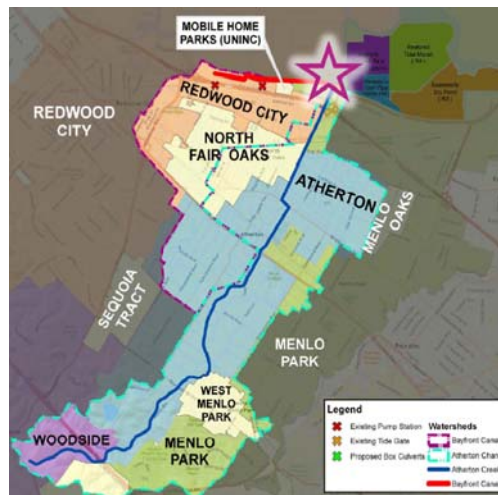
Transportation



The Menlo Park Fire Protection District:
"Flooding near Marsh Rd. & Haven - Please avoid!"

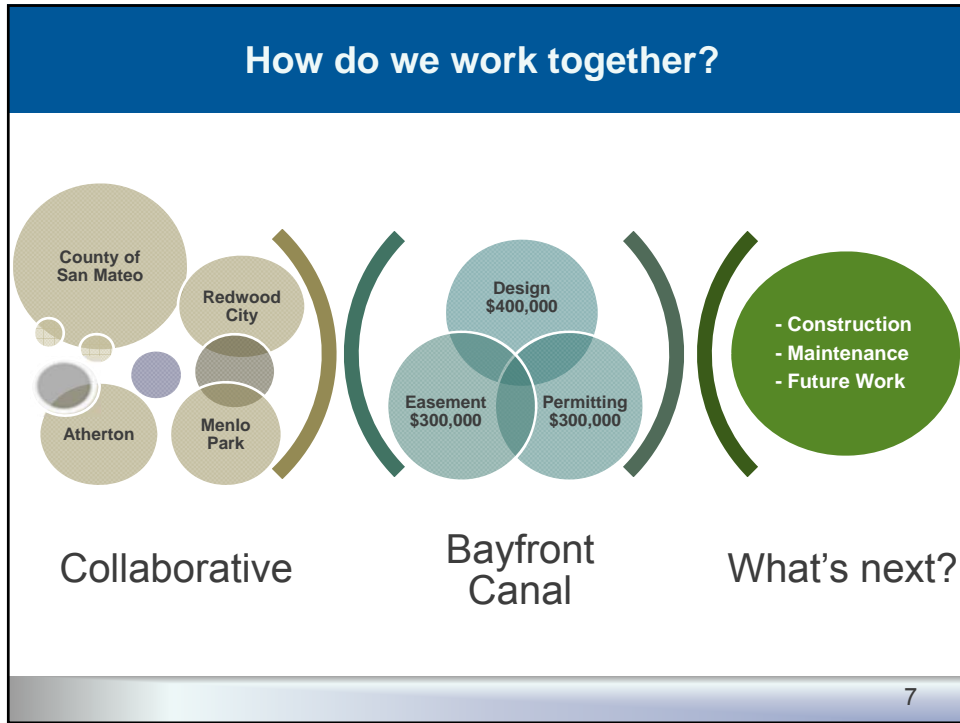
5

Bayfront Canal and Atherton Channel Region



Bayfront Canal Outfall

6



Collaborative and Stakeholders

- Town of Atherton
- Redwood City California
- County of San Mateo
- City of Menlo Park
- South Bay Salt Pond Restoration Project
- Caltrans
- Coastal Conservancy
- California Fish & Wildlife
- PROP 1
- Cargill
- STANFORD HOSPITAL & CLINICS
- California Water Boards
- Department of Water Resources
- bcdc
- C/CAG
- Office of Sustainability
- US Army Corps of Engineers
- FEMA
- facebook

8

Flow Contributions = Funding Contributions

Subwatershed Contributions

- Evaluated watershed and determined sub-watershed flows

Jurisdictional Flow Contributions

Jurisdiction	Watershed Area	Flow Contribution	Revised Flow Contribution
Town of Atherton	43.7%	38.0%	39.8%
City of Redwood City	13.4%	26.0%	26.1%
San Mateo County	19.8%	22.0%	22.6%
City of Menlo Park	16.8%	10.5%	11.5%
Town of Woodside	6.4%	3.5%	0.0%
Total	100.0%	100.0%	100.0%

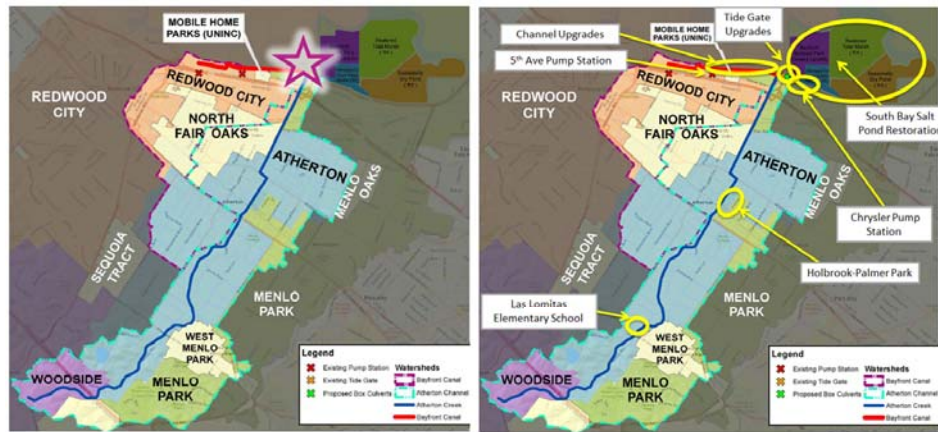
Calculated by the City of Menlo Park.
Updated by the County of San Mateo.



Planning and Design Approach



Bayfront Canal and Atherton Channel Region



Regional Improvements

11

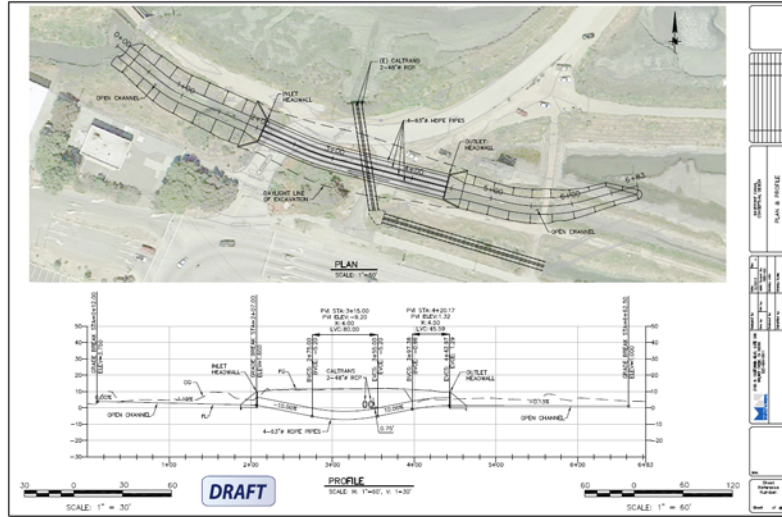
Bayfront Canal and Atherton Channel Flood Management and Restoration Project



Project Goals

12

Bayfront Canal and Atherton Channel Region



Design Alternative – Option 1

13

Construction Challenges

Funding?

- Pending grants
- Potential grants
- City and County CIP



FEMA

Easements?



Schedule?



Permitting?



14

Flooding in the News!

Building Resilient Infrastructure



Bayfront Canal behind trailer home communities (Mercury News, Dec 2012)



Bayfront Canal/Flood Slough Weir (Moffat and Nichol, 2012)



5th Avenue & Hoover Street (Redwood City, December 2012)

15

Questions?

16