



Hamilton Forum

Hamilton *CFD and Levee*

June 11, 2014

Agenda Overview



- Welcome
- Background Info
 - Purpose and Structure of the CFD (Michael)
- Financials (Brian)
 - Background
 - Fund Balance History
 - Refinancing Bonds
 - Future
- Levee Information (Russ)
 - Background (Michael)
 - Status (Russ)
 - FEMA Recertification (Russ)
- Maintenance (Russ)
 - What does CFD pay for? What is City paying for?
 - Staffing
 - Typical Schedule
 - Future Projects
- Q and A

Purpose

- Answer questions
- Ease concerns
- Build trust
- Listen to concerns
- Clear up any misinformation



Background



- Hamilton not annexed
- Military Base was within the City's boundaries
- Maps
 - Military Base
 - CFDs

Map of Hamilton





Community Facility Districts (CFDs)

Levee

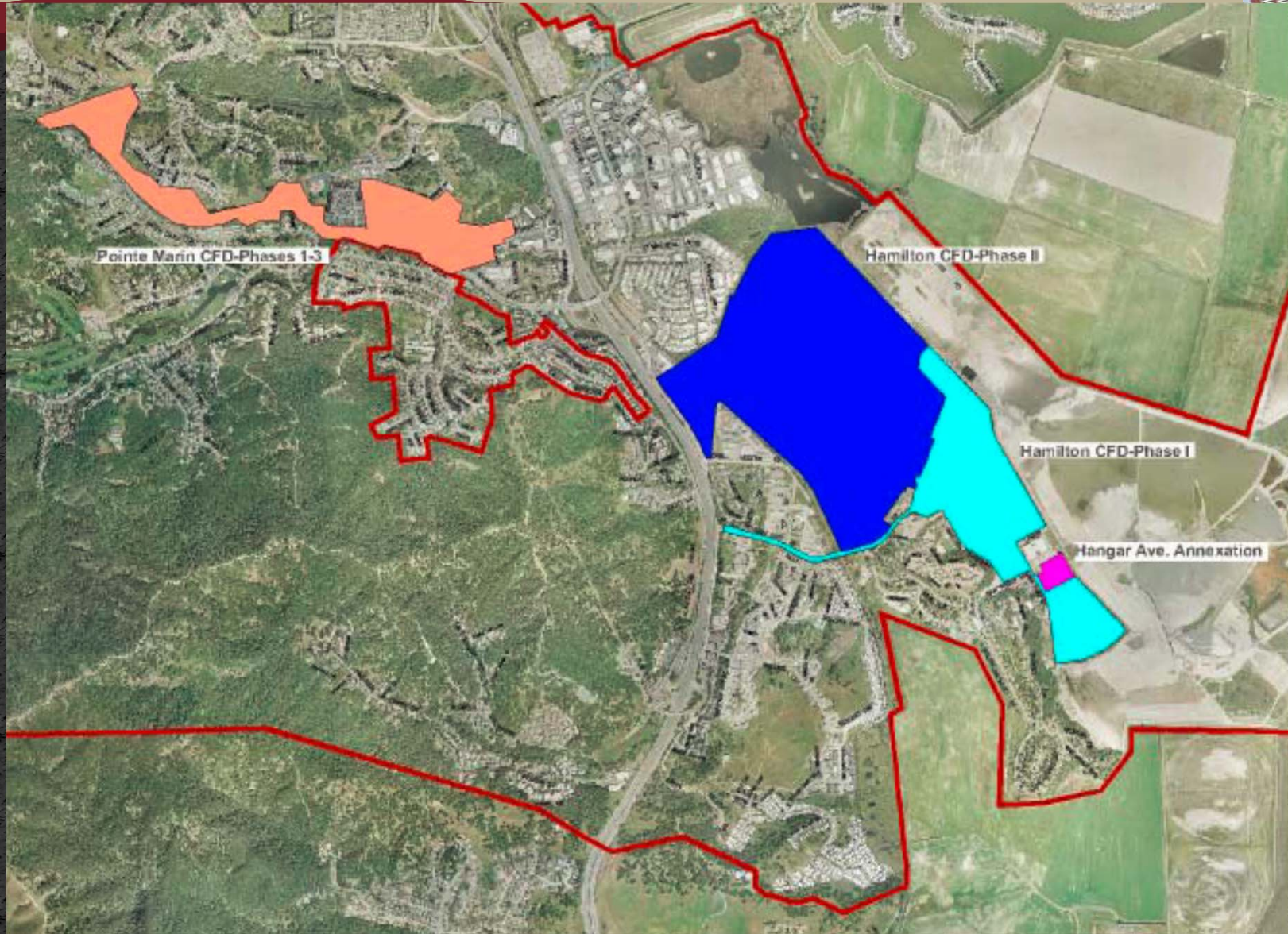


Hamilton & Pointe Marin CFD Facts



- CFD established
 - Hamilton CFD established 1995
- All properties within a CFD pay for all services listed in the CFD formation resolution

Map of Hamilton Area CFDs



Hamilton & Pointe Marin CFD Facts



- Both CFDs have two components
 - Bond repayment
 - Service Tax
- Hamilton CFD
 - Bond repayment \$1.6M
 - Hamilton Service Tax \$ 500,000 - Set up to pay for “cost of maintaining and operating the storm drainage, levee system and pump station, and landscaping”

Hamilton CFD



- Landscape Maintenance
 - 2 FTE Maintenance Workers
 - Operating and supply costs
- Levee Maintenance
 - 0.5 FTE Maintenance Worker
 - Operating and supply costs
- Pump Stations #1 and #2
 - 0.5 FTE Maintenance Worker
 - Operating and supply costs
- Administration
 - 0.7 FTE Supervisor
 - Citywide overhead

Accountability



- Taking responsibility for addressing issues as they arise
 - i.e. levee seepage
- General Fund steps in to provide loans if not enough funding in CFD



Questions and Input



Levee Update Hamilton Forum

City of Novato
December 2, 2009

Messages



- Hamilton levees are safe
- Identified 4 seepage sites
 - 3 sites impact Hangers $\frac{3}{4}$ and the 350 Hanger Avenue Development
 - 1 site impacts three residences along Emerson Avenue
- Red slimy water is harmless (naturally occurring bacteria)
- Seepage sites have no relationship to any risk of flooding
- City staff and their geotechnical consultant evaluated each seepage site

Components of the Drainage System



- The levee made mostly of impervious material
- Levee toe drain and seepage collection system
- Crowned streets to take water to sides
- Curbs & gutters to take rainwater off structures
- Catch basins for water entry into the system
- Pipes that carry water to large sumps
- Pumps that transport the water to the bay

All the components of the drainage system are designed to work together.

Components to transport water



Pump Station #1



Pump Station #2



Outfall Pad for PS #1

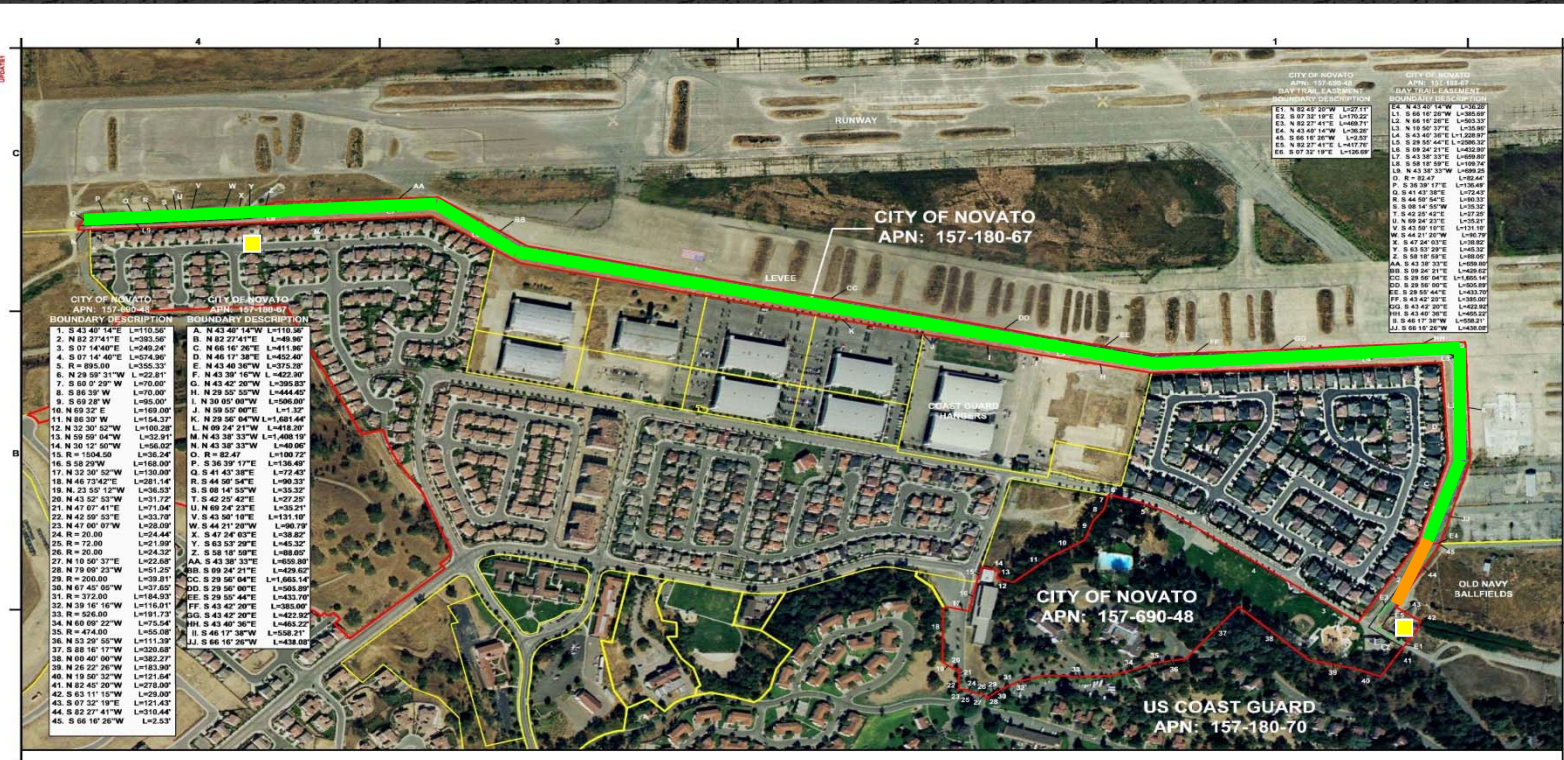
The two pump stations and spillway that lead to the bay. Low flow pumps are electric and high flow pumps are diesel driven. This system moves the storm water to the bay.

A Brief History of the Hamilton Levee



- Designed by Geomatrix and CSW/Stuber-Stroeh in 1994-1995
- Constructed by a contractor for the New Hamilton Partners developers and completed in 1996
- In 2005-2006, a test levee was placed to determine the effects of Bay Trail surcharge on the outboard side of the levee
- The Levee was raised in 2006 by the City with design help from Geomatrix to accommodate settlement for the next 100 years

Hamilton Levee and Drainage System

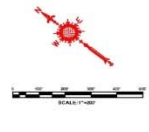


BAY TRAIL SEGMENT C- CITY OF NOVATO EASEMENT AREA

HAMILTON WETLANDS RESTORATION PROJECT
SAN FRANCISCO DISTRICT USACE
CALIFORNIA STATE COASTAL CONSERVANCY
28 SEPTEMBER 2006

PROPERTY INFORMATION

- PROPERTY LINE
- CITY OF NOVATO PARCEL
- BAY TRAIL EASEMENT



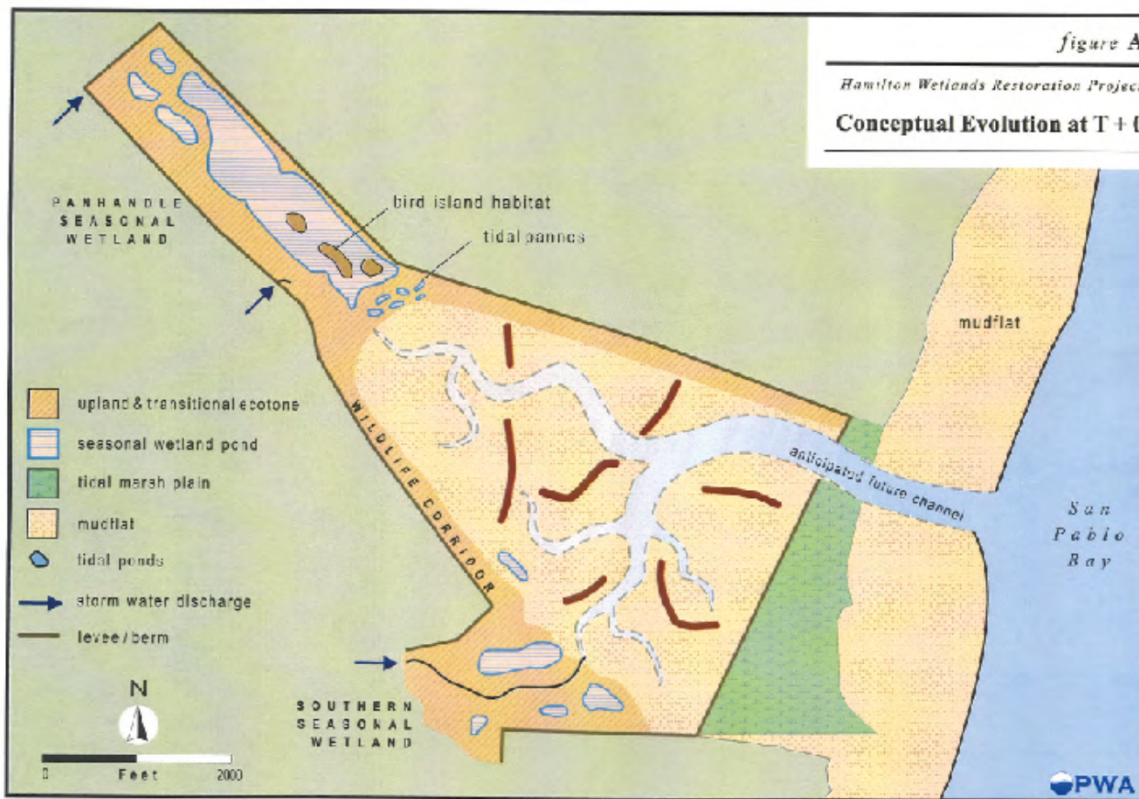
UPDATE

Some Facts about the Hamilton Levee



- The levee is about 6,500 LF in length
- The levee is 95 feet wide at the base and 13 feet wide at its crest
- The top crest elevation is 9.7 feet (12.3 NAVD88)
- The top of the splash wall elevation is 13.4 (16 NAVD88)
- The levee was built on top of the old runway in most locations
- The levee consists of mainly impermeable materials
- The Hamilton Levee is the only certified levee in Marin County accepted by FEMA

Hamilton Wetlands Restoration Project



The Wetlands Restoration Project reduces flood potential by creating a large buffer with higher elevations and vegetation

Hamilton Wetlands Restoration Project



Photos from before any dredge was pumped



From the wetlands looking at the levee.

On the floor of Cell 1 near Bayside with cell wall.



Hamilton Wetlands Restoration Project



Photos showing temporary high levels of pumped water

Dredge material has filled
much of the cells.



The elevation of fill has
increased significantly.

Hamilton Wetlands Restoration Project



Gradually, the excess water is allowed to drain away



The groundwater level in the cells will be lowered further in the future

As water drains away from the dredge, soil is left



Concerns Raised

- Climate change and sea level rise
- Seepage water quality and safety
- El Nino and a wet winter



Climate Change and Sea Level Rise



- Data indicates that sea level in the San Francisco Bay has risen about 8 inches per century
- Future sea level rise may increase at a faster rate and estimates vary from 4 to 35 inches in the next 100 years
- The Hamilton Levee currently has 32.4 inches of height above the base flood elevation
- The City surveys the levee crest elevations on a regular basis as part of its inspection, monitoring, and maintenance program