

Marin County Flood Control and Water Conservation District

FLOOD CONTROL ZONE 1 ADVISORY BOARD MEETING
FEBRUARY 5, 2015

STAFF REPORT

Item 1. Approval of Meeting Minutes: August 28, 2014

Recommended Action: Approve minutes.

Item 2. Open Time for Items Not on the Agenda

Comments will be heard for items not on the agenda (limited to three minutes per speaker).

Item 3. Zone Engineer's Report

a) *Storm Reports*

- **December 3rd and 11th Storms:** The storms that passed through the Bay Area early last December helped locally with the drought, however, their intensities were trying for the storm water systems in Novato, which appeared to get the brunt of the storm for the County.

The intensities associated with the December 11th storm along with high tides and saturated soil from the December 3rd storm resulted in an intensified effect for the Novato levees. This combined effect manifested the need to take emergency action on the Novato Creek levee system; specifically, an intentional breach of the levee separating Novato Creek and the Deer Island basin. This breach relieved building pressures and prevented uncontrolled overtopping and/or a catastrophic breach of the levee.

- **Summary of Levee Storm Damages and Cost Estimates for Repairs:** High tides and heavy rains caused the Novato Creek levee to breach in 3 locations. The levee is maintained by the Marin County Flood Control and Water Conservation District (District), which contracted out for temporary repairs after the storm but permanent reconstruction of the levee must be performed prior to the next rainy season. Each breach location is described below. (see map for site locations)

Site 1 - Downstream of SMART Railroad Bridge: A 20-foot-wide section of the east levee along Novato Creek was intentionally breached during the December 16th storm as an emergency measure to direct water away from downtown businesses and nearby subdivisions.

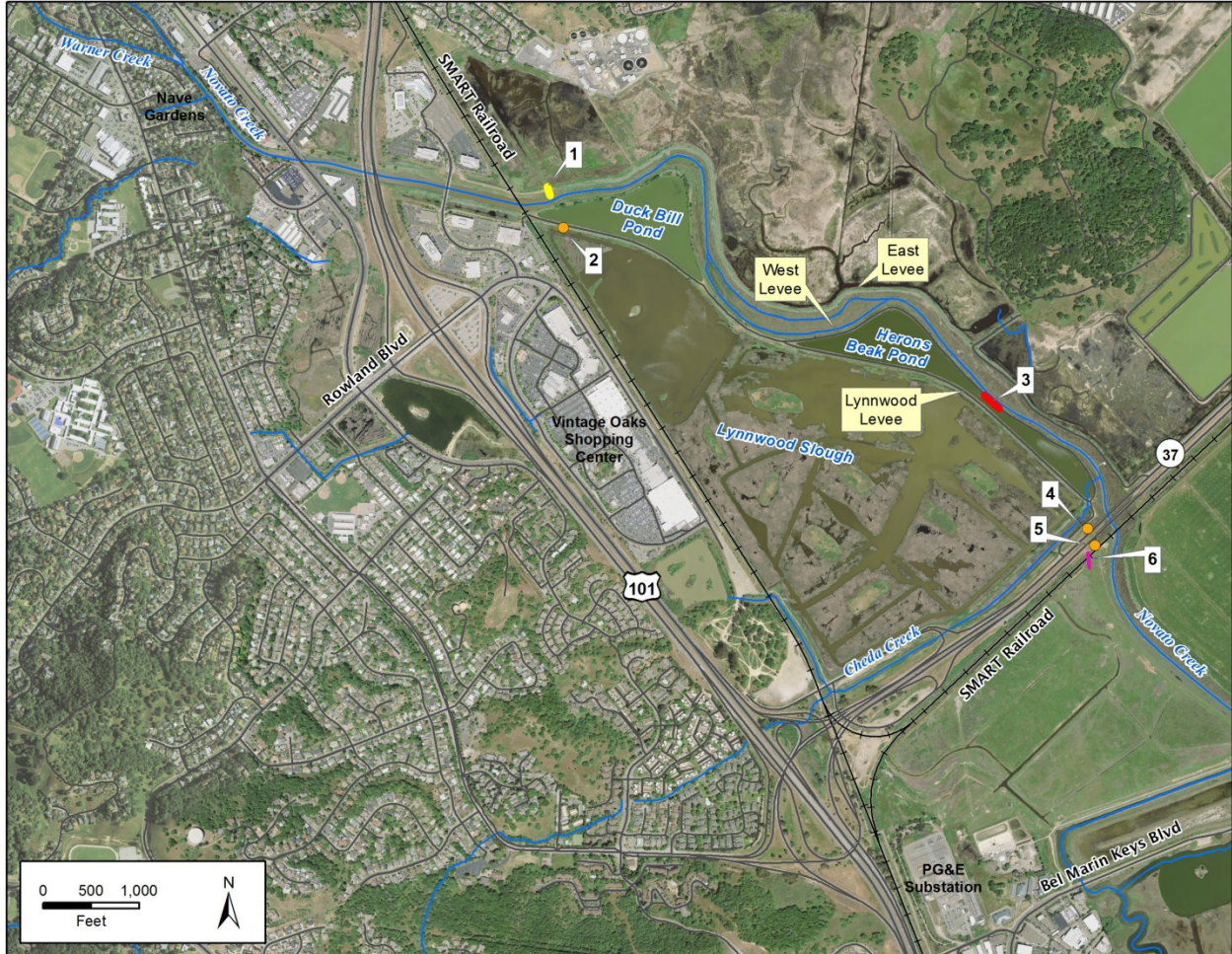
Site 2 - Between Lynwood Basin and Duckbill Pond: Just downstream from the SMART Railroad Bridge on the west side of the creek, a 20 foot long section of the Lynwood Levee between Lynwood Basin and Duck Bill Pond, was breached when high water levels in Duck Bill Pond caused the water to seep through the levee around the abandoned pipe and "blow out" a large chunk of levee material on the foot of the levee.

Site 3 - Between Novato Creek and Herons Beak Pond: A 200+ feet section of levee overtopped into Heron's Beak pond from Novato creek, just upstream from Highway 37. In addition, 500+ feet of levee along the pond, had extensive piping (water rushing

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through the levee) at rodent holes for in the levee. The piping and overtopping caused noticeable erosion, however the levee remained standing.

Sites 4, 5, and 6 are maintained by other agencies.



Emergency stabilization measures of the Novato levee were completed for a total cost of \$59,313. Flood Control Zone 1 has provided funding for these repairs. Up to 75% of the cost of the emergency stabilization measures are eligible for reimbursement by California Disaster Assistance Act funding (Cal OES).

For this work the District followed emergency contracting procedures in conformance with Resolution No. 2007-07. Ghilotti Construction was chosen to assist in implementation of these measures due to their past experience with similar projects as well as their track record of delivering under difficult conditions and time critical situations. They completed their portion of the work for \$44,981, well within the District's initial \$85,000 estimate.

Intermediate stabilization measures should cost an additional \$50,000. Flood Control Zone 1 is able to provide funding for these repairs. It is unlikely there will be outside funding assistance for this work.

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Final repair measures are estimated at an additional \$1,000,000 to restore the levees to their pre-existing level of protection. County General Funds are being set aside for this work

The District applied for Army Corps of Engineers Public Law 84-99 rehabilitation assistance funding to cover the costs of the emergency stabilization measures but we were initially denied because although we submitted an application for the Army Corps of Engineers' (USACE) Rehabilitation Assistance Program (Public Law PL84-99) in November of 2014, the initial inspection of the levee by the USACE was not performed prior to the damaging storm event. The District will work with the Army Corps of Engineers to appeal their decision not to provide the rehabilitation assistance funding. In addition, the District will work to ensure that, if financially feasible, the levees are rehabilitated to a standard that would meet PL84-99 requirements to become eligible for federal funding.

- SMART Bridge: The new SMART rail bridge did very well in the December storms. Novato Creek water levels approached the top of the new bridge bents with no debris accumulation whatsoever.
- Pacheco Pond: The pond was filled to capacity from the December 11th storm. The Leveroni tides gates functioned properly by restricting tidal water from entering the pond at higher tides and allowing out-flow of the pond at lower tides. It took several days between lower tides for the pond to drain to normal water levels. There were no known levee over-toppings or breaches around Pacheco Pond, but there may have been street drain back-up during intense periods.
- Los Robles Mobile Home Park:
There was stormwater ponding a few feet deep within the Los Robles Mobile Home Park. We have not received any reports of significant damages. The Mobile Home Park drains via Pacheco Creek to Pacheco Pond which was filled to near capacity due to heavy rains and high tides.
- Rush Creek Drainage
A business owner reported flooding near drainage ditch along the railroad tracks and Olive Avenue.
- Follow-up Actions
Staff is working with the City of Novato to better understand the causes of localized flooding and identify remedial actions to be taken by each agency.

b) Report on Ongoing Maintenance

This year the District partnered with the Youth Ecology Corps (YEC) in an 8-week summer program. The program benefits 16-24 year olds through education and work experience and is funded 50% through the California Workforce Investment Board.

As a part of the Novato Creek Enhancement Project pursuant to mitigation measures imposed by the 2012 Sediment Removal Project, YEC planted 15 native trees along the Grant Avenue Bridge (Lee Gerner Park reach). Additionally, they planted 15 native trees and shrubs along Vineyard Creek (near Arbor Circle*). There will be 47 more riparian native

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species (trees and shrubs) planted in the coming year, pursuant to the Novato Creek Enhancement Project.

Additionally, YEC removed a total of 300-lbs of litter and recyclables from the Novato and Vineyard Creeks and an approximate 3.2 acre area was policed for invasive plant removal.

*The plantings on Vineyard Creek were in response to a site-specific report on Arbor Circle by the restoration specialist who performed the Vineyard Creek Flood Control Improvement Project habitat restoration and monitoring. See the watershed website for a copy of the report entitled Vineyard Creek Phase 2 Vegetation Enhancement:
http://www.marinwatersheds.org/pubs_reports.html#zone_1

Item 4. Novato Creek Watershed Program Update

- a) *North Bay Water Re-use Program (NBWRP) Update:*
Staff is preparing an MOA between the County and Novato Sanitary District to formalize its participation in the NBWRP. Participation will allow the Lower Novato Creek project (selected project from the alternatives analysis described in 4.a above.) to be included in the NBWRP environmental compliance documents. We anticipate that the MOA will be approved by the County and the Sanitary District this spring.
- b) *Alternatives Development and Modeling:*
The contract for the Novato Watershed Program's alternatives development and analysis was awarded to Kamman Hydrology and Engineering (KHE) by the County Board of Supervisors at their December 16, 2014 meeting. The first three months of the contract period will be spent identifying and assessing alternative elements for inclusion in the modeling. Once the elements and ranking criteria have been vetted with your board and stakeholders, the focus of the study efforts will move to alternatives modeling. A draft report and community meeting(s) will follow during the summer of 2015, with a final report due by the end of the year.
- c) *Community Meetings - Schedule:*
Staff will report on upcoming stakeholder outreach efforts. A summary schedule of upcoming community meetings is provided below:

<u>Meeting</u>	<u>Topic</u>	<u>Schedule</u>
• Community Meeting #1	Overview of Novato Watershed Program and Historical Ecology of the Watershed	Apr/May 2015
• Community Meeting #2	Present the Draft Alternatives Assessment Report	Nov/Dec 2015
• Community Meeting #3	Present the Final Alternative Assessment Report and Funding Strategy	Feb/Mar 2016

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d) *Novato Watershed Program Fact Sheet*

Staff will provide for AB review and comment, a draft fact sheet to support the Novato Watershed Program at public events.

Item 5. Budget Review

The Zone 1 budget for FY 2015-2016 (begins July 1, 2015 and ends June 30, 2016) will be presented to the Board of Supervisors at a hearing this summer. A proposed budget summary will be presented to the AB by staff for review.

Recommended Action: Recommend Board of Supervisors approve budget.

Item 6. Schedule Next Meetings

Although the draft By-Law revisions recommended by your board last year have not been approved by the Board of Supervisors, it is recommended that the Advisory Board consider the need for meetings in the upcoming year and adopt a meeting schedule for the year.