

Marin County Flood Control and Water Conservation District

FLOOD ZONE 1 ADVISORY BOARD MEETING

MAY 16, 2011

STAFF REPORT

The following is a staff report for the items listed on the Agenda for Flood Zone #1 Advisory Board (AB) meeting on May 16, 2011:

Item 1. Approval of Meeting Minutes for May 6, 2010

Action by Board: Advisory Board members will review meeting minutes from the May 6, 2010 meeting, make corrections, and approve minutes as corrected.

Item 2. Open Time for Items Not on the Agenda

Comments will be heard for items not on the agenda.

Item 3. Project Updates

a. Novato Flood Protection and Watershed Program

Staff presented the Countywide Watershed Program website at an earlier meeting (www.marinwatersheds.org). The site continues to be updated and now includes a page for Novato's Watershed Program at <http://www.marinwatersheds.org/novato.html>.

Staff has identified several goals for the Novato Watershed Program:

- Increase the level of flood protection
- Reduce on-going maintenance costs and impacts
- Develop projects that provide multiple benefits *e.g. flood protection and water reuse*
- Ability to permit as a self-mitigating project
- Responsive to sea level rise
- Incorporates ecological benefits
- Meet multiple partner agency objectives

The Novato Creek hydrology and hydraulics study will begin this summer. The goal will be to develop a comprehensive computerized model that can accurately describe watershed runoff and stream flow under a range of storm conditions and show the benefit of proposed improvements to flow. The study will utilize existing model data from several sources and supplement with topographic surveys, rainfall data and stream flow.

A second complementary study will incorporate existing studies with data from a 2009 California Department of Fish and Game Novato Creek stream assessment. A database will be developed using Geographic Information Systems' software to link the data spatially. The database would include information about the distribution of fish, vegetation, opportunities for restoration, erosion control, and barriers to fish passage. It will also incorporate data from partners including: flood protection infrastructure, storm drain networks, project information, and other relevant information.

The Technical Working Group (TWG) will meet for the first time in June to review and advise us on the development of these work products and to communicate this progress to the community. TWG members include local stakeholders, staff from participating agencies, regulatory and resource agency staff, and watershed and community groups.

Staffing for the program is now complete and includes the addition of Associate Civil Engineer Roger Leventhal, P.E. who will manage the development of the computerized watershed runoff and stream flow model. Roger has over 20 years of experience designing, modeling and

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managing coastal, riverine, and wetland projects in northern California. He joins Liz Lewis, Chris Choo, Laurie Williams, and Pat Balderama to support the Watershed Program in Novato.

b. Vineyard Creek Geomorphic Monitoring

Kamman Hydrology and Engineering, Inc. (KHE) submitted their second annual Geomorphic Monitoring report with site-specific management recommendations; including a recommendation to remove sediment from under Center Road bridge which was carried out by the Conservation Corps late last summer. Overall the project is performing well in terms of improved flow capacity, low-flow channel and floodplain formation, and bank stabilization. KHE will present a summary of the results of their geomorphic monitoring to your Board.

c. Cheda Pump Station

The existing pumps at the Cheda Pump Station are over 40 years old and are at the end of their serviceable life. Estimate to refurbish the pumps shows that the cost would be about the same as the price for new pumps. This summer a project will be put out to bid for new and more efficient pumps to replace the existing pumps to provide a reliable pumping system for the Cheda Creek watershed. In addition, portion of the wall of the concrete wet well is broken and will be reconstructed, the steel beams supporting the pumps will be removed and reinstalled, and the deteriorated outfall pipe will be replaced. Estimated cost for this project is about \$240,000.

d. Novato Creek Sediment Removal

Novato Creek sediment removal is typically done on a 4-year cycle. The last sediment removal was done in 2008 and the next episode is tentatively scheduled for summer 2012. Field survey is now under way to determine preliminary sediment accumulation and to confirm that sediment removal is required next year. If sediment accumulation is found to be minimal to moderate, sediment removal can be postponed to save money.

In anticipation of the next sediment removal, whether in summer 2012 or later, staff has picked several dredge disposal sites and is in the process of finishing up applications to jurisdictional agencies for the purpose of obtaining permits this year.

Item 4. Annual and Preventative Maintenance Plan

Zone 1 has approximately 18 miles of creek to maintain and every year performs brush trimming and debris removal. The zone spends around \$200,000 per year on creek maintenance alone. The work is contracted through the North Bay Conservation Corps (formerly Marin Conservation Corps). Zone 1 also provides preventive maintenance to four pump stations and tidegates at Arroyo San Jose and Rush Creek.

Item 5. SMART Railroad Bridge

SMART decided to forego the construction of a new bridge across Novato Creek and opted to use the existing bridge which was repaired recently. The refurbished bridge is now about 20 inches higher than the old bridge. The County of Marin and MCFC&WCD sent a letter to the SMART management to express their concern about this decision, citing flooding and debris jams that could pose a risk to the proposed passenger rail service.

Item 6. Zone 1 Budget FY 11-12

Staff will present the Zone 1 FY2011-12 budget. The Advisory Board will be asked to review and provide a recommendation to the BOS in regards to approval.

Item 7. Schedule Next Meeting

Advisory Board members will set a date for the next meeting.