

**Marin County Flood Control and Water Conservation District**

**FLOOD CONTROL ZONE 4 ADVISORY BOARD MEETING  
MAY 12, 2014**

**STAFF REPORT**

---

**Item 1. Approval of Meeting Minutes for May 23, 2013**

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. District Engineer's Report**

FEMA Map Revisions: FEMA has prepared updated Flood Insurance Rate Maps (FIRMs) for tidally influenced areas along Marin's bay coast, including Tiburon/ Bel Aire and Strawberry. These preliminary FIRMs were released and reviewed by the County and local municipalities last year and were also presented to the public at a series of four public meetings held last October and November. The following additional public meetings have been scheduled:

Tuesday, June 17, 6:30 p.m. to 8:30 p.m.  
MPR at the Hill Education Center  
720 Diablo Ave, Novato

Wednesday, June 18, 2014, 6:30 p.m. to 8:00 p.m.  
City of San Rafael Council Chambers  
1400 5th Avenue, San Rafael

Thursday, June 19, 2014, 6:30 p.m. to 8:00 p.m.  
Mill Valley Community Center Cascade Room  
180 Camino Alto, Mill Valley

Based on their current schedule, it is expected that FEMA will publish a public notice in the Marin Independent Journal relatively soon, which would begin the official 90-day appeal period for the FIRMs. Following a review of appeals, FEMA will issue a Letter of Final Determination in the fall which will start the six month adoption period before the FIRMs become effective in March 2015. Additional information may be obtained by visiting FEMA's website: <http://www.r9map.org/Pages/San-Francisco-Coastal-Bay-Study.aspx>

FEMA's preliminary FIRMs for the Zone 4 area (see enclosed) indicate that properties north of Tiburon Blvd. (Highway 131) are located outside of the Special Flood Hazard Area and, as such, would not be subject to mandatory requirements for the purchase of flood insurance.

## ***Marin County Flood Control and Water Conservation District***

### **Item 4. Annual and Preventive Maintenance Plan**

Staff will present this year's plan, including:

- a. **Pump Stations:** No major maintenance work was performed in FY 2013-2014. The following work is scheduled for FY 2014-2015:
  - 1) Major maintenance work for Pump No. 2 at Pamela Ct.
  - 2) Major maintenance work for both pumps at Strawberry Circle. (These pumps received unplanned major maintenance work two years ago; therefore, it is expected that only minor maintenance at these pumps will be necessary.)
  - 3) Engine maintenance for the Cove and Pamela Ct. back-up pumps performed by the Building Maintenance Division.
  - 4) Preventative maintenance at all pump stations, including inspection, testing, and the as needed replacement of electrical and mechanical components.
  
- b. **Vegetation:** Prior to the winter season and following notification of residents, the Conservation Corps North Bay will perform annual vegetation maintenance along East and West Creeks and at the Karen Way Trash Rack. During maintenance, the District will identify and perform any bank stabilization repairs needed and may remove deteriorated sandbags. The East Creek access road will also be mowed this summer.

### **Item 5. Southern Marin Watershed Program**

#### **Background**

The Southern Marin Watershed Program is a joint effort of the County and partner agencies including the Marin County Flood Control and Water Conservation District (funding provided from Zone 3 and Zone 4) and the City of Mill Valley. Primary goals of the program include:

- Develop cost effective solutions to help reduce flooding
- Protect, enhance, and restore sensitive creek and wetland habitat and water quality
- Identify multi-benefit projects that will improve the ability to compete for state and federal funding
- Identify the impacts of sea level rise and develop project concepts that could be adapted to rising tides
- Evaluate the beneficial re-use of dredged sediment from sediment removal projects for wetland restoration, levee maintenance, and shoreline protection
- Improve efficiency of existing flood maintenance operations

Visit the Southern Marin Watershed Program webpage at [http://marinwatersheds.org/southern\\_marin.html](http://marinwatersheds.org/southern_marin.html) to learn more about the program and to view and download documents. All deliverables and supporting documents will be posted to the website. A schedule for upcoming work is included as an enclosure to this staff report.

## ***Marin County Flood Control and Water Conservation District***

### Ongoing Efforts

#### *Southern Marin Watershed Plan*

A Request for Proposals (RFP) has been drafted for preparation of a Southern Marin Watershed Guide. The RFP will be released this spring and a consultant team will be hired to edit and prepare content, design graphics, and layout the plan. The guide is expected to be complete in 2015. It will incorporate information developed through:

- Existing conditions information which is presently included as content on [http://www.marinwatersheds.org/richardson\\_bay.html](http://www.marinwatersheds.org/richardson_bay.html)
- Review of existing flood studies, past and present (by subwatershed)
- Compiled project lists from each watershed (by subwatershed)
- Updated hydrology and hydraulics data
- Flood control infrastructure data and maintenance practices
- Habitat assessments and fish passage barrier data
- Richardson Bay Shoreline study (climate change and rising sea levels)

Based on the above documents, the Southern Marin Watershed Guide will:

- Describe watershed history and existing conditions
- Describe watershed structure and functions
- Describe watershed habitats and sensitive species
- Describe types of flooding (street, riverine, tidal), FEMA-designated flood areas and flood history
- Discuss climate change, sea level rise (SLR), and future conditions
- Explain predicted SLR scenarios and describe adaptation strategies
- Describe the history and current maintenance and capital activities in flood control zones
- Provide an overview of the six sub-watersheds in Richardson Bay
- Link past and current studies, projects, and priorities within each sub-watershed and incorporate stakeholder recommendations for future project implementation
- Describe a financial strategy for leveraging local funds to attract state and federal grant funds
- Describe a process and schedule for Watershed Plan updates

The goal of the Watershed Guide is to communicate the risks of the landscape both natural and man-made. Flood protection is the underlying theme, but the guide will describe the interconnectedness between flooding, habitat, natural disasters, and future rising sea levels so that the community understands the basis for possible flood protection options.

As staff is developing the guide, community meetings will be held in order to obtain input and provide updates on progress. Staff is presently planning on holding a community meeting for the Zone 4 – Bel Aire sub-watershed this fall.

The Watershed Guide will be used as starting point for decision-making and project implementation. Construction projects will require additional revenue, which could be raised through passage of a fee or tax measure. The guide will be used as a tool for outreach and consensus building in the community. The Southern Marin Watershed Program staff will take the lead with community outreach for the review of the guide with partners and stakeholders.

#### *Richardson Bay Shoreline Study*

## ***Marin County Flood Control and Water Conservation District***

The Richardson Bay Shoreline Study will assess vulnerabilities within the Inner Richardson Bay shoreline (including Flood Control Zones 3 and 4) to various scenarios of sea level rise based on inundation modeling. The study will describe flooding issues and possible impacts to infrastructure and built areas related to direct sea level rise inundation. In October 2013, preliminary maps of sea level rise inundation for two scenarios (+16 and +55 inches of sea level rise) along with a series of preliminary shoreline direct coastal inundation defense alignments were presented to the Technical Working Group. As part of the study, Point Blue Conservation Science has been retained to support the County's effort by developing improved sea level rise maps for the Richardson Bay shoreline. Point Blue will update figures of inundation for the shoreline and will work with County staff to map wave attenuation and inundation at a variety of sea level rise scenarios along the Richardson Bay shoreline. The Shoreline Study will present the range of potential shoreline adaptation alternatives along with pros/cons for each approach for climate change scenarios. The anticipated completion date for the Richardson Bay Shoreline Study is fall 2014.

A pilot Shoreline Resilience Demonstration Project opportunity has been identified for studying the effectiveness of natural bay shoreline approaches to protect eroded areas of the Richardson Bay shoreline from current and anticipated increases in wind and wave shoreline erosion associated with sea level rise. Various design concepts and locations are being considered as part of a grant submittal for a Proposition 84 Bay Area Integrated Regional Water Management project. Grant funding would help the County proceed with a demonstration project for studying the effectiveness of the various adaptation measure designs. Knowledge gained through the demonstration project would aid in the design of flood control infrastructure which aims to protect the shoreline from anticipated sea level rise. County staff anticipates learning about the funding status of the grant submittal by the end of 2015.

### Upcoming

The Technical Working Group (TWG) will meet this summer to discuss the Watershed Guide and to receive updates on the sea level rise shoreline study and other ongoing studies. The last TWG meeting was held on October 29, 2013. The agenda included an update on the Arroyo Corte Madera del Presidio Flood Study (Zone 3), progress on the hydrology and hydraulics modeling, existing flooding conditions mapping, and the Richardson Bay Shoreline Study. Input was requested from the TWG on the methods and information collected to date.

### **Item 6. Zone Budget for FY 2014-2015**

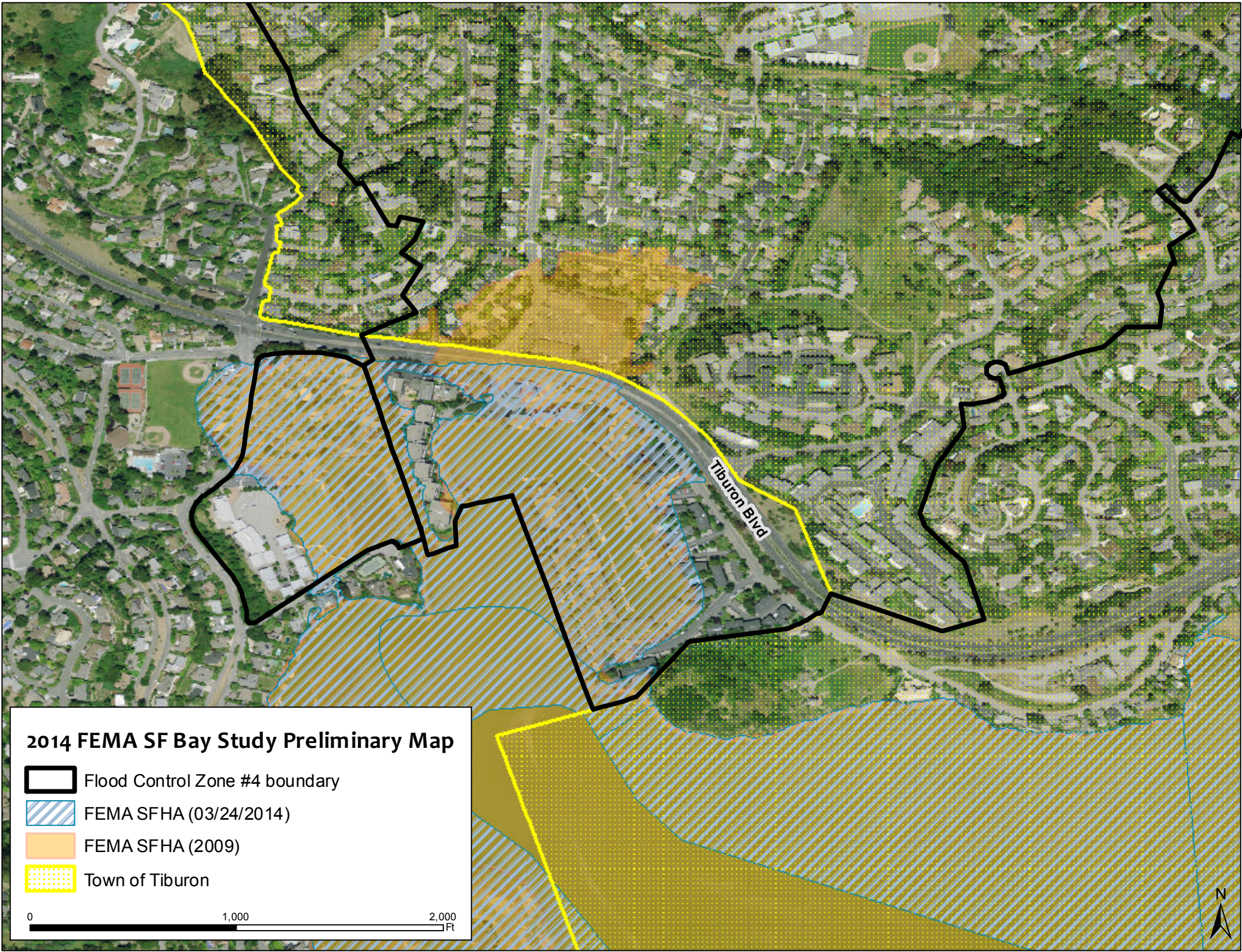
The Zone 4 budget for FY 2014-2015 (begins July 1, 2014 and ends June 30, 2015) is enclosed and will be presented to the Board of Supervisors at a hearing this summer.

Recommended Action: Recommend that the Board of Supervisors approve the budget.





### **Item 7. Next Meeting**

Schedule the next meeting of the Zone 4 Advisory Board. The bylaws specify that the next meeting be held on June 4, 2014.





### 2014 FEMA SF Bay Study Preliminary Map

-  Flood Control Zone #4 boundary
-  FEMA SFHA (03/24/2014)
-  FEMA SFHA (2009)
-  Town of Tiburon

0 1,000 2,000  
Ft







**FY 2014 - 2015 Budget Report  
 FCZ #4A - Strawberry  
 Fund 23740**

**Budget Summary**

Account Description	FY 2013-14 Budget	FY 2013-14 Projected	FY 2014-15 Budget
<b>Fund Beginning Balance</b>	\$ 16,542	\$ 18,448	\$ 17,202
<b>Expenses</b>			
Salaries and Benefits	\$ -	\$ -	\$ -
Service and Supplies	\$ 8,000	\$ 8,000	\$ 18,000
Capital Outlay	\$ -	\$ -	\$ -
<b>Total Expenditures</b>	<b>\$ 8,000</b>	<b>\$ 8,000</b>	<b>\$ 18,000</b>
<b>Revenue</b>			
Taxes	\$ 6,000	\$ 6,734	\$ 6,734
Revenues From Use of Money and Property	\$ 40	\$ 20	\$ 20
Intergovernmental Revenues	\$ -	\$ -	\$ -
<b>Total Revenue</b>	<b>\$ 6,040</b>	<b>\$ 6,754</b>	<b>\$ 6,754</b>
<b>Fund Ending Balance</b>	<b>\$ 14,582</b>	<b>\$ 17,202</b>	<b>\$ 5,956</b>

**Major "Services & Supplies" Expenditures**

<b>Professional Services</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Maintenance &amp; Repair Services - Equipment</b>	<b>\$5,000</b>	<b>\$5,000</b>	<b>\$15,000</b>
<b>Maintenance &amp; Repair Supplies - Equipment</b>	<b>\$1,500</b>	<b>\$1,500</b>	<b>\$1,500</b>
<b>Utilities</b>	<b>\$1,500</b>	<b>\$1,500</b>	<b>\$1,500</b>
<b>Other Services &amp; Supplies</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>