

Marin County Flood Control and Water Conservation District

FLOOD CONTROL ZONE 7 ADVISORY BOARD MEETING
JANUARY 14, 2013

STAFF REPORT

Item 1. Approval of Meeting Minutes: September 20, 2012

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. Project Status Report

An update on active projects / initiatives occurring in the zone:

a) Gallinas Creek Flood Protection & Watershed Program

Watershed Program Staff have prepared a Request for Proposals to prepare a SWMM (Storm Water Management Model) of the entire Santa Venetia drainage system including street drains, interceptors, interties, pump stations, and catchments both in the hillsides and lowlands. The successful firm(s) will use drainage mapping data and other information collected by District staff to model and target areas for improvement. The results could inform decisions on future flood control and stormwater pollution control projects. This model is a larger scale version of the one that staff developed for the La Pasada Interceptor drain which helped the District determine the flood risk associated with sedimentation and develop an effective design for improvements.

b) Las Gallinas Creek Levee Evaluation

The District has been working with the U.S. Army Corps of Engineers (Corps) on completing phase I of the jointly funded two phase feasibility study. In October advisory board Chairperson Michael Perani and Vice-Chairperson Tim Ribble accompanied Supervisor Susan Adams and staff to a meeting with the Corps to reiterate the importance of completing phase I of the study and try to secure a renewed commitment from the Corps to provide key deliverables as promised in the past. After the meeting, the Corps worked with District staff and devised a schedule for completing phase I and submitting all deliverables to the District in summer 2013.

As a result of this effort, completion dates for the following items were identified; the Hydrology & Hydraulics Analysis is to be completed this winter; the Geotechnical and Alternatives Analysis is to be completed this coming spring; and the Preliminary Flood Damage Analysis is to be completed this coming summer.

c) Pump Station No. 2 Afterbay Reconstruction

As reported and approved by your board in prior meetings, staff has begun to investigate replacing the plywood wall that forms a holding pool for the pump station to provide ability to

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discharge stormwater during high tides. This structure is known as an afterbay. In our prior discussions, staff indicated it would cost approximately \$50,000 to replace the plywood wall with a concrete wall. Upon further investigation it was determined that a better alternative to extend the life of the afterbay would be a combination plywood skin with a steel frame. This provides the benefit of lower cost, fewer assembly concerns and timing of work can be done during the winter season because the pump station does not need to be taken out of service during construction.

d) La Pasada Interceptor Drain Improvement

Noble Consultants has prepared a draft design to slip-line and extend the outfall of the pipeline which was submitted to regulatory agencies this fall. The District is aiming for a construction completion date goal of October 15, 2013. The District has installed water level sensors in the drain and Las Gallinas Creek in order to calibrate the hydraulic model (SWMM) previously developed and this data will also benefit Watershed Program efforts. This model indicated that the interceptor drain has sufficient capacity to pass up to the 100-year flow under current sediment loading; therefore, the District does not anticipate immediate issues with the functionality of this system during this winter.

e) Storm Drain Near 503 Vendola

Earlier this year a resident reported that a 4" storm drain pipe draining to the creek at 503 Vendola Dr. was clogged with sediment and causing drainage issues. Staff conducted a field investigation and later performed a topographic and boundary survey. All but the outfall of the drain lies on private property without any rights granted to the District. The outfall is on State Tide Lands Trust land that was granted to the County of Marin in 1959. The facility only serves three properties and there are no records that the District or the County of Marin constructed or maintained this facility. The homeowners have been advised that they should use pumps to discharge to the street any water that ponds in their back yards.

To preserve the structural integrity of the levee it is recommended that the pipe be abandoned (such as by plugging with grout or installing a cutoff wall) or removed. The District will return to the advisory board at the May budget meeting with a cost estimate(s) for such a project and seek a recommendation on whether to move forward.

Item 4. Winter Storm Report

On December 2nd Santa Venetia received the first significant storm of the year. The following are some observations:

- Venetia Valley Middle School reported 1.69" of rain after receiving over 5" of rain during the previous week.
- Instantaneous rainfall rates appeared to exceed ½" per hour for nearly an hour (about 2-year recurrence interval rainfall event for this period) which can overwhelm the small catchments of Santa Venetia when soils are saturated.
- All pump stations in Santa Venetia were fully operational.
- There were reports of streets and garages flooding on Estancia Way and standing water elsewhere was also noticed by County maintenance crews.
- Other parts of the County experienced storm related impacts. Both Novato Creek and Corte Madera Creek came within inches of overtopping their banks during this storm.

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Item 5. Community Requests and Responses

Listed below are requests from residents and staff responses:

- a) A resident on Estancia Way reported a concern regarding delayed responses to reports of localized flooding when calling the after-hours flood control emergency response number posted on the Flood Control website (415-473-7513) and noted often firemen were sent to respond instead of DPW staff to address the problem. Staff confirmed that (415) 473-7513 is the proper number to call for after-hours flooding emergencies. This number contacts the Sheriff's dispatch center at the County of Marin and the operators are trained to determine the best available resources to respond to the emergency. Unfortunately, during major storms there tends to be calls from across the county and resource allocation issues develop which can result in delayed response for less critical, non-life threatening emergencies. In many cases firemen are the first responders during emergencies.
- b) A resident on Estancia Way reported a concern regarding the operation of one of Zone 7's portable pumps that is located near 870 Estancia Way. She suggested that the Zone install an automated pump at this location. In response, staff looked at three options for an automatic system:
 - 1) Replacement of the existing portable pump with a two inch submersible pump with sump pit, float switches, PG&E hookup, emergency generator, power transfer switch, and alarm system which has an estimated cost of \$80,000.
 - 2) A three inch portable diesel pump with moisture probe to turn on automatically would cost about \$35,000. Installation of a sump pit to minimize vortexing would add about \$6,000.
 - 3) Replacement of the 12" storm drain pipe with an 18" pipe and construction of a new inlet at a low spot in the gutters with larger openings which has an estimated cost of \$80,000. (The Estancia Way storm drain improvements would need to be coupled with Estancia Ditch improvements and/or addition of another pump station along Estancia Ditch to improve drainage.)

Due to the high cost of these options, staff does not recommend initiating a project at this location at this time. The Watershed Program will provide a more comprehensive look at drainage in Santa Venetia. In the meanwhile the resident was informed that the District's top priorities are the existing five major pump stations which provide protection to the wider community. Time permitting, maintenance staff will operate the pump at the end of Estancia Way and at 870 Estancia Way.

Item 6. Next Meeting

Schedule the next meeting of the advisory board. The next meeting, per the bylaws, would be held on the first Tuesday in February, the Tuesday, February 5th, 2012.