**Marin County 2017 Repetitive Loss Analysis Report**

July 25, 2017

**Recommendations from Repetitive Loss Area Analysis dated March 2015**

**Action items for yearly report**

**For the County of Marin**

Prepare an annual outreach mailing that encourages property owners in the RL areas to pursue a mitigation measure.

**Action Taken**: Land Development mailed standard repetitive loss letters (as seen in figure 500-3 on page 500-11) to homeowners in the 19 Repetitive Loss Areas on April 20, 2017.

Provide information to assist interested property owners in applying for a mitigation grant.

**Action Taken:** Flood Control & Water Conservation District (FC) provided information to Repetitive Loss Area property owners about available 2016 HMGP funding on April 12, 2017. Included in the funding package was a Frequently Asked Questions flyer and excerpts from the FEMA Hazard Mitigation Assistance guidance document. An update on the status of the current HMGP funding was emailed to homeowners on the approved HMGP funding list on June 1, 2017.

Provide information that encourages homeowners to frequently clear their ditches of debris to ensure open flow for stormwater in accordance with all regulatory permits. **Action Taken**: Land Development Division mails a yearly brochure to homeowners and residents in the Repetitive Loss Area. The brochures encourage people in the SFHA to clear debris from drainage conveyances as part of their winter preparation checklist.

In the existing flood zones, develop flood control projects for review and approval by the County and Flood Control & Water Conservation District (FC). Where appropriate, seek out funding for projects.

**Action Taken**:

* **The County approved Ross Valley Flood Control District** with a 3% property tax for flood protection on July 10, 2017. The project is designed to reduce damage due to flooding; maintain natural creek functions; reduce pollutants entering the Bay; incorporate habitat enhancements; and, improve fish passage. The duration of the storm drainage fee is for an additional ten (10) years, terminating with fiscal year 2026/27. Fees will be subject to an annual increase of up to 3% per year as determined by the Board of Supervisors. Funding for the storm drainage improvements shall be derived from a property based fee levied on each parcel that drains into the watershed.
* **The Marin Flood Control and Water Conservation District** budgeted $1.4 million to dredge three Novato creeks through Flood Control Zone 1. Dredging of the creeks was implemented in 2016 and it is recommended to implement again in 2020. This project is called the **Novato Creek Maintenance Sediment Removal**. What was unique about this most recent sediment removal event was that the material removed from the creeks was “beneficially reused” to form the beginnings of future levees to adapt to sea level rise and restore tidal wetlands. Restoring tidal wetlands could in turn increase the tidal prism in the creek and reduce future sedimentation. If feasible, beneficial reuse may occur in 2020 as well.
* **Coyote Creek Middle Reach Sediment Removal:** The Coyote Creek Middle Reach Sediment Removal project is tentatively scheduled for 2016 and 2017. This project is funded entirely by Flood Control Zone 3. Surveying and modeling being conducted every two years (last in 2015) indicated that there is not a need to perform this sediment removal yet. An RFP has just been released to conduct bathymetric surveys and hydraulic analysis of Coyote and Nyhan Creeks, and this analysis is expected to be initiated in September of 2017. If sediment removal need is identified in order to reduce flood risk to design levels, this could be conducted as early as 2018, pending necessary regulatory permits. Flood Control Zone 3 has budgeted $1 million for sediment removal in the middle reach.
* **Former Nursery Site Detention Basin on Fairfax Creek:** The former Nursery Site Detention Basin on Fairfax Creek will detain flood waters that otherwise flood downstream homes, businesses, and public facilities. In Fiscal Year 2016/17 progress was made on the environmental review. Funding will initially come from Flood Control Zone 9 funds with the basin site serving as the “Project Description” in the San Anselmo Flood Risk Reduction Project CEQA document. The San Anselmo Flood Risk Reduction Project will utilize DWR grant funding originally secured for the Memorial Park Dual-Use Facility.
* **Novato Creek Sediment** **Removal Project**: The Novato Creek Sediment Removal Project will encompass two project cycles; the first cycle in 2016/2017, and the second beginning in 2020. This project will be funded entirely by Flood Control Zone 1. Dredging of the creeks was implemented in 2016 and it is recommended to implement again in 2020. This project is called the Novato Creek Maintenance Sediment Removal. What was unique about this most recent sediment removal event was that the material removed from the creeks was “beneficially reused” to form the beginnings of future levees to adapt to sea level rise and restore tidal wetlands. Restoring tidal wetlands could in turn increase the tidal prism in the creek and reduce future sedimentation. If feasible, beneficial reuse may occur in 2020 as well.
* **The Deer Park Detention Basin:** The Deer park Detention Basin project will add infrastructure to existing lay field to allow for use as a storm water detention basin. The objective is to reduce peak flood flow in San Anselmo Creek and provide flood protection during the 100-year flood event and is scheduled for 2016 - 2021. Flood Control Zone 9 will contribute 30% of the funding. The balance to be obtained through grant funding. No grant fund opportunities have been identified to date.
* **Lefty Gomez Field Dual Use Detention Basin**: Lefty Gomez Field Dual Use Detention Basin will add infrastructure to an existing play field to allow for a storm water detention basin. In Fiscal Year 2016/17 progress was made on the environmental review. The Objective is to reduce the peak flood flow in Fairfax Creek during the 100-year flood event. Flood Control Zone 9 will contribute 30% of the funding. The balance to be obtained through grant funding. The proposed basin site was identified as a non-preferred alternative through the Memorial Park DWR grant migration (San Anselmo Flood protection Project), and no other grant fund opportunities have been identified to date.
* **Loma Alta Detention Basin:** The Loma Alta Detention Basin will add infrastructure to existing open space preserve to allow for use as a storm water detention basin. In Fiscal Year 2016/17 progress was made on the environmental review. The objective is to reduce the peak flood flow in Fairfax Creek during the 100-year flood event. Flood Control Zone 9 will contribute 30% of the funding. The balance to be obtained through grant funding. The proposed basin site as identified as a non-preferred alternative through the Phoenix Lake DWR grant migration (Corte Madera Creek Floodplain Project), and no other grant fund opportunities have been identified to date.
* **Phoenix Lake IRWM** **Retrofit:**  The Phoenix Lake IRWM Retrofit Project has been replaced with the Corte Madera Creek Floodplain Project. In Fiscal Year 2016/17 progress was made on the environmental review. The objective is to reduce peak flood flow in Corte Madera Creek while enhancing portions of the creek. Flood Control Zone 9 will contribute approximately 50% of the funding. The balance will be funded by the DWR grant agreement.
* **San Anselmo Flood Protection** **Project:** The San Anselmo Flood Risk Reduction Project will add infrastructure upstream or within the Town of San Anselmo to meet the goals of the DWR grant for Memorial Park Detention Basin Project. In Fiscal Year 2016/17 progress was made on the environmental review. The objective is to reduce peak flood flow in San Anselmo Creek to provide flood protection during the 100-year flood event. Flood Control Zone 9 will contribute 30% of the funding. The balance to be obtained through other sources.
* **Corte Madera Creek Flood Risk Management Project**: The Corte Madera Creek Floodplain Project. In Fiscal Year 2016/17 progress was made on the environmental review. The objective is to reduce peak flood flow in Corte Madera Creek while enhancing portions of the creek. Flood Control Zone 9 will contribute approximately 50% of the funding. The balance will be funded by the DWR grant agreement.

Complete the CRS application process and improve the County’s CRS classification.

**Action Taken:** (1) The County completed the CRS application process and joined the CRS program on May 1, 2016 with Class 7. (2) The County is presently working on improving the CRS score by fine-tuning responses. The County applied for modification in June 2017.

Adopt this Area Analysis according to the process detailed in the CRS Coordinator’s

Manual.

**Action Taken:** The Repetitive Loss Area Analysis was adopted by the Board of Supervisors on August 11, 2015.

Conduct an outreach program that provides an opportunity for property owners to request more detailed explanation of the RLAA report findings, identify hazard mitigation measures that are currently undertaken by the County, and hazard mitigation measures that can be undertaken by property owners.

**Action Taken:** Land Development mailed standard repetitive loss letters to homeowners in the 19 Repetitive Loss Areas on April 20, 2017. This letter included suggestions on how to protect themselves from flooding.

**b. For the residents of the study area**

Contact the County for more information about possible funding opportunities.

**Action Taken:** Flood Control & Water Conservation District (FC) provided information to Repetitive Loss Area property owners about available 2016 HMGP funding. A total of 89 homeowners responded with an interest in participating in the HMGP funding opportunity to raise their homes. The County has a total of $3 million to work with and is awaiting notification from FEMA as to which properties will be awarded funding.

Review the alternative mitigation measures discussed in this analysis and implement those that are most appropriate for their situation.

**Action Taken:** The County Flood Control and Water Conservation District (FC) reviewed all of the alternative mitigation measures mentioned previously and continues to implement them as funding allows.

Purchase and maintain a flood insurance policy on the home and its contents.

Action Taken: Land Development mailed standard repetitive loss letters to homeowners in the 19 Repetitive Loss Areas on April 20, 2017. This letter included a reminder to purchase flood insurance as homeowner’s insurance policies do not cover flooding.

This Repetitive Loss Report will be posted on the County website under the heading FEMA Flood Information and CRS Program, Local Resources (<http://maringovstg/depts/pw/divisions/land-use/fema-flood-information/local-resources>) after August 1, 2017.