

FLOOD ZONE 9 ADVISORY BOARD MEETING
JUNE 16, 2015
SIR FRANCIS DRAKE HIGH SCHOOL STUDENT CENTER ROOM
STAFF REPORT

Item 1. Approval of Meeting Minutes for May 20, 2015

Action by Board: Advisory Board members will review meeting minutes from the May 20, 2015 meeting, make corrections, and approve the minutes as corrected.

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. Draft Flow Reduction Study Presentation

At the Advisory Board meeting on May 20, 2015, staff was asked to provide details of conversations and correspondence with the owners of private properties which are included as potential measures within the study. Specific correspondence with each of the private property owners is described below:

1. Sunnyside Nursery former growing yard (Tom Perry and Jim Perry): the Perrys indicated they need to address a few issues internally before they are ready to discuss the use of the property for flood protection.
2. San Domenico School (David Wise, Chief Financial Officer and Amy Skewes-Cox, Building & Grounds Committee member): the decision to allow a detention basin on school property would be made by the governing body of the school. The governing body will need more details on detention basin site location, layout, and operations before considering this basin as a feasible project.
3. Bothin Park Youth Center (Vince Ronay, Site Manager, Girl Scouts of America): Mr. Ronay recommended that the water not pond on the lower field area because it contains a septic leach field.
4. Marin Stables (Jim McDermott, Facilities Manager and Constance Berto, Director): Mr. McDermott had ideas for detention basin locations upstream of the stable buildings and gave a site tour to District staff. Constance Berto strongly objected to a detention basin at Marin Stables and asked that it be removed from consideration.
5. Camp Tamarancho Lake (Michael Dybeck, Executive, Boy Scouts of America): BSA already lowers the lake level in the fall to provide some flood protection during the winter. The lake is pretty small and does not have much effect. (District staff note: lowering the lake provides approximately 5 ac-ft. of storage).
6. Pine Mountain Lake tunnel (Carl Gowan, Principal Engineer, MMWD): Mr. Gowan stated that the tunnel seems too small, at too high of an elevation, and too far away to be very useful as a detention basin.
7. Hidden Valley Elementary School, Brookside Elementary School, Manor Elementary School, and Deer Park (Bret Joyner, Facilities Manager, Ross Valley School District and Midge Hoffman, Chief Financial Officer, Ross Valley School District): the decision to allow a detention basin on school property would be made by the governing body of the school district, but Midge

Marin County Flood Control and Water Conservation District

Hoffman would not recommend it for Deer Park. Deer Park is a surplus property for the school district. The School District is deciding what to do with it.

Stetson Engineers has completed hydrologic and hydraulic modeling of the three program alternatives described in CH2M-HILL’s Deliverable #2. All program alternatives achieved the target flow reductions, so CH2M-HILL has prepared conceptual plans and cost estimates for all new project elements within the programs. The results are summarized in a draft report dated June 2015 and are included with this staff report. In addition, the draft report was uploaded to the Ross Valley Flood Program website on June 9. The Advisory Board and public have an opportunity to provide comments on this document during the meeting. The District will also collect public comments by email during the two-week public review period beginning on June 9 and ending on June 16. A final report will then be prepared and posted on the website in mid-July.

This is the final presentation to the Advisory Board for this study. Please find a compilation of presentations, including past presentations, below regarding this study.

Deliverable	TWG Presentation Date	AB Presentation Date	Public Comment Dates
Selection criteria, weighting factors, and list of preliminary Flow Reduction Elements being considered.	February 26, 2015	March 17, 2015	March 13-27, 2015
Results of applying preliminary fatal flaw criteria to elements; group remaining elements into preliminary Program alternatives.	March 26, 2015	April 16, 2015	April 13-27, 2015
Analyze & apply criteria to Program alternatives, and rank them.	May 15, 2015	No presentation	No public comments
Draft Report with program conceptual plans and cost estimates.	No presentation	June 16, 2015	June 9-16, 2015

Action by Board: Recommend approval to proceed with Programmatic EIR strategy to include the nine potential future detention basin sites defined in the Draft Ross Valley Flow Reduction Study Report dated June 2015.

Action by Board: Recommend approval of Implementation Strategy defined in the Draft Ross Valley Flow Reduction Study Report dated June 2015 to proceed with implementation (discussions with homeowners, planning level studies, cost estimates, conceptual designs, geotechnical studies, etc.) of the elements included in the top scoring Program Alternative 3 – Phoenix Lake, Former Nursery Site, Lefty Gomez Field, Deer Park, and Memorial Park.

Item 4. Project Status Updates (Information Item):

The Current Cost Estimate covering environmental and feasibility studies, design and construction of 10-year Work Plan Baseline Measures is included as **Attachment A** to this Staff Report. A summary of project descriptions, cost estimates, project construction start dates, and grant funding sources is included as **Attachment B** to this Staff Report.

Marin County Flood Control and Water Conservation District

a) Phoenix Lake Integrated Regional Water Management (IRWM) Retrofit Project

URS has completed the sampling and testing of the soil samples from the dam and the sediment samples from the lake. A draft Geotechnical Data Report has been reviewed by the District, MMWD, and CH2M-HILL. URS is currently making the revisions and then the report will be submitted to CA Division of Safety of Dams (DSOD) for review. The earthquake ground motion analysis technical memo for the dam site has been reviewed by DSOD and URS is addressing their review comments. URS has started developing existing material properties for future seepage and stability analysis.

Stetson Engineers is currently preparing the Hydrologic Study of Long-Term Yield of Phoenix Lake and the Phoenix Lake Coordinated Operations Plan. The District staff and MMWD are currently reviewing the first submittal of the Coordinated Operations Plan. The Ross Creek In-Stream Flow Study and the Water Quality Baseline Study are both in draft form and are being reviewed. Results of these studies will be available on www.rossvalleywatersheds.org later this year.

b) Memorial Park Dual-Use Facility

The Town of San Anselmo issued a Request for Qualifications (RFQs) for Environmental Documentation and Permitting Services. Four consulting firms were invited for interviews which were held on May 20, 2015. No selection has been made to date.

The Town issued a RFQ for Engineering and Design Services on April 14, 2015. Five SOQs were received from consultants and evaluated. The top four firms were invited for interviews on June 10, 2015.

c) Lefty Gomez Field Dual-Use Facility

URS has completed the installation of groundwater monitoring wells and the collection of soil samples. The last reading of groundwater levels will occur in early June 2015.

URS has completed laboratory analyses of the soil samples, submitted final boring logs, sediment loading analyses, a geotechnical report, a conceptual design plan, and a construction cost estimate.

Staff will present final geotechnical findings and sediment loading calculations performed by URS to the Advisory Board at a future meeting. Staff continues to look for appropriate grant opportunities for this project.

d) Loma Alta Dual-Use Facility

Staff is currently evaluating alternate locations for the Loma Alta Dual-Use Facility. Staff has held discussions with Marin County Parks & Open Space District and with the Ross Valley School District on the alternate locations. Staff described the two alternate locations and received feedback from the neighbors on the alternate locations. Staff is preparing conceptual cost estimates for each alternate location and a technical memo which identifies the preferred location. A draft technical memorandum will be presented to the Advisory Board later this summer.

e) Bridge Replacements in Town of San Anselmo

Marin County Flood Control and Water Conservation District

Building Bridge 2

The Town of San Anselmo is assessing newly released funding for FEMA grants before making a decision on whether to apply for grants for Building Bridge 2.

Nokomis and Madrone Bridge Replacements

The project design team is currently waiting for the Caltrans field review meetings that have been scheduled later this June for both projects. The project design team is also scheduled to meet with the Town of San Anselmo and District staff to discuss the results of the hydraulic analyses performed for the various bridge scenarios later this week.

The Center Boulevard/Sycamore Avenue Bridge Replacement

The project is still undergoing the feasibility study that has been authorized by Caltrans. The existing building at 800 San Anselmo Avenue poses a significant conflict to the design configurations being considered for the project. The property has been identified as a contributor to flooding in the Town of San Anselmo and is currently for sale. For these reasons, the Board of Supervisors authorized the District in May to submit a letter of intent to the seller to purchase the property and to order an appraisal. Following a due diligence investigation, the County Real Estate Division has negotiated to purchase the property for \$900,000 and is scheduled to return to the Board in June to authorize the purchase. It is anticipated that the Town will purchase the property from the District once they have received approval to proceed with land acquisitions under the Highway Bridge Program grant that is funding the bridge replacement project.

f) Winship Avenue Bridge Replacement in Town of Ross

The project design team is currently waiting for Caltrans to schedule the field review meeting that is required before further progress can be made. The project design team is scheduled to meet with the Town of Ross and District staff to discuss the results of the hydraulic analyses performed for the various bridge scenarios later this week.

g) Azalea Avenue Bridge Replacement in Town of Fairfax

The Town of Fairfax is still awaiting the obligation by Caltrans and the Federal Highway Administration of Highway Bridge Program funds for the project which was scheduled to occur by April 2015. The Town and District staff are in communication with the state agencies to find out why the funds have not been obligated yet.

h) Corte Madera Creek Units 3 and 4 Project

The Project Design Team (PDT) consisting of the U.S. Army Corps of Engineers – San Francisco Office (USACE) and the District continues to proceed with work needed to reach the first milestone that is scheduled by the end of September, 2015. Milestone One is defined as the agreement on the focused array of alternatives and the criteria used to evaluate and compare the alternatives that will be used to select the agency recommended plan. The PDT is in process of developing an array of alternatives that will be part of the complete package to be submitted to USACE Headquarters for their review. These alternatives consist of a combination of measures that will reduce flooding during storm events. The District has contracted with Stetson Engineers who have performed land surveying and hydrologic and hydraulic analyses needed to determine the water surface profiles for a suite of different return period flood events. These were used to develop floodplain maps that were recently presented to the PDT. The economist with the USACE will use the data generated from these maps to estimate damages under existing conditions. The PDT has also initiated the

Marin County Flood Control and Water Conservation District

environmental review process by developing a draft scope of work that a future consultant will need to complete by June 2016. It is anticipated that public comment will be received at the scoping meeting to be held at the start of the environmental review process this year.

i) Lower Corte Madera Creek Improvement Project

In response to the recommendations given by the Advisory Board at the May meeting, District staff is currently negotiating a cost sharing agreement with the City of Larkspur that includes terms specifically for the proposed pump station project in the Hillview neighborhood.

At the last Advisory Board meeting, District staff presented a “geomorphic dredge” approach that will be used to develop channel sections along Lower Corte Madera Creek that could be expected to be in equilibrium with the available tidal prism. District staff and their consultants are expected to perform this study starting in July or August.

Item 5. Ross Valley Creek Maintenance Update in Incorporated and Unincorporated Areas

District staff is preparing annual creek maintenance tasks for this summer within incorporated and unincorporated areas of the Ross Valley Watershed.

Within incorporated areas, municipalities have scheduled June creek walks to assess current conditions of the creeks. Municipalities will be supported by hydrologist Gerhard Epke to develop a list of priority creek maintenance sites that will be effective in both promoting flood reduction and healthy creeks within the watershed as a whole. Following the creek walk assessment, District staff will schedule a meeting with the municipalities to review creek maintenance activities performed last year and determine maintenance tasks recommended for completion this year. District staff will then verify work is completed prior to October 15 and provide any required follow-up documentation to permitting agencies.

For unincorporated areas, District staff will:

- support the biennial inspection of the completed Corte Madera Creek Flood Control Channel Project in July or August by the U.S. Army Corps of Engineers “Readiness Branch”,
- continue fire fuel reductions such as adjacent to the earthen channel access road upstream from Bon Air Road Bridge,
- perform sediment removal within the fish resting pools, greasing and, if needed, repairing tide gates within the Corte Madera Creek concrete channel,
- evaluate options to restore localized degradation of concrete surfaces within the bottom of the Corte Madera Creek concrete channel,
- continue to coordinate with the College of Marin’s proposed fence retrofit adjacent to the Corte Madera Creek concrete channel and possible changes to the channel expected through the U.S. Army Corps of Engineers completion of the Corte Madera Creek Flood Control Channel Project.

Item 6. Adjourn, Confirm Next Meeting on September 21st

At the last May 20, 2015 Flood Zone 9 Advisory Board meeting, the Flood Zone 9 Advisory Board scheduled the next Advisory Board meeting for Monday September 21, 2015.

**ROSS VALLEY FLOOD PROTECTION AND WATERSHED PROGRAM
COSTS AND REVENUES ESTIMATES
Attachment A**

								Last Updated: June 9, 2015
FLOOD CONTROL MEASURES - 10-Year Work Plan*	Implementing Agency	Current Cost Estimate**	Grants Secured***	Grants In Pursuit****	Current Cost Estimates minus Secured Grants	70% Outside Funding Target	% of Funding Target	Current Work Program
BASELINE MEASURES 10 YWP								
Lower Corte Madera Creek Improvement Project (Dredge) - (Includes Past Grant Application Costs)	FC District	\$6,220,265	\$0	PENDING	\$6,220,265	\$4,354,186	0%	\$6,220,265
Loma Alta	FC District	\$1,900,000	\$0		\$1,900,000	\$1,330,000	0%	\$1,900,000
Lefty Gomez	FC District	\$6,400,000	\$0		\$6,400,000	\$4,480,000	0%	\$6,400,000
Memorial Park (Prop 1E Scope+Past Grant Application Costs)	San Anselmo	\$17,633,683	\$8,720,500		\$8,913,183	\$12,343,578	71%	\$8,913,183
Phoenix Lake (Prop 1E Scope+Past Grant Application Costs)	FC District	\$19,740,150	\$7,661,000		\$12,079,150	\$13,818,105	55%	\$12,079,150
Azalea Ave - FX [135]	Fairfax	\$2,326,520		\$2,326,520		\$1,628,564	0%	\$2,326,520
Nokomis Ave SA [083]	San Anselmo	\$2,493,917	\$2,409,042	\$64,500	\$84,875	\$1,745,742	138%	\$84,875
Madrone Ave SA [077]	San Anselmo	\$2,487,917	\$2,127,413	\$57,102	\$360,504	\$1,741,542	122%	\$360,504
Sycamore Ave (Center Blvd) SA [063]	San Anselmo	\$5,930,375	\$5,131,752	\$84,104	\$798,623	\$4,151,263	124%	\$798,623
Winship Ave RS [005]	Ross	\$2,413,075	\$2,329,340		\$83,735	\$1,689,153	138%	\$83,735
Sir Francis Drake Blvd Bridge RS [021]	Ross	\$6,125,000	\$0	PENDING	\$6,125,000	\$4,287,500	0%	\$6,125,000
Bldg Bridge #2 [046] (Includes Past Grant Application Costs)	San Anselmo	\$3,425,200	\$0	GRANT READY	\$3,425,200	\$2,397,640	0%	\$3,425,200
Corte Madera Creek Units 3 and 4 Project (Assumptions)								
- Planning and Design (Includes Past Grant Application Costs)	FC District/USACE	\$2,810,265	\$400,000	\$2,400,000	\$2,410,265	\$1,967,186	20%	\$2,410,265
- Construction	FC District/USACE	\$6,560,000	\$0	\$6,560,000	\$6,560,000	\$4,592,000	0%	\$6,560,000
- Real Estate, easements and disposal areas	FC District	\$4,500,000	\$0	PENDING	\$4,500,000	\$3,150,000	0%	\$4,500,000
TOTAL - Baseline Measures		\$90,966,368	\$28,779,047	\$11,492,225	\$62,187,321	\$63,676,457		\$62,187,321
% of TOTAL Current Cost Estimates		100%	32%	13%	68%	70%	45%	68%
ADDITIONAL MEASURES 10 YWP								
Merwin Avenue Bridge Replacement [124]*	TBD	\$989,000	\$0	\$741,750	\$989,000	100%	0%	\$0
Channel Modifications at Merwin Bridge Area[121][122][123][125][126][127][128]	TBD	\$957,000	\$0		\$957,000	100%	0%	\$0
Install new wing wall [142]	TBD	\$126,000	\$0		\$126,000	100%	0%	\$0
Install new wing wall [143]	TBD	\$136,000	\$0		\$136,000	100%	0%	\$0
Install Floodwall/Berm as wing wall extension [144]	TBD	\$70,000	\$0		\$70,000	100%	0%	\$0
Supplement: Floodwall <3.6' RS662-700 (35 ft long)	TBD	\$50,000	\$0		\$50,000	100%	0%	\$0
Supplement:Floodwall <3.3' RS662-791 (129 ft long)	TBD	\$655,000	\$0		\$655,000	100%	0%	\$0
Supplement:Floodwall <2.0' RS956-1283 (327 ft long)	TBD	\$150,000	\$0		\$150,000	100%	0%	\$0
Taylor Avenue Bridge Replacement [203]	TBD	\$991,000		\$991,000	\$991,000	100%	0%	\$0
Replace Existing Retaining Wall [209]	TBD	\$216,000	\$0		\$216,000	100%	0%	\$0
Retrofit/Replace Existing Retaining Wall [213]	TBD	\$77,000	\$0		\$77,000	100%	0%	\$0
Construct new retaining wall [216]	TBD	\$99,000	\$0		\$99,000	100%	0%	\$0
Supplement: Floodwall<1.0' RB RS2762-2796 (34 ft long)	TBD	\$10,000	\$0		\$10,000	100%	0%	\$0
Construct new retaining wall as wing wall [219]	TBD	\$382,000	\$0		\$382,000	100%	0%	\$0
Construct new retaining wall [220]	TBD	\$387,000	\$0		\$387,000	100%	0%	\$0
Broadmoor Avenue Bridge Replacement [224]	TBD	\$1,354,000	\$0		\$1,354,000	100%	0%	\$0
Channel Modifications RS3400-3442 [225][227][228]	TBD	\$249,000	\$0		\$249,000	100%	0%	\$0
Floodwall <2.0' LB RS3646 +/- 80' (160 ft long)	TBD	\$65,000	\$0		\$65,000	100%	0%	\$0
Floodwall <2.0' LB RS4085 +/- 120' (240 ft long)	TBD	\$90,000	\$0		\$90,000	100%	0%	\$0
All Flood Control Measures (22) from RS437000-45970	TBD	\$9,214,000	\$0		\$9,214,000	100%	0%	\$0
Floodwall <1.0' RB RS43397-43512 (115 ft long)	TBD	\$15,000	\$0		\$15,000	100%	0%	\$0
Supplement:Floodwall <3.0' RB RS43716-43773 (57 ft long)	TBD	\$50,000	\$0		\$50,000	100%	0%	\$0
Supplement:Floodwall <32.5' RB RS43828-43838 (10 ft long)	TBD	\$5,000	\$0		\$5,000	100%	0%	\$0
ADDED MEASURES - SUPPLEMENT TO 10YWP								
SUBTOTAL - Additional Measures								
		\$16,337,000	\$0	\$1,732,750	\$16,337,000			\$0
PROGRAM MANAGEMENT and PUBLIC OUTREACH								
Staff (July 1st, 2011 to June 30th 2014)	NA	\$1,199,708			\$1,199,708			\$1,199,708
Staff (July 1st, 2014 to June 30, 2022) = 7 Years @ \$388,089	NA	\$2,877,603			\$2,877,603			\$2,877,603
Annual Updates to Storm Drainage Fee @ \$50,000 every 3 Years	NA	\$166,667			\$166,667			\$166,667
Flow Reduction Study (for Program)	NA	\$162,000			\$162,000			\$162,000
Hydraulic & Hydrologic Engineering, Future Grant Application Prep (2 Years \$120,000) for 8 Years (July 1st 2011 through June 30th 2019)	NA	\$480,000			\$480,000			\$480,000
Outreach Services + Website Updates (FY 14/15 & 15/16)	NA	\$218,968			\$218,968			\$218,968
SUBTOTAL		\$5,104,946			\$3,905,238			\$5,104,946
GRAND TOTAL *****		\$112,408,314	\$28,779,047	\$13,224,975	\$82,429,559			\$67,292,267
Deficit/Surplus with an annual 3% rise in fee amount					-\$32,625,208			-\$17,487,916
Expected Revenue - With No Rise in Fee Amounts:		\$43,146,194						
Expected Revenue - With 3% Rise in Fee Amounts:		\$49,804,351						

NOTES:
* Pending review and certification of environmental documents and alternatives to the listed project.
** Cost Estimates include grant application costs spent to date for Phoenix Lake IRWM Retrofit and Memorial Park Dual-Use Detention Basin. For Operations and Maintenance costs
*** Executed grant agreements, E76, or notified the grant application was selected.
**** In grant application process, or working with ACOE on obtaining federal funding.
***** GRAND TOTAL does not include annual zone operation and maintenance costs such as that needed for: website maintenance, precipitation and stream gauge maintenance, ALERT System, Creek Maintenance Program, Routine Maintenance Program, Maintenance of Unit 1-3, Utilities, Maintenance & Repair Services, Land & Buildings, Rent & Operating Leases, Professional Development, Travel, Dues, Office Supplies, Maintenance & Repair Supplies & Equipment, Land & Building Supplies, and Miscellaneous Supplies.

ATTACHMENT B

BASELINE MEASURE	DESCRIPTION	GRANT AMOUNT
<p><i>Phoenix Lake IRWM Retrofit Project</i> Implementing Agency: Marin County Flood Control and Water Conservation District Cost Estimate: \$19,740,150 (Source – DWR Prop 1E Grant Agreement 5/8/2013 + Grant Application Expenses To Date) Projected Construction Start Date: Summer 2019</p>	<p>The proposed Phoenix Lake Integrated Regional Water Management (IRWM) Retrofit Project involves modifying the Phoenix Lake reservoir, dam, spillway and outlet works to increase water storage capacity in order to reduce or prevent flooding within the Ross Valley watershed during large storms.</p>	<p align="center">\$7,661,000</p>
<p><i>Memorial Park Dual-Use Detention Project</i> Implementing Agency: Town of San Anselmo Cost Estimate: \$17,633,683 (Source – DWR Prop 1E Grant Application 9/20/2013 + Grant Application Expenses To Date) Projected Construction Start Date: 2018</p>	<p>The proposed Memorial Park Dual-Use Facility will provide a new detention basin and restoration and improvement of the park recreational facilities.</p>	<p align="center">\$8,720,500</p>
<p><i>Lefty Gomez Field Dual-Use Facility</i> Implementing Agency: Marin County Flood Control and Water Conservation District Cost Estimate: \$6,400,000 (Source – Ross Valley Capital Improvement Plan, May 2011) Projected Construction Start Date: Approximately 4 years after secured funding (~2 years environmental review, ~ 2 years engineering design)</p>	<p>The proposed Lefty Gomez Field Dual-Use Facility could include conversion of the existing Lefty Gomez Field at White Hill Middle School to a dual-use facility allowing the field to be used to detain high creek flows during infrequent, large flood events. The proposed project also could include recreation improvements to the existing field at the site.</p>	<p align="center">NOT GRANT READY</p>
<p><i>Loma Alta Detention Basin Project</i> Implementing Agency: Marin County Flood Control and Water Conservation District Cost Estimate: \$1,900,000 (Source – Ross Valley Capital Improvement Plan, May 2011) Projected Construction Start Date: Approximately 4 years after secured funding (~2 years environmental review, ~ 2 years engineering design)</p>	<p>The proposed Loma Alta Dual-Use Facility could convert a 3-acre portion of the existing Loma Alta open space area into a dual-use facility that will temporarily detain high creek flows during infrequent, large flood events. The project could also include improvements to the existing trail network at the site.</p>	<p align="center">NOT GRANT READY</p>
<p><i>Building Bridge 2</i> Implementing Agency: Town of San Anselmo Cost Estimate: \$3,425,200 (Source – Grant Application Proposal for FEMA Hazard Mitigation Grant Program 6/12/14 + Grant Application Expenses To Date) Projected Construction Start Date: ~3 years after secured funding</p>	<p>This project proposes the removal of Building Bridge #2 and a commercial building spanning the San Anselmo Creek in downtown San Anselmo.</p>	<p align="center">GRANT READY</p>
<p><i>Nokomis Avenue Bridge</i> Implementing Agency: Town of San Anselmo Cost Estimate: \$2,493,917 (Source –Town of San Anselmo) Projected Construction Start Date: 2017</p>	<p>This project proposes the removal and replacement of the Nokomis Avenue Bridge over San Anselmo Creek in the Town of San Anselmo.</p>	<p align="center">\$2,409,042</p>
<p><i>Madrone Avenue Bridge</i> Implementing Agency: Town of San Anselmo Cost Estimate: \$2,487,917 (Source –Town of San Anselmo) Projected Construction Start Date: 2017</p>	<p>This project proposes the removal and replacement of the Madrone Avenue Bridge over San Anselmo Creek in the Town of San Anselmo.</p>	<p align="center">\$2,127,413</p>
<p><i>Sycamore Avenue/Center Boulevard</i> Implementing Agency: Town of San Anselmo Cost Estimate: \$5,930,375 (Source –Town of San Anselmo) Projected Construction Start Date: ~3 years after project and grant funding approval</p>	<p>This project proposes the removal of the bridge at Sycamore Avenue and replacement with a new bridge at Center Boulevard over San Anselmo Creek in the Town of San Anselmo.</p>	<p align="center">\$5,131,752</p>
<p><i>Winship Avenue Bridge</i> Implementing Agency: Town of Ross Cost Estimate: \$2,413,075 (Source – Town of Ross) Projected Construction Start Date: 2017</p>	<p>This project proposes the removal and replacement of the Winship Avenue Bridge over San Anselmo Creek in the Town of Ross.</p>	<p align="center">\$2,329,340</p>
<p><i>Azalea Avenue Bridge</i> Implementing Agency: Town of Fairfax Cost Estimate: \$2,326,520 (Source – Town of Fairfax) Projected Construction Start Date: ~3 years after receipt of grant</p>	<p>This project proposes the removal and replacement of the Azalea Avenue Bridge over Fairfax Creek in the Town of Fairfax.</p>	<p align="center">PENDING</p>
<p><i>Corte Madera Creek Units 3 and 4 Project</i> Implementing Agency: Marin County Flood Control and Water Conservation District Cost Estimate – Environmental, Permitting, Design & Construction: \$9,370,265 (Source – USACE + Grant Application Costs To Date), Right-of-way Acquisition: \$4,500,000 (Source: District) Projected Construction Start Date: Summer 2018</p>	<p>The proposed Corte Madera Creek Units 3 and 4 Project would improve the existing concrete channel and the earthen channel up to the Sir Francis Drake Boulevard bridge in Ross including removing the old wooden fish ladder that is currently in the creek. The proposed project is part of a prior U.S. Army Corps of Engineers (USACE) Flood Control Project and therefore the USACE is our partner and potential funding source.</p>	<p align="center">\$400,000</p>
<p><i>Lower Corte Madera Creek Improvement Project (Dredge)</i> Implementing Agency: Marin County Flood Control and Water Conservation District Cost Estimate: \$6,220,265 (Source - Flood Zone 9/Ross Valley 10-Year Work Plan + Grant Application Costs To Date) Projected Construction Start Date: Approximately 4 years after secured funding (~2 years environmental review, ~ 2 years engineering design)</p>	<p>This proposed project will remove accumulated sediment from the lower sections of Corte Madera Creek in Kentfield, Larkspur, and Greenbrae. As the design moves forward, Staff will consider habitat improvements and beneficial sediment reuse opportunities that complement the project.</p>	<p align="center">PENDING</p>