

FLOOD CONTROL ZONE 9 ADVISORY BOARD MEETING

MAY 16, 2017

ROSS SCHOOL LIBRARY, ROSS

STAFF REPORT

Item 1. Approval of Meeting Minutes for March 21, 2017

Action by Board: Advisory Board members will review meeting minutes from the March 21, 2017 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. Staff Updates

A. Proposed DRAFT Project Milestone Timeline

Staff will propose use of the DRAFT Ross Valley Watershed Project Milestone Timeline at the May 16, 2017 Advisory Board (AB) Meeting to act as a streamlined information tool for communicating the status of active projects to the Ross Valley community.

With support of the AB, an updated version of the Project Milestone Timeline would be included with each AB meeting packet for board member review and then discussed during the AB Meeting. In reference of the Timeline, Staff would present highlights about the project schedules, milestones and/or constraints during the Staff Updates portion of the agenda. Updates on program activities that are not reflected in the Project Timeline will include a narrative discussion in the Staff Report and, at the request of the AB, presented during the meeting. Any projects scheduled as an individual presentation item on the AB meeting agenda will also include a narrative discussion in the Staff Report.

B. Project Updates

Program Staff, utilizing the DRAFT Project Milestone Timeline, will present a brief update on schedule and significant milestones for the following projects during the May 16, 2017 AB Meeting. The Department of Water Resources IRWM Prop 1E Grant Project (previously named the Phoenix Lake IRWM Project) will be discussed during Item 4, as reflected on the AB meeting agenda.

- Lower Corte Madera Creek Improvement Project
- San Anselmo Flood Risk Reduction Project
- Azalea Ave Bridge
- Madrone Ave Bridge
- Nokomis Ave Bridge
- Sycamore Ave (Center Blvd) Bridge
- Winship Bridge
- US Army Corp of Engineers – Corte Madera Creek Units 2, 3, & 4 Project

The AB Members requested an update on the USACE Project at the March 21, 2017 AB Meeting, thus narrative discussion is included below.

USACE developed a new two-dimensional, unsteady-state hydraulic model that extends from Unit 4 downstream to San Francisco Bay with input and assistance from the District and our consultant. The District has concurrently developed a similar hydraulic model in the upper

Marin County Flood Control and Water Conservation District

watershed and has merged the two models to provide a more realistic interpretation of creek and floodplain flow. The District is also developing a suite of hydrographs for different flow events that are being used as input into the model. The District's consultant is currently calibrating the hydrology and hydraulics model to reflect observed conditions during previous flood events including last winter's storms.

The Commander of the USACE San Francisco District presented a waiver package to the USACE Headquarters (HQ) in March of this year to request approval to exceed the \$3 million and 3 year time frame. The response from USACE HQ was that the project had continued support and work should continue to complete the TSP (Tentatively-Selected Plan) milestone. However, under new process requirements a decision on approval of the waiver will not be given until the TSP milestone is met.

The Fiscal Year 2017 Federal Appropriations Bill was approved by Congress the first week of May, 2017 after which the District has been told work plan funds are normally allocated to projects within four to six weeks.

The environmental review process for the Project is proceeding concurrently and technical studies needed for the environmental document are underway. One of the budget and schedule changes in the waiver request is to increase the number of design alternatives being analyzed to comprise a reasonable range. The District anticipates that this work will move forward when funding becomes available.

Next Steps:

Once the hydrology and calibration of the merged hydraulic model are completed, USACE will conduct dual technical reviews, on both a District and Division level which are scheduled to be completed by July 2017. While this will add time to the schedule, the District feels this will be an important step that will add credibility to the analyses and final product. The existing conditions model will be delivered to the USACE who will add and size the alternatives that have been developed to estimate and compare the cost and benefit ratios that will lead to the TSP. The TSP will either be the plan that yields the highest net-benefit or a locally-preferred alternative. With authorization of Fiscal Year 17 work plan funds by the USACE, the draft TSP would be scheduled for estimated completion and public input by late 2017. The Draft EIR/EIS will be released after the TSP or by early 2018. Next steps following development of the TSP will include submitting the package to USACE HQ for their review and approval of the project, referred to as the Agency Decision Milestone.

Following the completion of hydraulic analyses, the District and the USACE will plan a series of neighborhood meetings or workshops to present and discuss the modeling results of the alternatives for the Project. It is anticipated that these meetings will begin in July 2017 once the analysis described above is completed

C. Program Meetings/Outreach

1) Upcoming Meetings

- Public Workshop – Department of Water Resources Grant Migration Opportunity (Phoenix Lake IRWM Grant Program) – (Details, date and location: TBD)
- Granton Park/Laurel Ave Neighborhood Meeting – June 13th 2017 at 6:30 PM (location: TBD)
- Sleepy Hollow Creek Clean Up Event – ~ Summer 2017 (Details, date and location: TBD)

Marin County Flood Control and Water Conservation District

2) Recently Held Meetings

- San Anselmo Flood Risk Reduction Project EIR Scoping Meeting, April 20, 2017 - The Project Environmental Impact Review Scoping Meeting was held on April 20 at San Anselmo Town Hall to collect public comment on potential environmental effects. Approximately 35 community members attended. The presentation is available on the San Anselmo Project website available from RossValleyWatershed.org.
- Downtown San Anselmo Merchants Meeting to Discuss Flood Control, May 3, 7:00 pm – 9:00 pm, Town Hall Council Chambers 525 San Anselmo Avenue, San Anselmo
- Murphy Creek Cleaning Event, May 5 and May 6
- Madrone and Nokomis Avenue Bridge Replacements Pop-Up Meeting, May 13th – 11:00 AM to 12:30 PM at corner of Madrone and Nokomis Avenue. More information is available from SanAnselmoBridges.org.

D. Programs/Activities:

1) Creek Program

a. Creek Gages

The District continues to operate and maintain two real-time gaging stations in Zone 9 located in Kentfield (rain) and Ross Valley Fire Station (creek stage). In addition the District is preparing to install new rain and creek gauges as part of the Flood Emergency Response Plan (FERP) grant awarded to the District by Department of Water Resources last year. The District recommends a new creek camera located at the fish ladder and tide gage located in Lower Corte Madera Creek, which are both not eligible for FERP grant reimbursement, be funded through Zone 9. Funding for these two monitoring sites is included in the enclosed FY 17/18 budget action proposed as a later Agenda item.

The FERP grant for the Ross Valley Watershed provides State funding of: \$5,600 to upgrade existing District gauges to ALERT2 protocols which was completed, \$14,000 to upgrade two non-District sites to ALERT2 protocols located in downtown San Anselmo (stage) and RVFD Fairfax Station (stage), and \$31,000 to install a total of four new ALERT 2 sites located at RVFD Sleepy Hollow Fire Station #20 (rain & stage), White Hill Middle School or Former Nursery Site (rain), and RVFD Fairfax Fire Station (rain).

Attached is a map summarizing the existing monitoring site locations (rain, creek stage, camera) and tentative new site locations continuing to be evaluated for feasibility through upcoming contractor site visits and coordination with Ross Valley Fire Department and other City/Town program partners.

b. Creek Conveyance and Habitat Maintenance Program

The District is funding creek maintenance activities within each Ross Valley municipality and has proposed a budget of \$60,000 for fiscal year 2017/18. The Program conducted creek assessment visits in Larkspur and San Anselmo. Assessments in Fairfax and Ross will be completed in June. Observations from the creek assessments will be used to develop FY 17/18 creek maintenance work plans in coordination City/Town Public Works staff.

c. Community Creek Clean Up Events

The District is expanding its previous work to support and plan community creek cleanup

Marin County Flood Control and Water Conservation District

events in unincorporated areas of the County to all Ross Valley municipalities. A recent creek clean-up event was held May 5 and May 6 in cooperation with College of Marin, Friends of Corte Madera Creek and Murphy Creek community volunteers.

Another community creek clean-up is currently under development for volunteers in Sleepy Hollow. Event details will be available from the Sleepy Hollow Homeowners' Association Creek Committee webpage at <http://www.shha.org/CreekCommittee.html> and at RossValleyWatershed.org.

District staff will work with all Ross Valley municipalities to identify potential sites for other community creek clean-up events during upcoming summer project coordination meeting related to local creek assessments and maintenance.

2) Marin County Structure Elevation Program:

The Marin County Structure Elevation Program is a proposed grant program whereby individual homeowners can raise their homes above the FEMA base flood elevation with 75% of their eligible costs reimbursed by the federal government. An application for this Program was submitted in June 2016 to the California Office of Emergency Services (Cal OES), and is currently under FEMA's environmental and historic review which is expected to be completed within the next 18 months. Although this project is very likely to be funded by FEMA this round, staff recommends also resubmitting an application again this year so that additional homeowners may benefit from the grant. A total of 89 homeowners previously expressed interest county-wide and it is anticipated that only 10-15 will be able to be funded in each grant round. Homeowners, who are interested in participating in future opportunities may contact Jon Liang at jliang@marincounty.org. Jon will provide more specific updates to homeowners as more information becomes available.

The District, pending a recommendation by the Advisory Board as part of the later Fiscal Year 17/18 budget Agenda item, will resubmit the application with the required Match Commitment letter addressed to Cal OES indicating that if the District is awarded and the Board of Supervisors accepts the grant funding that up to \$25,000* from Flood Control Zone 9 funds will be applied for staff application and administrative costs.

**The actual amount will be proportionate to how many homeowners in Ross Valley benefit from the grant and \$25,000 is included within the recommended Fiscal Year 17/18 budget Program Management line items.*

3) Marin County Community Rating System (CRS) Program:

The Community Rating System (CRS) is a voluntary program for National Flood Insurance Program (NFIP) participating communities. The goals of the CRS program are to reduce flood damages to insurable property, strengthen and support the insurance aspects of the NFIP, and encourage a comprehensive approach to floodplain management. The County entered into the CRS program for the unincorporated communities in order to earn its residents flood insurance premium discounts for the County's implementation of floodplain management practices that exceed the minimum requirements of the NFIP. The County encourages unincorporated homeowners to ask their insurers to prove that they received the CRS discount of 15%. For reference, the NFIP community identification number in Marin County is 06041C.

In FY17/18, Program Staff will work with the incorporated areas of Ross Valley to identify needs for support and opportunities to leverage existing CRS activities to the benefit of the greater watershed.

Item 4. Department of Water Resources IRWM Grant Project (previously named Phoenix Lake IRWM Project)

The originally proposed project scope and operation of the Phoenix Lake reservoir for flood risk reduction included a higher lake water level and rapid drawdown of the lake level prior to forecasted large storms. As part of the Feasibility Analysis, it was determined that modifications to the existing Phoenix Lake dam would be necessary to accommodate a higher water level and rapid drawdown. Various retrofit alternatives and a dam replacement alternative were identified. Costs of work on the dam, as well as the necessary work on the spillway and outlet works, were developed. The sum of the estimated costs for dam, spillway and outlet works for the alternatives are listed below.

**Figure 1: Phoenix Lake IRWM Retrofit Project
Conceptual Alternatives Cost Estimate**

| PHOENIX LAKE IRWM RETROFIT PROJECT | | |
|--|--|-------------------|
| CONCEPTUAL ALTERNATIVES COST ESTIMATES | | |
| | | Total Project |
| Alternative ID | Alternative Description | Range of Estimate |
| 1 | Dam Buttressing & Ground Improvement, Modify Existing Spillway, and New 66" Tunneled Outlet | \$17.8M-\$29M |
| 2 | Dam Buttressing, Ground Improvement & Seepage Cutoff Wall; Modify Existing Spillway; & New 66" Tunneled Outlet | \$15.4M-\$25.1M |
| 3 | Dam Replacement, Spillway Replacement, & 66" Outlet Replacement | \$13.1M-\$21.2M |
| Assumptions: | | |
| 1. Existing spillway is structurally sound and can be modified for Alternatives 1 and 2. | | |
| 2. The grant application budget for the dam, spillway, & outlet improvements is approximately \$16.6M. | | |

The three alternatives above were evaluated according to the criteria of:

- Construction Risks-potential for increased costs or duration
- Construction Complexity-the use of conventional methods
- Environmental Impacts-to the environment and to the public

Marin County Flood Control and Water Conservation District

- Comparative Cost

Alternative #3, dam replacement, scored the highest for the above criteria. District staff was concerned that the high end of the Alternative #3 cost estimate range exceeded the project budget of \$16.6M for the dam, spillway and outlet work. Schedule was also a concern, as it usually takes several years to obtain environmental review compliance and permits for the construction of a dam, which means project completion would extend beyond the grant agreement deadline even if the deadline is extended to June 30, 2020. MMWD has shared similar concerns with District staff.

Because of cost and schedule concerns, District staff is evaluating other priority projects which may use the Department of Water Resources (DWR) grant awarded to the Phoenix Lake IRWM Project in the amount of \$7,661,000. The other projects may include portions of the original project that would provide lake draw-down for flood control through system improvements and operational changes, but would not include raising the lake above its current level or rapid drawdown of the lake water level prior to a storm. In conjunction with the criteria used to assess the original project scope, as discussed above, the additional criteria (confirmed by DWR staff) below will help evaluate the feasibility of new potential project alternatives.

- Meet the DWR grant-required project elements;
 - Flood Risk Reduction
 - Improved Water Supply
 - Improved Water Quality
 - Ecosystem Restoration
 - Improved Recreation & Public Access
- Within a project budget of \$15,322,000 (returns project to a 50%/50% cost share)
- Within schedule (complete by June 30, 2020)
- Has community support
- Has regulatory support

The evaluation of other projects that could be funded by the DWR grant is still in process and additional alternative projects to be considered have been discussed with the Town of Ross staff and the Technical Work Group. The project selection process and the potential alternate projects will be discussed at the Advisory Board meeting. Future work includes preparation and execution of a formal grant agreement amendment with DWR no later than August 31, 2016. To meet a June 30, 2020 project completion deadline, the California Environmental Quality Act process for the project would need to be completed by summer of 2018.

Recommend Action: Recommend that Program Staff proceed with assessment of selecting preferred alternatives for the migration of the Dept. of Water Resources IRWM Prop 1E Grant (previously named Phoenix Lake IRWM Project) to other priority projects in the Ross Valley Watershed.

Item 5. Annual Budget and Work Plan (Fiscal Year 2017-18)

The District met with a member of the Ad-Hoc Budget Sub-Committee on Wednesday April 19, 2017 to discuss formatting, presentation and accounting information provided as part of the Fiscal Year 17/18 budget and Fiscal Year 17/18 Work Plan package. The Budget and Work Plan documents incorporate

Marin County Flood Control and Water Conservation District

feedback received by the Ad-Hoc Budget Sub-Committee in accordance with Brown Act requirements. District staff recommends that the chair dissolve the current makeup of the Ad-Hoc Sub-Committee. If needed, a future Ad-Hoc Sub-Committee can be created, at the discretion of the chair, such as to fulfill a specific short-lived function addressing a discrete matter.

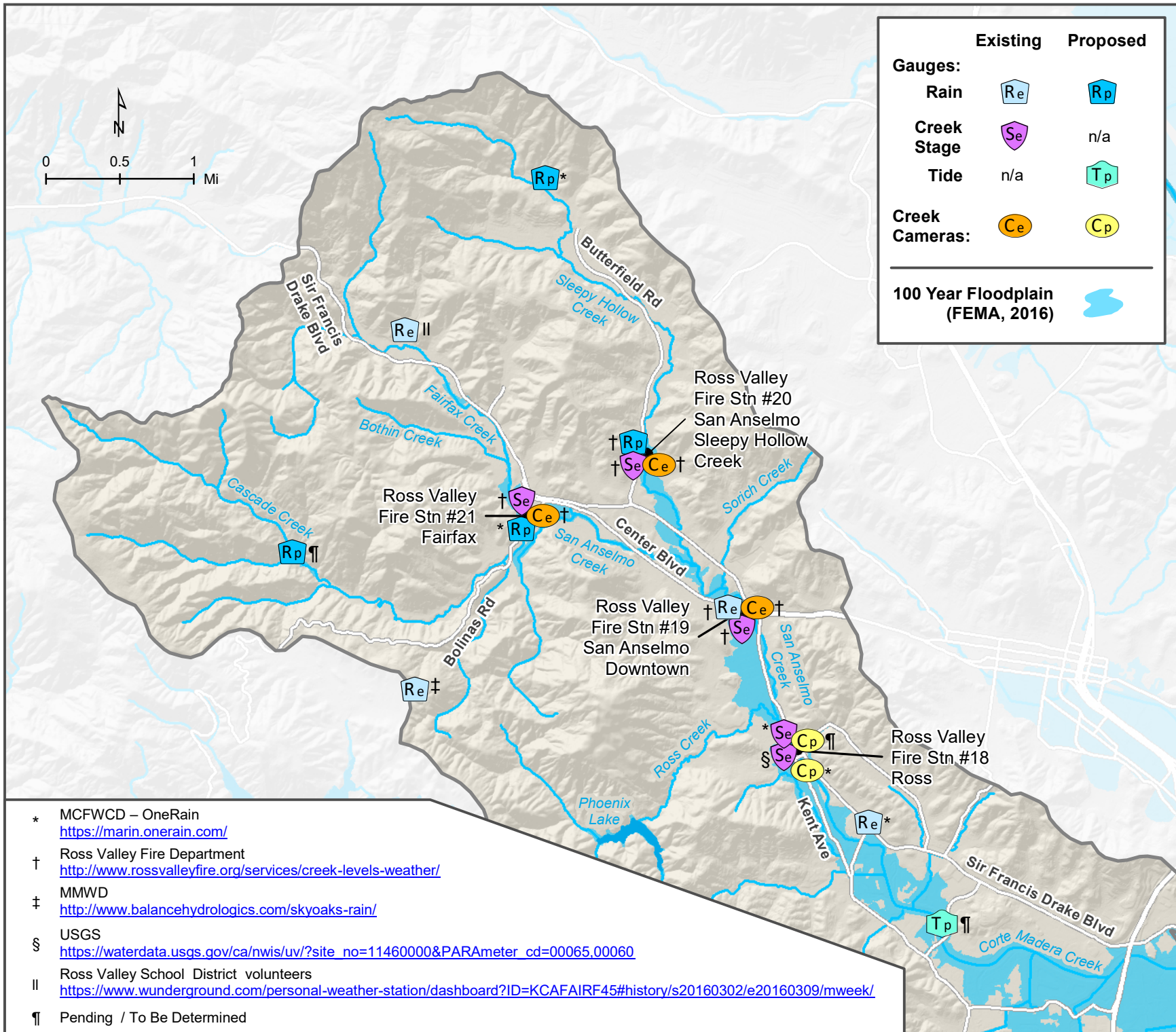
The Zone 9 Budget for Fiscal Year 2017-2018 (begins July 1, 2017 and ends June 30, 2018) will be presented to the Board of Supervisors at a hearing this spring. Staff will present the enclosed proposed budget to the Advisory Board for review and their recommendation to the Board of Supervisors. This budget assumes a 3% increase in Ross Valley Storm Drainage Fee Amounts in Fiscal Year 2017/18.

Recommended Action: Recommend that the Board of Supervisors approve the budget for Fiscal Year 2017-18 and dissolve the Flood Control Zone 9 Ad-Hoc Budget Sub-Committee.

Item 6. Confirm Next Meeting Date & Adjourn

Staff recommends holding a special Flood Zone 9 Advisory Board Meeting in June, 2017 (date and location to be determined) to review and provide recommendation for selecting another priority project for the Department of Water Resources IRWM Prop 1E Grant Project (previously named the Phoenix Lake IRWM Project).

Staff recommends resuming the quarterly schedule with the following Flood Control Zone 9 Advisory Board Meeting scheduled on Tuesday, September 19th, 2017, at 7:00 pm.



DRAFT - Ross Valley Flood Control Zone 9 Fiscal Year Budget Planning Worksheet - DRAFT

| | FY 16/17 Budget ¹ | FY 16/17 Actual+Est. ² | FY 17/18 Budget ³ |
|---|---------------------------------|--------------------------------------|---------------------------------|
| Ross Valley Watershed Flood Risk Reduction Program | | | |
| PROGRAM REVENUE & BUDGET SUMMARY⁴ | | | |
| Total Program Funds Available | | | |
| Beginning Fund Balances July 1, 2017 | | \$14,012,498 | |
| <i>FY15/16 unspent, previously encumbered funds:</i> | | (\$1,748,946) | |
| Estimated Available Fund Balance Total | | \$12,263,551 | \$5,327,833 |
| Total Program Management Expenses (by Major Budget Category) | | | |
| Professional and Trade Services Total: | \$4,003,599 | \$3,827,009 | \$1,345,800 |
| Capital Assets/Real Estate Acquisition Total: | \$3,000,000 | \$3,800,000 | \$1,800,000 |
| Implementation Total: | \$199,285 | \$448,000 | \$836,250 |
| County Salary and Overhead Total: | \$1,393,777 | \$1,584,104 | \$1,644,746 |
| Estimated Ross Valley Flood Risk Reduction Program Total⁵ | \$8,596,661 | \$9,659,113 | \$5,626,796 |
| Total Program Revenue⁶ | | | |
| Watershed Fee (Assumes 3% Increase per Year) | | \$2,515,506 | \$2,590,971 |
| Taxes | | \$199,610 | \$199,610 |
| Revenues from Use of Money and Property | | \$7,253 | \$7,253 |
| Intergovernmental Revenues | | \$1,025 | \$1,025 |
| Miscellaneous Revenues | | \$0 | \$0 |
| Estimated Program Revenue Total* | | \$2,723,394 | \$2,798,859 |
| Estimated Fund Ending Balance June 30, 2018 | | \$5,327,833 | \$2,499,896 |

*NOTE: Department of Water Resources Grants (San Anselmo Flood Risk Reduction Project, Phoenix Lake IRWM and Local Levee Assistance Program) revenue are not yet reflected in the Program Budget as project accounts and administration are currently under development. Grant fund revenue will be included in subsequent budgets and the Program Annual Report (to be published in Fall 2017)

All public meetings and events sponsored or conducted by the County of Marin are held in accessible sites. Requests for accommodations may be made by calling (415) 473-4381 (voice/TTY) or 711 for the California Relay Service or e-mailing disabilityaccess@marincounty.org at least four work days in advance of the event. Copies of documents are available in alternative formats, upon written request.

DRAFT - Ross Valley Flood Control Zone 9 Fiscal Year Budget Planning Worksheet - DRAFT

| | FY 16/17 Budget ¹ | FY 16/17 Actual+Est. ² | FY 17/18 Budget ³ |
|---|---------------------------------|--------------------------------------|---------------------------------|
| Ross Valley Watershed Flood Risk Reduction Program | | | |
| ROSS VALLEY FLOOD RISK REDUCTION PROGRAM EXPENDITURE SUMMARY⁵ | | | |
| Capital Improvement Projects | | | |
| <i>Project Including Multiple Flood Program Elements:</i> | | | |
| Lower Corte Madera Creek Improvement Project ⁷ | \$395,000 | \$62,000 | \$226,000 |
| Department of Water Resources IRWM Prop 1E Grant Phoenix Lake IRWM Retrofit Project ⁸ | \$2,121,299 | \$2,034,000 | \$1,015,000 |
| San Anselmo Flood Risk Reduction Project ⁹ | \$847,000 | \$1,705,585 | \$2,065,000 |
| U.S. Army Corps of Engineers Units 2, 3, and 4 Project ¹⁰ | \$281,403 | \$346,000 | \$550,000 |
| Bridge Projects: | | | |
| 634-636 San Anselmo Ave - Building Bridge #2 (San Anselmo) ¹¹ | \$58,500 | \$45,000 | |
| Azalea Ave (Fairfax) ¹² | \$13,000 | \$13,000 | \$49,000 |
| Madrone Ave (San Anselmo) ¹³ | \$13,000 | \$28,000 | \$70,375 |
| Nokomis Ave (San Anselmo) ¹⁴ | \$13,000 | \$26,000 | \$50,375 |
| Sleepy Hollow Creek/Morningside Feasibility ¹⁵ | \$10,000 | \$55,324 | \$6,000 |
| Sycamore/Center Blvd (San Anselmo) ¹⁶ | \$13,000 | \$50,000 | \$56,000 |
| Winship Ave (Ross) ¹⁷ | \$13,000 | \$18,000 | \$42,000 |
| Flood Diversion Storage Basins: | | | |
| Deer Park Dual-Use Facility ¹⁸ | \$5,000 | \$5,000 | \$0 |
| Former Sunnyside Nursery Growing Grounds ¹⁹ | \$3,225,000 | \$3,874,000 | \$0 |
| Lefty Gomez Field Dual-Use Facility ²⁰ | \$87,000 | \$0 | \$0 |
| Loma Alta Dual-Use Facility ²¹ | \$7,000 | \$5,000 | \$0 |
| Capital Improvement Projects Total: | \$7,102,202 | \$8,266,909 | \$4,129,750 |
| Program Management | | | |
| Program Activities ²² | \$1,077,905 | \$858,605 | \$1,028,110 |
| Administration | \$67,929 | \$72,629 | \$77,136 |
| Operation and Maintenance ²³ | \$348,625 | \$460,970 | \$391,800 |
| Program Management Total: | \$1,494,459 | \$1,392,204 | \$1,497,046 |
| Ross Valley Flood Risk Reduction Program Total: | \$8,596,661 | \$9,659,113 | \$5,626,796 |

DRAFT - Ross Valley Flood Control Zone 9 Fiscal Year Budget Planning Worksheet - DRAFT

| | FY 16/17 Budget ¹ | FY 16/17 Actual+Est. ² | FY 17/18 Budget ³ |
|---|---------------------------------|--------------------------------------|---------------------------------|
| Ross Valley Watershed Flood Risk Reduction Program | | | |
| PROGRAM BUDGET DETAILS | | | |
| Capital Improvement Projects | | | |
| Projects Incorporating Multiple Program Elements | | | |
| Lower Corte Madera Creek Improvements⁷ | | | |
| Professional & Trade Services Subtotal: | \$325,000 | \$0 | \$135,000 |
| Implementation Subtotal: | \$20,000 | \$42,000 | \$36,000 |
| County Salaries & Overhead Subtotal: | \$50,000 | \$20,000 | \$55,000 |
| ESTIMATED TOTAL: | \$395,000 | \$62,000 | \$226,000 |

*NOTE: Budget only shows local cost share and does not include participating costs through the pending DWR LOLE grant

| | | | |
|--|--------------------|--------------------|--------------------|
| Department of Water Resources IRWM Prop 1E Grant - Phoenix Lake IRWM Retrofit Project⁸ | | | |
| Professional & Trade Services Subtotal: | \$2,025,299 | \$1,850,000 | \$800,000 |
| Implementation Subtotal: | \$0 | \$0 | \$0 |
| County Salaries & Overhead Subtotal: | \$96,000 | \$184,000 | \$215,000 |
| ESTIMATED TOTAL: | \$2,121,299 | \$2,034,000 | \$1,015,000 |

| | | | |
|---|------------------|--------------------|--------------------|
| San Anselmo Flood Risk Reduction Project⁹ | | | |
| Professional & Trade Services Subtotal: | \$800,000 | \$1,519,585 | \$0 |
| Capital Assets/Real Estate Acquisition Subtotal: | \$0 | \$0 | \$1,800,000 |
| Implementation Subtotal: | \$0 | \$0 | \$0 |
| County Salaries & Overhead Subtotal: | \$47,000 | \$186,000 | \$265,000 |
| ESTIMATED TOTAL: | \$847,000 | \$1,705,585 | \$2,065,000 |

*NOTE: DWR Prop 1E grant reimbursement will start after District expenses exceed \$8.7M

| | | | |
|---|------------------|------------------|------------------|
| U.S. Army Corps of Engineers Units 2, 3 and 4¹⁰ | | | |
| Professional & Trade Services Subtotal: | \$60,000 | \$151,000 | \$50,000 |
| Implementation | | | |
| In-Kind Cash Match to USACE | \$0 | \$50,000 | \$290,000 |
| Implementation Subtotal: | \$0 | \$50,000 | \$290,000 |
| County Salaries & Overhead Subtotal: | \$221,403 | \$145,000 | \$210,000 |
| ESTIMATED TOTAL*: | \$281,403 | \$346,000 | \$550,000 |

*Note: \$400,000 in federal funds was programmed in the 2014 federal work plan by the U.S. Army Corps of Engineers. \$500,000 in federal funds was approved within 2015 federal work plan by Corps. "FY 16/17 Actual" project charges to be journaled from Fund 3290 (FCZ9 Fund) to Fund 3280 (FCZ9A Fund) until FCZ9A fund balance is depleted.

Pending DWR LOLE grant reimbursements expected to cover portion of Zone 9 15/16-17/18 project expenses and not reflected in this budget

DRAFT - Ross Valley Flood Control Zone 9 Fiscal Year Budget Planning Worksheet - DRAFT

| Ross Valley Watershed Flood Risk Reduction Program | FY 16/17 Budget ¹ | FY 16/17 Actual+Est. ² | FY 17/18 Budget ³ |
|---|---------------------------------|--------------------------------------|---------------------------------|
| PROGRAM BUDGET DETAILS (Continued) | | | |
| Capital Improvement Projects | | | |
| Bridge Projects (Modifications, Replacements, and/or Removals) | | | |
| Azalea Ave (Fairfax)¹² | | | |
| Professional & Trade Services Subtotal: | \$0 | \$0 | \$0 |
| Implementation Subtotal: | \$0 | \$10,000 | \$40,000 |
| County Salaries & Benefits Subtotal: | \$13,000 | \$3,000 | \$9,000 |
| ESTIMATED TOTAL: | \$13,000 | \$13,000 | \$49,000 |
| 634-636 San Anselmo Ave - Building Bridge #2 (San Anselmo)-See San Anselmo Flood Risk Red. Project)¹¹ | | | |
| Professional & Trade Services Subtotal: | \$10,000 | \$0 | |
| Implementation Subtotal: | \$25,000 | \$25,000 | |
| County Salaries & Benefits Subtotal: | \$23,500 | \$20,000 | |
| ESTIMATED TOTAL: | \$58,500 | \$45,000 | |
| *NOTE: FY 17/18 Expenses and Encumbrances moved to the San Anselmo Flood Risk Reduction Project | | | |
| Madrone Ave (San Anselmo)¹³ | | | |
| Professional & Trade Services Subtotal: | \$0 | \$0 | \$0 |
| Implementation Subtotal: | \$0 | \$24,000 | \$62,375 |
| County Salaries & Overhead Subtotal: | \$13,000 | \$4,000 | \$8,000 |
| ESTIMATED TOTAL: | \$13,000 | \$28,000 | \$70,375 |
| Nokomis Ave (San Anselmo)¹⁴ | | | |
| Professional & Trade Services Subtotal: | \$0 | \$0 | \$0 |
| Implementation Subtotal: | \$0 | \$22,000 | \$42,375 |
| County Salaries & Overhead Subtotal: | \$13,000 | \$4,000 | \$8,000 |
| ESTIMATED TOTAL: | \$13,000 | \$26,000 | \$50,375 |
| Sleepy Hollow Creek/Morningside Feasibility Study (San Anselmo)¹⁵ | | | |
| Professional & Trade Services Subtotal: | \$0 | \$4,324 | \$0 |
| Implementation Subtotal: | \$0 | \$0 | \$0 |
| County Salaries & Overhead Subtotal: | \$10,000 | \$51,000 | \$6,000 |
| ESTIMATED TOTAL: | \$10,000 | \$55,324 | \$6,000 |
| Sycamore/Center Blvd (San Anselmo)¹⁶ | | | |
| Professional & Trade Services Subtotal: | \$0 | \$0 | \$0 |
| Implementation Subtotal: | \$0 | \$48,000 | \$48,000 |
| County Salaries & Overhead Subtotal: | \$13,000 | \$2,000 | \$8,000 |
| ESTIMATED TOTAL: | \$13,000 | \$50,000 | \$56,000 |
| Winship Avenue (Ross)¹⁷ | | | |
| Professional & Trade Services Subtotal: | \$0 | \$0 | \$0 |
| Implementation Subtotal: | \$0 | \$15,000 | \$34,000 |
| County Salaries & Overhead Subtotal: | \$13,000 | \$3,000 | \$8,000 |
| ESTIMATED TOTAL: | \$13,000 | \$18,000 | \$42,000 |

DRAFT - Ross Valley Flood Control Zone 9 Fiscal Year Budget Planning Worksheet - DRAFT

| | FY 16/17 Budget ¹ | FY 16/17 Actual+Est. ² | FY 17/18 Budget ³ |
|---|---------------------------------|--------------------------------------|---------------------------------|
| Ross Valley Watershed Flood Risk Reduction Program | | | |
| PROGRAM BUDGET DETAILS (Continued) | | | |
| Capital Improvement Projects | | | |
| Flood Diversion Storage Basins | | | |
| Deer Park Dual-Use Facility¹⁸ | | | |
| Professional & Trade Services Subtotal: | \$0 | \$0 | \$0 |
| Implementation Subtotal: | \$0 | \$0 | \$0 |
| County Salaries & Overhead Subtotal: | \$5,000 | \$5,000 | \$0 |
| ESTIMATED TOTAL: | \$5,000 | \$5,000 | \$0 |
| Former Sunnyside Nursery Growing Grounds¹⁹ | | | |
| <i>(Refer to San Anselmo Flood Risk Reduction Project for FY 17/18 Proposed)</i> | | | |
| Professional & Trade Services Subtotal: | \$160,000 | \$0 | \$0 |
| Capital Assets/Real Estate Acquisition Subtotal: | \$3,000,000 | \$3,800,000 | \$0 |
| Implementation Subtotal: | \$0 | \$18,000 | \$0 |
| County Salaries & Overhead Subtotal: | \$65,000 | \$56,000 | \$0 |
| ESTIMATED TOTAL*: | \$3,225,000 | \$3,874,000 | \$0 |
| *NOTE: FY 17/18 Expenses and Encumbrances moved to the San Anselmo Flood Risk Reduction Project | | | |
| Lefty Gomez Field Dual-Use Facility²⁰ | | | |
| Professional & Trade Services Subtotal: | \$62,000 | \$0 | \$0 |
| Implementation Subtotal: | \$20,000 | \$0 | \$0 |
| County Salaries & Overhead Subtotal: | \$5,000 | \$0 | \$0 |
| ESTIMATED TOTAL: | \$87,000 | \$0 | \$0 |
| Loma Alta Dual-Use Facility²¹ | | | |
| Professional & Trade Services Subtotal: | \$2,000 | \$0 | \$0 |
| Implementation Subtotal: | \$0 | \$0 | \$0 |
| County Salaries & Overhead Subtotal: | \$5,000 | \$5,000 | \$0 |
| ESTIMATED TOTAL: | \$7,000 | \$5,000 | \$0 |

DRAFT - Ross Valley Flood Control Zone 9 Fiscal Year Budget Planning Worksheet - DRAFT

| | FY 16/17 Budget ¹ | FY 16/17 Actual+Est. ² | FY 17/18 Budget ³ |
|---|---------------------------------|--------------------------------------|---------------------------------|
| Ross Valley Watershed Flood Risk Reduction Program | | | |
| PROGRAM BUDGET DETAILS (Continued) | | | |
| Program Management | | | |
| Program Activities^{22*} | | | |
| Professional & Trade Services Subtotal: | \$486,500 | \$160,000 | \$275,000 |
| <u>Implementation Programs/Activities:</u> | | | |
| Flood Preparedness Program: | | | |
| Ross Valley Flood Preparedness Assistance Pilot | \$0 | \$0 | \$80,000 |
| Home Elevation Grant-Property Owner Support | \$0 | \$0 | \$25,000 |
| Elevation Survey Program | \$0 | \$0 | \$0 |
| Creek Program: | | | |
| Creek Conveyance & Habitat Maint. (Incorp.) | \$45,000 | \$65,000 | \$60,000 |
| Community Clean Up Events/Activities | \$0 | \$0 | \$15,000 |
| Rain/Stream Gage Program & Alert System ²¹ | \$2,000 | \$7,000 | \$28,600 |
| Rent & Operating Leases | \$8,500 | \$8,500 | \$8,500 |
| Implementation Subtotal: | \$93,500 | \$118,500 | \$227,100 |
| County Salaries & Overhead Subtotal: | \$497,905.00 | \$580,105.00 | \$526,010.00 |
| ESTIMATED TOTAL: | \$1,077,905 | \$858,605 | \$1,028,110 |

***NOTE: Expenses include the following Program Activities:**

General Program Management: Program Implementation, Grant Acquisition and Support Services, Finance Strategy, Hydrology Support, and Public Engagement and Outreach

Flood Preparedness Program: Ross Valley Flood Preparedness Pilot, Home Elevation Grant-Property Owner Support and Elevation Program Survey

Creek Program: Creek Conveyance & Habitat Maintenance (Incorp. Areas), Regulatory Agency and Permitting Support, Creek Assessments, Creek Maintenance Agreements with City/Towns and Rain/Stream Gage Program & Alert System²¹

| | | | |
|--------------------------------------|-----------------|-----------------|-----------------|
| Administration | | | |
| Implementation Subtotal: | \$18,200 | \$22,900 | \$26,400 |
| County Salaries & Overhead Subtotal: | \$49,729 | \$49,729 | \$50,736 |
| ESTIMATED TOTAL*: | \$67,929 | \$72,629 | \$77,136 |

*NOTE: Administration charges can consist of one or more of the following: Office Supplies, Misc. Supplies, Communication, Professional Development, Travel, Rent & Operating Lease, Dues & Membership

| | | | |
|---|------------------|------------------|------------------|
| Operation and Maintenance²³ | | | |
| Professional and Trade Services Subtotal: | \$72,800 | \$142,100 | \$85,800 |
| Implementation Subtotal: | \$22,585 | \$52,600 | \$30,000 |
| County Salaries & Overhead Subtotal: | \$253,240 | \$266,270 | \$276,000 |
| ESTIMATED TOTAL: | \$348,625 | \$460,970 | \$391,800 |

DRAFT - Ross Valley Flood Control Zone 9 Fiscal Year 17/18 Budget Planning Worksheet - DRAFT

| Exhibit A | |
|--|--|
| Assumptions and Additional Notes For FY 17/18 Budget Document | |
| 1 | "FY 16/17 Budget" refers to budget recommended by Flood Control Zone 9 Advisory Board on April 19, 2016. See FY 16/17 budget document provided in Staff Report at following file path link: http://www.marinwatersheds.org/documents/FCZ9ABStaffReport-Budget4-19-2016_FINAL.pdf |
| 2 | "FY 16/17 Actual+Est." refers to 'Estimated Actual Expenditures' partway through Fiscal Year 16/17 plus 'Estimated Expenditures' for the remainder of Fiscal Year 16/17. |
| 3 | "FY 17/18 Budget" is the proposed budget for July 1, 2017 through June 30, 2018 and does not include budget recommended in a prior fiscal year. |
| 4 | "Program Revenue & Budget Summary" shows starting and ending balance which are only shown within "FY 16/17 Actual+Est." and "FY 17/18 Budget" columns. This information shown is subject to change. Phoenix Lake project currently resides outside of Fund 3280 and Fund 3290 but is reflected in the beginning balance information and continues to draw down from \$2.1 million transfer to the project made in FY 12/13 from Fund 3290 and future transfers. |
| 5 | "Estimated Ross Valley Flood Risk Reduction Program Totals" do not provide budget allocations to proceed with detention basin sites with zero fee allocated in the current "Ross Valley Flood Protection and Watershed Program Costs and Revenues Estimates" spreadsheet. |
| 6 | a) Revenue, aside from Storm Drainage Fee which is assumed to increase 3% per year and subject to annual public hearing and approval by the Board of Supervisors, is assumed to remain as in the prior fiscal year revenue amount. b) Department of Water Resources Grants (San Anselmo Flood Risk Reduction Project, Phoenix Lake IRWM and Local Levee Assistance Program) revenue are not yet reflected in the Program Budget as project accounts and administration are currently under development. Grant fund revenue will be included in subsequent budgets and the Program Annual Report (to be published in Fall 2017) c) DWR IRWM Prop 1E Grant Project (Phoenix Lake IRWM) included \$2.1 million in "anticipated future grant revenue" from the Proposition 1E grant in FY 2012/13 when the project account was created for feasibility, design and environmental review efforts, therefore revenue shown in "FY 16/17 Budget", "FY 16/17 Actual+Est.", and "FY 17/18 Budget" will not include any revenue received to date because it was already accounted for in FY 2012/13. |
| 7 | Lower Corte Madera Creek Improvement Project - Pump Station and Hillview Drainage Improvements Memorandum of Agreement for first phase is approved in "FY 16/17 Actual+Est." by the City Council and Marin County Flood Control and Water Conservation District Board of Supervisors, and NEPA funded outside of FCZ9. Phase 1 Concept Design is completed for Hillview Drainage Improvement in FY 16/17 or early FY 17/18 and Phase 2 proceeds in FY 17/18. "FY 16/17 Actual+Est." assumes no additional funding by Zone is provided for geomorphic dredge study. "FY 17/18 Budget" assumes \$0 for plans, specifications, and environmental permits to dredge the Corte Madera Creek channel if needed, and \$135,000 for Local Levee Evaluation assuming Department of Water Resources grant is awarded and executed allowing for grant reimbursable work in FY 17/18. Grant includes \$20,000 for bathymetric survey. |
| 8 | DWR IRWM Prop 1E Grant Project (Phoenix Lake IRWM) - Project scope may shift due to changes in feasibility outlined in the original DWR Grant Application. The new project scope was not yet defined as of the approval of the FY17/18 budget and thus estimated actuals and FY17/18 budget may change with approval by the Board or Supervisors. The FY16/17 to FY17/18 budgets reflect expenses for the Program EIR and preliminary design of the existing project scope. |
| 9 | San Anselmo Flood Risk Reduction Project - assumes EIR and preliminary design will occur during FY16/17 to FY17/18 and final design will occur during FY17/18 to FY18/19. |

Exhibit A (CONTINUED)

| | |
|----|--|
| 10 | U.S. Army Corps of Engineers Units 2, 3 and 4 - Note: budget shown is based on 3x3 waiver approval and split between misc. services (cash to USACE and other Work-in-Kind) and in-house costs. Details of split to be determined with USACE when (or if) work plan funds are approved with current assumption that \$50,000 cash payment provided in FY 16/17 (Actual+Est.) and \$290,000 cash payment provided in FY 17/18. Note: \$400,000 in federal funds programmed in the 2014 federal work plan by USACE. \$500,000 in federal funds approved within USACE 2015 federal work plan. "FY 16/17 Actuals+Est.." project charges to be journaled from Fund 3290 (FCZ9 Fund) to Fund 3280 (FCZ9A Fund) until FCZ9A fund balance is depleted. Pending DWR LOLE grant reimbursements expected to cover portion of Zone 9 FY 15/16-17/18 project expenses and not reflected in this budget |
| 11 | 634-636 San Anselmo Ave (Building Bridge #2) - a) Estimated FY 17/18 Budget for this program element is reflected under the San Anselmo Flood Risk Reduction Project. b) No FEMA grant received as of 5/2/17 but part of San Anselmo Flood Risk Reduction Project grant migration |
| 12 | Azalea Avenue Bridge Replacement - PO for PE phase already encumbered (\$65,000) |
| 13 | Madrone Avenue Bridge Replacement - PO for PE phase already encumbered (\$159,617) |
| 14 | Nokomis Avenue Bridge Replacement - PO for PE phase already encumbered (\$84,875) |
| 15 | Sleepy Hollow Creek/Morningside Feasibility Study - Assumes no work continues past FY 16/17 other than seeking grant funding sources for project. |
| 16 | Sycamore/Center Blvd Bridge Replacement - PO for PE phase already encumbered (\$380,332) |
| 17 | Winship Avenue Bridge Replacement - PO for PE phase already encumbered (\$83,735) |
| 18 | Deer Park Dual-Use Facility is part of the Program EIR. |
| 19 | Former Sunnyside Nursery Growing Grounds - assumes project will become part of the San Anselmo Flood Risk Reduction Project. |
| 20 | Lefty Gomez Field Dual-Use Facility is part of the Program EIR. |
| 21 | Loma Alta Dual-Use Facility - No tasks anticipated. Site is included in Program EIR. |
| 22 | Program Activities, Rain/Stream Gage Program & Alert System - Zone 9 contributions from Department of Water Resources Flood Emergency Response Planning grant agreement are not included in this budget. 9 gauges are maintained by Flood Control in "FY 17/18 Budget". New Tide Gauge and Camera installed in FY 17/18. Tide gauge installed/maintained by USGS with funding agreement for installation and first year of maintenance costs. |

Exhibit B

FY2017-18 Ross Valley Watershed Flood Risk Reduction Program Work Plan Summary

NOTE: Work Plan Summary includes estimated expenses for Capital Improvement Project and Program Management Activities expected to be incurred in FY2017/18. Estimates to do not reflect previously encumbered funds that are reflected in the Program FY17/18 Budget

| | Project/ Program Activity | Project/Program Activity Description | Lead Agency | FY17-18 Milestone | Estimated FY 17/18 Expenditure¹ | Funding Source |
|---|--|---|--|--|---|--|
| Capital Improvement Projects | | | | | | |
| Projects Incorporating Multiple Program Elements | | | | | | |
| 1 | Lower Corte Madera Creek Improvement Project | Remove accumulated sediment from lower sections of Corte Madera Creek, Larkspur, Greenbrae. Add storm drain pump station and storm drain line in Larkspur, Hillview neighborhood. Evaluate existing levees along Corte Madera Creek and perform Kentfield Gardens drainage study. | Flood Control District, City of Larkspur | 1) Sign DWR grant agreement 2) Bathymetric and land survey 3) H&H analyses of channel and geotechnical exploration at locations along creek 4) Geomorphic Dredge Study Report | \$226,000 | DWR Grant, FZ9 Watershed Fee, Cal Trans bridge funding to City |
| 2 | DWR Grant Migration Project (Phoenix Lake IRWM Retrofit) | Phoenix Lake Integrated Regional Water Management (IRWM) Retrofit Project currently undergoing a grant migration originally involved modifying the Phoenix Lake dam, spillway, outlet works and other nearby facilities to reduce flood risk. Increase water storage, improve water quality, improve the ecosystem and improve public amenities in and around Phoenix Lake. | Flood Control District | 1) Finalize DWR Grant Scope Amendment 2) Complete Program EIR 3) Finalize Project Description and Complete Project EIR (CEQA) 4) Conduct Public Engagement | \$1,684,299 | DWR Grant, FZ9 Watershed Fee |

| | | | | | | |
|---|--|---|----------------------------|--|-------------|--|
| 3 | San Anselmo Flood Risk Reduction Project | Considers program elements including former Sunnyside Nursery Site Detention Basin, removal of buildings over San Anselmo Creek, creek improvements from downtown San Anselmo to Town of Ross and bike lane on Sir Francis Drake Blvd along Form Nursery site frontage. | Flood Control District | <ol style="list-style-type: none"> 1) Complete Project EIR 2) Finalize Project Description 3) Conduct Community Meetings 4) Complete Property Acquisition if project selected through CEQA | \$3,469,585 | DWR Grant, FZ9 Watershed Fee |
| 4 | U.S. Army Corps of Engineers - Corte Madera Creek Units 2, 3 & 4 Project | Improve existing concrete and earthen channel from Sir Francis Drake Blvd Bridge in Ross extending to downstream end of concrete channel. Measures may include removal of existing fish ladder, smooth transition at upstream end of concert channel, remove constrictions, top of bank and offset floodwalls, bypass channels and creek restoration. | US Army Corps of Engineers | <ol style="list-style-type: none"> 1) Complete analysis of alternatives & hold public meetings 2) Determine alternative with best cost: benefit ratio (NED plan) and/or Locally Preferred Plan to decide on Tentatively Selected Plan (TSP). 3) TSP to USACE Headquarters and reach Agency Decision Milestone | \$650,000 | US Army Corp of Engineers, DWR Grant, FZ9 Watershed Fee, Other Zone 9a Funds |

| Bridge Projects (Modifications, Replacements, and/or Removals) | | | | | | |
|---|---|--|------------------------|--|----------|-------------------------------------|
| 5 | Azalea Ave Bridge Replacement | Removal and replacement of bridge over Fairfax Creek in Town of Fairfax | Town of Fairfax | 1) Complete Concept Design 2) Initiate CEQA 3) Conduct Public Engagement | \$49,000 | Cal Trans. Grant, FZ9 Watershed Fee |
| 6 | Madrone Ave Bridge Replacement | Removal and replacement of Madrone Ave Bridge over San Anselmo Creek in Town of San Anselmo | Town of San Anselmo | 1) Complete CEQA 2) Complete 30% Design 3) Conduct Public Engagement | \$70,375 | Cal Trans. Grant, FZ9 Watershed Fee |
| 7 | Nokomis Ave Bridge Replacement | Removal and replacement of Nokomis Ave Bridge over San Anselmo Creek in Town of San Anselmo | Town of San Anselmo | 1) Complete CEQA 2) Complete 30% Design 3) Conduct Public Engagement | \$50,375 | Cal Trans. Grant, FZ9 Watershed Fee |
| 8 | Sleepy Hollow Creek Feasibility Study | Develop a feasibility level hydraulic study for 10-year Work plan measures for Sleepy Hollow Creek in the Morningside neighborhood that would provide a 25-year flood level of protection. | Flood Control District | 1) Finalize Study | \$6,000 | FZ9 Watershed Fee |
| 9 | Sycamore Ave (Center Blvd) Bridge Replacement | Removal of bridge at Sycamore Ave and replacement with a new bridge at Center Blvd over San Anselmo Creek in Town of San Anselmo | Town of San Anselmo | 1) Acquire Caltrans funding to proceed with Preliminary 2) Initiate CEQA | \$56,000 | Cal Trans. Grant, FZ9 Watershed Fee |
| 10 | Winship Ave Bridge Replacement | Removal and replacement of Winship Ave Bridge over San Anselmo Creek in Town of Ross | Town of Ross | 1) Complete CEQA 2) Complete 30% Design 3) Conduct Public Engagement | \$42,000 | Cal Trans. Grant, FZ9 Watershed Fee |

| Flood Diversion Storage Basins | | | | | | |
|--------------------------------|---|--|------------------------|--|--------------|---|
| 11 | Former Sunnyside Nursery Growing Grounds | <i>Basin is a program element of the San Anselmo Flood Risk Reduction Project</i> | | | | |
| Program Management | | | | | | |
| 12 | Ross Valley Flood Preparedness Support Pilot | 1) Work closely with program partners to identify, frequent flooding hotspots and priorities; develop localized solutions; and implement where feasible and as funds allow. Potential solutions could include flood barriers/walls, flood proofing, etc. 2) Provide Community Rating System (CRS) Support to Ross Valley municipalities and in pursuit of gaining flood insurance premium discounts that exceed minimum requirements of the NFIP. This year, the Program will work to expand this effort from Unincorporated County to all Ross Valley jurisdictions. | Flood Control District | 1) Design & Implement Preparedness Program in partnerships with Ross Valley Cities/Towns and Unincorporated Areas of County 2) Work with Ross Valley City/Towns to develop relevant CRS supportive services 3) Provide applicable CRS support services to Ross Valley Watershed, apply watershed-wide perspective to CRS activities and leverage efficiencies where applicable | \$120,000 | FZ9 Watershed Fee |
| 13 | Home Elevation Grant - Property Owner Support | Provide on-going support to property owners who have applied for assistance for home elevation | Flood Control District | 1) Develop avenue for supporting assistance with permitting for property owner who seek to raise their home out of the flood plain 2) Provide on-going support to applicants under the FEMA Home Elevation Grant | \$ 40,000.00 | Home Elevation Grant, FZ9 Watershed Fee |

| Program Management (continued) | | | | | | |
|--------------------------------|--|---|--|--|----------|--|
| 14 | Creek Conveyance & Habitat Maintenance Program | Includes in-channel creek assessments and maintenance throughout Ross Valley | Flood Control District, Ross Valley City/Towns | 1) Conduct Creek assessments to identify priority maintenance 2) Develop work plan 3) Perform maintenance | \$92,000 | FZ9 Watershed Fee |
| 15 | Community Creek Clean Up Events/Activities | In support of the Creek Conveyance & Habitat Maintenance Program and in partnerships with Ross Valley City/Towns, plan and facilitate community-based clean up/restoration events and activities along critical reaches of local creeks. Events/activities would also be designed to provide creek maintenance and habitat restoration education. | Flood Control District | 1) Identify critical reach areas that could support community clean up event 2) Support/facilitate 4 community clean up events in Ross Valley | \$25,000 | FZ9 Watershed Fee |
| 16 | Rain/Stream Gage Program & Alert System | District awarded a grant to upgrade existing and install new creek gages to ALERT2. | Flood Control District | 1) Upgrade existing gages to ALERT2 protocols 2) Install new gages | \$61,600 | Flood Emergency Response Plan (FERP) grant |
| 17 | Hydrology & Hydraulics Analysis and Support | Collect data and build in-house capacity to model watershed-scale flood conditions for determining feasibility of flood reduction measures. | Flood Control District | 1) Complete 2D hydraulic model including alignment with partner models and calibration | \$50,000 | FZ9 Watershed Fee |

| Administration | | | | | | |
|----------------------------------|--------------------------------------|---|------------------------|---|-----------|-------------------|
| 18 | Program Administration Activities | Administration charges can consist of one or more of the following: Office Supplies, Misc. Supplies, Communication, Professional Development, Travel, Rent & Operating Lease, Dues & Membership. Work plan cost includes Implementation and County Staff Time and Overhead. | Flood Control District | 1) Perform administrative functions and activities in support of managing the Ross Valley Program | \$73,636 | FZ9 Watershed Fee |
| Operation and Maintenance | | | | | | |
| 19 | Operation and Maintenance Activities | General Maintenance of in-channel facilities, structures and vegetation not included in the Creek Conveyance and Habitat Maintenance Program. | Flood Control District | 1) Perform on-going and routine maintenance 2) Perform additional repair and maintenance of channel, facilities and structures on as-needed or emergency basis | \$481,600 | FZ9 Watershed Fee |

Total Estimated FY17/18 Work Plan Expenditures²: \$7,247,470

¹ County staff time and overhead associated with Implementation Programs is captured in the FY17/18 Budget as "County Salaries & Overhead"

² Estimated FY17/18 Work Plan Summary Expenditures does not include all Program expenses (such as Administration, Operation & Maintenance, Rent and Operating Leases) or previously encumbered expenses and thus may not be reflective of estimates provided in the FY17-18 Program Budget.

Last Modified: 5/11/2017