

CAPITAL
IMPROVEMENT
PROGRAM

FY 2017 - 2018

FY 2017-2018 to FY 2021-2022



COUNTY OF MARIN



Presented to the Board of Supervisors

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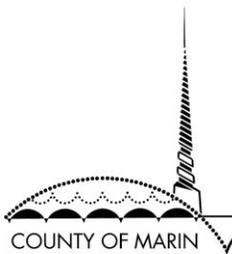


By Matthew Hymel
County Administrator

FY 2017-2018 to FY 2021-2022 Capital Improvement Plan (CIP)

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June 19, 2017

Marin County Board of Supervisors
3501 Civic Center Drive
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SUBJECT: Proposed Fiscal Year 2017-18 Capital Improvement Program

Dear Board Members:

It is our pleasure to submit the proposed Fiscal Year (FY) 2017-18 Capital Improvement Program (CIP) for your review and adoption. The CIP is a multi-year planning tool used to identify and implement the County's short-term and long-term capital needs. In FY 2017-18, we recommend a capital program of \$56.7 million which includes projects in four major areas for Road Maintenance, County Facilities (including Parks and Libraries), Gness Field Airport, and Water Resources.

The CIP is submitted to your Board pursuant to the Marin County Code requirement that a long-term plan of capital improvements be recommended to your Board. It is the result of significant collaboration between Capital Projects staff in the Department of Public Works (DPW) and the County Administrator's Office, and also reflects input from multiple County departments.

FY 2016-17 Capital Improvement Program Accomplishments

The County continues to benefit from significant capital investments in County facilities and infrastructure. There have been many accomplishments in capital projects over the past year. The "Overview" section at the beginning of the attached Capital Improvement Program highlights the projects implemented or completed in each of the four major areas. Major accomplishments during FY 2016-17 include:

- Designed, permitted and started construction on the West Marin Service Center major renovation, Point Reyes Station
- Completed construction of Phase 1 accessibility retrofit of jury deliberation room restrooms and begin construction work on the Phase 2 restroom retrofits
- Completed design, plans and specifications for the Civic Center roof replacement project
- Completed schematic design and held community meeting for the Tomales Fire Station replacement project
- Designed and install photovoltaic solar arrays at Nicasio Corp Yard & Wellness Campus as part of the Climate Action Plan
- Completed design and awarded construction contract for the accessibility improvements at County Jail for showers and housing cells
- Completed significant work in retrofitting and remodeling the former Sheriff space at the Civic Center for reuse by other departments

- Installed and certified a new Automated Weather Observation System (AWOS) at Gness Field
- Installed a new fire alarm and control system at the Marin Center Exhibit Hall
- Completed work on the Woodacre Fire Station female dormitory improvements

FY 2017-18 Capital Improvement Recommendations

The proposed FY 2017-18 CIP totals \$56.7 million and includes recommendations in four categories of projects:

- Gness Field Airport (\$2,550,000)
- Facility Improvements (\$18,054,000)*
- Water Resources (\$10,629,830)
- Road Maintenance (\$25,450,000)

**As started in last year’s CIP, the Facility Improvements Section includes the Parks and Library Department’s funds for facility projects from voter approved measures and County Service Area funds, besides the \$4 million recommended funding from the General Fund.*

The Overview section provides a comprehensive summary of each of the four categories, including actual or anticipated grant or other available project funds. Below is a high-level discussion about each area:

Gness Field Airport

During FY 2016-17, the County Airport received a \$244,500 grant from the Federal Aviation Administration (FAA) for design and survey services to completely reconstruct the Airport runway pavement. We also submitted an FAA grant fund application to do the runway rehabilitation construction work in FY 2017-18. In FY 2016-17 the airport completed a Pavement Maintenance Management Plan (PMMP) documenting Airport pavement conditions, a Wildlife Hazard Assessment (WHA), and installed and certified a new Automated Weather Observation System (AWOS).

In April 2016 the FAA released a Purpose and Need Working Paper that revised the aviation forecast resulting in a new critical aircraft as the most demanding aircraft to design the future runway extension. Based on public comment received, in May 2017, a second public hearing was held on a purpose and need working paper that will ultimately document the FAA’s decision on the appropriate runaway extension length per FAA guidance. The Final Supplemental EIS will be completed after the final purpose and need working paper is released by the FAA.

Facility Improvements

The proposed FY 2017-18 CIP includes \$4 million from the General Fund in new funding for improvements to various facilities at the Civic Center campus including the jail, Hall of Justice office space, Lagoon Park, Veterans’ Memorial Auditorium parking lot, General Services building and parking lot, and buildings at the Fire/Sheriff station in Point Reyes Station and 1600 Los Gamos Drive. Improvements include renovations, major deferred maintenance repairs, code required upgrades, and disability access program priorities. Besides the annual \$4 million there is \$450,000 toward Library facilities improvements from the 2015 voter approved measure, \$11.3 million toward Parks facility projects from the voter

approved measure in 2012, and \$700,000 in Parks facility projects in various County Service Areas. In FY 2016-17, your Board appropriated the net proceeds of \$25.5 million from the July 2015 Certificates of Participation (COPs) refinancing, and \$6 million from the one-time Fire Facilities Reserve, discussed more fully, below.

Water Resources

In partnership with Ross Valley local agencies (Towns/Cities of Fairfax, Larkspur, Ross, San Anselmo and unincorporated areas of Marin County) and in coordination with the community, the Ross Valley Flood Risk Reduction Program (RV Program) is moving a number of projects through feasibility/conceptual design and into environmental review in 2017. These projects are designed to increase the capacity of creeks and channels while decreasing peak flows through flood diversion and storage basins where possible.

The San Anselmo Flood Risk Reduction Project entered CEQA in April 2017 to assess flood reduction elements including one flood diversion and temporary storage basin at the former Sunnyside Nursery site coupled with removal of a commercial building over San Anselmo Creek and creek improvements, along with four other alternatives. The project is scheduled to complete CEQA in early 2018 and then construction by the end of 2020 as required by the supporting Department of Water Resources Grant schedule.

Flood Control is currently in the pre-design and planning phase for the next cycle of sediment removal in Novato Creek, scheduled for 2020. In addition, sediment removal in Coyote Creek (Tamalpais Valley) is planned for two separate projects: 1) The Coyote Creek Concrete Channel Sediment Removal Project; and 2) the Coyote Creek Middle Reach Sediment Removal Project. The Coyote Creek Concrete Channel Sediment Removal Project is scheduled be completed in 2017. The Coyote Creek Middle Reach Sediment Removal Project is in the pre-design and permitting process, and the need to perform sediment removal is being analyzed through surveying and hydraulic modeling in 2017. The Coyote Creek projects will restore flow capacity and flood mitigation to the original design level. As part of the removal of sediment in the Middle Reach of Coyote Creek, the potential for reuse of sediment to help the adjacent Bothin Marsh adapt to rising sea levels is being analyzed.

Road and Bridge Maintenance

Maintaining infrastructure for all modes of public mobility is an essential service and affects nearly every county resident. The Department of Public Works maintains 421 miles of road, consisting of 845 lane miles and 151 bridges, with most bridges more than 50 years old and many in need of substantial repairs to ensure their continued safe service. The proposed budget allocates an additional \$7 million towards road maintenance and other road improvements. In addition to General Fund contributions, we will be leveraging \$35 million in grant funds over the next few years for improvements to roads in Muir Woods and Point Reyes, and utilizing \$13 million in TAM funding to resurface Sir Francis Drake Blvd. from Greenbrae to the Town of Ross.

With the passage if Senate Bill 1 (SB1) earlier this year, the County will receive an additional vehicle fuel tax revenue source for road improvements. SB1 generates revenue for several transportation programs, but the main benefit for Marin County's paving program is the Road Maintenance and Rehabilitation Account (RMRA). It is estimated that RMRA will provide the County an average revenue of \$4.16 million

per year over the next 10 years. The addition of this revenue to the current County funding level for roads will facilitate increasing the County’s Pavement Condition Index (PCI) toward a ‘good’ rating (between 70 & 80).

COPs Funds and Fire Facility Reserves

In July 2015, the Department of Finance and County Administrator refinanced a 2010 issue of Certificates of Participation (COPs) which successfully raised \$25.5 million for renovations, repairs, construction, and improvements to County facilities having a life of at least 30 years. In addition, in prior years, your Board had set aside \$6 million of one-time General Fund reserves for fire station improvements. Staff from the Department of Public Works and the County Administrator’s Office presented recommendations to your Board at the March 2016 Budget Hearings and in the June 2016 Budget Hearings on how the COP proceeds and reserves, together totaling \$31.5 million, might be allocated to capital projects, as outlined below:

Recommended Projects and Fund Allocations

- Civic Center Roof Replacement: \$21.0 million
- Fire Station Replacements: \$6.5 million
- West Marin Service Center: \$3.0 million
- Marin Center Priority Repairs: \$1.0 million

These funds were appropriated to these projects in October 2016. The Civic Center Roof Replacement project has been designed and went out to bid in early June. The preliminary Tomales Fire Station replacement project cost is estimated to be \$8.1 million, and part of the final budget actions we are recommending today is to add \$1.6 million from fiscal year-end fund balance to the already appropriated \$6.5 million to meet the cost estimate. The West Marin Service Center project final estimate included additional costs of \$500,000, so when the construction contract was awarded in April 2017 the additional funds were appropriated from various county department budgets as specified in the staff report when the project was awarded. Public Works and Cultural Services staff, working with the County Administrator’s Office, are currently prioritizing potential projects at the Marin Center.

Large Capital Projects, Programs and Emerging Issues

Capital projects or programs that are underway and funded partially or totally outside of this fiscal years’ CIP Program are listed below. The Overview section provides a comprehensive summary of each of these major areas broken out.

- Partnership with the Agricultural Institute of Marin to design a farmers’ market at the Christmas Tree lot
- Future implementation of Fire Department Facilities Vision Plan
- Closing County office leases and relocating staff, and leasing space at 1600 Los Gamos
- 250 Bon Air Drive, Greenbrae, building refurbishment

Emerging Issues:

- Civic Center and Marin Center parking repairs and refurbishment
- Marin Center facilities renovation strategies
- Parks and Libraries facilities infrastructure refurbishment
- General Services Building and associated parking lot renovations

- Rehabilitation of aging storm drain infrastructure
- 920 Grand Avenue H&HS building refurbishment and conversion

Conclusion

The projects recommended in the Proposed FY 2017-18 Capital Improvement Program represent the County's continuing commitment to invest in our facilities for the benefit of the public and employees. County staff remains committed to the search for outside grant funding from federal, state, and regional sources to supplement the County's budget and further enhance our facilities and infrastructure. Inter-department collaboration will continue to be a priority to ensure that capital funding will be allocated appropriately and implemented on projects that will provide the greatest benefit to the County. Your Board's commitment to the long-term maintenance of the historic Civic Center campus and other capital infrastructure is providing a strong and effective service to our public.

Respectfully submitted,



Matthew H. Hymel
County Administrator



Raul M. Rojas
Director of Public Works

Overview of FY 2017-18 Capital Improvement Program

The County's Capital Improvement Program (CIP) is a multi-year planning tool to identify and implement short-term and long-term capital needs. Capital projects in the CIP include acquisitions, additions, improvements, and non-routine maintenance to County-owned facilities, roads, bridges and flood control facilities.

The recommended FY 2017-18 CIP includes a total of \$56.7 million in four categories of projects. The proposed total amount represents a slight decrease in funding as compared to FY 2016-17 planned and approved funding. The chart below identifies funding for these categories in the current year and recommended funding for FY 2017-18:

Category	Revised FY 2016-17 Budget	Prior Year Carry Forward	Proposed FY 2017-18 Budget
Airport	\$459,500	\$852,860	\$2,550,000
Facility Improvements*	\$38,920,000	\$34,087,000	\$18,054,000
Water Resources	\$11,764,600	\$4,053,870	\$10,629,830
Road Maintenance	\$10,550,000	\$0	\$25,450,000
Total	\$61,194,100	\$38,993,730	\$56,683,830

**Facility funding from the General Fund remains at \$4,000,000. Large Facility Projects were added last fiscal year to the planned funding to reflect projects funded outside the CIP process. In FY 2016-17, Facility Improvements Planned Funding included \$25.5 million in funds from Certificates of Participation (COPs) and \$6 million from Fire Facilities reserves that were appropriated later in FY 2016-17, plus \$500,000 in additional FY 2016-17 one-time funding appropriated for the West Marin Service Center project from various department operating budgets, explained in more detail in the specific project pages, following.*

Non-general fund facility projects are included from Marin County Free Library and Marin County Parks in the amount of \$12,450,000. \$11.3 million for Parks from a past voter approved measure, and \$700,000 in various Community Service Area projects. The Marin County Free Library (MCFL) expects to spend \$450,000 in capital projects in FY 2016-17, funded from a past voter approved measure for the MCFL.

The CIP uses four categories to separate the projects into various service areas: Airport, Facility Improvements, Water Resources and Road Maintenance. These funds come from a range of sources including the County General Fund, user fees, various state and federal grants and loans, taxes, voter approved measures and special districts.

I. Airport Projects

During FY 2016-17, the County Airport received a \$244,500 grant from the Federal Aviation Administration (FAA) for design and survey services to completely reconstruct the Airport runway pavement. We also submitted an FAA grant fund application to do the runway rehabilitation construction work in FY 2017-18.

The proposed FY 2017-18 Airport CIP budget of \$2,550,000 will continue to include annual facility maintenance, completion of the runway extension environmental review, and the construction of the Runway Reconstruction Resurfacing project. Other than the \$100,000 designated for annual facility maintenance needs in order to preserve the integrity of the facility, the other capital projects are dependent on the award of grant funds from the FAA in the years identified in the project details. Generally, the grants are made up of 90% federal funds and require a 10% local match.

The Airport Runway Extension project Environmental Impact Report (EIR) was certified by the Board of Supervisors on February 11, 2014. The FAA issued its Final Environmental Impact Statement (EIS) in June 2014. However, after public review and FAA internal review, the FAA requested that additional study be accomplished prior to a final federal project decision. In May 2017, a second public hearing was held on a purpose and need working paper that will ultimately document the FAA's decision on the appropriate runway extension length per FAA guidance. The Final Supplemental EIS will be completed after the final purpose and need working paper is released by the FAA.

Airport Accomplishments/Highlights during FY 2016-17

- Completed a Pavement Maintenance Management Plan (PMMP) documenting Airport pavement conditions
- Completed a Wildlife Hazard Assessment (WHA)
- Installed and certified a new Automated Weather Observation System (AWOS)
- Received FAA Grants totaling \$220,050 (net)
- Completed a major crack seal project on the main ramp and markings were repainted



New AWOS system



Main ramp crack seal project

II. Facility Improvement Projects

The FY 2017-18 CIP includes \$4 million from the General Fund in new funding for improvements to various facilities at the Civic Center campus including the jail, Hall of Justice office space, Lagoon Park, Veterans' Memorial Auditorium parking lot, General Services building and parking lot, and buildings at the Fire/Sheriff station in Point Reyes and 1600 Los Gamos Drive. Improvements include renovations, major deferred maintenance repairs, code required upgrades, and disability access program priorities. Besides the annual \$4 million there is \$450,000 toward Library facilities improvements from the 2015 voter approved measure, \$11.3 million toward Parks facility projects from the voter approved measure in 2012, and \$700,000 in Parks facility projects in various County Service Areas.

Facility Improvement Accomplishments/Highlights during FY 2016-17

- Woodacre Fire Station - Female Dormitory, various Improvements
- New modular Sheriff Substation located at College of Marin
- Civic Center Fire Alarm Replacement (completion)
- Jury Deliberation Room, Restroom Accessibility Retrofits, Phase 1
- New Exhibit Hall Fire Alarm System

- BOS Chambers - Fixed seating retrofit
- Pt. Reyes Sheriff Substation - Tenant improvements
- 3260 Kerner – Emergency power generator upgrades
- Lagoon Park water main and irrigation system, Phase I construction
- Libraries: Work Plan / MOU / Design
- 3270 Kerner: Fire alarm upgrades
- Climate Action Plan: Design and install photovoltaic solar array at Nicasio Corp Yard & Wellness Campus
- Climate Action Plan: Civic Center Admin Bldg. LED light retrofit
- GSA facility assessment
- GSA facility - fuel management assessment & recommendations
- Marin Center facility assessment
- Tomales Fire Station: RFP, consultant selection, & initiate design
- Novato Bike Path Stabilization: Design & construction
- HOJ - Room 145: Design, bid and under construction
- HOJ - Room 266: Design, bid and under construction
- West Marin Service Center: Design, permitting and start of construction
- Civic Center Roof Replacement: Peer review & final design
- Jail Shower Accessibility Retrofits: Design, bidding & project awarded
- 920 Grand: Initiate roof & HVAC replacement design and accessibility design
- 250 Bon Air: CSU Improvements: Under design
- 10 North San Pedro: Parapet Wall Repair design & construction
- Civic Center Drive Improvement Project: Design, permitting, bidding and construction
- San Quentin & Murray Park Sewer Main. Districts: Administered SMU, and formalize a connection policy
- Space Planning / Office Mod.: 21 ergonomic requests for work stations and offices

Recommended projects in the Facility Improvements category were developed in a collaborative process to increase organizational involvement. As part of the two-year General Fund budget cycle, staff from the County Administrator's Office and Public Works Capital staff spoke specifically with each department that had submitted a capital fund request to understand that department's priorities. A number of multi-year projects received additional funding needed to complete the project, such as the jail roof replacement and fire line suppression replacement for 1600 Los Gamos Drive. Additional projects were funded as prioritized by the County Administrator Office, specifically the next fiscal year funding for the Hall of Justice (HOJ) renovations and reconfiguring that became available by the move of the Sheriff into the Emergency Operations Facility (EOF) at 1600 Los Gamos Drive in 2014. This year, \$1.1 million in proposed to continue the renovation of space that was started in FY 2015-16, and it is expected that approximately \$1.5 to \$1.8 million will be requested in next FY 2018-19 in order to complete all the HOJ renovations resulting from the Sheriff relocation.



Civic Center Drive Project



Pt Reyes Safety Building Sheriff Improvements BOS Chambers Seat Replacement Project

The CIP considers facilities and barrier removal projects that are greater than \$25,000 and in general less than \$1 million in total cost, although the CIP annual funding of \$4 million has some projects that set aside funds over a few years in order to meet the expected total project cost. Examples in this FY 2017 -18 CIP include the Jail Roof Replacement, the Veterans' Memorial Auditorium parking lot, future costs for North Civic Center Campus improvements associated with the relocation of the farmers' market to the Christmas Tree Lot, and underground fire sprinkler supply line at 1600 Los Gamos. Larger cost projects identified through facilities' assessments and master plans are generally not funded through this process, but are prioritized and planned for over multiple fiscal years. Staff reviewed, analyzed, and prioritized capital project requests submitted by County departments. Staff reviewed and prioritized each project using the following criteria, which criteria are each weighted and prioritized:

- Removes or Reduces Hazards or Threats to Health and Safety
- Meets Legal Mandates
- Maintains Operations and Functions
- Prevents Major Repair or Replacement Costs
- Saves Energy
- Meets County Goals
- Provides a Large Functional / Aesthetic Benefit to the Users / Public

Using these evaluation criteria, the County Administrator’s Office and Department of Public Works then worked with department representatives to develop the following list of recommended Facility Improvements projects, funded by \$4 million from the General Fund, to be included in this year’s CIP.

2017-18 CIP FACILITY IMPROVEMENTS SUMMARY – GENERAL FUND		
Project	Location	Amount
Small Projects Countrywide	Countywide	\$150,000
Various Accessibility/Transition Plan Implementation Projects	Countywide	\$1,000,000
VMA Parking Lot Circulation Improvements	Marin Center	\$200,000
North Civic Center Campus Improvements	Civic Center Campus	\$100,000
Second Phase of Jail Roof Replacement (Year 2 Funding & Construction)	Civic Center	\$350,000
Replacement of Underground Fire Sprinkler Supply Line, 1600 Los Gamos (Year 2 Funding)	1600 Los Gamos Drive	\$190,000
Lagoon Park Waterline Renovation - Phase 2 Design	Marin Center	\$75,000
Civic Center (Hall of Justice) - Office Space/Tenant Improvements	Civic Center	\$1,100,000
Pt. Reyes Sheriff Substation Improvements	Pt. Reyes Station	\$85,000
Civic Center - Escalator Repairs	Civic Center	\$80,000
Civic Center - Switchgear Replacement	Civic Center	\$220,000
GSA - Stormwater Improvements	Civic Center	\$100,000
GSA - Vertical Left Replacement	Civic Center	\$350,000
	General Fund Total	\$4,000,000

III. Water Resources Projects

Capital improvement efforts underway in the Water Resources Division are focused on projects with the following primary objectives:

- Maintenance and improvement of existing flood control channels, pump stations, levees and drainage pipes
- Construction of new stormwater flood diversion and storage (FDS)
- Creek enhancement, including improving flow capacity
- Dredging of waterways to facilitate navigation for recreational boating
- Creek and wetland restoration, and habitat and water quality improvements

Ross Valley Flood Risk Reduction Projects

In partnership with Ross Valley local agencies (Towns/Cities of Fairfax, Larkspur, Ross, San Anselmo and unincorporated areas of Marin County) and in coordination with the community, the Ross Valley Flood Risk Reduction Program (RV Program) is moving a number of projects through feasibility/conceptual design and into environmental review in 2017. These projects are designed to increase the capacity of creeks and channels while decreasing peak flows through temporary retention where possible.

In tandem with multiple projects currently pursuing independent California Environmental Quality Act (CEQA) review to maintain short-term grant driven schedules, the RV Program launched a Program-wide Environmental Impact Report (PEIR) in February 2017. The PEIR provides a holistic, watershed-scale assessment of the identified flood reduction elements within the RV Program Capital Improvement Plan that could provide a 100-year level of protection. The PEIR approach assesses potential environmental affects as a system, supports identification of watershed-wide mitigation opportunities and streamlines future project-based CEQA reviews.

The San Anselmo Flood Risk Reduction Project entered CEQA in April 2017 to assess flood reduction elements including one flood diversion and temporary storage basin at the former Sunnyside Nursery site coupled with removal of a commercial building over San Anselmo Creek and creek improvements, along with four other alternatives. The project is scheduled to complete CEQA in early 2018 and then construction by the end of 2020 as required by the supporting Department of Water Resources Grant schedule.

A number of Ross Valley bridge projects are under CEQA review and continue to move forward in the design phase including, the replacement of Winship Avenue Bridge in the Town of Ross, Azalea Avenue Bridge in Fairfax, and the Town of San Anselmo's Center Boulevard, Nokomis Avenue and Madrone Avenue Bridges. The bridge projects are funded predominately through Caltrans and managed by the respective cities/towns with completion of CEQA scheduled for 2018 and then constructed by the end of 2020.

The Corte Madera Creek Flood Risk Management Project (Units 2, 3 and 4), in partnership with the US Army Corps of Engineers (USACE), is currently in the feasibility phase and under EIS/EIR review. Concurrently, the USACE is in pursuit of a waiver to increase the federal funding and extend the environmental review milestones. The project schedule is reliant upon the waiver and confirmation of work plan funds.

Creek Sediment Removal Projects

In November of 2016 the Novato Creek Sediment Removal Project was completed. Approximately 24,000 cubic yards of creek sediment was removed from Novato Creek between Diablo Boulevard to downstream of the SMART Bridge, as well as portions of Arroyo Avichi and Warner Creeks. The removed sediment was stockpiled near the Lynwood Basin as well as the Gness Airport for future use as levee maintenance material or other uses. The Project included placement of previously removed sediment (from the 2012 project and stored at the Airport) in the Deer Island Basin along the alignment of future sea level rise levees to protect the city of Novato. Additionally, finer grained sediment removed from the tidally-influenced portion of Novato Creek was used to construct an "ecotone levee" in Deer Island Basin. Sometimes called "horizontal levees" or "living levees," an ecotone levee slopes gently downwards in the same way that the land in the Bay Area did hundreds of years ago, before the marshes were filled and the tidal flats diked off for salt ponds. This low slope allows for natural, gradual transitions from open water, to tidal mudflat, to tidal marsh, to "ecotone" or transitional upland habitat to be re-established in these areas. The Flood Control District is the first local agency to obtain permission to place sediment at the site of future levees required for sea level rise in wetland areas.



Excavators removing sediment and vegetative matter at Warner Creek



Aerial view of Ecotone Levee at Deer Island Basin during sediment placement

Flood Control is currently in the pre-design and planning phase for the next cycle of sediment removal in Novato Creek, scheduled for 2020. In addition, sediment removal in Coyote Creek (Tamalpais Valley) is planned for two separate projects: 1) The Coyote Creek Concrete Channel Sediment

Removal Project; and 2) the Coyote Creek Middle Reach Sediment Removal Project. The Coyote Creek Concrete Channel Sediment Removal Project will be completed in 2017. The Coyote Creek Middle Reach Sediment Removal Project is in the design and permitting process, and the need to perform sediment removal is being analyzed through surveying and hydraulic modeling this year. The Coyote Creek projects will restore flow capacity and flood protection to the original design level. As part of the removal of sediment in the Middle Reach of Coyote Creek, the potential for reuse of sediment to help the adjacent Bothin Marsh adapt to rising sea levels is being analyzed.

Navigational Dredging Projects

In addition to the Flood Control Zones, the Division manages two County Service Areas: CSA 6 - Gallinas Creek, and CSA 29 - Paradise Cay. For the past 40 years, local dredging efforts in CSA 6 have provided recreational and aesthetic benefits to the Santa Venetia community. Costs to continue this work have risen faster than the funds to pay for it. Staff have been working to identify a new type of dredging approach that creates a creek with dimensions closer to what would be naturally occurring; aka a geomorphic dredge. The anticipated advantage of a geomorphic dredge is that it is more cost-effective and less environmentally impactful. Steps towards design of the geomorphic dredge were recommended by the CSA 6 Advisory Board last year, and dredging could occur as early as 2018 if the San Rafael Airport works out as a sediment disposal site and bids for construction come in under budget.

Dredging of Paradise Cay (CSA 29) is for recreational and boating use within the waterways and entry channels off San Francisco Bay. Dredging is typically performed every 4 years. The last dredging project was completed in 2014 for the South Cay. The North Cay dredging was completed in 2015. The next dredging event for the entire Cay is scheduled for 2019.

Levee Repair and Deer Island Flood Basin Improvements

This project was described in last year's CIP report and involved what was anticipated to be an interim levee repair with construction of an erodible weir (i.e. an engineered section of the levee constructed of erodible materials that self-erodes down to a weir elevation that would be rebuilt after eroding events), and design of a larger permanent weir following additional design analysis.

In 1995, 2006, and again in 2014, water levels in Novato Creek rose so high as to threaten flooding of Nave Gardens, downtown Novato, and washing out of the levee near a railroad bridge that crosses the creek. In response, the District used an excavator to intentionally breach the nearly overtopped levee that runs along the creek in order to relieve the flooding and washout threat. By doing so, water flows into the mostly dry Deer Island Basin.



Completed Erodible Weir at Deer Island Basin/Novato Creek Levee

The repair of this breach and associated construction of an erodible weir was completed in 2016 for about \$160,000. However, the additional design analysis conducted in 2016 showed that the erodible weir meets the goals of the permanent weir concept at Deer Island Basin and thus the erodible weir will be kept in place. Therefore, the Deer Island Basin design effort is being redirected from the permanent weir concept towards a concept involving setting back levees adjacent to Novato Creek and re-opening historic tidal wetlands to tidal inundation in eastern Deer Island Basin.

A DWR grant that was associated with construction of the permanent weir is in the process of being migrated towards replacement of pumps at Simmons Slough with a new drainage management system. Successful grant migration depends on a study to take place this spring that must identify equivalent or better benefits.

IV. Road Maintenance Projects

Road Maintenance Accomplishments/Highlights during FY 2016/17

- Continued development of five bridge replacement projects in anticipation of construction in 2019
- Continued development of FLAP (SFD) with FHWA in anticipation of construction in 2018
- Continued development of FLAP (MWR) with FHWA in anticipation of construction in 2021
- Completed two resurfacing projects throughout the County of Marin
- Completed Fairfax-Bolinas Road emergency repairs
- Completed construction management of the Creekside Marsh culvert replacement
- Completed Corte Madera Creek Pathway widening project in Kentfield
- Completed Center Road accessibility improvements

- Completed Main Street sidewalk gap closure improvements in San Quentin Village
- Completed McAllister Avenue sidewalk gap closure improvements in Kentfield
- Completed multi-modal safety improvements along Miller Creek Road in Marinwood
- Completed Class II bike lane gap closure improvements on Olive Avenue in Novato
- Completed traffic signal safety improvements at Redwood Highway Frontage Road and De Silva Island Drive intersection
- Started several emergency slide repairs as a result of early 2017 storm damage

The one-year deferred maintenance backlog is currently \$91.9 million and the County overall road network condition is rated at 65 out of 100. The \$91.9 million backlog represents the funding needed to bring our entire road network to a rating of 85 out of 100 in one year's time. State funding reductions have drastically impacted the road maintenance work program. In response to this growing problem, the Board of Supervisors initiated two five-year Road and Bridge Programs representing a \$50 million investment in our road infrastructure. All work was completed on both five-year programs in 2014 and the County's overall road network condition rating went from 48 to 60 out of 100 in that time. In order to maintain the current road condition and keep the deferred maintenance backlog from growing, the Board initiated a \$48M six-year 2014-2020 Road and Bridge Rehabilitation program. Funding under this latest program has provided matching funds such that significant grant revenue could be captured under the Federal Lands Access Program (FLAP) (\$23M) and the Highway Bridge Program (\$12M) to further preserve our transportation system. The 2017 winter storms of January and February caused significant damage to County facilities and the cost for emergency road repairs is currently estimated at \$3.8M for FY 17/18. Funds for these projects are anticipated to come from a combination of State/Federal Emergency grants and (if secured) would be reimbursed in a future fiscal year.

With the passage of Senate Bill 1 (SB1) earlier this year, the County will receive an additional vehicle fuel tax revenue source for road improvements. SB1 generates revenue for several transportation programs, but the main benefit for Marin County's paving program is the Road Maintenance and Rehabilitation Account (RMRA). It is estimated that RMRA will provide the County an average revenue of \$4.16 million per year over the next 10 years. The addition of this revenue to the current County funding level for roads will facilitate increasing the County's Pavement Condition Index (PCI) toward a 'good' rating (between 70 & 80).

Despite recent federal grant successes for major roads and bridges, federal and state grants for local road resurfacing projects are becoming scarcer, so aggressive pursuit of other grant sources or larger general fund contributions are needed to address the road infrastructure shortfall and reverse the deterioration of our roads infrastructure. Fiscal year 2017/18 represents the amount of road maintenance capital projects recommended for funding this fiscal year.

**CAPITAL IMPROVEMENT PROGRAM
FY 2017/18 - FY 2021/22**

Category	Funded** (Prior Year Carry forward)	2017/18	2018/19	2019/20	2020/21	2021/22	TOTALS
AIRPORT	\$852,860	\$2,550,000	\$100,000	\$6,800,000	\$4,850,000	\$5,100,000	\$20,252,860
FACILITIES*							
Facility Improvements	\$1,737,000	\$4,000,000	\$4,000,000	\$4,000,000	\$4,000,000	\$4,000,000	\$21,737,000
Parks Improvements	\$350,000	\$12,004,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$24,354,000
Library Improvements		\$450,000	\$450,000	\$500,000	\$500,000	\$500,000	\$2,400,000
Large Facility Projects ***	\$32,000,000	\$1,600,000					\$33,600,000
TOTAL FACILITIES	\$34,087,000	\$18,054,000	\$7,450,000	\$7,500,000	\$7,500,000	\$7,500,000	\$82,091,000
WATER RESOURCES							
Flood Control Projects	\$4,013,870	\$10,629,830	\$10,412,500	\$19,083,500	\$9,836,000	\$6,600,000	\$60,575,700
County Service Area Projects			\$3,240,000				\$3,240,000
Fish Passage Projects	\$40,000		\$90,000	\$250,000	\$488,000		\$868,000
TOTAL WATER RESOURCES	\$4,053,870	\$10,629,830	\$13,742,500	\$19,333,500	\$10,324,000	\$6,600,000	\$64,683,700
ROAD MAINTENANCE							
General Maintenance		\$1,750,000	\$1,750,000	\$1,750,000	\$1,750,000	\$1,750,000	\$8,750,000
Special Projects		\$12,200,000					\$12,200,000
Culvert Replacement		\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$1,500,000
Traffic Improvements		\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$1,500,000
Roads & Bridges Program		\$10,900,000	\$9,400,000	\$43,600,000	\$8,800,000	\$8,800,000	\$81,500,000
TOTAL ROAD MAINTENANCE	\$0	\$25,450,000	\$11,750,000	\$45,950,000	\$11,150,000	\$11,150,000	\$105,450,000
GRAND TOTAL	\$38,993,730	\$56,683,830	\$33,042,500	\$79,583,500	\$33,824,000	\$30,350,000	\$272,477,560

* For future Fiscal Years total General Fund Baseline Allocation to Facility Improvements does not represent specific projects.

** See Summary sheets for explanation of prior year carry over amounts

*** Projects mostly funded from COPs and One-time General Fund Reserves

Large Capital Projects, Programs and Emerging Issues FY 2017-18 Capital Improvement Program

As the County continues to make improvements in how we serve the community, a number of issues related to capital needs have emerged and have been outlined in prior years' CIP documents. In this upcoming 2017-18 fiscal year, these issues are reviewed and updated in this section to the CIP, as well as any new ones that have been added. The purpose of this section is to provide an overview of the major programs and projects not discussed elsewhere, and to provide a short summary of potential future issues that may require capital funding.

In July 2015, the Department of Finance and County Administrator refinanced a 2010 issue of Certificates of Participation (COPs) which successfully raised \$25.5 million for renovations, repairs, construction, and improvements to County facilities having a life of at least 30 years. In addition, in prior years, your Board had set aside \$6 million of one-time General Fund reserves for fire station improvements. Staff from the Department of Public Works and the County Administrator's Office presented recommendations to your Board at the March 2016 Budget Hearings and in the June 2016 Budget Hearings on how the COP proceeds and reserves, together totaling \$31.5 million, might be allocated to capital projects, as outlined below:

Recommended Projects and Fund Allocations

- Civic Center Roof Replacement: \$21.0 million
- Fire Station Replacements: \$6.5 million
- West Marin Service Center: \$3.0 million
- Marin Center Priority Repairs: \$1.0 million

These funds were appropriated to these projects in October 2016. The Civic Center Roof Replacement project has been designed and went out to bid in early June. The Tomales Fire Station replacement project cost is estimated to be \$8.1 million, and part of the FY 16 - 17 budget action we are recommending is to add \$1.6 million from fiscal year-end fund balance to the already appropriated \$6.5 million to meet the cost estimate. The West Marin Service Center project final estimate included additional costs of \$500,000, so when the construction contract was awarded in April 2017 the additional funds were appropriated from various county department budgets as specified in the staff report when the project was awarded. Public Works and Cultural Services staff, working with the County Administrator's Office, are currently prioritizing potential projects at the Marin Center. Specific discussions about the projects above are detailed in the *Facility Improvement Projects* section of this CIP.

Capital projects or programs that are underway and funded partially or totally outside of this years' or prior fiscal years' CIP Program are listed here and then outlined below:

- Partnership with the Agricultural Institute of Marin (AIM) to design a farmers' market at the Christmas Tree lot
- Future implementation of Fire Department Facilities Vision Plan
- Closing County office leases and relocating staff, and leasing space at 1600 Los Gamos
- 250 Bon Air Drive, Greenbrae, building refurbishment

Emerging Issues:

- 920 Grand Avenue H&HS building refurbishment and laboratory conversion
- Civic Center and Marin Center parking repairs and refurbishment
- Marin Center facilities condition
- Parks and Libraries facilities
- General Services Building refurbishment and associated parking lot renovations
- Countywide culvert infrastructure repairs and replacement

Non-CIP Projects:

Partnership with the Agricultural Institute of Marin to design a farmers' market at the Christmas Tree lot: On May 24, 2017, your Board approved an updated Memorandum of Understanding with the Agricultural Institute of Marin (AIM). This non-binding MOU outlines the responsibilities of both parties in the planning and potential future construction of the Christmas Tree lot site including the farmers' market, a potential future AIM building and grounds. The MOU outlines the terms of a future ground lease, license for use of a shared parking lot with the Marin Center, revenues to the County, responsibilities for operations of the site, the design process, and implementation.

AIM has separately developed the capital and operating costs of its project in order to develop a fundraising plan. The Board of Supervisors will have a future study session on the proposed design concept. Both the Board of Supervisors and the Board of Directors of AIM will review and approve any designs. Part of the MOU is to split evenly the costs to pave the future shared parking area of the Christmas Tree lot. The County set aside a reserve of \$1 million in July 2012 toward those costs. The final cost estimate will not be known until the parking lot is designed, however, given other similar projects and cost escalations over time, the County's share is expected to be more. Costs to the County to reconfigure the GSA parking lot and provide sidewalks and other improvements to the Civic Center parking areas on the west side of the Civic Center building are still be evaluated and will be reported once the project design is finalized, approved by the Board, and reviewed by design and cost estimating professionals. Partial funding of these longer term North Civic Center Campus Improvements was begun last fiscal year and is expected to be continued over future fiscal year's CIP programs.

Marin County Fire Department Facilities Vision Plan: In October 2010, a firm with expertise in fire station planning and design completed an assessment of and conceptual planning for the Woodacre, Hicks Valley, Tomales, and Point Reyes fire facilities, and the Mt. Barnabe and Mt. Tamalpais fire lookouts. It is estimated that costs could range from \$57 to \$68 million within the next 10-20 years to replace or substantially renovate these facilities. The results of this study included a prioritization of these needs which are incorporated into the Facility Asset Management planning process.

After moving forward with the Tomales fire station modernization plan, the next highest priorities identified in the Fire Facilities Vision Plan from 2010 are as follows: 1) Identify a future location for the Woodacre headquarters and fire station that provides better access to Sir Francis Drake Boulevard; 2) Renovate or rebuild the Hicks Valley Fire Station; 3) Update the Point Reyes Fire Station to current essential service codes. Fire Department and CAO staffs are discussing ideas on how best to identify and plan for these priorities. No funding has been secured for these next steps.

Overview of County's Acquisition of 1600 Los Gamos, Closing General Fund Leases, Moving Staff to 1600 Los Gamos; and Leasing of Vacant Space

On November 15, 2011, the Board approved the purchase of 1600 Los Gamos Drive, San Rafael, to construct the Emergency Operations Facility ("EOF"). The County paid \$29.4 million for the 328,000 rentable square foot ("s.f.") building (about \$90 per rentable s.f.), located on a 23.4 acre area, and the payment included \$1 million to separate building systems that were shared with 1650 Los Gamos Drive, next door. The Board adopted a space use policy to help guide the use of the building. The policy is summarized as follows:

- The property should continue to be managed with uses compatible to existing non-County tenants;
- The Building Management Plan included:
 - Design and construction of EOF;
 - Expansion of existing private tenant(s) as requested;

- Close County leased space to backfill the north building portion or part of the existing warehouse space for the registrar of voters, providing up to \$1.1 million in General Fund lease savings to be used toward the operating costs of the new building;
- Provide swing space for County projects (such as the remodel of 20 North San Pedro over the next few years);
- No other permanent County uses within this 3 year period;
- Exploration of future compatible Government partners or compatible private tenants at market based rents for additional revenues.

By adopting this plan, the County let the existing and future tenants know that the building would continue to be a professional office environment.

County staff gave an update to the Board of Supervisors on April 12, 2016 about the status and results of the management plan adopted in 2011:

- **New Leases:** Since the County acquired 1600 Los Gamos, there are four new leases totaling 34,679 rentable s.f. The most recent leases are on April 5, 2016 with Avena Technologies for 12,495 rentable s.f. of office space and about 1,500 s.f. of storage space, and the Marin County Free Library expansion of an additional 4,132 square feet on April 12, 2016. In addition, two private tenants remain in the building that were tenants prior to the County's acquisition, including a private child care provider and the Internal Revenue Service, that total 25,294 rentable s.f.
- **Given the County's cost of about \$90 per s.f. on the building purchase, the County acted at the right time in the local real estate market.** There have been a number of recent office building sales in the local San Rafael and nearby Novato markets in 2015. The building next door at 1650 Los Gamos was purchased by Kaiser in August 2015 for about \$149 per s.f., and other buildings in San Rafael sold for a range of \$194 to \$245 per s.f. in 2015. Three notable office building complexes in Novato, including Hamilton Landing and Rowland Way buildings where the County currently or formerly leased space, sold in 2015 for a range of \$174 to \$207 per s.f.
- **The Emergency Operations Facility project came in on time and under budget.** The EOF project included adding 1,700 photovoltaic ("PV") panels to the roof and other energy and water saving measures. The PV panels generate over 700,000 kw-hr annually. The project was awarded the GOLD certified Leadership in Energy and Environmental Design ("LEED" as is commonly known).
- **County is saving approximately \$950,000 per year by locating previously-leased operations at 1600 Los Gamos.** DPW and Health and Human Services ("HHS") staff relocated to permanent space at the new building from 899 Northgate in June 2015, with an annual General Fund savings of \$710,000 from the lease and operating expenses. In addition, General Fund leases were closed at 70 San Pablo, San Rafael, 3140 Kerner Boulevard, San Rafael, and Building #816 at Hamilton in Novato.
- **Using the building for "swing" space has saved approximately \$700,000** (Swing space is space used on a temporary basis while projects requiring staff to vacate where they are located during construction or for temporary uses such as training or fixed-term projects such as the County's enterprise resource system software replacement called "ATOM"). Currently, County departments occupy about 24,000 rentable s.f. of office swing space and 5,000 s.f. of storage swing space, and it is estimated that about \$700,000 would have been expended to rent space in other locations short term to cover those projects' needs. Projects at County buildings include 20 North San Pedro, 120 Redwood Dr., 4 Jeannette Prandi Way, the Hall of Justice renovations at the Civic Center and other departments such as Human Resources,

have all located staff or other departmental needs into swing space at 1600 Los Gamos since acquisition.

- **Future programming of the building will include other governmental activities and additional private leases.** The planned government uses include the Information Services and Technology (“IST”) Department relocation of out leased space, which was approved by the Board on May 9, 2017. The Marin Emergency Radio Authority (“MERA”) prime site is being planned to move from the Civic Center. Given the history of use by County departments and the need for County-wide swing space during projects, and uses like the ATOM project, the County will retain swing space for office uses and storage, such that the total government use of the building would be about 60% of the total office s.f. available.

There will remain 20% of the office s.f. space available, approximately 60,000 s.f. of vacant office space for lease in the upper floors of the building. Future lease revenues can be used to offset operating costs of the building.

The current Building Management Plan includes the following:

- Plan for MERA
- Expansion of existing private tenant(s)
- Provide swing space for County projects
- Based on market demand, target about 30,000 s.f. of office space over the next two years to lease for private tenants at market based rents

250 Bon Air Drive, Greenbrae – Community Mental Health Building: This facility is co-owned 51% by the County and 49% by the Marin Healthcare District in an undivided 49% interest in the fee title which includes property of approximately 4.98 acres. The Community Mental Health Building (“CMHB”) contains about 40,000 square feet in a two stories. In September 2013, the County commissioned an Access Compliance Survey Report which indicated the most notable issue was the lack of elevator access between first and second floors. MGH staff developed a plan, with County staff input, to construct an elevator and improve the path of travel from the new parking garage adjacent to the CMHB to the elevator landings. The new garage opened last July 2016. The County’s share of the cost of the elevator had been agreed to not exceed \$400,000, with MGH absorbing any cost overruns. The Department of Health and Human Services had funding set aside in a capital account to fund for this project. The elevator project is expected to be completed by the end of June 2017.

Another large project at the CMHB is to remodel the County’s Crisis Stabilization Unit (CSU) on the second floor. Currently, the design is completed and the project is in the permitting phase at the beginning of June 2017. In May 2016, Health and Human Services was awarded grant funding from the California Healthcare Facilities Financing Authority (CHFFA) to expand the CSU’s patient capacity; improve patient and staff safety and correct non-compliant items noted in the 2013 Access Compliance Survey Report. The overall project cost is being funded from multiple sources, including grant funds, County capital accessibility funds and Health & Human Services funds. The project is being permitted under the Office of Statewide Health Planning & Development (OSHPD) building codes. Depending on the permitting timeline, construction should commence in fall of 2017 and is be completed in March 2018.

Emerging Issues:

920 Grand Avenue, San Rafael: Staff from the Department of Health and Human Services (H&HS), the Department of Public Works (DPW), and the County Administrators’ office (CAO) have begun discussions about the future use by H&HS at this location. The FY 2016-17 CIP recommended \$420,000 towards the replacement of the roof and HVAC system at 920 Grand as a stopgap measure proposed by DPW that

prevents major repair or replacement, one of the CIP major criteria, since a roof leakage failure, which was eminent, would have required hundreds of thousands of dollars more of costs. The long-term plan for 920 Grand Ave. will still need to be discussed by all parties.

Civic Center and Marin Center parking areas: The Hall of Justice parking lot was repaired and partially resurfaced in 2011 to extend its useful life. The 'Pit' parking area was resurfaced in 2003. However, the remaining parking areas around the Civic Center and the Marin Center need significant repair or complete resurfacing. The Veterans' Memorial Auditorium parking area is being designed and integrated with the north gateway improvements project but is not yet fully funded. In FY 2012-13's CIP, \$250,000 was set aside toward the needed \$2.8 to \$3.0 million estimated to completely resurface it and meet current codes. Another \$228,000 was set aside in the FY 2013-14 CIP budget and \$100,000 in FY 2014-15 CIP. In FY 2015-16 and FY 2016-17, \$200,000 was set aside in both years. In FY 2017-18 another \$200,000 is recommended to be set aside toward the needed funding. All of the other parking areas around the Civic Center and Marin Center have no funding set aside for resurfacing, and the highest priorities will be identified and recommended for funding in future CIP cycles.

Marin Center Facilities renovation strategies: Marin Center facilities used to be maintained by the Department of Cultural Services. With the adoption of a facility fee on ticket sales in FY 2015-16, the Board approved the transfer of maintenance responsibility and staff to Department of Public Works (DPW) Building Maintenance division. DPW's Capital Projects division manages major repair work and capital improvement projects at these facilities. In recent years most of the mechanical ventilation systems in both the Exhibit Hall and the Auditorium have been replaced or upgraded; the fire curtain at the stage in the Auditorium was replaced; and the fire panel and fire alarm system replaced at the Exhibit Hall. In FY 2015-16, funding was recommended for a thorough Marin Center facility assessment, with a report completed in November 2016. As discussed above, staff is currently prioritizing potential projects at the Marin Center.

Parks and Libraries facilities: Significant funding for the Libraries and for Parks has been provided by voter approved measures for each department. Each department, the Library and Parks, have their own process for prioritizing funding of projects. Funds are specified for use and cannot be used for other County uses. These are not General Funds used for these projects. Specific discussions about the projects for each department are detailed in the *Facility Improvement Projects* section of this CIP.

General Services Building and associated parking lot renovations: The General Services Administration (GSA) Building located at 6 Peter Behr Dr., San Rafael, is a one-story, 17,000 square foot structure which includes administrative, clerical, communication technicians, communication installers, vehicle mechanics, and roads maintenance personnel. Three separate DPW divisions Garage, Communication Services, and Road Maintenance, with 47 people are located at this building. The building consists of a combination of office space, equipment storage, garage bays for vehicles maintenance / equipment installation, and other designated work areas. Besides repair and resurfacing of the existing parking areas associated with the GSA building, there is a need to reconfigure the vehicle and storage lot located on the north side of the complex to accommodate plans for an adjacent relocated future Farmers Market.

A Facility Assessment of the complex was completed in mid-2016 that outlined a variety of options for facility upgrades, including the possibility of development of a new site for the Roads Division somewhere off of the Civic Center Campus. This option was not deemed to be financially feasible and would result in other operational challenges that do not make this option viable. Other possible improvements include re-location of some or all of the Communications Services operations at another County-owned facility; the construction of an addition onto the building; and, a combination of facility renovation and the addition of a temporary office area that would address the short term inefficiencies posed by the existing facility configuration and space needs. Preliminary cost estimates were formulated for the range of options and next steps in the process are being reviewed. In the near term, the 2017-18 CIP is addressing the collection and treatment of stormwater generated within the complex through a project to improve existing conditions. A second 2017-18 CIP project will provide funding for the procurement and installation of a new vehicle lift to replace one of

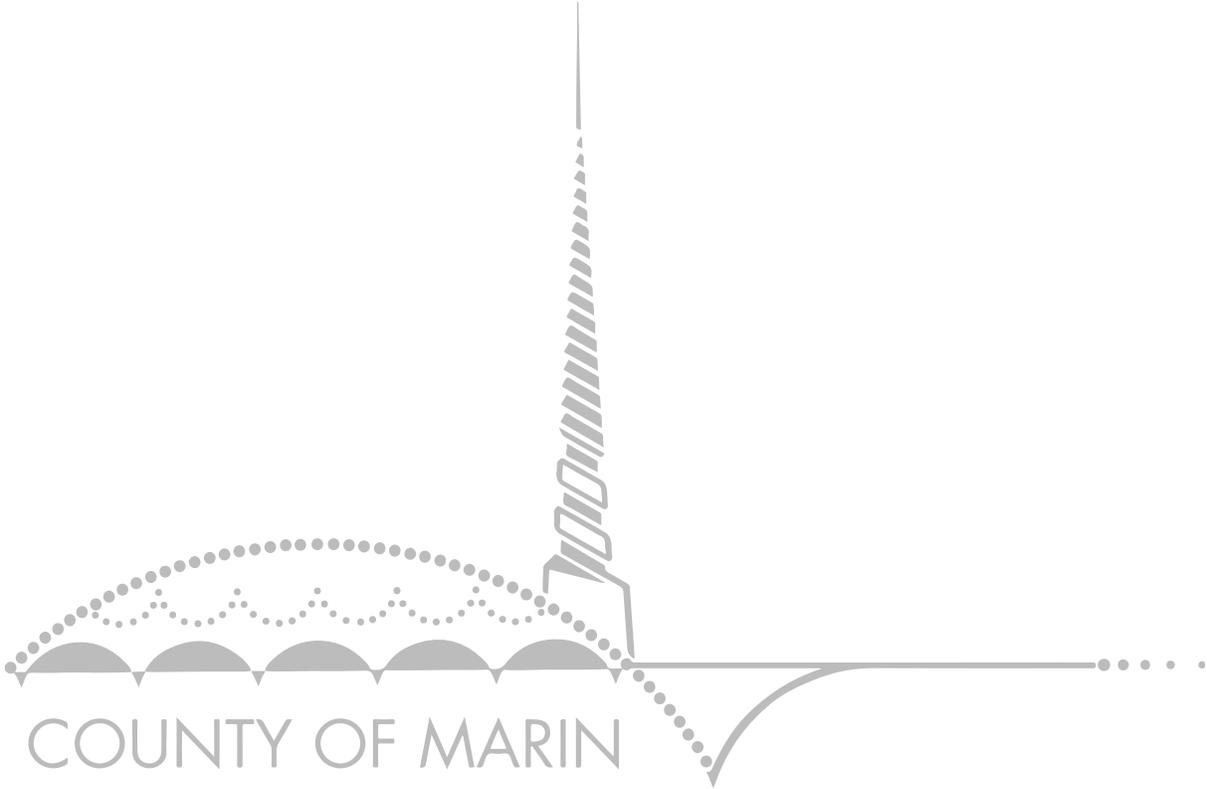
two aging lift systems. Other improvements, such as improvements to the facility's electrical systems, are being considered for near term investment. It is anticipated that additional capital planning efforts for facility improvements will be undertaken in the coming year.

Countywide Culvert Infrastructure Maintenance: Culvert Infrastructure Maintenance - Existing drainage systems throughout the County are being catalogued and prioritized. Based on research to date, it is estimated that 75% (approximately 90,000 feet) of the culverts in the right-of-way are 50 to 60 years old and in need of rehabilitation or replacement. The estimated cost is \$12M-\$15M (\$1.2M-\$1.5M per year over 10 years) to address this need Countywide which is a 4 to 5 times increase over current efforts of \$300,000 per year.

Conclusion:

In this next FY, staff will develop a prioritization of outstanding needs and emerging issues and return to the Board of Supervisors with strategies to consider for addressing them.

AIRPORT IMPROVEMENTS



AIRPORT

The expenditures below include all costs related to the development or significant maintenance of Gross Field, the County airport near Novato, a 121-acre facility housing nearly 250 tenants. Fixed base operators under contract or leases with the County provide the services at the Airport. Funding in future years is indicated for planning purposes only and subject to available funding and approval by the Board of Supervisors. Inclusion of unfunded projects does not guarantee funding in future years; unfunded projects will be subject to available funding (including from grants) and reviewed along with new emerging needs. Several grants are shown as "In Progress" and are being carried forward until project completion.

Summary of Proposed Airport Projects and Expenditures

Project Description	In Progress (Prior Year Carry Forward)	Recommended for FY 2017/18	Planned for FY			
			2018/19	2019/20	2020/21	2021/22
	\$	\$	\$	\$	\$	\$
Miscellaneous Maintenance		100,000	100,000	100,000	100,000	100,000
Runway Extension Supplemental EIS	358,360					
AGIS, ALP with Narrative	250,000					
Design of Existing Runway Resurfacing	244,500					
Existing Runway Resurfacing & Reconstruction.		2,200,000				
Wildlife Hazard Management Plan		25,000				
Final Supplemental EIS Review		225,000				
Environmental Mitigation/ Permitting Runway 13/31 Extension				6,400,000		
Runway 13/31 and Parallel Taxiway Extension Design				300,000		
Phase 1 Runway 13/31 and Parallel Taxiway Extension Construction					4,100,000	
Runway 13/31 and Parallel Taxiway Extension Design Phase 2					650,000	
Runway 13/31 Parallel Taxiway Extension. Construction Phase 2						5,000,000
TOTALS	\$852,860	\$2,550,000	\$100,000	\$6,800,000	\$4,850,000	\$5,100,000

Miscellaneous Maintenance

1. Project Description and Background

Miscellaneous maintenance projects at the Airport. Projects are primarily pavement, levee, drainage, and building-related maintenance needs.

2. Project Objective

To maintain the Airport facility and property in a safe and functional condition.

3. Cost Estimate

\$100,000 annually.

4. Basis of Estimate

Staff estimate.

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
General Fund						
Grant Funds						
Special Funds						
Other Funds		\$100,000	\$100,000	\$100,000	\$100,000	\$100,000

Runway Extension Supplemental EIS

1. Project Description and Background

The Final Environmental Impact Report (EIR) for the project was certified by the Board of Supervisors in February 2014. The FAA issued its Final Environmental Impact Statement in June 2014. However, after public comment and internal FAA review, the FAA requested that additional study be completed prior to a final federal decision. A scope of work has been prepared for a Supplemental EIS.

2. Project Objective

Complete the Supplemental Environmental Impact Statement (EIS) necessary to extend the existing runway (length to be determined) to improve Airport safety and implement the Airport Master Plan.

3. Cost Estimate

\$358,360

4. Basis of Estimate

FAA grant.

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
General Fund						
Grant Funds	\$322,524					
Special Funds						
Other Funds	\$35,836					

AGIS, ALP with Narrative

1. Project Description and Background

Create an Federal Aviation Administration (FAA) required Airport Geographic Information System (AGIS) database and update the Airport Layout Plan (ALP) and narrative to meet the FAA aeronautical requirements for the proposed runway extension. An FAA grant has been received. Phase 1 work was completed and Phase 2 work on the ALP update is in progress. The available funds shown below are for the Phase 2 work. Completion of the work is tied to the FAA Runway Extension EIS Record of Decision.

2. Project Objective

To complete documents necessary to extend the existing runway (length to be determined) to improve Airport safety and implement the Airport Master Plan.

3. Cost Estimate

\$250,000

4. Basis of Estimate

Staff and FAA estimate.

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
General Fund						
Grant Funds	\$129,834					
Special Funds						
Other Funds	\$12,983					

Design of Existing Runway Resurfacing

1. Project Description and Background

This project will be a design phase for leveling and paving the existing 3,300-foot-long runway surface, safety areas, and taxiway alignment.

2. Project Objective

Create plans and specifications for the leveling and rehabilitation of the existing runway and taxiway alignment.

3. Cost Estimate

\$244,500

4. Basis of Estimate

Consultant estimate.

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
General Fund						
Grant Funds	\$220,050					
Special Funds						
Other Funds	\$24,450					

Existing Runway Resurfacing & Reconstruction

1. Project Description and Background

Reconstruction of existing runway and taxiway surfaces by grinding, leveling, repaving, repainting runway markings, and re-aligning taxiways.

2. Project Objective

To improve runway and taxiway pavement surfaces for landing and takeoff operations.

3. Cost Estimate

\$2,200,000

4. Basis of Estimate

Consultant estimate.

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
General Fund						
Grant Funds		\$1,980,000				
Special Funds						
Other Funds		\$220,000				

Wildlife Hazard Management Plan

1. Project Description and Background

Develop measures from the completed Wildlife Hazard Assessment to determine steps needed to address wildlife hazards at Gross Field.

2. Project Objective

To eliminate wildlife hazards to aircraft operations by providing Airport staff training, authority, and responsibility for implementing the management plan.

3. Cost Estimate

\$25,000

4. Basis of Estimate

Consultant estimate.

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
General Fund						
Grant Funds		\$22,500				
Special Funds						
Other Funds		\$2,500				

Final Supplemental EIS Review

1. Project Description and Background

The FAA issued its Final Environmental Impact Statement in June 2014. However, after public comment and internal FAA review, the FAA requested that an additional study be completed prior to a final federal decision.

2. Project Objective

Complete the FAA Environmental Impact Statement and Record of Decision for the Gross Field Runway Extension.

3. Cost Estimate

\$225,000

4. Basis of Estimate

Consultant estimate.

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
General Fund						
Grant Funds		\$202,500				
Special Funds						
Other Funds		\$22,500				

Runway 13/31 Extension Environmental Mitigation and Permitting

1. Project Description and Background

Identify the availability of mitigation options and permitting requirements for the runway extension addressing drainage, levee construction and relocation of existing ditches, and continued implementation of mitigation measures.

2. Project Objective

Purchase credits of wetland and biological habitat for the runway extension (including levee and ditch relocation) and to comply with biological and wetland mitigation requirements.

3. Cost Estimate

\$6,400,000

4. Basis of Estimate

Consultant estimate.

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
General Fund						
Grant Funds				\$5,760,000		
Special Funds						
Other Funds				\$640,000		

Runway 13/31 and Parallel Taxiway Extension Phase 1 - Design

1. Project Description and Background

The project consists of design work for Runway 13/31 and parallel taxiway extension addressing drainage, levee construction and relocation of existing ditches, and continued coordination of environmental mitigation measures.

2. Project Objective

Design the runway extension including levee and ditch relocation, and to comply with biological and wetland mitigation requirements.

3. Cost Estimate

\$300,000

4. Basis of Estimate

Consultant estimate.

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
General Fund						
Grant Funds				\$270,000		
Special Funds						
Other Funds				\$30,000		

Phase 1 Runway 13/31 Extension Construction, including Levee Work and Ongoing Mitigation Work

1. Project Description and Background

Construct Phase 1 of the runway extension addressing drainage, levee construction and relocation of existing ditches, and continued implementation of mitigation measures.

2. Project Objective

Begin construction on the runway extension including levee and ditch relocation, and to comply with biological and wetland mitigation requirements.

3. Cost Estimate

\$4,100,000

4. Basis of Estimate

Consultant estimate.

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
General Fund						
Grant Funds					\$3,690,000	
Special Funds						
Other Funds					\$410,000	

Phase 2 Runway 13/31 Extension Design, including Parallel Taxiway

1. Project Description and Background

Design Phase 2 of the runway extension pavement design, airfield geometry, and realignment of taxiway connectors and adjustments of navigational aids.

2. Project Objective

Complete the runway extension and parallel taxiway design for the phase 2 runway construction project.

3. Cost Estimate

\$650,000

4. Basis of Estimate

Consultant estimate.

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
General Fund						
Grant Funds					\$585,000	
Special Funds						
Other Funds					\$65,000	

Phase 2 Runway 13/31 Parallel Taxiway Extension Construction

1. Project Description and Background

Construction Phase 2 of the runway extension pavement, airfield geometry, and realignment of taxiway connectors and adjustments of navigational aids.

2. Project Objective

Complete construction of the parallel taxiway.

3. Cost Estimate

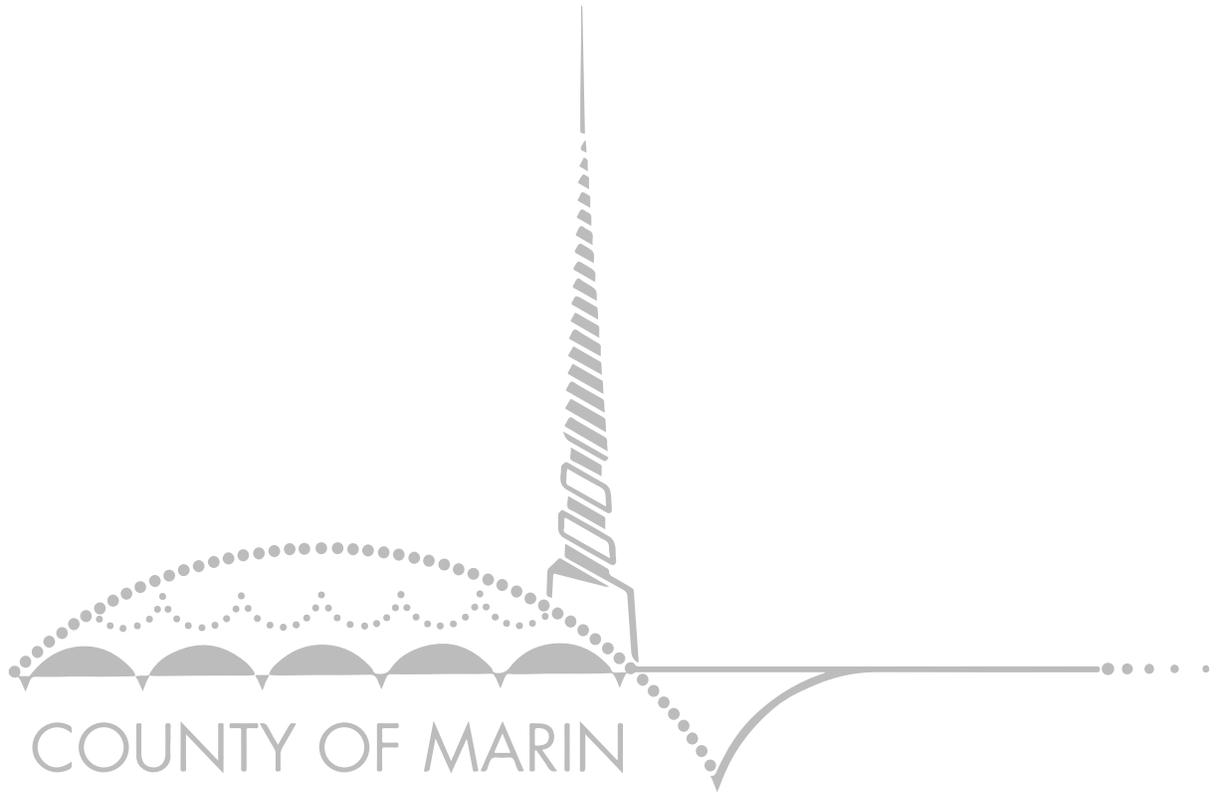
\$5,000,000

4. Basis of Estimate

Consultant estimate.

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
General Fund						
Grant Funds						\$4,500,000
Special Funds						
Other Funds						\$500,000

FACILITY IMPROVEMENTS



FACILITY IMPROVEMENTS

The Department of Public Works Building Maintenance Division is responsible for all building and plant maintenance for 44 County buildings (totaling over 1 million square feet, excluding Marin Center facilities), 16 flood control pump stations, and underground fuel tank systems. The Capital Projects Division administers contracts for construction projects at County buildings and various other County facilities. Fiscal Year 2017-18 represents the amount for the specific capital projects recommended for funding in the Proposed Budget. Recommendations were developed with a focus on health and safety, legal/policy mandates, and high priority program enhancements. Funding indicated for future fiscal years is for planning purposes only and subject to available/anticipated funding and approvals by the Board of Supervisors.

Summary of Proposed Facility Improvements

Project Description	In Progress (Prior Year Carry Forward)	Recommended for Fiscal Year 2017/18	Planned for future fiscal years			
			2018/19	2019/20	2020/21	2021/22
	\$	\$	\$	\$	\$	\$
Small Projects Countywide		150,000	150,000	150,000	150,000	150,000
Various Accessibility/Transition Plan Implementation Projects		1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
VMA Parking Lot Circulation Improvements	654,000	200,000	200,000	500,000	500,000	
North Civic Center Campus Improvements	218,000	100,000	400,000			
Second Phase of Jail Roof Replacement (Year 2 Funding & Construction)	465,000	350,000				
Replacement of Underground Fire Sprinkler Supply Line, 1600 Los Gatos (Year 2 Funding)	400,000	190,000				
Lagoon Park Waterline Renovation - Phase 2 Design		75,000				
Civic Center (Hall of Justice) - Office Space/Tenant Improvements		1,100,000	1,500,000			
Pt. Reyes Sheriff Substation Improvements		85,000				
Civic Center - Escalator Repairs		80,000				
Civic Center - Switchgear Replacement		220,000				
GSA - Stormwater Improvements		100,000				
GSA - Vertical Left Replacement		350,000				
Future Unspecified Projects			750,000	2,350,000	2,350,000	2,850,000
General Fund Subtotal	1,737,000	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000
Libraries Measure A Capital Funding		450,000	450,000	500,000	500,000	500,000
Library Fund Subtotal		450,000	450,000	500,000	500,000	500,000
Parks Measure A Capital Projects		11,304,000	3,000,000	3,000,000	3,000,000	3,000,000
Parks CSA and other Capital Projects	350,000	700,000				
Parks Fund Subtotal	350,000	12,004,000	3,000,000	3,000,000	3,000,000	3,000,000
Civic Center Roof Replacement	21,000,000					
Fire Station Renovation/Replacement	6,500,000	1,600,000				
West Marin Service Center in Point Reyes**	3,500,000					
Marin Center Projects*	1,000,000					
Large Facility Projects Subtotal *	32,000,000	1,600,000	-	-	-	-
TOTAL ALL FUNDS	\$ 34,087,000	\$ 18,054,000	\$ 7,450,000	\$ 7,500,000	\$ 7,500,000	\$ 7,500,000

* Project funded primarily from COPs and One-time General Fund Reserves

** In addition to COPs and One-time funds, \$500,000 of additional FY 2016 - 17 budgeted funds were appropriated in April 2016 toward this project

Small Projects Countywide

1. Project Description and Background

This allocation funds various small projects during the fiscal year, coordinated through the Department of Public Works Capital Projects Division.

2. Project Objective

Implement various small projects or preventive repair projects.

3. Cost Estimate

\$150,000 for 16/17; \$150,000 annually thereafter.

4. Basis of Estimate

Engineer's Estimate.

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
General Fund		\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
Grant Funds						
Special Funds						
Other Funds						

Various Accessibility/Transition Plan Implementation Projects

1. Project Description and Background

The self-evaluation and transition plan completed in FY 07/08 identified high priority accessibility projects for County facilities. The projects listed below address path of travel (POT) issues, and other miscellaneous accessibility and barrier removal improvements to various County facilities for FY 16/17.

Projects:

- Fairfax Library: Repair accessible parking spaces and curb ramp.
- Children’s Island Bridges and VMA Plaza: Repair detectable warnings.
- Civic Center S. Arch Parking: Install two accessible parking spaces.
- Civic Center Campus – Peter Behr @ Sheriff’s Parking Lot Entrances: Install four curb ramps.
- Marin Center – VMA East Exit: Remove and replace hardscape.
- Marin Center – VMA: Various interior accessibility upgrades.
- Point Reyes Station Rest Stop: Renovate two accessible parking spaces and add detectable warnings. Relocate bike rack.
- Traffic Signal, Sidewalk and Other Curb Ramp Retrofits.
- Various Other Small Projects.

2. Project Objective

Complete the projects listed above in compliance with current codes.

3. Cost Estimate

\$ 1,000,000 - Annually

4. Basis of Estimate

Engineer’s Estimate.

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
General Fund		\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
Grant Funds						
Special Funds						
Other Funds						

Veterans' Memorial Auditorium Parking Lot Circulation Improvements

1. Project Description and Background

In FY2012/13, a concept study was undertaken to identify various improvements to the existing Veterans' Memorial Auditorium parking lot, including Civic Center Drive frontage improvements.

2. Project Objective

To repave the original parking lot surface, replace the electrical wiring for lighting, improve storm water management and improve circulation for vehicles, pedestrians and bicyclists within the parking lot and ingress/egress from Civic Center Drive.

3. Cost Estimate

\$3.0 million is the estimated total project construction cost. Prior CIPs starting in FY 2012/13 have been setting aside funds for this project. Staff continues to seek additional funding sources such as State & Federal grant programs, etc.

4. Basis of Estimate

Preliminary design cost estimate.

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
General Fund	\$654,000	\$200,000	\$200,000	\$500,000	\$500,000	
Grant Funds						
Special Funds						
Other Funds						

North Civic Center Campus Improvements

1. Project Description and Background

There are multiple projects located within the north portion of the Civic Center Campus that are either in the planning stages or are close to going to construction. The Civic Center Drive Improvement project will be complete in early 2017, and there are several projects planned at the Marin Center. The planning for the Farmers' Market is progressing and the GSA Facility Assessment and the Marin Center Facility Assessment (both FY 2015-16 CIP projects) are complete with recommendations for facility improvements. Additional funding is required to augment these efforts.

2. Project Objective

To improve and/or augment projects located within the northern portion of the Civic Center Campus.

3. Cost Estimate

\$100,000 is programmed for FY2017/18 and \$400,000 for FY2018/19 with the possibility of additional funds being required in the out years.

4. Basis of Estimate

Programmed funding.

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
General Fund	\$218,000	\$100,000	\$400,000			
Grant Funds						
Special Funds						
Other Funds						

2nd Phase of Jail Roof Replacement (Year 2 Funding & Construction)

1. Project Description and Background

The roof on the County Jail is approximately 20 years old and requires replacement. The project was divided into two phases, with the first portion being replaced in 2015. The second portion of the roof, which comprises approximately 60% of the total roof volume, is scheduled for a replacement in 2017. This facility is the County's only adult detention center and has an active inmate population. Funding in FY 2017-18 is the second of two funding allotments required to fully fund the replacement

2. Project Objective

The roof replacement is part of the normal, on-going maintenance of County facilities. The primary project objective is asset preservation; however, due to the active day-to-day population within the facility, this improvement will maintain and enhance working and living conditions within the complex.

3. Cost Estimate

The project previously received \$465,000 of funding in the FY 2016-17 CIP. This is the second of year of the two-year funding cycle and includes the final \$350,000 allocation. The estimated cost for the project totals \$815,000.

4. Basis of Estimate

Design is complete and included an engineer's estimate for construction.

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
General Fund	\$465,000	\$350,000				
Grant Funds						
Special Funds						
Other Funds						

**Replacement of the Underground Fire Sprinkler Supply
Line at 1600 Los Gamos
(Year 2 Funding & Construction)**

1. Project Description and Background

Replacement of the main underground water feed to the fire sprinkler system supply for 1600 Los Gamos, including the replacement of approximately 1,700 linear feet (LF) of 10” fusable PVC pipe; and, 450 LF of 8” fusable PVC pipe to various hydrants and risers within the building. This installation will allow the system to hold 300 psi rating as per new fire code.

2. Project Objective

The installation of this line will bring the facility up to new fire code requirements of the City of San Rafael, and will improve the health and safety capabilities of the facility.

3. Cost Estimate

\$190,000

4. Basis of Estimate

Engineer’s Estimate.

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
General Fund	\$400,000	\$190,000				
Grant Funds						
Special Funds						
Other Funds						

Lagoon Park Waterline Renovation – Phase 2 Design

1. Project Description and Background

The existing water system (both domestic and irrigation) throughout the Civic Center campus is beyond its design life and experiencing failures at an increasing rate. The comprehensive study to evaluate existing conditions that was funded in the FY2013-14 CIP was completed in 2015. The first phase of construction to replace the water system was completed in late 2016. This next allocation is to complete a design for Phase 2 that will enable us to commence construction on the next phase of water line replacement in 2018.

2. Project Objective

To rehabilitate an aged system that has exceeded its expected life and to improve water conservation.

3. Cost Estimate

\$75,000 for Phase 2 design fees.

4. Basis of Estimate

Engineer’s Estimate for highest priority repairs identified for Phase 2 of the project.

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
General Fund		\$75,000				
Grant Funds						
Special Funds						
Other Funds						

Civic Center (Hall of Justice) – Office Space/Tenant Improvements

1. Project Description and Background

In 2014, the Sheriff’s Department moved from the Civic Center to 1600 Los Gamos, leaving approximately 25,000 square feet of vacant office space in the Hall of Justice to be renovated and reoccupied. Work is currently under way to re-locate the DA’s Office (Room 145) and Probation (Room 266). Both of these projects require additional, phases of work that will be addressed in FY2017/18. Additional work to relocate the Public Defender’s office and to create additional conference room shared conference room space within the HOJ will be completed in the out years.

2. Project Objective

On the first and second floors of the Hall of Justice, construct and furnish two new large County conference rooms, new office spaces for the Public Administrator, IST Help Desk/Training Division, Human Resources, and CDA/Environmental Health/GIS.

3. Cost Estimate

\$1,100,000 is the estimated total project cost.

4. Basis of Estimate

Preliminary design cost estimate.

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
General Fund		\$1,100,000	\$1,500,000			
Grant Funds						
Special Funds						
Other Funds						

Pt. Reyes Sheriff Substation Improvements

1. Project Description and Background

Public Safety Building was constructed in the early 1980's and the original windows have not been replaced. The window hardware on many of the windows is no longer functional and cannot be replaced due to lack of available of parts. Additionally, there is concern that the windows do not provide the level of first floor safety within both the Sheriff's substation and the Fire Department areas. This project will remove and replace the approximately 40 windows found within the facility with modern, insulation glass that will allow appropriate security measures.

2. Project Objective

Remove and replace the original windows with modern, double pane windows that provide the ability for adequate ventilation and safety.

3. Cost Estimate

\$85,000

4. Basis of Estimate

Engineer's Estimate

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
General Fund		\$85,000				
Grant Funds						
Special Funds						
Other Funds						

Civic Center – Escalator Repairs

1. Project Description and Background

The existing Civic Center escalator is over fifty years old. In 2016 it suffered significant down time due to continuous daily wear and tear. Based on age and operational history of the escalator, an assessment of the system was conducted. Two components were identified for replacement, the gearbox and the motor. The FY2017/18 project will consist of the replacement of the gearbox and associated system.

2. Project Objective

Staff estimates that by completing the repairs to the gearbox system and the motor, the useful life of the existing system can potentially be extended another ten years.

The gearbox and associated system replacement will replace an existing system that has required extensive work over the last several years. Working with our maintenance provider, the scope of the replacement has been identified. Staff estimates that the gearbox replacement project would cost approximately \$80,000.

3. Cost Estimate

\$80,000 is the estimated total project cost. Additional funding in the out years will be required to replace the existing escalator motor.

4. Basis of Estimate

Preliminary design cost estimate.

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
General Fund		\$80,000				
Grant Funds						
Special Funds						
Other Funds						

Civic Center – Switchgear Replacement

1. Project Description and Background

The Civic Center’s main electrical switchgear is beyond the end of its useful life and needs to be replaced. There are currently no back up units available, failure of any of the existing switchgear units would leave portions of the Civic Center without any power.

2. Project Objective

Purchase new switchgear units. Remove and refurbish existing switchgear units. Replace existing switchgear units with either new or refurbished switchgear units. Upon completion, all the switchgear units will either have been replaced or refurbished, and spare units will be available in case of future switchgear failure.

3. Cost Estimate

\$220,000 is the estimated total project cost.

4. Basis of Estimate

Preliminary design cost estimate.

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
General Fund		\$220,000				
Grant Funds						
Special Funds						
Other Funds						

GSA – Stormwater Improvements

1. Project Description and Background

The GSA Civic Center Corporation Yard was inspected by Regional Water Quality Control Board staff in September 2014 and deficiencies were identified. Water Board staff at the time allowed the County to take voluntary actions to correct the deficiencies; however the Water Board will re-inspect the facility before the end of our current permit term (June 2018).

The federal Clean Water Act and CA Water Code prohibits the discharge of non-stormwater or waste (i.e. anything but clean rainwater) to waters of the U.S. or State. Because of this discharge prohibition, the State requires the County to obtain coverage under a permit (NPDES Phase II stormwater permit) that requires specific actions that must be taken to protect the quality of stormwater discharged from our storm drain system or from our facilities.

2. Project Objective

Prevent pollution from leaving the site to the maximum extent practicable. Material storage bins must be covered, bermed, disconnected from runoff, vehicle wash pads must be plumbed to sanitary sewer, material removed from catch basins, storm drains dewatered on an impervious pad that is plumbed to sanitary sewer.

3. Cost Estimate

\$100,000 is the estimated total project cost.

4. Basis of Estimate

Preliminary design cost estimate.

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
General Fund		\$100,000				
Grant Funds						
Special Funds						
Other Funds						

GSA – Vertical Lift Replacement

1. Project Description and Background

Two, existing heavy-duty lifts located in the County Garage are not correctly installed per manufacture. These two lifts see extensive use throughout the year by the County’s Fleet management staff. Repairs of the existing lifts has been on-going over the last several years and they are reaching the end of their useful life. One of the two lifts is currently not functional. Staff is recommending that the current non-operational lift be replaced in FY2017/18, with the other lift replacement scheduled for an out year of the program.

2. Project Objective

Install one (1) Rotary Mod35 in ground vehicle lift replacing the current non-operational Rotary vehicle lift.

3. Cost Estimate

\$350,000 is the estimated total project cost.

4. Basis of Estimate

Manufactures installation proposal and related cost.

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
General Fund	0	\$350,000				
Grant Funds						
Special Funds						
Other Funds						

Various Marin County Free Library Projects

1. Project Description and Background

In June 2014, voters in the Marin County Free Library District renewed Measure A, which assessed a \$49 per parcel special tax on parcels located in the Marin County Free Library District, effective 2015 through 2024 with annual CPI adjustments 2016 through 2024. Among the many services that this measure supports, \$500,000 per year is being allocated towards addressing library facility needs such as critical maintenance, ADA improvements, and bringing libraries up to date.

The allocation of these funds was reviewed by the Library’s Measure A Oversight Committee. Although these funds allow the Library to address some critical facility needs, they are not sufficient to address the continuing long-term capital needs originally identified in the Library’s Facilities and Services Vision Plan from 2007. The Library will continue to explore long-term funding mechanisms to implement the Facilities and Services Vision Plan recommendations for providing 21st century library services at all locations. The current capital project expenditure plan projects include:

- Electrical panel and wiring upgrades at Corte Madera, Fairfax, Novato and Civic Center libraries
- Concrete sidewalks and path repairs
- Miscellaneous small repairs and maintenance items
- Improvements to the Novato Library HVAC system
- Improved bathrooms at Corte Madera
- Glazing of windows

2. Project Objective

Address critical life safety infrastructure needs at Marin County libraries.

3. Cost Estimate

\$450,000

4. Basis of Estimate

Estimates from 2015 Raker Architects Study.

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
General Fund						
Grant Funds						
Special Funds		\$450,000	\$450,000	\$500,000	\$500,000	\$500,000
Other Funds						

Various Marin County Parks Measure A Projects

1. Project Description and Background

In FY 2017/18, a significant share of Measure A funding will be devoted to either construction of capital projects, development of construction documents for upcoming capital projects, or road and trail management projects in Open Space. The current capital expenditure plan includes the following prioritized projects:

- Mill Valley/Sausalito Multi-Use Pathway Construction—E. Blithedale to Lomita
- Mill Valley/Sausalito Multi-Use Pathway Construction—E. Blithedale to Almonte
- McInnis Park Master Plan Phase I Construction
- Stafford Lake Recreation Improvements
- Stafford Lake Picnic Area Renovations
- Buck’s Landing Redevelopment
- Lagoon Park Donor Wall
- Deer Island ADA Improvements
- Inclusive Access Plan White House Pool Improvements
- Various Open Space Road and Trail Improvements
- McInnis Marsh Restoration Design and CEQA
- Roy’s Redwoods Restoration

2. Project Objective

To provide better park facilities and manage open space trails.

3. Cost Estimate

\$11,304,000

4. Basis of Estimate

Various landscape architect, engineer, architect, and expert cost estimator estimates.

Funding Source	Available Prior Years Funds	17/18	18/19	19/20	20/21	21/22
General Fund						
Grant Funds		\$550,000				
Special Funds						
Other Funds		\$10,754,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000

Various Marin County Parks CSA and Other Projects

1. Project Description and Background

Marin County Parks provides capital project services to County Service Areas (CSA's) and also coordinates grants and volunteer groups efforts, as well as coordinating work with the Department of Public Works in the construction of capital projects or development of construction documents for upcoming capital projects.

Projects

- CSA 14 Homestead Valley Pool \$200,000
- CSA 16 Greenbrae Medians \$175,000
- CSA 17 Hal Brown Park Labyrinth \$100,000
- CSA 17 Bridge Design/Permitting \$200,000
- CSA 18 Construction \$25,000
- Stafford Lake Intake Pump \$350,000

Funding sources: CSA 14, CSA 16, CSA 17, CSA 18, Parks Capital

2. Project Objective

To provide better park facilities and manage capital projects in County Service Areas.

3. Cost Estimate

\$1,050,000

4. Basis of Estimate

Various landscape architect, engineer, architect, and expert cost estimator estimates.

Funding Source	Available Prior Years Funds	17/18	18/19	19/20	20/21	21/22
General Fund						
Grant Funds						
Special Funds	\$350,000					
Other Funds		\$700,000				

Large Facility Projects: Civic Center Roof Replacement

1. Project Description and Background

Staff from Public Works have been reviewing various roofing replacement systems and issued a Request for Proposal for architecture and engineering services, with responses due in late October. The Marin County Civic Center is comprised of four primary segments: the Administration Building wing to the south, the Dome at center, the Hall of Justice (HOJ) to the north, and the Tower just northeast of the Dome. Assessment, cleaning or any repair of the Tower is not included in the scope of the project. The roof replacement project would include a partial or full removal of existing roofing materials, skylight repairs, concrete repairs and perimeter metal restoration.

An historical architect will be involved in the planning and implementation of the roof and ornamental repairs in order to maintain the historical significance of the Civic Center and work shall be performed to meet the Secretary of Interior Standards for the treatment of historical properties.

2. Project Objective

Remove prior roofs to the bare concrete, repair concrete as needed, install new roof.

3. Cost Estimate

\$21,000,000

4. Basis of Estimate

Engineer's Estimate

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
General Fund	\$1,000,000					
Grant Funds						
Special Funds						
Other Funds	\$20,000,000					

Large Facility Projects: Fire Station Renovation/Reconstruction

1. Project Description and Background

Staff from the Marin County Fire Department, Public Works, and the County Administrator's Office have prioritized the Tomales Fires Station in West Marin to be the initial project to be modified to meet modern essential services standards and accommodate modern equipment. DPW staff developed a review process and solicited proposals from qualified architecture and engineering (A/E) teams, and have awarded a professional services contract to start the design process. It is estimated that the design, permitting, and construction process could take 18 - 24 months. Staff will also be developing the initial needs assessments at the Point Reyes Station or Hicks Valley Fire Stations should funds be available after the development of the Tomales Fire Station plans. After a review of plans and cost estimates by staff, an additional amount of \$1.6 million was allocated from FY 2016-17 available year end fund balance.

2. Project Objective

Reconstruct Tomales Fire Station to meet Essential Services requirements.

3. Cost Estimate

\$8,100,000

4. Basis of Estimate

Engineer's Estimate

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
General Fund	\$3,500,000	\$1,600,000				
Grant Funds						
Special Funds						
Other Funds	\$3,000,000					

Large Facility Projects: West Marin Service Center in Point Reyes

1. Project Description and Background

A detailed facility and programming assessment of Health & Human Services West Marin Service Center (WMSC) in Point Reyes Station determined that the center is inadequate to provide services mandated by provisions of the Affordable Care Act. In prior years' CIP your Board approved funding to prepare a design for the renovation. In FY 2015-16, staff met with the local community and the project went through the design-review permitting process. The project consists of adding approximately 2,100 square feet to the existing two-story building, relocating the public entrance, and renovating the entire building. The design was completed in early 2017, went out to bid, and was awarded on 04/25/2017.

2. Project Objective

Expand and upgrade facility to meet modern, public-serving requirements.

3. Cost Estimate

\$3,500,000

4. Basis of Estimate

Engineer's Estimate

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
General Fund	\$1,000,000					
Grant Funds						
Special Funds						
Other Funds	\$2,500,000					

Large Facility Projects: Marin Center

1. Project Description and Background

Public Works and Cultural Services staff, working with the County Administrator’s Office, are currently prioritizing potential projects at the Marin Center.

2. Project Objective

Develop prioritized list of projects.

3. Cost Estimate

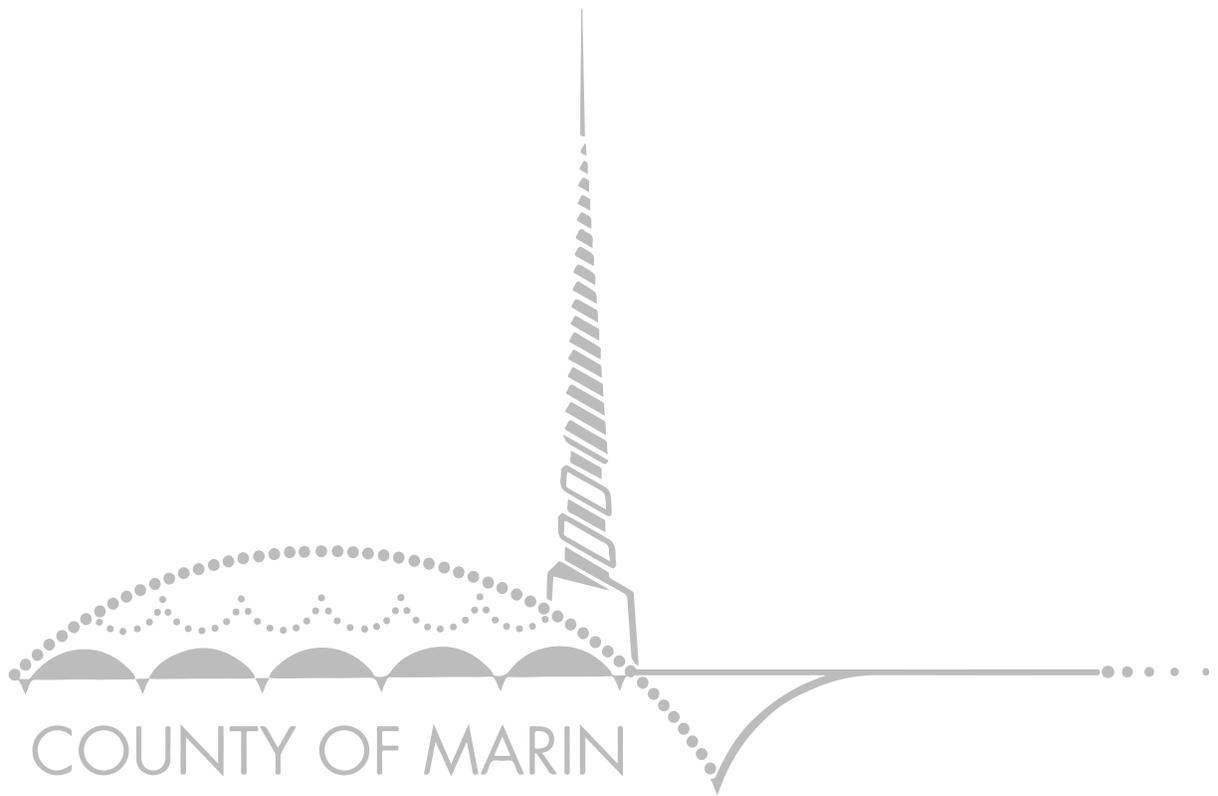
\$1,000,000

4. Basis of Estimate

Engineer’s Estimate

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
General Fund	\$1,000,000					
Grant Funds						
Special Funds						
Other Funds						

WATER RESOURCES



FLOOD CONTROL

The staff of the Flood Control and Water Resources Division of the Department of Public Works (DPW) provides administration for the Marin County Flood Control and Water Conservation District with support from other Divisions of DPW. The District is a political subdivision of the State of California and is a separate and distinct agency from the County. It was established in 1953 by an act of the State legislature. The Board of Supervisors of the County sits as the Board of the District. Within the District, eight separate flood control zones have been formed. The purpose of the zones is to collect taxes and fees to fund specific flood control projects within that particular zone. The taxes and fees collected are restricted and must be spent within each respective zone. There is no impact on the County's General Fund.

Summary of Proposed Flood Control Projects and Expenditures*

Project Description	In Progress (Prior Year Carry Forward)	2017/18	2018/19	2019/20	2020/21	2021/22
	\$	\$	\$	\$	\$	\$
Zone 1						
Novato Creek Sediment Removal				1,540,000		
Simmons Slough Water Management System	150,000	2,500,000				
Zone 3						
Coyote Creek Sediment Removal		200,000	1,000,000			
Zone 4						
Cove Pump Station Upgrade	290,170	2,109,830				
Zone 9						
Phoenix Lake IRWM Retrofit, Phase 1	2,121,300	985,000	3,000,000	8,933,500		
San Anselmo Flood Risk Reduction Project	847,000	3,285,000	4,812,500	5,660,000	2,836,000	
Lower Corte Madera Creek Improvement Project	325,000	200,000	500,000	2,500,000	2,500,000	
Corte Madera Creek Flood Risk Management Project	280,400	1,350,000	1,100,000	450,000	4,500,000	6,600,000
TOTALS	4,013,870	10,629,830	10,412,500	19,083,500	9,836,000	6,600,000

*Includes grant funding, federal cost share and other special funds.

**Novato Creek Sediment Removal
Zone 1**

1. Project Description and Background

Remove sediment from Novato Creek between the SMART Bridge and Diablo Avenue as part of the recurring maintenance of the Novato Flood Control Project. This project also includes a portion of Arroyo Avichi and Warner Creek in this area. It is anticipated that a sediment removal project is required once every 4-years at this location. The last sediment removal project occurred in 2016.

Like the 2016 cycle, the 2020 cycle may include beneficial reuse of dredged sediments by placing them along the alignment of future flood protection levees required for the protection of built areas for the City of Novato. These levees would be required in order to allow for the future restoration of a portion of Deer Island Basin for restoration to full tidal conditions, a project which would have multiple habitat and flood risk reduction benefits.

Other work proposed to start up following the 2016 cycle includes a study on introducing a thin-layer lift at select locations within Deer Island Basin to help the wetland adapt to sea level rise. If the study provides enough information to determine a benefit to the thin layer lifts, it is anticipated that they will be introduced during the 2020 cycle.

2. Project Objective

To remove sediment from creek to maintain flow capacity. Secondly, to beneficially reuse sediments to improve habitat, flood risk reduction, and adaptation to future sea level rise.

3. Cost Estimate

\$1,540,000 for 5 years (for the 2020 cycle).

4. Basis of Estimate

Flood Control Staff ¹.

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
Flood Control Zone 1 Funds				\$1,540,000		
Grant Funds						
Special Funds						
Other Funds						

1) Soft cost such as permitting, design, and construction administration is not included.

Simmons Slough Water Management System Zone 1

1. Project Description and Background

In January 2017 mechanical issues arose with a large pump that has been staged for over 30 years at the end of Simmons Slough which pumps stormwater into Novato Creek. The drainage basin serves residential areas, Audubon Society properties, as well as Atherton Ave, Olive Ave, and Hwy 37. To prevent flooding of these critical facilities, temporary pumps were rented but a long-term and more affordable solution is needed. A new Simmons Slough Water Management System will be identified this year through a study of its watershed, and a construction project implemented as early as 2018. An exact project concept is not yet determined but many options will be studied.

The District is working to mitigate a construction grant of \$1,500,000 from the CA Department of Water Resources, originally intended for Deer Island Basin Improvements to this higher priority project. Construction must be completed by 2019 to benefit from this grant. The Flood Zone may need to contribute up to \$1,150,000 towards this effort primarily for completion of a hydrology and hydraulics study, preparation of plans and specifications and permitting, in addition to funding interim pumping solutions (not included in this estimate).

2. Project Objective

To prevent flooding of residences, Atherton Ave, Olive Ave, and Highway 37 while protecting important wetland habitat in the Simmons Slough basin.

3. Cost Estimate

Study of water management options estimated to cost \$150,000. Construction cost TBD in late 2017. A grant of up to \$1,500,000 may be available.

4. Basis of Estimate

Study cost based on estimate from consultants, but construction cost is just a placeholder until project options are later identified.

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
Flood Control Zone 1 Funds	150,000	1,000,000				
Grant Funds		1,500,000				
Special Funds						
Other Funds						

Coyote Creek Sediment Removal Concrete Channel and Middle Reach - Zone 3

1. Project Description and Background

The Middle Reach of Coyote Creek, from the concrete channel to the Highway 1 overcrossing, has required periodic sediment removal every 8-15 years in order to remove accumulated sediment and maintain the creek's intended design capacity for flow. The last sediment removal project occurred in 2003. Plans to remove sediment within this earthen channel section (Middle Reach) are tentatively scheduled to occur as early as summer 2018. The need for the potential sediment removal will be determined by the results of an updated survey and hydraulics model to be conducted in 2017. Plans to remove sediment within the concrete channel portion of Coyote Creek are tentatively scheduled for 2017.

2. Project Objective

To restore Coyote Creek to its intended design capacity for flow.

3. Cost Estimate

\$200,000 for the concrete channel section and \$1,000,000 for the earthen channel section (construction costs only).

4. Basis of Estimate

Engineer's Estimate^{1, 2, 3, 4.}

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
F.C. Zone 3 Funds		\$200,000	\$1,000,000			
Federal Funds						
Special Funds						
Other Funds						

1) Noble Consultants, Inc. Memorandum 7 Sedimentation Analysis (6/5/13) which is Appendix F of the Coyote Creek Levee Evaluation (Final) Hydraulic Analyses and Results for Coyote Creek and Nyhan Creek in Marin County (March 21, 2016), they recommend using the "2013 to 2003" as the best scenario for evaluating sedimentation quantities because it is the difference between two specific surveys. This suggests approximately 4,000 – 4,500 yd³ of sediment to be removed from the earthen channel.

2) Concrete channel estimate is approximately 560 yd³ and 70 truck trips.

3) Based on District records, the 2003 dredge episode removed an estimated 10,000+/- yd³ of sediment for a total cost of \$600,000.

4) Soft cost such as permitting, design, and construction administration is not included.

Cove Stormwater Pump Station Upgrades Zone 4

1. Project Description and Background

Upgrade the pump station to increase capacity to meet potential future 100-year inflows to the pump station. This upgrade includes increased pumping capacity, an onsite generator that will run the entire pump station, new controls and electrical upgrades, modifications to the wetwell, building improvements, and a self-cleaning trash rack. The project will consist of two phases: 1) Preparation of Final Design and Plans, Specifications and Construction Cost Estimate (PS&E) for Cove Stormwater Pump Station Upgrades; and 2) Selection of a contractor, via the competitive bidding process, to complete the upgrades in compliance with the PS&E referenced above (this phase includes completing environmental review and obtaining required permits and right-of-way). Phase 1 is anticipated to be complete by November 2017. Phase 2 is anticipated to be complete by October of 2018.

2. Project Objective

To upgrade the existing Cove Stormwater Pump Station to meet expected 100-year inflows and provide onsite back-up power.

3. Cost Estimate

Phase 1: \$290,170; Phase 2: \$2,109,830

4. Basis of Estimate

Design Costs: The District has entered into a contract with CSW/Stuber-Stroeh for Phase 1 (PS&E), and the contract amount is \$290,170.

Construction and other soft costs: In July of 2016, the Cove Stormwater Pump Station was evaluated by Schaaf & Wheeler Consulting Civil Engineers. Their Study (Cove Stormwater Pump Station and Collection System Hydrology and Hydraulic Study) outlined three alternatives for possible projects that would upgrade the pump station's flood mitigation potential. Per this Study, the Zone 4 Advisory Board selected the 100-year inflow design. Schaaf & Wheeler estimated the cost to design and construct this 100-year inflow upgrade to be \$2,400,000, including PS&E and construction. This \$2,400,000 amount, less the PS&E cost, leaves a remaining cost estimate of \$2,109,830.

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
FCZ#4 Funds	\$290,170		\$2,109,830			

Phoenix Lake IRWM Retrofit- Phase 1 Zone 9

1. Project Description and Background

Retrofit an existing water supply reservoir to add benefits related to flood reduction, water supply, water quality, ecosystem restoration, and public access and recreation. The original project was identified in the Ross Valley Capital Improvement Plan Study for Flood Reduction and Creek Management. The project is currently being divided into two phases so Phase 1 conforms to grant schedule requirements and has a maximum cost of \$15,322,000.

2. Project Objective

Reduce peak flood flow within the Ross Valley watershed; in concert with other future measures, provide flood protection during the 100-year flood event.

3. Cost Estimate

\$985,000 for FY 2017/18. Phase 1 total is \$15,322,000 which includes previously expended funds.

4. Basis of Estimate

Phoenix Lake Draft Replacement Project Study

Funding Source	Available Prior Year Funds	17/18 ⁴	18/19	19/20	20/21	21/22
Phoenix Lake Project Fund	\$2,121,300 ¹	\$659,950	\$1,500,000 ²	\$4,466,750 ²		
DWR Grant Funds ³		\$325,050	\$1,500,000 ²	\$4,466,750 ²		
Special Funds						
Other Funds						

¹FZ9 Advisory Board FY16/17 original recommended budget. A \$3,300,000 transfer in FY16/17 from Zone 9 account to this project was recommended by the Advisory Board in May 2016, but has not posted to this project account as of 3/28/17.

²These amounts follow a future DWR grant amendment that Zone 9 will contribute 50% of full project costs. The balance is to be funded by the grant.

³Stormwater Flood Management Grant (Proposition 1E, Round 1)

⁴Scope of project is expected to change and thus the FY 17/18 project budget may be modified

Note: This project requires a final agreement with the property owner (MMWD) to complete the project.

San Anselmo Flood Risk Reduction Project Zone 9

1. Project Description and Background

The project includes several flood reduction elements including one flood diversion and temporary storage basin at the former Sunnyside Nursery site coupled with removal of a commercial building over San Anselmo Creek and creek improvements, along with four other alternatives. The project is scheduled to complete CEQA in early 2018 and then construction by the end of 2020 as required by the supporting Department of Water Resources Grant schedule.

2. Project Objective

Reduce peak flood flow in San Anselmo Creek; in concert with other measures that improve creek capacity.

3. Cost Estimate

Total is \$17,441,000 (assumes easements cost \$19,000, feasibility verification costs \$162,000, design & CEQA costs \$1,477,000, and construction & inspection costs \$15,783,000 similar to Memorial Park). Budget was \$847,000 for FY 2016/17.

4. Basis of Estimate

This is a planning level estimate from the Memorial Park grant application to DWR.

Funding Source	Available Prior Year Funds ²	17/18 ³	18/19	19/20	20/21	21/22
FZ9 Funds	\$847,000	\$3,285,000	\$4,588,000			
Grant Funds ¹			\$224,500	\$5,660,000	\$2,836,000	
Special Funds						
Other Funds						

¹Grant fund reimbursement does not start until the District has spent \$8,720,500.

²Funds budgeted in 16/17

³Scope of project is expected to change and thus the FY 17/18 project budget may be modified

Lower Corte Madera Creek Improvement Project Zone 9

1. Project Description and Background

Remove accumulated sediment of Corte Madera Creek to increase flood capacity of earthen channel along tidal section and make other improvements, including levees, floodwalls and interior drainage. This project is identified as one of the baseline measures in the Ross Valley Capital Improvement Plan Study for Flood Reduction and Creek Management. The last sediment removal project occurred in 1998.

2. Project Objective

Goal to increase flood capacity of lower reaches of Corte Madera Creek and in conjunction with the measures and projects of the Ross Valley Flood Protection and Watershed Program to convey the 1% annual - chance flood without overbank flow.

3. Cost Estimate

\$100,000 for FY 2017/18. Total is \$5,700,000.

4. Basis of Estimate

Engineer's Estimate

Funding Source	Available Prior Year Funds ¹	17/18 ²	18/19	19/20	20/21	21/22
F.C Zone 9 funds	\$325,000	\$100,000	\$350,000	\$2,500,000	\$2,500,000	
Grant Funds		\$100,000	\$150,000			
Special Funds						
Other Funds						

¹Funds budgeted in 16/17

²Scope of project is expected to change and thus the FY 17/18 project budget may be modified

Corte Madera Creek Flood Risk Management Project- Units 2, 3 and 4 Improvements Zone 9

1. Project Description and Background

Design of improvements along Units 2, 3 and 4 sections of Corte Madera Creek from Sir Francis Drake Boulevard Bridge in Ross to the downstream end of the concrete channel in Kentfield to increase flow capacity while maintaining the environmental integrity of the creek. Project may include removal of the wooden fish ladder, widening overly narrow sections, installing flood barriers adjacent to or offset from the banks, stabilizing creek slopes, and bypass tunnels in Unit 4. Additional measures downstream of the fish ladder in Units 2 and 3 may include replacing a section of the concrete channel with a natural creek, installing flood barriers and widening sections of the floodplain.

2. Project Objective

Goal is to increase flood capacity and in conjunction with the measures and projects of the Ross Valley Flood Protection and Watershed Program.

3. Cost Estimate

Total Project cost is \$14,100,000².

4. Basis of Estimate

Army Corps of Engineer's Estimate

Funding Source	Available Prior Year Funds ¹	17/18 ²	18/19	19/20	20/21	21/22
F.C Zone 9 Funds	\$280,400	\$150,000	\$150,000	\$150,000		
Federal Funds		\$400,000 ³	\$400,000 ⁴	\$300,000 ²		
Special Funds		\$800,000	\$550,000			
Other Funds ⁵					\$4,500,000 ³	\$6,600,000 ³

¹Funds budgeted in FY 16/17

²Scope of project is expected to change and thus the FY 17/18 project budget may be modified

³ Assumes \$400,000 will be allocated in USACE FY17 Work Plan

⁴ No federal funding has been allocated in future years, but cost sharing agreement has identified 50/50 federal/county split for the feasibility phase.

⁵ U.S. Army Corps of Engineers cost sharing to be determined for real estate and construction costs.

CSA 29 Paradise Cay Maintenance Dredge

1. Project Description and Background

Dredge Paradise Cay for recreation/boating use to minus 7 (-7 NAVD88) feet within the waterways and to minus 8 (-8 NAVD88) feet in the entry channels. Dredging is typically performed every 4 years. Last dredging was in 2014 for the South Cay. The North Cay dredging was completed in 2015. The next dredging event is scheduled for 2019.

2. Project Objective

Removal of sediment to maintain navigable waterways for homeowners' boating use.

3. Cost Estimate

\$800,000¹ for next full dredging in 2019 (construction cost only).

4. Basis of Estimate

Engineer's Estimate based on bids from 2014 ².

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
CSA Funds			\$800,000			
Grant Funds						
Special Funds						
Other Funds						

1) A \$30/CY unit cost was used.

2) Soft cost such as permitting, design, and construction administration is not included.

CSA 6 Santa Venetia Lower Las Gallinas Creek Dredge
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1. Project Description and Background

For the past 40 years, local dredging efforts have provided recreational and aesthetic benefits to the Santa Venetia community. Costs to continue this work have risen faster than the funds to pay for it. Staff have been working to identify a new type of dredging approach that creates a creek with dimensions closer to what would be naturally occurring; aka a geomorphic dredge. The anticipated advantage of a geomorphic dredge is that it is more cost-effective and less environmentally impactful. Steps towards design of the geomorphic dredge were recommended by the CSA 6 Advisory Board last year, and dredging could occur as early as 2018 if the San Rafael Airport works out as a sediment disposal site and bids for construction come in under budget.

2. Project Objective

Removal of sediment to maintain navigable waterways for local residents' recreational and/or boating use.

3. Cost Estimate

\$1,200,000 to \$4,100,000 for next full dredging in 2018 (construction cost only). Using a placeholder of \$2,440,000¹ due to funding constraints.

4. Basis of Estimate

See Lower Las Gallinas Geomorphic Dredge Memo

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
CSA Funds			\$2,440,000			
Grant Funds						
Special Funds						
Other Funds						

1) Soft cost such as permitting, design, and construction administration is not included.

FISH PASSAGE PROJECTS

In 2005, Marin County Board of Supervisors voted to establish a County Creek Restoration and Fish Passage Program aimed at restoring fish passage through county culverts on salmon streams in Marin. Since 2005, nine fish passage projects have been constructed by the County. Three projects have completed designs and staff is seeking grant funding for construction.

Grant funding supports a large part of this program with \$2,510,034 received from multiple State and Federal agencies to date. Inclusion of unfunded projects does not guarantee funding in future years, as unfunded projects are often subject to available grant funding and updating of priorities due to emerging needs.

Summary of Proposed Fish Passage Projects and Expenditures

Project Description	In Progress (Prior Year Carry Forward)	2017/18	2018/19	2019/20	2020/21	2021/22
	\$	\$	\$	\$	\$	\$
Montezuma Creek				250,000		
San Geronimo Valley Dr. bridge downstream of Roy's Pools	40,000		90,000			
Larsen Creek Fish Ladder					488,000	
Contingency Funds						
TOTALS	40,000		90,000	250,000	488,000	

Montezuma Creek at Guadalupe Ave.

1. Project Description and Background

Replacement of a County culvert on Montezuma Creek at Guadalupe Ave, and restoration of the stream channel upstream that runs through the Forest Knolls County Park. 100% project designs were completed by County engineering as a match to the San Geronimo Valley Landowners design grant from California Department of Fish and Wildlife.

2. Project Objective

Restore fish passage and restore habitat for coho salmon and steelhead trout.

3. Cost Estimate

\$250,000

4. Basis of Estimate

Engineer's Estimate.

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
General Fund						
Grant Funds				\$250,000		
Special Funds						
Other Funds						

*Construction funding will be pursued through grants.

San Geronimo Valley Drive Bridge at Roy's Pools

1. Project Description and Background

Removal of a concrete sill on County bridge that is a barrier to salmon to provide fish passage. Restore the stream channel beneath the San Geronimo Valley (SGV) bridge to a natural bottom, matching channel elevation to existing downstream gradient. The project also include reinforcement of the bridge footings with cut-off walls on the upstream side in order to protect the bridge footings when the Roy's Pools fish ladder is eventually removed upstream on SGV Golf Course property by others. That project's schedule is contingent on the Golf Course project being completed first.

2. Project Objective

Restore fish passage through the County bridge structure and protect bridge footings from scour when Roy's Pools fish ladder is removed.

3. Cost Estimate

\$40,000 for design in FY 2016/2017. Estimated cost to construct is \$90,000.

4. Basis of Estimate

Engineer's Estimate.

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
General Fund						
Grant Funds			\$90,000			
Special Funds						
Other Funds	\$40,000					

* Final 100% plans on hold pending completion of design to remove Roy's Pools. A grant will be submitted for construction funds to DFW FRGP in May 2017. Grant awards are expected in 2018. If not selected, DPW will pursue other grant opportunities.

Larsen Creek Fish Ladder

1. Project Description and Background

Retrofit existing box culvert under Sir Francis Drake Blvd with concrete baffles inside the culvert and construct a fishway downstream of the culvert. Design for this project was funded by a Department of Fish and Wildlife (DFW) grant and completed in 2014.

2. Project Objective

Improve fish passage for coho salmon and steelhead.

3. Cost Estimate

\$488,000 for construction.

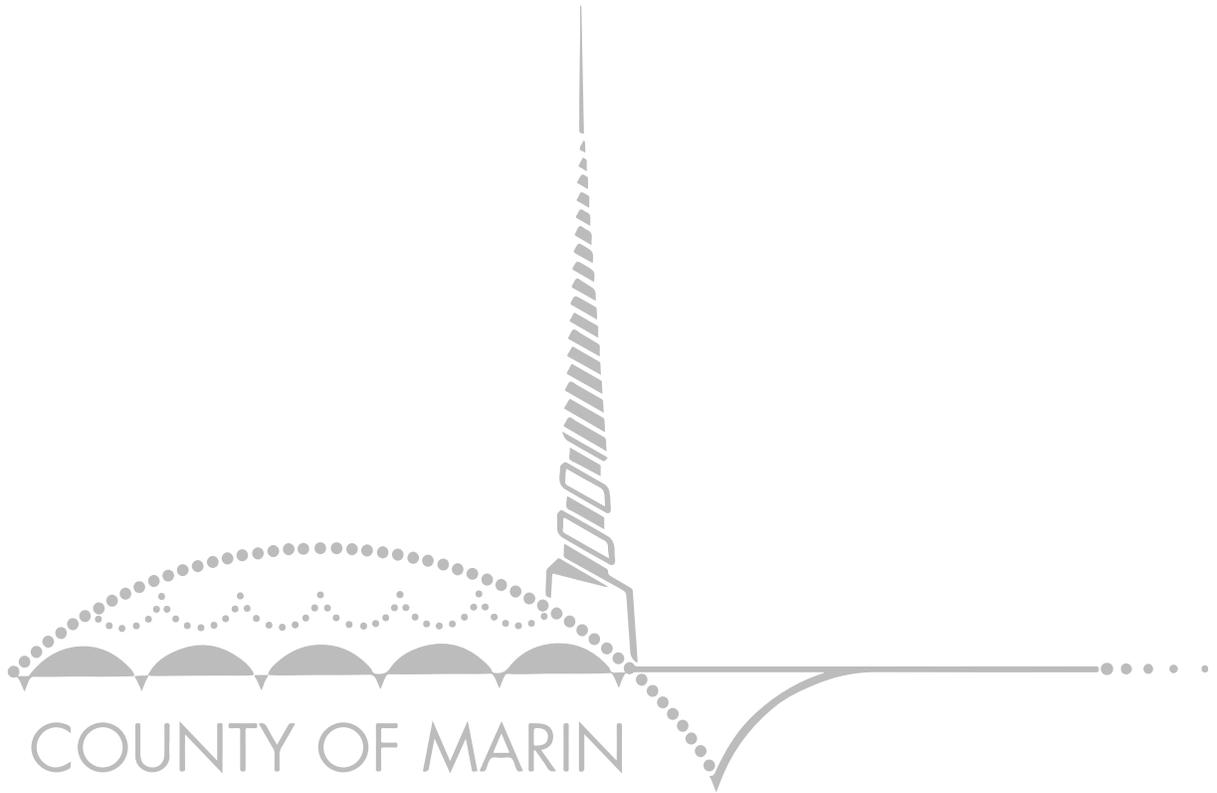
4. Basis of Estimate

Engineer's Estimate.

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
General Fund						
Grant Funds					\$488,000	
Special Funds						
Other Funds						

*Grant funding for construction has been pursued, but the project has not been selected. Since DFW no longer funds fish ladders, this project will be difficult to fund with grants. Public Works will continue to pursue grants.

ROAD MAINTENANCE IMPROVEMENTS



ROAD MAINTENANCE

The objective of the Road Maintenance Division is to provide and maintain a safe and adequate road system for the unincorporated areas of Marin County. In addition to general maintenance, this budget includes the cost of engineering, right-of-way acquisition and construction of the 420 miles of County road. The Division's activities include: traffic safety, street overlays, replacement of culverts, road surface maintenance, chip seals, patching, shoulder repairs, tree removal and maintenance, removal of roadside debris, storm patrol, storm cleanup, striping, and providing requested service to other County departments.

The one-year deferred maintenance backlog is currently \$91.9 million and the County overall road network condition is rated at 65 out of 100. The \$91.9 million backlog represents the funding needed to bring our entire road network to a rating of 85 out of 100 in one years' time. State funding reductions have drastically impacted the road maintenance work program. In response to this growing problem, the Board of Supervisors initiated two five-year Road and Bridge Programs representing a \$50 million investment in our road infrastructure. All work was completed on both five-year programs in 2014 and the County's overall road network condition rating went from 48 to 60 out of 100 in that time. In order to maintain the current road condition and keep the deferred maintenance backlog from growing, the Board initiated a \$48M six-year 2014-2020 Road and Bridge Rehabilitation program. Funding under this latest program has provided matching funds such that significant grant revenue could be captured under the Federal Lands Access Program (\$23M) and the Highway Bridge Program (\$12M) to further preserve our transportation system. The 2017 winter storms of January and February caused significant damage to County facilities and the cost for emergency road repairs is currently estimated at \$3.8M for FY 17/18. Funds for these projects are anticipated to come from a combination of State/Federal Emergency grants and (if secured) would be reimbursed in a future FY.

Despite recent Federal grant successes for major roads and bridges, federal and state grants for local road resurfacing projects are becoming scarcer, so aggressive pursuit of other grant sources or larger general fund contributions are needed to address the road infrastructure shortfall and reverse the deterioration of our roads infrastructure. Fiscal year 2017/18 represents the amount of road maintenance capital projects recommended for funding this fiscal year.

Summary of Proposed Road Maintenance Projects and Expenditures

Project Description	Fund Source	In progress (Prior Year Carryforward)	Recommended for FY 2017/18	Planned for FY			
				2018/19	2019/20	2020/21	2021/22
		\$	\$	\$	\$	\$	\$
General Maintenance	R		1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
	G						
	GF		750,000	750,000	750,000	750,000	750,000
	Other						
Special Projects	R						
	G		12,200,000				
	GF						
	Other						
Culvert Replacement	R		300,000	300,000	300,000	300,000	300,000
	G						
	GF						
	Other						
Traffic Improvements	R		200,000	200,000	200,000	200,000	200,000
	G						
	GF						
	Other		100,000	100,000	100,000	100,000	100,000
Roads & Bridges Program	R						
	G		1,100,000		35,000,000		
	GF		6,000,000	7,600,000	6,000,000	7,000,000	7,000,000
	SF			800,000	1,600,000	800,000	800,000
	Other		3,800,000	1,000,000	1,000,000	1,000,000	1,000,000
Road Fund Subtotal =		-	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000
Grant Fund Subtotal =		-	13,300,000	-	35,000,000	-	-
General Fund Requested Subtotal =		-	6,750,000	8,350,000	6,750,000	7,750,000	7,750,000
Special Fund =		-	-	800,000	1,600,000	800,000	800,000
Other Fund Subtotal =		-	3,900,000	1,100,000	1,100,000	1,100,000	1,100,000
GRAND TOTAL		\$ -	\$ 25,450,000	\$ 11,750,000	\$ 45,950,000	\$ 11,150,000	\$ 11,150,000

R= Road Fund G= Funded by Grant GF= General Fund SP= Special Fund

General Maintenance

1. Project Description and Background

General maintenance for the road system includes, but is not limited to, pot hole repair, minor patch paving, ditch maintenance and clearing, tree removal, crack sealing, and other drainage maintenance outside of culvert repairs.

2. Project Objective

General road maintenance.

3. Cost Estimate

\$1,750,000 - Annually

4. Basis of Estimate

Engineer's Estimate.

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
Road Funds		\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
General Fund		\$750,000	\$750,000	\$750,000	\$750,000	\$750,000
Grant Funds						
Special Funds						
Other Funds						

Special Projects

1. Project Description and Background

This includes the resurfacing of Sir Francis Drake Blvd from Highway 101 in Greenbrae to the Ross town limit utilizing \$13,000,000 in TAM funds through their Major Roads and Related Infrastructure Expenditure Plan. Funding in the amount of \$800,000 to develop alternatives, prepare environmental documents, and develop plans and specifications has been secured. Funding for construction will be secured through TAM in 17/18 with construction anticipated in that year or the following year.

2. Project Objective

Improve public safety.

3. Cost Estimate

\$12,200,000

4. Basis of Estimate

Engineer's Estimate.

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
General Fund						
Grant Funds		\$12,200,000				
Special Funds						
Other Funds						

Culvert Replacements (Roads)

1. Project Description and Background

Our drainage infrastructure is comprised of a significant amount of 50 to 60 year old corrugated metal pipe culverts (approximately 35,000 linear feet) that are at the end of their life cycle. The funding below reflects what is available in roads funds to affect some culvert repairs, but the long term maintenance need is much larger – estimated at \$1.2M/year for 15 years.

2. Project Objective

Improve public safety.

3. Cost Estimate

\$300,000 - Annually

4. Basis of Estimate

Engineer's Estimate.

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
Road Funds		\$300,000	\$300,000	\$300,000	\$300,000	\$300,000
General Fund						
Grant Funds						
Special Funds						
Other Funds						

Traffic Improvements

1. Project Description and Background

Improving and maintaining current traffic control systems throughout the County.

2. Project Objective

Improve public safety.

3. Cost Estimate

\$300,000 - Annually

4. Basis of Estimate

Engineer's Estimate.

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
Road Funds		\$200,000	\$200,000	\$200,000	\$200,000	\$200,000
General Fund						
Grant Funds						
Special Funds						
Other Funds		\$100,000	\$100,000	\$100,000	\$100,000	\$100,000

Roads & Bridges Program

1. Project Description and Background

This includes resurfacing of various County roads and pavement rehabilitation projects and bridge projects utilizing an average of \$7 million in general fund contributions. A portion (\$600K) of the FY17 General Funds will be used to match Federal grant funds for two Federal Lands Access Program resurfacing projects – one on Sir Francis Drake Blvd from Pierce Point Road to the Point Reyes Lighthouse and one on Muir Woods Road from the monument to Highway One. These projects are slated for construction in the summers of 2018 and 2021 respectively. Grant Funds for FY 17/18 reflect the Donahue Street Resurfacing project appropriations. Special Funds include sales tax revenue from Measure A and Measure B annual allocations and Other Funds includes allocations from the Road Impact Fee account.

The 2017 winter storms of January and February caused significant damage to County facilities and the cost for emergency road repairs is currently estimated at \$3.8M. Funds for these projects are anticipated to come from a combination of State/Federal Emergency grants and local monies and are shown as “Other Funds” for FY 17/18.

2. Project Objective

Improve public safety.

3. Cost Estimate

\$10,900,000 – FY 17/18, average \$7,000,000 thereafter.

4. Basis of Estimate

Engineer’s Estimate.

Funding Source	Available Prior Year Funds	17/18	18/19	19/20	20/21	21/22
General Fund		\$6,000,000	\$7,600,000	\$6,000,000	\$7,000,000	\$7,000,000
Grant Funds		\$1,100,000		\$35,000,000		
Special Funds			\$800,000	\$1,600,000	\$800,000	\$800,000
Other Funds		\$3,800,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000

CAPITAL
IMPROVEMENT
PROGRAM

FY 2017 - 2018

FY 2017-2018 to FY 2021-2022

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COUNTY OF MARIN