

DRAFT Flood Control Capital Improvement Plan 2018 Update

Fiscal Year 2017/2018 - 2023/2024

CONTRA COSTA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

June 2018

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2018 FLOOD CONTROL CAPITAL IMPROVEMENT PLAN

A. INTRODUCTION AND OVERVIEW

The Flood Control Capital Improvement Plan (CIP) is a programming document for the funding of capital flood control projects¹ within the Contra Costa County Flood Control and Water Conservation District (District). The District's jurisdictional boundary covers the entire Contra Costa County and includes cities in addition to the unincorporated County communities.

The District operates 79 miles of flood control channels, 29 dams and detention basins, and 47 drop structures throughout the County. These facilities are on 4,189 parcels covering over 1,500 acres, and provide the regional backbone of flood protection in Contra Costa County. The CIP is prepared in accordance with the District's Expenditure Policy and presented to the Board of Supervisors for approval. This CIP is intended to be updated every two years and it provides a 7-year outlook on the District's capital activities in support of the regional, long-range development and related flood control plans.

It is recognized that local communities have direct interest in the regional flood control projects and that those projects can impact a wide range of stakeholders. Therefore, the District is committed to developing projects in an open, community-based planning process. Furthermore, development of consistent stormwater management strategies in the region requires close coordination between local governments, regulators, as well as developers and landowners. Those strategies include concepts for comprehensive watershed management and resilient and sustainable design integration. To the extent feasible, those concepts have been incorporated into the development of this CIP. It is the intention of the District to continue to work collaboratively with all stakeholders to coordinate the implementation of regional drainage improvements.

Approval of this CIP by the Board of Supervisors does not automatically approve projects for implementation. Flood control projects typically require years of advance planning, coordination, and cooperation between various agencies and community stakeholders. This CIP is prepared as a programmatic, planning-level document that intends to guide the District to program and initiate preliminary engineering work on the identified projects. Each project must undergo its own individual feasibility analysis and environmental assessment. As such, scope and cost of each project is preliminary and may change after additional reviews. Some projects may later prove to be infeasible or not cost-effective and may be dropped from subsequent plans.

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¹ A capital project is a long-term capital investment that constructs, expands, renovates, or replaces a facility or facilities, often called infrastructure.

B. FUNDING CHALLENGES AND PRIORITIES

Over the years, the District's revenues have been constrained by fiscally-restrictive, state-wide ballot measures, while the cost of operations and maintenance has increased significantly due to more stringent regulatory requirements and aging facilities. As a result, deferred maintenance has created over \$24 million backlog of facility repair and restoration work throughout the District. In response to these challenges and increasing demand for more capital improvements, in 2005, the Board of Supervisors, as the governing Board of the District, established the Flood Control Expenditure Policy to provide overall fiscal programming direction and guidance to staff in developing the District's capital improvement program. That Policy, generally, dictates that the District establish Capital Improvement Plans and give the highest priority to those projects that preserve the existing infrastructure and extend the useful life of a facility.

C. REVENUE SOURCES

Funds for flood control improvements are mainly derived from property tax assessments, development and special benefit fees, and federal and state grants. Property tax and fee assessments are typically collected through various Flood Control Zones, Drainage Areas, and Benefit Assessment Areas. These areas have been established throughout the District over the years. A map of established Drainage Areas and Drainage Zones is shown in Figure 1. The following provides a summary description of funding sources from those areas and other revenue sources:

1. Flood Control Zone Property Tax Assessments

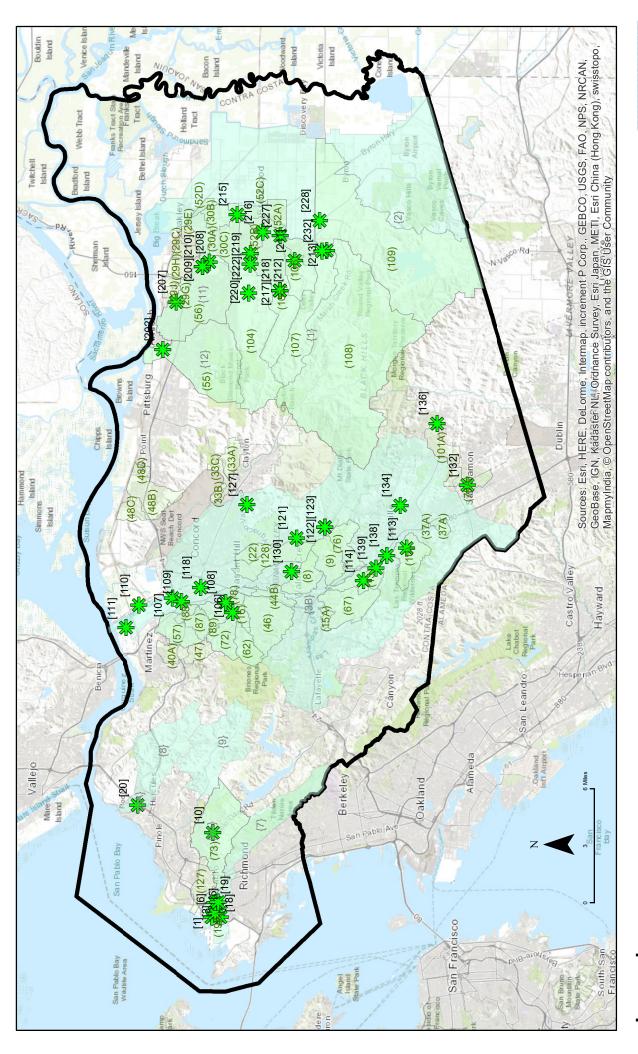
Flood Control Zones were established over entire watersheds to fund the design, construction, and maintenance of flood control and water conservation facilities in the watershed. Funding resources vary from Zone to Zone with some Zones having no operating funds. In most cases, funding is not sufficient to maintain existing improvements, construct additional drainage facilities needed to provide the desired level of flood protection, or restore flood control channels to sustainable natural systems². There are 14 identified major watershed Flood Control Zones in the District. Ten Flood Control Zones have been formed, but only five generate tax revenue.

2. Drainage Area Fees

Drainage Areas were formed, as subwatersheds of Flood Control Zones, to provide funding for the construction of drainage improvements needed to mitigate increased storm runoff resulting from development within the subwatershed area³. Drainage Areas typically do not provide funding for ongoing maintenance of the DA improvements. There are 180 Drainage

² Funding discrepancy between Zones is mainly due to Proposition 13 which effectively fixed property tax rates and constrained the District's ability to raise new revenues.

³ Drainage Areas are analogous to the "Areas of Benefits" or "AOB" that collect revenues and fund transportation projects.



Legend

Rroject Locations [ID #]

Drainage Areas (DA#)

Drainage Zones {DZ#}

Contra Costa County Flood Control and Water Conservation District DRAFT 7-Year CIP Location Map



& Water Conservation District

Figure 1

Areas identified in the District representing small watersheds or subwatersheds. Sixty-three of the Drainage Areas have been formed and have an adopted plan and a drainage fee ordinance. These are in areas where development has, is, or will be occurring. As such, revenues from these areas are dependent on the housing and land development economy.

3. Drainage Area Benefit Assessments

Drainage Area Benefit Assessments (DABA) are funds that are typically used on operation, maintenance, and repair of storm drainage facilities in a defined drainage benefit assessment area. There are currently seven DABAs established in the District.

4. Drainage Area Tax Assessments

Three of the 63 formed Drainage Areas receive a small portion of tax revenue in addition to, or instead of, developer fees. Drainage Area property tax revenue is typically spent on the design, construction, operation, maintenance, repair, rehabilitation, and reconstruction of storm drainage facilities within the Drainage Area.

5. Federal and State Grants

The District has been successful in seeking and obtaining various state and federal grants for many of its projects in the recent past and continues to pursue those sources actively for future projects. In general, federal and state grants are becoming more competitive and very limited for single-purpose, flood control projects. This is a change from past decades when state and federal grants provided a majority of the District's capital funding. Most grants now provide assistance to projects that provide grant-specific environmental benefits. This is another incentive for the District to incorporate environmental components to its flood control projects in order to be competitive with state and federal grants.

D. 2018 FLOOD CONTROL CAPITAL IMPROVEMENT PLAN

In accordance with its Expenditure Policy, the District sets priorities within three specific program categories in establishing its capital program. These priorities are then balanced with the available funding in given Flood Control Zones or Drainage Areas to ensure the most feasible project delivery. The program categories in order of priority are:

- 1. System Preservation
- 2. Public Safety
- 3. System Expansion

Based on the Expenditure Policy framework, a total of 43 projects representing an investment of \$53 million over seven years make up this plan's recommended projects. Figure 1 shows the geographic location of the proposed projects. Table 1 below provides an overall summary of recommended projects by funding entity highlighting project locations by watershed/major creek.



 Table 1. 7-Year Flood Control Capital Improvement Overall Summary (DRAFT)

 (By Fund Source/Creek)

& Water Conservation District									
Funding Source/Creek	FY 2017-18	3 FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2023-25	Totals
Flood Control Zone 1	\$ 481,571	1 \$ 590,000	3 1,306,000	\$ 1,059,000	\$ 468,000	\$ 1,640,000	\$ 420,000		\$ 5,964,571
Marsh*	\$ 391,571	1 \$ 430,000	306,000	\$ 1,059,000	\$ 468,000	\$ 1,500,000	\$ 210,000	٠ \$	\$ 5,364,571
Drv	· •	·v	··v	 		\$ 140,000	\$ 210,000	· \$	350,000
Deer	\$ 90,000	0 \$ 160,000	. \$	٠ ج			. '	٠,	\$ 250,000
Flood Control Zone 3B	\$ 770,000	\$ 1.	\$ 7.818.000	\$ 5,585,000	\$ 305,000	\$ 20,000	\$ 40,000	-	\$ 15.696,000
Grayson *	\$ 160,000		· 0	\$ 600,000	- \$	\$	\$	- \$	\$ 3,791,000
Walnut *	\$ 215,000	٠.	S	\$ 4,800,000		. \$	٠,	\$ 4,846,500	\$ 10,207,000
Pacheco *	٠ •	·	-γ-	\$ 75,000	\$ 75,000	۰ ۲	٠,		\$ 150,000
Pine	٠	· \$	\$ 143,000	\$ 110,000	\$ 230,000	٠	٠	٠,	\$ 483,000
Galindo	· \$	· \$	\$	· \$	- \$	\$ 20,000	\$ 40,000	· \$	\$ 60,000
San Ramon	\$ 20,000	s	Ş	· \$	- \$	- \$	· \$		
Various	\$ 375,000	0 \$ 400,000	140,000	5	· •	٠ ج	٠ \$	٠ -	\$ 915,000
Flood Control Zone 6A - San Pablo	٠ ٠	٠ ٠	·	\$ 20,000	· •	٠ ٠	\$ 20,000	٠ -	\$ 40,000
Flood Control Zone 7 - Wildcat	٠ ٠	\$ 27,000	٠	\$ 20,000	\$ 27,000	٠ ٠	\$ 20,000	٠ ٠	\$ 94,000
Drainage Area 10	۰ ۰	s	∽	٠ •	· •	٠ •	ج	· •	\$ 17,000
Drainage Area 13	\$ 20,000	0 \$ 333,000	\$ 300,000	٠ ٠	ب	٠ ۍ	ډ	ج	\$ 653,000
Drainage Area 46 - Grayson/Murderer's *	٠	s.	· •	\$ 528,000	\$ 626,000	ر د	, \$		\$ 1,154,000
Drainage Area 55 - Antioch	\$ 827,000	s.	s.	, S	ı S	٠ ٠	د		\$ 1,107,000
Drainage Area 56 - Antioch	\$ 90,000	0 \$ 225,000	\$ 1,078,000	\$ 500,000	\$ 115,000	\$ 108,000	\$ 102,000		\$ 2,218,000
Drainage Area 73	٠ ·	v.	ر. د	\$ 50,000	١ .	ر د	ı د	ر. د	\$ 50,000
Drainage Area 75A	\$ 10,000	s.	s.	د	- \$	٠ ٠	د	· \$	\$ 100,000
Drainage Area 130	\$ 36,050	S	ۍ.	\$ 166,000	\$ 353,000	\$ 814,000	\$ 1,607,000		\$ 4,088,050
Marsh *	\$ 26,050	0 \$ 100,000	φ •	ر د	\$ 11,000	\$ 77,000	\$ 578,000	\$ 55,000	\$ 1,659,050
Deer	٠ ٠	S.	S	\$ 39,000	\$ 215,000	\$ 88,000	\$ 594,000	\$ 5,143,000	\$ 958,000
Sand	\$ 10,000	φ.	31,000	\$ 127,000	\$ 127,000	\$ 649,000	\$ 435,000	\$ 76,000	\$ 1,471,000
Drainage Area 910	٠ ٠	\$ 26,000	ر د	ر د	د	د	د	ر د	\$ 26,000
Drainage Area 1010A - Shadow	٠	ب	v.	· ·	٠ ٠	٠ ٠	٠ ٠	٠ -	30,000
Grants - Walnut *	\$ 175,000	s.	s.	\$ 1,250,000	د	د	ر د	٠	\$ 2,062,000
Other - Grayson *	\$ 140,000	s.	6 V-	\$ 100,000	٠ ۍ	د	ر. د		\$ 1,286,000
Unfunded	\$ 23,000	٠.	٠.	\$ 8,000,000	\$ 6,407,000	\$ 3,430,000	\$ 890,000	\$ 4,846,500	\$ 19,143,000
Wildcat/San Pablo/Rodeo	٠ ٠	\$ 353,000	\$ 40,000	, \$	\$ 273,000	· \$	ج		\$ 666,000
Grayson/Murderer's *	٠ ۍ	- ج	ج	ج	\$ 34,000	ج	ج	٠ \$	\$ 34,000
Walnut *	· \$	- \$	- \$	\$ 8,000,000	\$ 500,000	\$ 450,000	\$ 450,000	\$ 4,846,500	\$ 9,400,000
Pacheco *	٠ \$	ج	· \$	٠ >	\$ 5,600,000	· \$	· \$	· •	\$ 5,600,000
Galindo	٠ \$	- ج	, \$	٠	· \$	· \$	\$ 440,000		\$ 440,000
Marsh *	٠ ٠	٠ ٠	٠ ٠	٠ ٠	- ج	\$ 2,980,000	ج		\$ 2,980,000
Kellog	\$ 23,000	S	S	- \$		- \$	٠ >		\$ 23,000
Totals	\$ 2,572,621	1 \$ 3,850,000	\$ 12,616,000	\$ 17,278,000	\$ 8,301,000	\$ 6,012,000	\$ 3,099,000	\$ 4,846,500	\$ 53,728,621
* Projects with multiple funding sources									

Each location shown in the list may have several projects in various phases of development and implementation.

It must be noted that some of the recommended projects are partially unfunded. Approximately \$31 million is planned to be funded through various flood control funds and \$3 million is planned to come from other local, State, or federal grants. An additional \$19 million will be needed to fully fund the projects. As projects are further developed, efforts will be made to seek additional resources. A more detailed list of all projects within each funding entity, including partially unfunded, is included in Table 2.

As stated above, priorities set for each project are based on the framework outlined in the District's Expenditure Policy. Approximately, 71% of planned capital expenditures will fund system preservation while 28% will support system expansion in support of flood risk reduction. The remaining 1% will improve public safety. Figure 2 below shows the breakdown of capital expenditures by program priority.

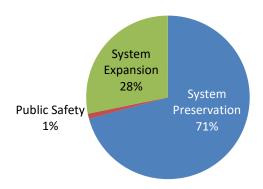


Figure 2. 7-Year CIP Expenditure by priority

Additionally, detailed information about each project is included in Appendix A. The information provided for each project includes project name, description, justification, cost estimate, funding source(s), program priority, and anticipated expenditure plan category.

Each project is assigned a unique number. Projects with numbers from 1 to 99 are located in West County, 100 to 199 are in Central County and 200 and greater are in East County. Projects are presented in numerical order.

Generally, all identified projects are led by the District; however, for the purpose of completeness, this CIP may include some projects that are co-funded by the District, but managed in partnership with other jurisdictions. It must be noted that in addition to capital projects, this CIP also includes several hydraulic, seismic, and condition assessment studies that support capital projects.

Table 2. 7-Year Flood Control Capital Improvement Project List (DRAFT) (By Fund Source)

Eunding Source ID Brainet Title	EV 2017 19	EV 2019 10	EV 2010-20	EV 2020 21	EV 2021.22	EV 2022 23	EV 2002 24	Totals
J out	4 A81 571	2 590 000	\$ 1 306 000	\$ 1 059 000 \$	468 000	\$ 1 640 000 S	3 000 000	5 964 571
210 March Creat Bacannir Sciemic Accassment [9255]	1017	\$ 130,000	160,000	200(2001	200,000	000/010/1	2006	000,000
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	\$ 90,000	\$ 160,000	٠	· ·	'	٠ ٠	٠.	250,000
213 Marsh Creek Reservoir Capacity and Habitat Restoration [8495]	\$ 55,521	\$	\$ 129,000	\$ 109,000	\$ 468,000	\$ 1,500,000 \$	\$ 210,000 \$	2,471,521
216 Marsh Creek Widening Between Dainty Avenue and Sand Creek [8466]	\$ 26,050	\$ 100,000	\$ 867,000		. '	- 5	٠٠	993,050
	310,000	200,000	· ·		, ,		۰	510,000
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232 Marsh Creek Reservoir Emergency Spiriway Renabilitation [18D]	م	٠ ٠	000'0ST \$	000,056 \$		Λ·	Λ·	1,100,000
	\$ 770,000	\$ 1,158,000	\$ 7,818,000	\$ 2,585,000	305,000	\$ 20,000 \$	40,000 \$	15,696,000
107 Grayson Creek Levee Rehabilitation at CCCSD Treatment Plant [8348]	\$ 140,000	\$ 146,000	\$ 900,000	\$ 100,000 \$	1	٠ -	٠,	1,286,000
108 Grayson Creek Channel Fence Rehabilitation [WO TBD]	,	- -	Ş	\$ 500,000	1	\$	-	200,000
	20 000	\$ 125,000	\$ 1.860,000		ا			2 005 000
	\$ 16F 000	200,000	COC,000	4 700 000		. •		E 692,000
	000,001 \$	2 232,000	000,626 \$, 4,700,000 + +		Λ·1	۰ ۱	0,002,000
Pacheco Marsh Restoration [8494]	٠ ٠	٠ ٠	ر ب	5 /5,000	2,000	٠ -		150,000
118 Walnut Creek Sediment Removal - Clayton Valley Drain to Drop Structure 1 [8334]	\$ 50,000	\$ 125,000	\$ 4,250,000	\$ 100,000 \$	'	· ·	·	4,525,000
121 Kubicek Basin Sediment Removal [WO TBD]	- د	Ş	· .	Ş	\$ 40.000	- \$	٠,	40,000
			,	\$ 110,000	190,000	. •		300,000
		. 10	1/13 000					143,000
	ጉ - (.	000/54	} •				113,000
Galindo Creek Improvements [WO 1BD]	ر م	٠ ٠	ر م	· ·	'	5 000,02 4	4 40,000 ×	000,00
	\$ 375,000	\$ 400,000	\$ 140,000	· ·	'	· ·	·	915,000
138 San Ramon Creek Watershed Study [8541]	\$ 20,000	\$ 70,000	' \$	· ·	'	· ·	٠,	90,000
Flood Control Zone 6A	- \$	•	' \$	\$ 20,000	1		20,000 \$	40,000
1 San Pablo Creek Silt Survey	,	,	,	\$ 20,000	,	. •	\$ 20,000 \$	40,000
Flood Control Zone 2	· •	27 000	· •	20000	27 000	· •	20,000	000,00
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5 Wildcat Sediment Basin Desilt	د	5 27,000	٠ ٠	٠ ٠	27,000	٠ -		54,000
Drainage Area 10	, \$		\$ 17,000	· ·	,	•	٠,	17,000
113 Update DA 10 for Danville Area	· \$	· \$	\$ 17,000	· ·	1	· ·	· ·	17,000
Drainage Area 13	\$ 20.000	\$ 333.000	300.000		,		٠.	653,000
114 Indate DA 12 Dian for Western Alamo		33,000	· ·				۰ - ۷	33,000
	2000	000,000	20000			. •	.	000,000
100	000'07 *	000,000	000,000		, ,,,	^ 1	^ 1	020,000
Drainage Area 4b	' ^ ₹	' ^ ∢	' ^	5 528,000	000,020	ሱ ላ	Λ (1,154,000
106 DA46 Grayson and Murderer's Creek Subregional Improvements	۰	٠	٠,	\$ 528,000	000,929	٠	· ·	1,154,000
Drainage Area 55	\$ 827,000	\$ 280,000	' \$	· ·	'	· ·	·	1,107,000
202 West Antioch Creek - DA55 Culverts at 10th Street [8399]	\$ 827,000	\$ 280,000	· \$	· · •	1	٠ -	٠,	1,107,000
Drainage Area 56	\$ 90,000	\$ 225,000	\$ 1,078,000	\$ 500,000	115,000	\$ 108,000 \$	102,000 \$	2,218,000
207 Trembath Detention Basin [8532]	\$ 90.000	\$ 225.000	\$ 1,050,000	\$ 450,000	. '			1,815,000
208 Lindsev Basin Finalization Tasks & R/W Transfer [8126]	. •		\$ 11.000	\$ 33.000	\$ 16.000	\$ 6,000		66,000
	,	,	17,000	17,000	000 66	\$ 102,000 \$	102 000 \$	337,000
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10 DA 73 Prainage Plan Hodate - Richmond [WO TRD]	, • •	, • • •	·	\$ 000.07	1	,	· ·	50,000
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Dialliage Alea / JA Dialliage Alea / JA 1727 Canvon Lakas Farilltias Conditions Assassment [8251]	10,000	000,06	 Դ. •	, ·		, ·	> • •	100,000
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	- 2000		· · ·	\$ 28,000	149,000	· · · · ·	· · · · · ·	1//,000
) 10,000	72,000	\$ 11,000	\$ 66,000	11,000	\$ 66,000	\$ 11,000 \$	247,000
ZZZ Lower Sand Creek Basin Construction [849.2]	' ^ •	5 20,000	20,000	000,19	000,011	5 283,000	\$ 424,000 \$	1,224,000
		\$ 26,000	·	·	1	·	v> +	26,000
134 Rassier Ranch Basin Conditions Assessment [8362]	- ج	\$ 26,000	ر ب	· ·	1	· ·	γ. -	26,000

Funding Source ID Project Title	FY 2017-18 F	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	Totals
Drainage Area 1010A	\$ - \$	30,000	· \$	· \$	· \$	· \$	- \$	\$ 30,000
136 Shadow Creek Basin Conditions Assessment [WO TBD]	\$ - \$	30,000	· \$	· \$, \$	· \$	· \$	30,000
Grants	\$ 175,000 \$	400,000	\$ 237,000	\$ 1,250,000	, \$	· \$	· \$	\$ 2,062,000
110 Lower Walnut Creek Restoration Project [8285]	\$ 175,000 \$	400,000	\$ 237,000	\$ 1,250,000	· \$	· \$	· \$	\$ 2,062,000
Other	\$ 140,000 \$	146,000	\$ 900,000	\$ 100,000	, \$, \$	· \$	\$ 1,286,000
107 Grayson Creek Levee Rehabilitation at CCCSD Treatment Plant [8348]	\$ 140,000 \$	146,000	\$ 900,000	\$ 100,000	· \$	· \$	· \$	\$ 1,286,000
Unfunded	\$ 23,000 \$	353,000	\$ 40,000	\$ 8,000,000	\$ 6,407,000	\$ 3,430,000	\$ 890,000	\$ 19,143,000
5 Wildcat Sediment Basin Desilt [WO TBD]	\$ - \$	273,000	· \$	· \$	\$ 273,000	· \$	· \$	\$ 546,000
18 San Pablo Conditions Assessment [WO TBD]	\$ - \$	•	\$ 20,000	· \$	· \$	· \$	· \$	\$ 20,000
19 Wildcat Conditions Assessment [WO TBD]	\$ - \$,	\$ 20,000	· \$	· \$	· \$	· \$	\$ 20,000
20 Rodeo Conditions Assessment [WO TBD]	\$ - \$	80,000	· \$	· \$	· \$	· \$	· \$	\$ 80,000
106 DA46 Grayson and Murderer's Creek Subregional Improvements [TBD]	\$ - \$	•	· \$	· \$	\$ 34,000	· \$	· \$	\$ 34,000
110 Lower Walnut Creek Restoration Project [8285]	\$ - \$		· \$	\$ 8,000,000	\$ 500,000	\$ 450,000	\$ 450,000	\$ 9,400,000
111 Pacheco Marsh Restoration [8494]	\$ - \$,	· \$	· \$	\$ 5,600,000	· \$	· \$	\$ 5,600,000
127 Galindo Creek Improvements [WO TBD]	\$		\$	- \$	- \$	· \$	\$ 440,000	\$ 440,000
213 Marsh Creek Reservoir Capacity and Habitat Restoration [8495]	\$ - \$,	\$	\$	\$	\$ 2,980,000	· \$	\$ 2,980,000
228 Kellog Conditions Assessment [WO TBD]	\$ 23,000 \$		· \$	· \$	- \$	- \$	· \$	\$ 23,000
Totals	\$ 2,572,621 \$	\$ 3,850,000	\$ 12,616,000	\$ 17,278,000	\$ 8,301,000	\$ 6,012,000	3,099,000	\$ 53,728,621

E. UNPROGRAMMED FUTURE PROJECTS

Unprogrammed future projects are those that have been scoped, but not yet programmed for funding in the next 7 years. Those projects are expected to be included in future plans for implementation after 2024. Table 3 includes a list of future projects. Details of these projects are included in Appendix B.

Funding Source	ID Project Title	FY 2024-
Flood Control Z	one 3B	\$13,767,000
	124 Pine Creek Reservoir Sediment Removal and Capacity Restoration [WO TBD]	\$ 5,000,000
	125 San Ramon Creek Sediment Removal near San Ramon Bypass [WO TBD]	\$ 363,000
	128 Green Valley Creek Improvements up to 1st Crossing of Diablo Road [WO TBD]	\$ 6,600,000
	129 Green Valley Creek Improvements Upstream of 2nd Crossing of Diablo Road [WO TBD]	\$ 1,804,000
Drainage Area 3	3A	\$ 209,779
	120 DA 33A Concord Boulevard Culvert Replacement [WO TBD]	\$ 209,779
Drainage Area 4	8B	\$ 429,000
	201 DA 48B Line A at Port Chicago Highway	\$ 429,000
Drainage Area 5	5	\$ 215,000
	205 Fitzuren Road Remainder Parcel	\$ 215,000
Drainage Area 1	09	\$ 270,000
	225 DA 109 - Kellogg Creek Project Development	\$ 270,000
Unfunded		\$50,839,221
	7 Wildcat Creek Habitat Improvements (USACE 1135 Program) [8619]	\$ 2,000,000
	9 Wildcat / San Pablo Creeks Phase II [WO TBD]	\$12,045,000
	12 Pinole Creek Habitat Restoration (1135 Project) [8493]	\$ 6,250,000
	17 Sustainable Capacity Improvement at Rodeo Creek [WO TBD]	\$10,285,000
	23 Canada di Cierbo Habitat Improvement [WO TBD]	\$ 3,000,000
	117 DA 67 - Tice Creek Bypass [WO TBD]	\$ 2,481,000
	120 DA 33A Concord Boulevard Culvert Replacement [WO TBD]	\$ 87,221
	203 West Antioch Creek Improvements - L Street to 10th Street [WO TBD]	\$ 4,906,000
	204 West Antioch Creek Improvements at Highway 4 [WO TBD]	\$ 2,200,000
	206 East Antioch Creek Marsh Restoration [WO TBD]	\$ 7,585,000
	Totals	\$ 65,730,000

Table 3. Unprogrammed Future Projects

F. FUTURE UPDATES

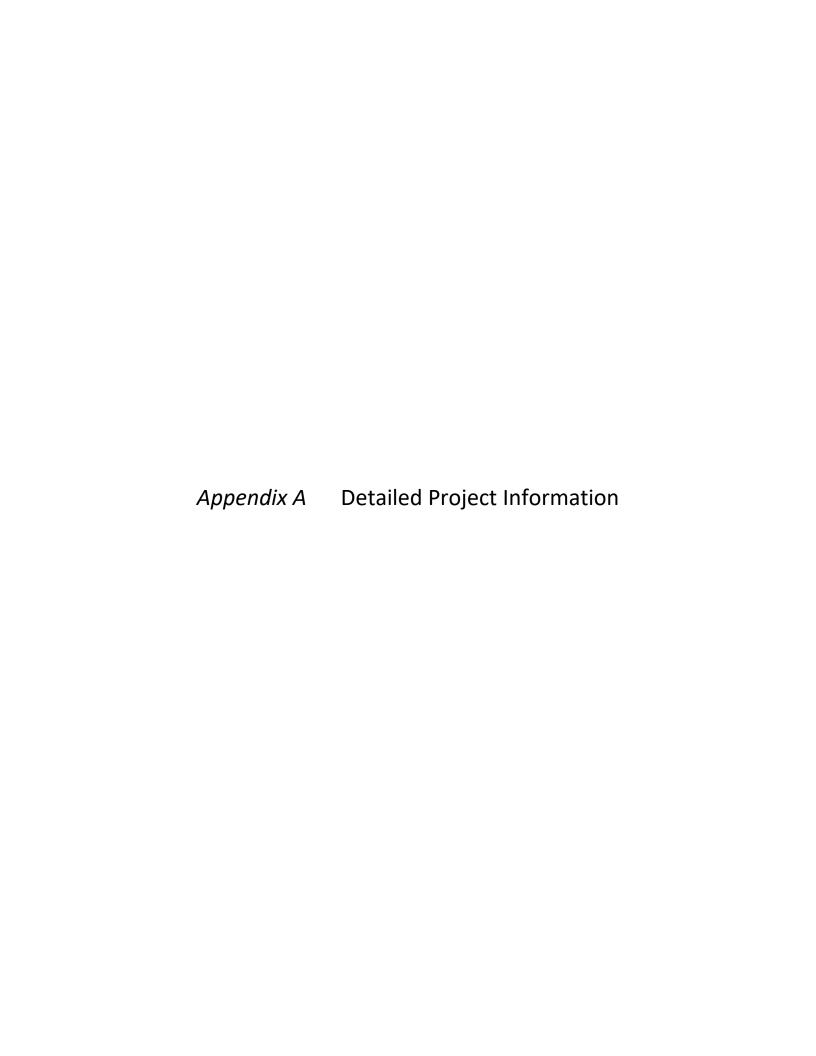
As staff develops and implements these capital projects, future CIP updates will include information on the progress and delivery of the listed projects. Additionally, efforts on the identification of funding shortfalls and additional funding sources to support the District's capital needs are underway. The 2013 Report on the Status of Flood Protection Infrastructure and its 2017 update provided some information about those efforts. Additional detailed information will be reported in future updates.

G. CREDITS

Prepared By: Gus Amirzehni, PE Reviewed By: Paul Detjens, PE

List of Appendices:

Appendix A Detailed Project Information Sheets
Appendix B Unprogrammed Future Projects Details



PROJECT NAME: San Pablo Creek Silt Survey

WORK ORDER: WO TBD ID: 1

PROJECT DESCRIPTION: Perform focused topographic surveys at six predesignated cross section locations to determine the amount of

sediment accumulation and to determine the need for channel desilting. Channel desilting, once determined to be

needed, would be scoped under a separate CIP entity.

PROJECT NEED: The current operations and maintenance manual produced by the Corps requires annual sediment surveys. These

surveys are a method to determine channel capacity and are in lieu of a more comprehensive survey and hydraulic

model.

SUPERVISOR DISTRICT:

PROGRAM TYPE: System Preservation

PROJECT PRIORITY: 4

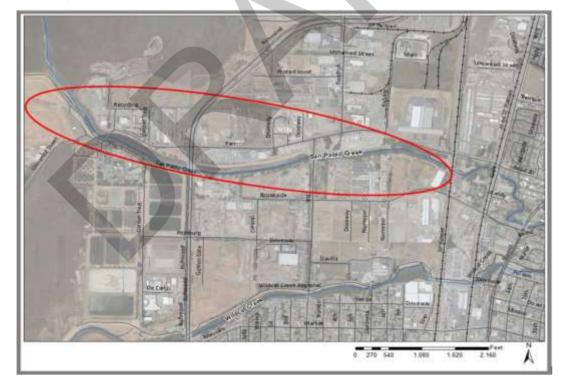
FUNDING SOURCE(S): Flood Control Zone 6

TOTAL PROJECT COST: \$40,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
PROJECT EXPENDITURES:	\$0	\$0	\$0	\$20,000	\$0	\$0	\$20,000
FUNDING SOURCE(S):							
Flood Control Zone 6A	\$0	\$0	\$0	\$20,000	\$0	\$0	\$20,000

LOCATION: Richmond, North Richmond



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): NO

NOTE:

August 2018 1/43

PROJECT NAME: Wildcat Creek Silt Survey

WORK ORDER: 9705 ID: 3

PROJECT DESCRIPTION: Perform focused topographic surveys at six predesignated cross section locations to determine the amount of

sediment accumulation and to determine the need for channel desilting. Channel desilting, once determined to be

needed, would be scoped under a separate CIP entity.

PROJECT NEED: The current operations and maintenance manual produced by the Corps requires annual sediment surveys. These

surveys are a method to determine channel capacity and are in lieu of a more comprehensive survey and hydraulic

model.

SUPERVISOR DISTRICT:

PROGRAM TYPE: <u>System Preservation</u>

PROJECT PRIORITY: 4

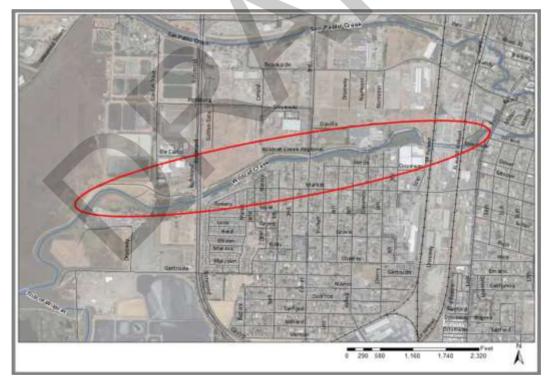
FUNDING SOURCE(S): FC Zone 7, TBD

TOTAL PROJECT COST: \$40,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
PROJECT EXPENDITURES:	\$0	\$0	\$0	\$20,000	\$0	\$0	\$20,000
FUNDING SOURCE(S):							
Flood Control Zone 7		\$0	\$0	\$20,000	\$0	\$0	\$20,000

LOCATION: Richmond



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): NO

NOTE:

August 2018 2 / 43

PROJECT NAME: Wildcat Sediment Basin Desilt

WORK ORDER: WO TBD ID: 5

PROJECT DESCRIPTION: Remove accumulated sediment from the Wildcat Creek Sediment Basin and stockpile on adjacent storage site for

later off haul.

PROJECT NEED: The Wildcat Creek sediment basin is designed to trap sediment and prevent sediment accumulation in more sensitive

areas downstream. If it is not periodically desilted, the basin becomes less effective and sediment escapes

downstream.

SUPERVISOR DISTRICT: I

PROGRAM TYPE: System Preservation

PROJECT PRIORITY: 2

FUNDING SOURCE(S): Flood Control Zone 7, Unfunded

TOTAL PROJECT COST: \$900,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
PROJECT EXPENDITURES:	\$0	\$300,000	\$0	\$0	\$300,000	\$0	\$0
FUNDING SOURCE(S):							
Flood Control Zone 7	\$0	\$27,000	\$0	\$0	\$27,000	\$0	\$0
Unfunded	\$0	\$273,000	\$0	\$0	\$273,000	\$0	\$0

LOCATION: Richmond



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): NO

NOTE: Basin was last desilted in 2010-2011.

August 2018 3 / 43

PROJECT NAME: DA 73 Drainage Plan Update - Richmond

WORK ORDER: WO TBD ID: 10

PROJECT DESCRIPTION: Update the Drainage Area 73 Drainage Plan to reflect community needs

PROJECT NEED: Drainage Area 73 has an outdated plan, and it does not reflect current drainage needs. In collaboration with the City

of Richmond and community stakeholders, this project will develop an updated drainage plan and a list of drainage

projects to accommodate current drainage needs.

SUPERVISOR DISTRICT: I

PROGRAM TYPE: System Expansion

PROJECT PRIORITY: 3

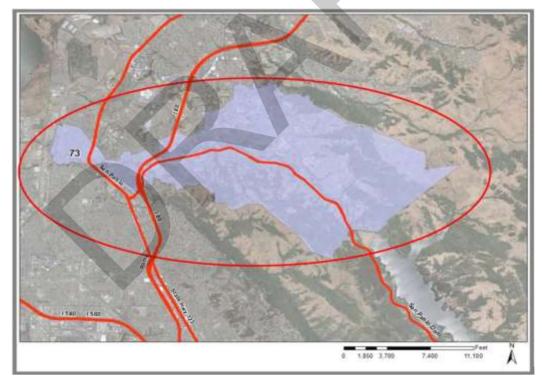
FUNDING SOURCE(S): Drainage Area 73

TOTAL PROJECT COST: \$50,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
PROJECT EXPENDITURES:	\$0	\$0	\$0	\$50,000	\$0	\$0	\$0
FUNDING SOURCE(S):							
Drainage Area 73	\$0	\$0	\$0	\$50,000	\$0	\$0	\$0

LOCATION: Richmond



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): NO

NOTE:

August 2018 4 / 43

PROJECT NAME: San Pablo Conditions Assessment

WORK ORDER: WO TBD ID: 18

PROJECT DESCRIPTION: Hire specialized consultants to assess conditions of existing facilities. Two-phase approach: start with initial

assessment, and proceed to more detailed assessment as warranted.

PROJECT NEED: Need to identify deficiencies and conduct a retrofit plan, if needed.

SUPERVISOR DISTRICT: | & ||

PROGRAM TYPE: System Preservation

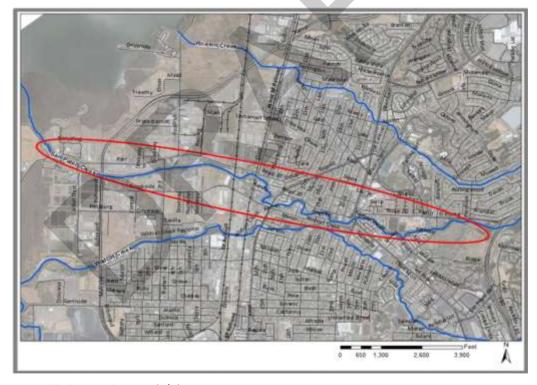
PROJECT PRIORITY: 1

FUNDING SOURCE(S): Unfunded TOTAL PROJECT COST: \$20,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
PROJECT EXPENDITURES:	\$0	\$0	\$20,000	\$0	\$0	\$0	\$0
FUNDING SOURCE(S):							
Unfunded	\$0	\$0	\$20,000	\$0	\$0	\$0	\$0

LOCATION: Richmond, El Sobrante, and San Pablo, Community of North Richmond



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): No

NOTE:

August 2018 5 / 43

PROJECT NAME: Wildcat Conditions Assessment

WORK ORDER: WO TBD ID: 19

PROJECT DESCRIPTION: Hire specialized consultants to assess conditions of existing facilities. Two-phase approach: start with initial

assessment, and proceed to more detailed assessment as warranted.

PROJECT NEED: Need to identify deficiencies and conduct a retrofit plan, if needed.

SUPERVISOR DISTRICT: I

PROGRAM TYPE: System Preservation

PROJECT PRIORITY: 1

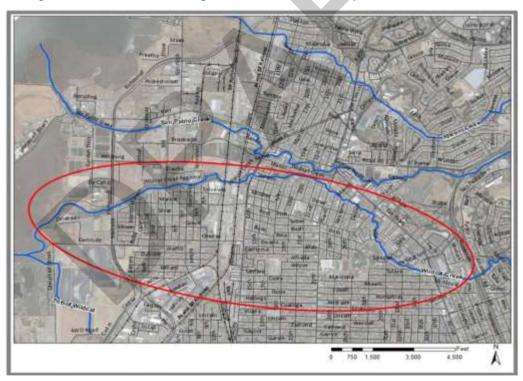
FUNDING SOURCE(S): Flood Control District Fund 7505

TOTAL PROJECT COST: \$20,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
PROJECT EXPENDITURES:	\$0	\$0	\$20,000	\$0	\$0	\$0	\$0
FUNDING SOURCE(S):							
Unfunded	\$0	\$0	\$20,000	\$0	\$0	\$0	\$0

LOCATION: Kensington, Richmond, E. Richmond Heights, San Pablo, and Community of N. Richmond



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): NO

NOTE:

August 2018 6 / 43

PROJECT NAME: Rodeo Conditions Assessment

WORK ORDER: WO TBD ID: 20

PROJECT DESCRIPTION: Hire specialized consultants to assess conditions of existing facilities. Two-phase approach: start with initial

assessment, and proceed to more detailed assessment as warranted.

PROJECT NEED: Need to identify deficiencies and conduct a retrofit plan, if needed.

SUPERVISOR DISTRICT: V

PROGRAM TYPE: System Preservation

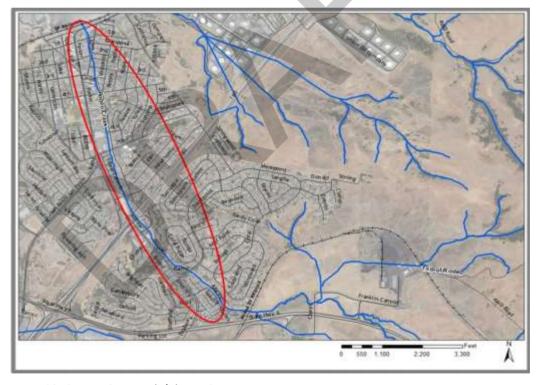
PROJECT PRIORITY: 1

FUNDING SOURCE(S): Unfunded TOTAL PROJECT COST: \$125,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
PROJECT EXPENDITURES:	\$0	\$80,000	\$0	\$0	\$0	\$0	\$0
FUNDING SOURCE(S): Unfunded	\$0	\$80,000	\$0	\$0	\$0	\$0	\$0

LOCATION: The Cities of Rodeo and Hercules



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): NO

NOTE: Prior year expenditures not shown.

August 2018 7 / 43

PROJECT NAME: DA46 Grayson and Murderer's Creek Subregional Improvements

WORK ORDER: TBD ID: 106

PROJECT DESCRIPTION: In partnership with the City of Pleasant Hill, the project will identify, design and implement sub-regional drainage

improvements in the Grayson / Murderer's Creeks subwatershed. Likely projects are capacity improvements at bridges, floodwalls along sections of creek, and collector storm drains to more efficiently deliver stormwater to the

creek.

PROJECT NEED: Downtown Pleasant Hill and Poet's Corner areas are identified on the FEMA maps as having moderate flood risk.

Area flooded in 1997 and again in 2006. City desires a project to take residents out of the floodplain. Early indications from the Corps study were favorable, but project ultimately did not have a sufficient benefit / cost ratio,

or federal funding. This local, smaller project is the result.

SUPERVISOR DISTRICT: IV

PROGRAM TYPE: System Expansion

PROJECT PRIORITY: 2

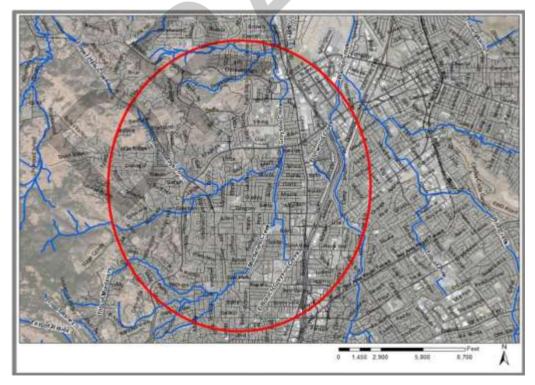
FUNDING SOURCE(S): Drainage Area 46 funds + City of Pleasant Hill funds

TOTAL PROJECT COST: \$1,188,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

.7/18 FY 1	8/19 FY 19/20	FY 20/21	FY 21/22 F	Y 22/23 F	Y 23/24
\$0 \$	\$0 \$0	\$528,000	\$660,000	\$0	\$0
\$0 \$	0 \$0	\$528,000	\$626,000	\$0	\$0
\$0 \$	0 \$0	\$0	\$34,000	\$0	\$0
	\$0 \$	\$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$528,000 \$0 \$0 \$0 \$528,000	\$0 \$0 \$0 \$528,000 \$660,000 \$0 \$0 \$0 \$528,000 \$626,000	\$0 \$0 \$0 \$528,000 \$660,000 \$0 \$0 \$0 \$0 \$528,000 \$626,000 \$0

LOCATION: Pleasant Hill



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): NO

NOTE: DA46 plan amendment needed before implementation of this project.

August 2018 8 / 43

PROJECT NAME: Grayson Creek Levee Rehabilitation at CCCSD Treatment Plant

WORK ORDER: 8348 ID: 107

PROJECT DESCRIPTION: Raise levees along Grayson Creek along STA 8+00 to 39+00 LT to improve level of protection at CCCSD treatment

plant.

PROJECT NEED: Additional flood protection is desired at the CCCSD Treatment Plant from Grayson Creek. This is in addition to the

2007 project that increased flood protection to a 100-year design storm level.

SUPERVISOR DISTRICT: V

PROGRAM TYPE: <u>System Preservation</u>

PROJECT PRIORITY: 1

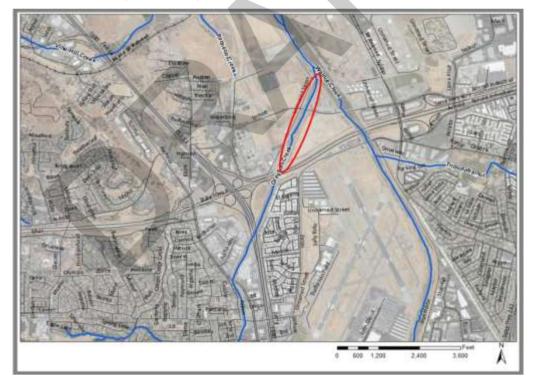
FUNDING SOURCE(S): Flood Control Zone 3B and CCCSD

TOTAL PROJECT COST: \$2,572,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
PROJECT EXPENDITURES:	\$280,000	\$292,000	\$1,800,000	\$200,000	\$0	\$0	\$0
FUNDING SOURCE(S):							
Flood Control Zone 3B	\$140,000	\$146,000	\$900,000	\$100,000	\$0	\$0	\$0
Other	\$140,000	\$146,000	\$900,000	\$100,000	\$0	\$0	\$0

LOCATION: Martinez area, Unincorporated County



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): NO

NOTE:

August 2018 9 / 43

PROJECT NAME: Grayson Creek Channel Fence Rehabilitation

WORK ORDER: WO TBD ID: 108

PROJECT DESCRIPTION: Repair Fences along Grayson Creek concrete channel as part of our Creek and Channel Safety Program

PROJECT NEED: Existing fence posts are starting to rust and spalling concrete from the channel wall. This project would renovate

existing fence posts and fence, rehabilitate the damaged concrete wall, and replace the failing fence with new material. This project would extend the useful life of the protective fenceline, as well as preventing further

deterioration of the concrete wall as part of our Creek and Channel Safety Program.

SUPERVISOR DISTRICT: IV

PROGRAM TYPE: Public Safety

PROJECT PRIORITY: 3

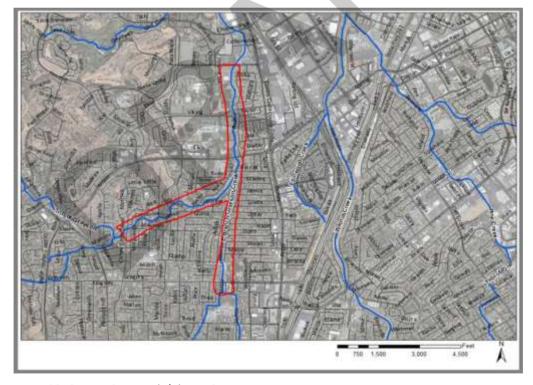
FUNDING SOURCE(S): Flood Control Zone 3B

TOTAL PROJECT COST: \$500,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
PROJECT EXPENDITURES:	\$0	\$0	\$0	\$500,000	\$0	\$0	\$0
FUNDING SOURCE(S):							
Flood Control Zone 3B	\$0	\$0	\$0	\$500,000	\$0	\$0	\$0

LOCATION: Pleasant Hill



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): NO

NOTE:

August 2018 10 / 43

PROJECT NAME: Grayson Creek Sediment Removal

WORK ORDER: 8334 ID: 109

PROJECT DESCRIPTION: Remove accumulated sediment from Grayson creek between confluence with Walnut Creek to Chilpancingo Parkway

(about 9,000 linear feet in selected areas)

PROJECT NEED: Remove accumulated sediment to restore design flood capacity of the channel. Exact areas to be desilted will be

determined with a pre-design topographic silt survey.

SUPERVISOR DISTRICT: IV & V

PROGRAM TYPE: System Preservation

PROJECT PRIORITY: 1

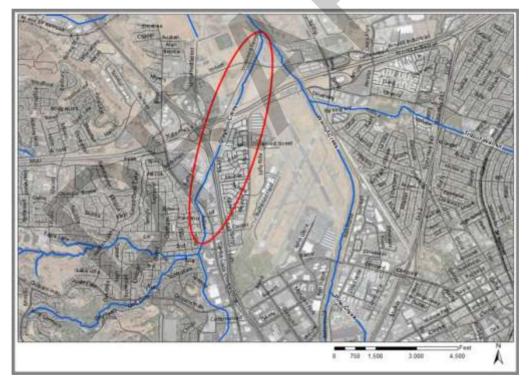
FUNDING SOURCE(S): Flood Control Zone 3B

TOTAL PROJECT COST: \$2,005,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
PROJECT EXPENDITURES:	\$20,000	\$125,000	\$1,860,000	\$0	\$0	\$0	\$0
FUNDING SOURCE(S):							
Flood Control Zone 3B	\$20,000	\$125,000	\$1,860,000	\$0	\$0	\$0	\$0

LOCATION: Pleasant Hill, Pacheco



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): NO

NOTE: Portions of this area was last desilted in 2006. Effort shared with Walnut Creek desilt (#118)

August 2018 11 / 43

PROJECT NAME: Lower Walnut Creek Restoration Project

WORK ORDER: 8285 ID: 110

PROJECT DESCRIPTION: Transform Lower Walnut Creek from an antiquated, difficult to maintain, legacy USACE facility into a sustainable,

environmentally sensitive facility for the next 50 years. Project includes modification of project levees, acquisition of flowage easements and possible reconfiguration of the channel conveyance to better accommodate sediment and

habitat.

PROJECT NEED: The Lower Walnut Creek project incorporates a new way of approaching the traditional methods of operating and

maintaining a flood control facility. This alternative approach moves away from the single purpose, flood protection USACE design, to a sustainable, environmentally sensitive plan that will restore appropriate floodplains and habitat in

the area.

SUPERVISOR DISTRICT: V

PROGRAM TYPE: System Preservation

PROJECT PRIORITY: 1

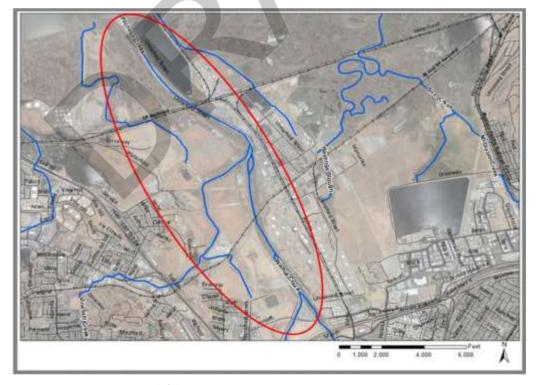
FUNDING SOURCE(S): Flood Control Zone 3B and Regional, State and federal Grant Funds (TBD)

TOTAL PROJECT COST: \$41,630,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
PROJECT EXPENDITURES:	\$340,000	\$692,000	\$762,000	\$13,950,000	\$500,000	\$450,000	\$450,000
FUNDING SOURCE(S):							
Flood Control Zone 3B	\$165,000	\$292,000	\$525,000	\$4,700,000	\$0	\$0	\$0
Grants	\$175,000	\$400,000	\$237,000	\$1,250,000	\$0	\$0	\$0
Unfunded	\$0	\$0	\$0	\$8,000,000	\$500,000	\$450,000	\$450,000

LOCATION: Martinez, Pacheco, Concord



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): NO

NOTE: Signature District project. Prior and future year expenditures not shown. Existing grants received from CDFW and EPA. Anticipated future grants to cover unfunded.

August 2018 12 / 43

PROJECT NAME: Pacheco Marsh Restoration

WORK ORDER: 8494 ID: 111

PROJECT DESCRIPTION: Project is another name for the North Reach of Lower Walnut Creek (CIP#110.) Pacheco Marsh is unique in that it

has different partners for restoration than the rest of LWC and, as such, is worthy of a separate CIP designation. This project intends to directly follow implementation of LWC Restoration (CIP#110) and will provide recreational

amenities, additional habitat creation and long term stewardship of the site.

PROJECT NEED: A restored Pacheco Marsh will provide 126 acres of quality habitat for a number of rare and endangered species, as

well as passive recreation amenities.

SUPERVISOR DISTRICT: V

PROGRAM TYPE: System Expansion

PROJECT PRIORITY: 1

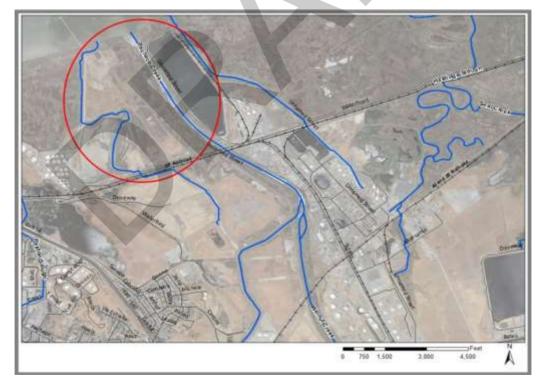
FUNDING SOURCE(S): Flood Control Zone 3B + funds from EBRPD, John Muir Land Trust, and future state and federal grants (TBD)

TOTAL PROJECT COST: \$10,895,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
PROJECT EXPENDITURES:	\$0	\$0	\$0	\$75,000	\$5,675,000	\$0	\$0
FUNDING SOURCE(S):							
Flood Control Zone 3B	\$0	\$0	\$0	\$75,000	\$75,000	\$0	\$0
Unfunded	\$0	\$0	\$0	\$0	\$5,600,000	\$0	\$0

LOCATION: Martinez



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): NO

NOTE: reference "Pacheco Marsh Public Access Plan-draft Vision Concepts", Alternative B (Placeworks. 4/102017) for details. Anticipate John Muir Land Trust funds to cover unfunded amount.

August 2018 13 / 43

PROJECT NAME: Update DA 10 for Danville Area

WORK ORDER: 8302 ID: 113

PROJECT DESCRIPTION: Update Drainage Area 10 Plan for Danville and develop a project for implementing the remaining elements of the

drainage area plan in coordination with the Town of Danville

PROJECT NEED: This project is needed to update existing drainage plan and determine future drainage improvements and related

costs.

SUPERVISOR DISTRICT: II

PROGRAM TYPE: <u>System Preservation</u>

PROJECT PRIORITY: 4

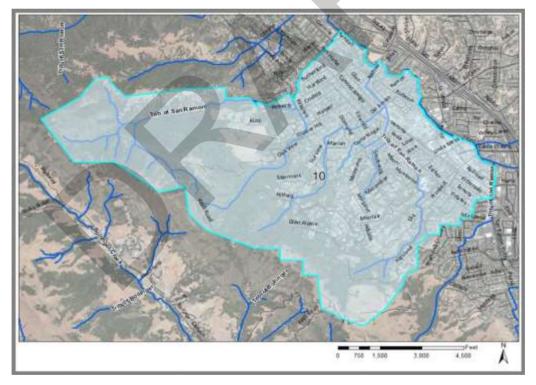
FUNDING SOURCE(S): Drainage Area funds

TOTAL PROJECT COST: \$86,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
PROJECT EXPENDITURES:	\$0	\$0	\$17,000	\$0	\$0	\$0	\$0
FUNDING SOURCE(S):							
Drainage Area 10	\$0	\$0	\$17,000	\$0	\$0	\$0	\$0

LOCATION: Danville



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): YES

NOTE: Prior year expenditures not shown.

August 2018 14 / 43

PROJECT NAME: Update DA 13 Plan for Western Alamo

WORK ORDER: 8303 ID: 114

PROJECT DESCRIPTION: Update the DA13 drainage plan and related costs

PROJECT NEED: The adopted DA13 plan is old, and it does not reflect the current needs of the community. This project would update

the plan so it is relevant, current, and ensures DA13 fees and ad valorem revenue are adequate to implement the

needed capital projects.

SUPERVISOR DISTRICT: II

PROGRAM TYPE: <u>System Preservation</u>

PROJECT PRIORITY: 3

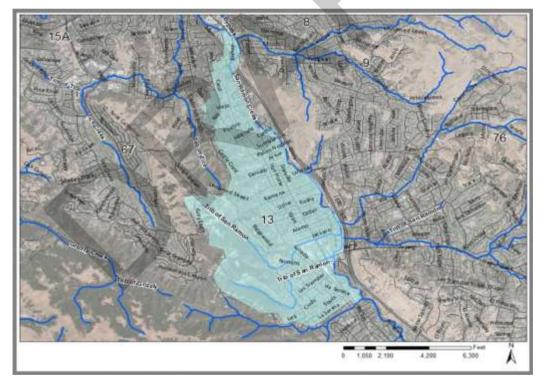
FUNDING SOURCE(S): Drainage Area 13 ad-valorem tax and drainage fee funds

TOTAL PROJECT COST: \$174,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
PROJECT EXPENDITURES:	\$0	\$33,000	\$0	\$0	\$0	\$0	\$0
FUNDING SOURCE(S):							
Drainage Area 13	\$0	\$33,000	\$0	\$0	\$0	\$0	\$0

LOCATION: Alamo



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): No

NOTE: Prior year expenditures not shown.

August 2018 15 / 43

PROJECT NAME: Walnut Creek Sediment Removal - Clayton Valley Drain to Drop Structure 1

WORK ORDER: 8334 ID: 118

PROJECT DESCRIPTION: Remove accumulated sediment from upland benches in Walnut Creek to restore channel capacity and restore

wetlands

PROJECT NEED: Remove accumulated sediment to restore design flood capacity of the channel. Exact areas to be desilted will be

determined with a pre-design topographic silt survey.

SUPERVISOR DISTRICT: IV

PROGRAM TYPE: <u>System Preservation</u>

PROJECT PRIORITY: 1

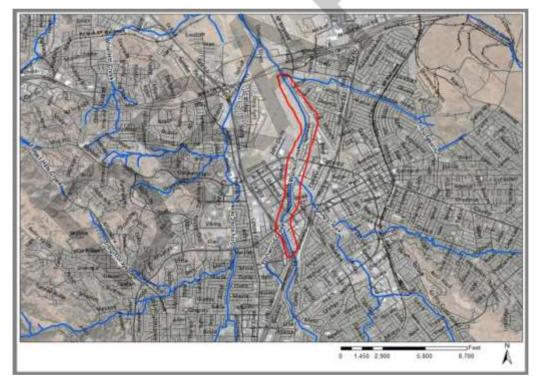
FUNDING SOURCE(S): Flood Control Zone 3B

TOTAL PROJECT COST: \$4,525,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
PROJECT EXPENDITURES:	\$50,000	\$125,000	\$4,250,000	\$100,000	\$0	\$0	\$0
FUNDING SOURCE(S):							
Flood Control Zone 3B	\$50,000	\$125,000	\$4,250,000	\$100,000	\$0	\$0	\$0

LOCATION: Concord, Pleasant Hill



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): NO

NOTE: Effort shared with Grayson desilt (#109)

August 2018 16 / 43

PROJECT NAME: Kubicek Basin Sediment Removal

WORK ORDER: WO TBD ID: 121

PROJECT DESCRIPTION: Remove sediment and restore habitat to ensure basin continues to function as designed

PROJECT NEED: The Pine Creek Detention Basin -- now known as the Kubicek Basin -- was designed for sediment storage. This

sediment needs to be periodically removed to ensure proper functioning of the basin. Sediment has not been

removed since the basin was constructed in the 1970s.

SUPERVISOR DISTRICT: IV

PROGRAM TYPE: <u>System Preservation</u>

PROJECT PRIORITY: 3

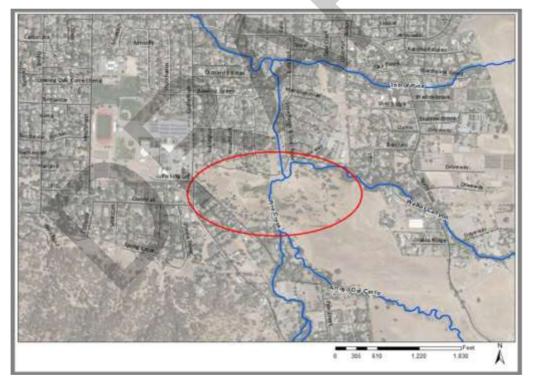
FUNDING SOURCE(S): Flood Control Zone 3B

TOTAL PROJECT COST: \$88,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
PROJECT EXPENDITURES:	\$0	\$0	\$0	\$0	\$40,000	\$0	\$0
FUNDING SOURCE(S):							
Flood Control Zone 3B	\$0	\$0	\$0	\$0	\$40,000	\$0	\$0

LOCATION: Walnut Creek, Concord



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): NO

NOTE: Prior year expenditures not shown.

August 2018 17 / 43

PROJECT NAME: Pine Creek Dam Seismic Assessment

WORK ORDER: 8346 ID: 122

PROJECT DESCRIPTION: Hire specialized consultant to assess seismic performance of existing dam and recommend retrofit improvements.

Two-phase approach: start with hazard assessment, and proceed to more detailed geotechnical analysis if warranted.

PROJECT NEED: This project would identify deficiencies and conduct a retrofit plan, if needed.

SUPERVISOR DISTRICT: IV

PROGRAM TYPE: System Preservation

PROJECT PRIORITY: 3

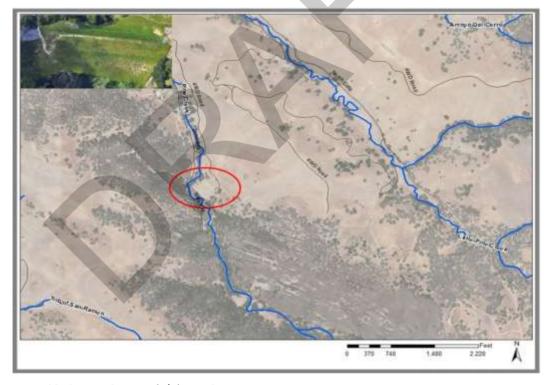
FUNDING SOURCE(S): Flood Control Zone 3B

TOTAL PROJECT COST: \$300,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
PROJECT EXPENDITURES:	\$0	\$0	\$0	\$110,000	\$190,000	\$0	\$0
FUNDING SOURCE(S):							
Flood Control Zone 3B	\$0	\$0	\$0	\$110,000	\$190,000	\$0	\$0

LOCATION: Walnut Creek, Unincorporated County



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): NO

NOTE:

August 2018 18 / 43

PROJECT NAME: Pine Creek Reservoir Functional Assessment

WORK ORDER: WO TBD ID: 123

PROJECT DESCRIPTION: Conduct a assessment of the existing Pine Creek Dam to ensure it meets DSOD standards and still provides the proper

hydraulic performance. Verify hydrologic design assumptions and compare to current development plans of the watershed. Determine if the downstream Kubicek Basin can hydraulically handle a situation where the Pine Creek

Dam is removed and not replaced.

PROJECT NEED: Pine Creek dam is an older facility; need to ensure it meets current safety standards and rehabilitate if needed. This

project would cover assessment only, and will be revisited if significant rehabilitation is found to be necessary.

SUPERVISOR DISTRICT: IV

PROGRAM TYPE: <u>System Preservation</u>

PROJECT PRIORITY: 3

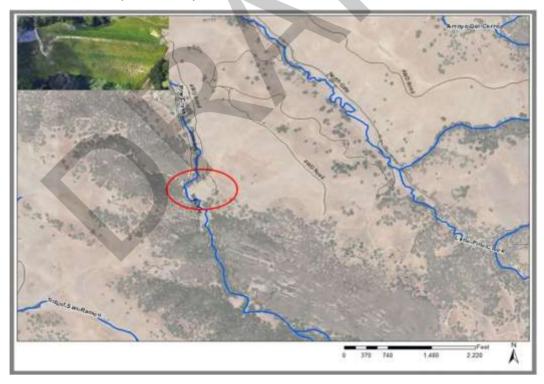
FUNDING SOURCE(S): Flood Control Zone 3B

TOTAL PROJECT COST: \$143,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
PROJECT EXPENDITURES:	\$0	\$0	\$143,000	\$0	\$0	\$0	\$0
FUNDING SOURCE(S):							
Flood Control Zone 3B	\$0	\$0	\$143,000	\$0	\$0	\$0	\$0

LOCATION: Walnut Creek, Unincorporated County



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): NO

NOTE: Assessment only; rehabilitation not included. Seismic evaluation is covered under a separate CIP entry because seismic work will likely be combined with other dams.

August 2018 19 / 43

PROJECT NAME: Galindo Creek Improvements

WORK ORDER: WO TBD ID: 127

PROJECT DESCRIPTION: Participate with City of Concord and USACE to construct a stormwater detention basin on Galindo Creek upstream of

Ygnacio Valley Road (CSU East Bay Campus). Basin will be created with a modification to the existing headwall.

PROJECT NEED: This project would reduce flood risk to properties in the floodplain between Ygnacio Valley and the start of the

concrete channel portion of Galindo Creek in the City of Concord. USACE and Concord have completed a federal

reconnaissance study.

SUPERVISOR DISTRICT: IV

PROGRAM TYPE: System Expansion

PROJECT PRIORITY: 5

FUNDING SOURCE(S): Flood Control Zone 3B and the City of Concord

TOTAL PROJECT COST: \$500,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
PROJECT EXPENDITURES:	\$0	\$0	\$0	\$0	\$0	\$20,000	\$480,000
FUNDING SOURCE(S):							
Flood Control Zone 3B	\$0	\$0	\$0	\$0	\$0	\$20,000	\$40,000
Unfunded	\$0	\$0	\$0	\$0	\$0	\$0	\$440,000

LOCATION: Concord



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): NO

NOTE: Assume Concord will be the lead agency for CEQA/permits. Expect larger total project with additional funding by other partners. \$500k is max FC Zone 3B contribution.

August 2018 20 / 43

PROJECT NAME: Flood Control Zone 3B Channels and Structures Conditions Assessment

WORK ORDER: 8353 ID: 130

PROJECT DESCRIPTION: Hire specialized consultants to assess conditions of existing facilities. Two-phase approach: start with initial

assessment, and proceed to more detailed assessment as warranted.

PROJECT NEED: Need to identify deficiencies and conduct a retrofit plan, if needed.

SUPERVISOR DISTRICT: IV & V

PROGRAM TYPE: System Preservation

PROJECT PRIORITY: 1

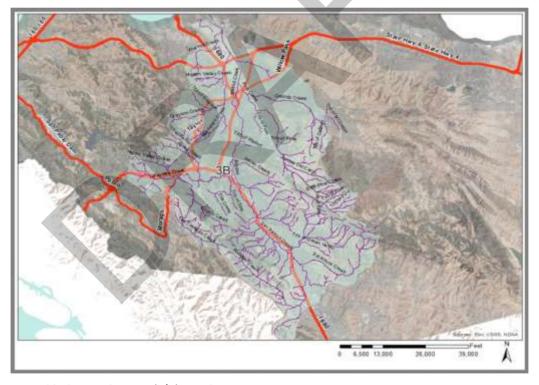
FUNDING SOURCE(S): Flood Control Zone 3B

TOTAL PROJECT COST: \$915,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
PROJECT EXPENDITURES:	\$375,000	\$400,000	\$140,000	\$0	\$0	\$0	\$0
FUNDING SOURCE(S):							
Flood Control Zone 3B	\$375,000	\$400,000	\$140,000	\$0	\$0	\$0	\$0

LOCATION: Pleasant Hill, Walnut Creek, Concord, and unincorporated.



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): NO

NOTE:

August 2018 21 / 43

PROJECT NAME: Canyon Lakes Facilities Conditions Assessment

WORK ORDER: 8361 ID: 132

PROJECT DESCRIPTION: Hire specialized consultants to assess conditions of existing facilities. Two-phase approach: start with initial

assessment, and proceed to more detailed assessment as warranted.

PROJECT NEED: Need to identify deficiencies and conduct a retrofit plan, if needed.

SUPERVISOR DISTRICT: II

PROGRAM TYPE: <u>System Preservation</u>

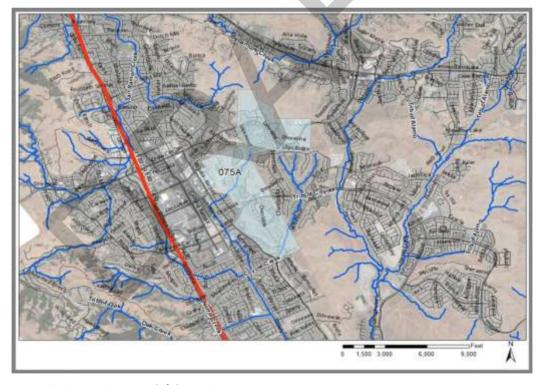
PROJECT PRIORITY: 1

FUNDING SOURCE(S): DABA 75A
TOTAL PROJECT COST: \$100,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
PROJECT EXPENDITURES:	\$10,000	\$90,000	\$0	\$0	\$0	\$0	\$0
FUNDING SOURCE(S):							
Drainage Area 75A	\$10,000	\$90,000	\$0	\$0	\$0	\$0	\$0

LOCATION: The City of San Ramon



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): NO

NOTE:

August 2018 22 / 43

PROJECT NAME: Rassier Ranch Basin Conditions Assessment

WORK ORDER: 8362 ID: 134

PROJECT DESCRIPTION: Hire specialized consultants to assess conditions of existing facilities. Two-phase approach: start with initial

assessment, and proceed to more detailed assessment as warranted.

PROJECT NEED: Need to identify deficiencies and conduct a retrofit plan, if needed.

SUPERVISOR DISTRICT: II

PROGRAM TYPE: <u>System Preservation</u>

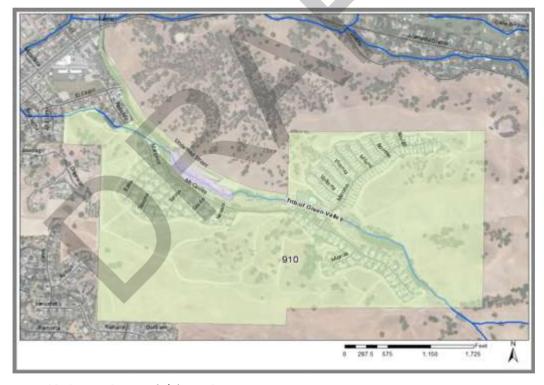
PROJECT PRIORITY: 1

FUNDING SOURCE(S): DABA 910
TOTAL PROJECT COST: \$26,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
PROJECT EXPENDITURES:	\$0	\$26,000	\$0	\$0	\$0	\$0	\$0
FUNDING SOURCE(S):							
Drainage Area 910	\$0	\$26,000	\$0	\$0	\$0	\$0	\$0

LOCATION: Danville



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): NO

NOTE: See #130.

August 2018 23 / 43

PROJECT NAME: Shadow Creek Basin Conditions Assessment

WORK ORDER: WO TBD ID: 136

PROJECT DESCRIPTION: Hire specialized consultants to assess conditions of existing facilities. Two-phase approach: start with initial

assessment, and proceed to more detailed assessment as warranted.

PROJECT NEED: Need to identify deficiencies and conduct a retrofit plan, if needed.

SUPERVISOR DISTRICT: III

PROGRAM TYPE: <u>System Preservation</u>

PROJECT PRIORITY: 1

FUNDING SOURCE(S): DABA 1010A
TOTAL PROJECT COST: \$30,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
PROJECT EXPENDITURES:	\$0	\$30,000	\$0	\$0	\$0	\$0	\$0
FUNDING SOURCE(S): Drainage Area 1010A	\$0	\$30,000	\$0	\$0	\$0	\$0	\$0

LOCATION: Blackhawk



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): NO

NOTE:

August 2018 24 / 43

PROJECT NAME: West Antioch Creek - DA55 Culverts at 10th Street

WORK ORDER: 8399 ID: 202

PROJECT DESCRIPTION: Fund construction of quadruple box culverts on West Antioch Creek at 10th Street by the City of Antioch.

PROJECT NEED: As reported by the City, this section of West Antioch Creek floods annually because of lack of capacity under 10th

Street and through the old Ford Dealer. This project would help alleviate this flooding by constructing culverts with sufficient capacity and will connect to the previously widened channel downstream. The improvement of the

channel upstream of 10th Street is a separate project in this CIP.

SUPERVISOR DISTRICT: V

PROGRAM TYPE: System Expansion

PROJECT PRIORITY: 2

FUNDING SOURCE(S): Local Funds (Drainage Area 55, City funds 50%), State Grants (IRWMP Prop 1E: 50%)

TOTAL PROJECT COST: \$1,800,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
\$827,000	\$280,000	\$0	\$0	\$0	\$0	\$0
\$827,000	\$280,000	\$0	\$0	\$0	\$0	\$0
	\$827,000	\$827,000 \$280,000	\$827,000 \$280,000 \$0	\$827,000 \$280,000 \$0 \$0	\$827,000 \$280,000 \$0 \$0	\$827,000 \$280,000 \$0 \$0 \$0

LOCATION: Antioch



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): YES

NOTE: City of Antioch is functional lead. DA55 contribution capped at \$1.8 million per 2012 agreement with Antioch. (Prior year expenditures not shown.)

August 2018 25 / 43

PROJECT NAME: Trembath Detention Basin

WORK ORDER: 8532 ID: 207

PROJECT DESCRIPTION: Design and construct Trembath Detention Basin. Trembath Basin is a new facility. Trembath Basin will be regulated

by State Division of Dam Safety.

PROJECT NEED: This project is needed to provide flood protection in the lower watershed of East Antioch Creek in accordance with

the adopted Drainage Area 56 (DA 56) plan.

SUPERVISOR DISTRICT: III

PROGRAM TYPE: System Expansion

PROJECT PRIORITY: 2

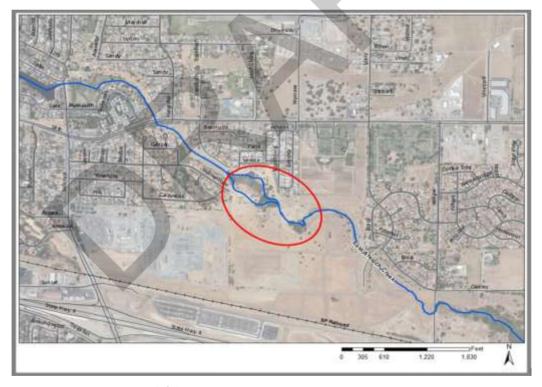
FUNDING SOURCE(S): Drainage Area 56 (Org 7566)

TOTAL PROJECT COST: \$11,690,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
PROJECT EXPENDITURES:	\$90,000	\$225,000	\$1,050,000	\$450,000	\$0	\$0	\$0
FUNDING SOURCE(S):							
Drainage Area 56	\$90,000	\$225,000	\$1,050,000	\$450,000	\$0	\$0	\$0

LOCATION: Antioch



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): YES

NOTE: Prior and future year expenditures not shown.

August 2018 26 / 43

PROJECT NAME: Lindsey Basin Finalization Tasks & R/W Transfer

WORK ORDER: 8126 ID: 208

PROJECT DESCRIPTION: Develop an Operations & Maintenance manual and convey basin right of way to the City of Antioch for perpetual

ownership and maintenance. Generate legal description of property to be conveyed to separate basin from

developable remainder parcels.

PROJECT NEED: This is a completed non-regional facility and needs to be conveyed to the local city for ownership and maintenance.

SUPERVISOR DISTRICT: III

PROGRAM TYPE: <u>System Preservation</u>

PROJECT PRIORITY: 5

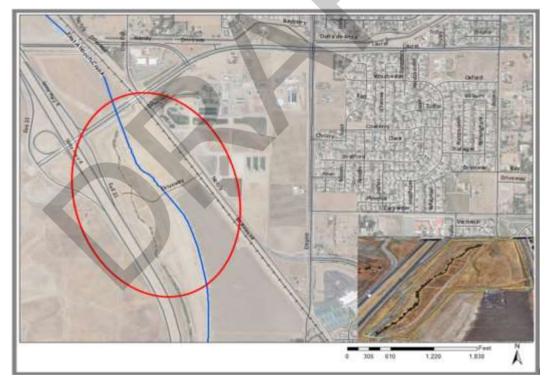
FUNDING SOURCE(S): DA 56 funds (Org 7566)

TOTAL PROJECT COST: \$258,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
PROJECT EXPENDITURES:	\$0	\$0	\$11,000	\$33,000	\$16,000	\$6,000	\$0
FUNDING SOURCE(S): Drainage Area 56	\$0	\$0	\$11,000	\$33,000	\$16,000	\$6,000	\$0

LOCATION: Antioch



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): NO (predates HCP adoption)

NOTE: Basin substantially completed in 2006 as part of Segment 1 of the SR4 Bypass. Still need to construct spillway across future Slaten Ranch Road.(Prior year expenditures not shown.)

August 2018 27 / 43

PROJECT NAME: Develop Revenue Generating Sites at Lindsey Basin

WORK ORDER: WO TBD ID: 209

PROJECT DESCRIPTION: Prepare conceptual plans and a cost estimate for the development of the two District-owned remainder parcels near

the Lindsey Basin. Market the parcels to generate maximum long-term revenue for the Drainage Area and / or the

District.

PROJECT NEED: The Lindsey Detention Basin was designed for future re-use of spoil disposal sites as revenue-generating

development. This project will facilitate this long-planned development. Project timing is a rough estimate; actual

development depends on the commercial real estate market.

SUPERVISOR DISTRICT: III

PROGRAM TYPE: <u>System Preservation</u>

PROJECT PRIORITY: 5

FUNDING SOURCE(S): Drainage Area funds (Org,7566)

TOTAL PROJECT COST: \$593,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
PROJECT EXPENDITURES:	\$0	\$0	\$17,000	\$17,000	\$99,000	\$102,000	\$102,000
FUNDING SOURCE(S):							
Drainage Area 56	\$0	\$0	\$17,000	\$17,000	\$99,000	\$102,000	\$102,000

LOCATION: Antioch



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): NO

NOTE: Future year expenditures not shown.

August 2018 28 / 43

PROJECT NAME: Marsh Creek Reservoir Seismic Assessment

WORK ORDER: 8355 ID: 210

PROJECT DESCRIPTION: Hire specialized consultant to assess seismic performance of existing dam and recommend retrofit improvements, if

needed. Two-phase approach: start with hazard assessment, and proceed to more detailed geotechnical analysis if

warranted.

PROJECT NEED: Need to identify deficiencies and conduct a retrofit plan, if needed.

SUPERVISOR DISTRICT: III

PROGRAM TYPE: System Preservation

PROJECT PRIORITY: 3

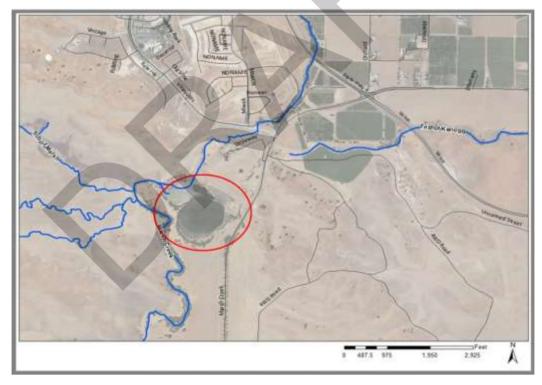
FUNDING SOURCE(S): Flood Control Zone 1

TOTAL PROJECT COST: \$330,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
PROJECT EXPENDITURES:	\$0	\$130,000	\$160,000	\$0	\$0	\$0	\$0
FUNDING SOURCE(S):							
Flood Control Zone 1	\$0	\$130,000	\$160,000	\$0	\$0	\$0	\$0

LOCATION: Brentwood



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): YES

NOTE:

August 2018 29 / 43

PROJECT NAME: Dry Creek Reservoir Seismic Assessment

WORK ORDER: WO TBD ID: 211

PROJECT DESCRIPTION: Hire specialized consultant to assess seismic performance of existing dam embankments and recommend retrofit

improvements, if needed. Two-phase approach: start with hazard assessment, and proceed to more detailed

geotechnical analysis if warranted.

PROJECT NEED: Need to identify deficiencies and conduct a retrofit plan, if needed.

SUPERVISOR DISTRICT: III

PROGRAM TYPE: System Preservation

PROJECT PRIORITY: 3

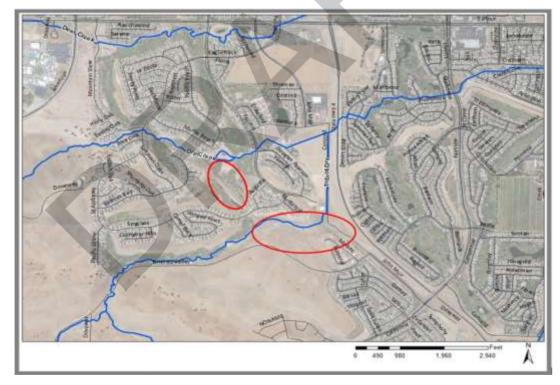
FUNDING SOURCE(S): Flood Control Zone 1

TOTAL PROJECT COST: \$360,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
PROJECT EXPENDITURES:	\$0	\$0	\$0	\$0	\$0	\$140,000	\$210,000
FUNDING SOURCE(S):							
Flood Control Zone 1	\$0	\$0	\$0	\$0	\$0	\$140,000	\$210,000

LOCATION: Brentwood



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): YES

NOTE:

August 2018 30 / 43

PROJECT NAME: Deer Creek Reservoir Seismic Assessment

WORK ORDER: 8355 ID: 212

PROJECT DESCRIPTION: Hire specialized consultant to assess seismic performance of existing dam and recommend retrofit improvements, if

needed. Two-phase approach: start with hazard assessment, and proceed to more detailed geotechnical analysis if

warranted.

PROJECT NEED: Need to identify deficiencies and conduct a retrofit plan, if needed.

SUPERVISOR DISTRICT: III

PROGRAM TYPE: System Preservation

PROJECT PRIORITY: 2

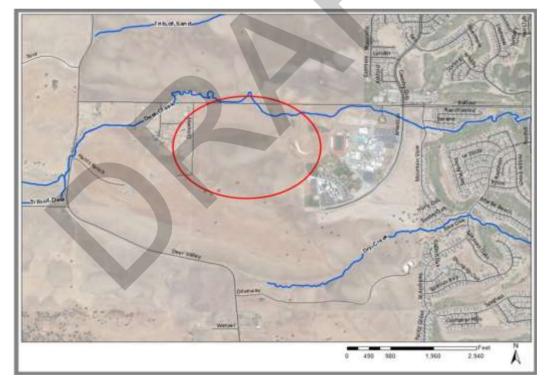
FUNDING SOURCE(S): Flood Control Zone 1

TOTAL PROJECT COST: \$200,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
PROJECT EXPENDITURES:	\$90,000	\$160,000	\$0	\$0	\$0	\$0	\$0
FUNDING SOURCE(S):							
Flood Control Zone 1	\$90,000	\$160,000	\$0	\$0	\$0	\$0	\$0

LOCATION: Brentwood



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): YES

NOTE:

August 2018 31 / 43

PROJECT NAME: Marsh Creek Reservoir Capacity and Habitat Restoration

WORK ORDER: 8495 ID: 213

PROJECT DESCRIPTION: Assess reservoir condition and habitat condition of impoundment area. Develop restoration plan that: maintains or

improves level of flood protection, improves surrounding habitat, is compatible with surrounding state park uses, deals appropriately with accumulated mercury and accommodates mercury that will arrive at the basin in the next 50

years. After proper approvals and CEQA analysis, implement the preferred alternative.

PROJECT NEED: Marsh Creek Reservoir was constructed in 1964 as a single-purpose facility and has reduced flood risks. Now nearing

a half-century of use, the reservoir has poor water quality (impacted by mercury). With the opening of the state park on surrounding lands, there is an increased pressure to allow public access. A comprehensive restoration plan is

needed to guide operations of this facility and development of future projects for the next 50 years.

SUPERVISOR DISTRICT: III

PROGRAM TYPE: System Preservation

PROJECT PRIORITY: 3

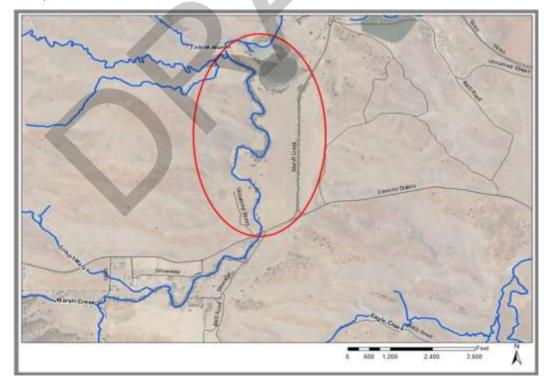
FUNDING SOURCE(S): Flood Control Zone 1, future grant funds

TOTAL PROJECT COST: \$5,500,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
PROJECT EXPENDITURES: FUNDING SOURCE(S):	\$55,521	\$0	\$129,000	\$109,000	\$468,000	\$4,480,000	\$210,000
Flood Control Zone 1	\$55,521	\$0	\$129,000	\$109,000	\$468,000	\$1,500,000	\$210,000
Unfunded	\$0	\$0	\$0	\$0	\$0	\$2,980,000	\$0

LOCATION: Oakley, Brentwood



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): Yes

NOTE: Plan implementation may be delayed depending on other priorities for FC Zone 1 funds, (Future year expenditures not shown.)

August 2018 32 / 43

PROJECT NAME: Marsh Creek Supplemental Capacity

WORK ORDER: WO TBD ID: 215

PROJECT DESCRIPTION: Raise channel banks, levees and construct floodwalls to improve flood protection

PROJECT NEED: A 2010 District study identified the need for additional channel capacity upon ultimate development of the

watershed. This project is needed to ensure 100-year storms are contained in the channel without overtopping and

flooding adjacent neighborhoods.

SUPERVISOR DISTRICT: III

PROGRAM TYPE: System Expansion

PROJECT PRIORITY: 3

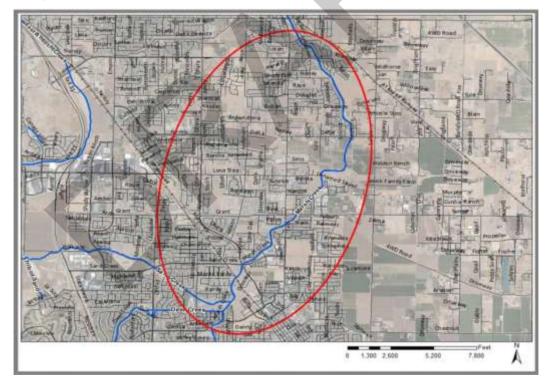
FUNDING SOURCE(S): Flood Control Zone 1, Drainage Area 130, future grant funds

TOTAL PROJECT COST: \$3,664,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
PROJECT EXPENDITURES:	\$0	\$0	\$0	\$0	\$11,000	\$77,000	\$578,000
FUNDING SOURCE(S):							
Drainage Area 130	\$0	\$0	\$0	\$0	\$11,000	\$77,000	\$578,000

LOCATION: Oakley, Brentwood



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): YES

NOTE: See the 2010 study on file to contain 100-year flood flows and contain 50-year flood flows with freeboard. (Future year expenditures not shown.)

August 2018 33 / 43

PROJECT NAME: Marsh Creek Widening Between Dainty Avenue and Sand Creek

WORK ORDER: 8466 ID: 216

PROJECT DESCRIPTION: Widen sections of the Marsh Creek Channel to improve peak flood capacity. Reconstruct access roads / trails, and

construct a large retaining wall along the left bank

PROJECT NEED: Marsh Creek in this vicinity does not have capacity to contain the 100-year event, or the 50-year event with

freeboard. Additional channel capacity is needed. This project is the second phase of the project at Dainty Road (and upstream) that was built in the late 1990s. This project is developed in collaboration with and is part of the

larger Three Creeks Parkway Restoration Project.

SUPERVISOR DISTRICT: III

PROGRAM TYPE: System Expansion

PROJECT PRIORITY: 1

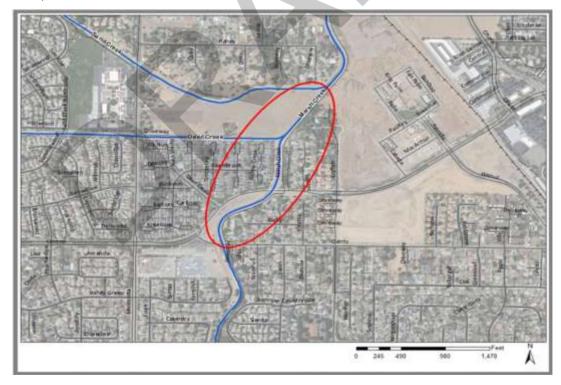
FUNDING SOURCE(S): Flood Control Zone 1 and Drainage Area 130

TOTAL PROJECT COST: \$2,564,800

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
PROJECT EXPENDITURES:	\$52,100	\$200,000	\$1,734,000	\$0	\$0	\$0	\$0
FUNDING SOURCE(S):							
Flood Control Zone 1	\$26,050	\$100,000	\$867,000	\$0	\$0	\$0	\$0
Drainage Area 130	\$26,050	\$100,000	\$867,000	\$0	\$0	\$0	\$0

LOCATION: Oakley, Brentwood



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): YES

NOTE:

August 2018 34 / 43

PROJECT NAME: Deer Creek Reservoir Expansion

WORK ORDER: 8447 ID: 217

PROJECT DESCRIPTION: Excavate the storage area of the existing Deer Creek Reservoir to increase stormwater holding capacity and reduce

flood flows downstream

PROJECT NEED: This project would increase storage capacity of Deer Creek Reservoir to protect downstream properties from

flooding. Work to date has established that it is more beneficial to expand the future storage volume behind the

existing dam by selectively excavating the storage area rather than raising the dam.

SUPERVISOR DISTRICT: III

PROGRAM TYPE: System Preservation

PROJECT PRIORITY: 3

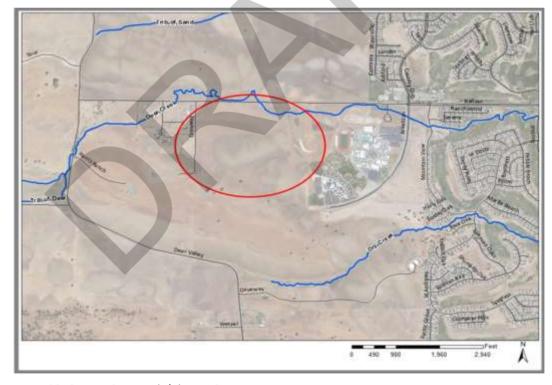
FUNDING SOURCE(S): Drainage Area 130, possible Flood Control Zone 1

TOTAL PROJECT COST: \$6,072,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
PROJECT EXPENDITURES:	\$0	\$0	\$22,000	\$11,000	\$66,000	\$88,000	\$594,000
FUNDING SOURCE(S):							
Drainage Area 130	\$0	\$0	\$22,000	\$11,000	\$66,000	\$88,000	\$594,000

LOCATION: Oakley, Brentwood



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): YES

NOTE:

August 2018 35 / 43

PROJECT NAME: Deer Creek Reservoir Expansion - R/W Acquisition

WORK ORDER: 8463 ID: 218

PROJECT DESCRIPTION: Acquire additional land rights over area currently encumbered only by a flowage easement. This is needed for

expansion of the storage area of the Deer Creek Reservoir, located south of Balfour Road in Brentwood.

PROJECT NEED: Need to retain additional stormwater in Deer Creek Reservoir to protect downstream properties. Instead of raising

the dam, the plan is to expand the storage volume behind the existing dam by selectively excavating the storage area. The existing flowage easement is insufficient to do so; need to upgrade flowage easement into a drainage

easement.

SUPERVISOR DISTRICT: III

PROGRAM TYPE: <u>System Preservation</u>

PROJECT PRIORITY: 3

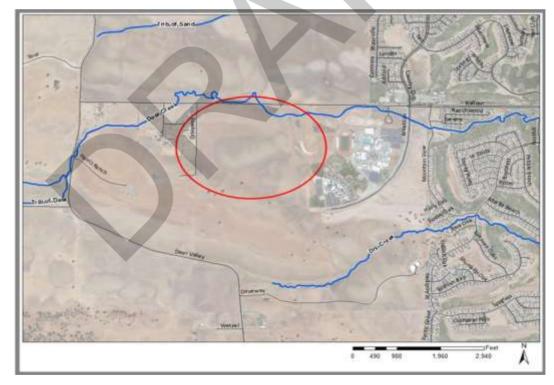
FUNDING SOURCE(S): Drainage Area 130, possible Flood Control Zone 1

TOTAL PROJECT COST: \$214,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
PROJECT EXPENDITURES:	\$0	\$0	\$0	\$28,000	\$149,000	\$0	\$0
FUNDING SOURCE(S):							
Drainage Area 130	\$0	\$0	\$0	\$28,000	\$149,000	\$0	\$0

LOCATION: Brentwood



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): N/A

NOTE:

August 2018 36 / 43

PROJECT NAME: Upper Sand Creek Basin Surplus Material

WORK ORDER: 8517 ID: 220

PROJECT DESCRIPTION: Coordinate removal of Upper Sand Creek Basin material by others, separate from main USCB contract. Includes

material removed in advance of construction as well as material removed post construction. Common customers

include contractors, developers and other agencies needing high quality fill material.

PROJECT NEED: Brokering dirt removal in this way typically represents an excellent value (in cost/yd3) for the District. Interest in

material (and thus cost) is highly dependent on the economy. Each cubic yard of material removed gets the basin

incrementally closer to its ultimate volume at a reduced cost per cubic yard.

SUPERVISOR DISTRICT: III

PROGRAM TYPE: System Expansion

PROJECT PRIORITY: 2

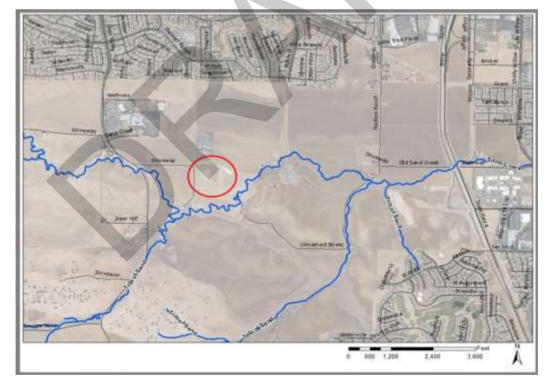
FUNDING SOURCE(S): DA 130, FC Zone 1

TOTAL PROJECT COST: \$458,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
PROJECT EXPENDITURES:	\$10,000	\$72,000	\$11,000	\$66,000	\$11,000	\$66,000	\$11,000
FUNDING SOURCE(S):							
Drainage Area 130	\$10,000	\$72,000	\$11,000	\$66,000	\$11,000	\$66,000	\$11,000

LOCATION: Antioch



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): YES

NOTE: Prior and future expenditures not shown.

August 2018 37 / 43

PROJECT NAME: Lower Sand Creek Basin Construction

WORK ORDER: 8492 ID: 222

PROJECT DESCRIPTION: Construct a 300 ac-ft regional detention basin on Sand Creek. The existing 40 ac-ft basin will be converted into an

300 ac-ft offline basin with new intake structure, primary and emergency spillways, low flow channel and riparian

mitigation area.

PROJECT NEED: In conjunction with the Upper Sand Creek Basin, this lower basin will reduce stormwater flows in Sand Creek and in

Marsh Creek. With the upper basin in place, the 100 year 12 hour flow rate is 1230 cfs. Once completed, the lower

basin will reduce this flow rate to 209 cfs, and provide improved flood protection for Brentwood and Oakley.

SUPERVISOR DISTRICT: III

PROGRAM TYPE: System Expansion

PROJECT PRIORITY: 3

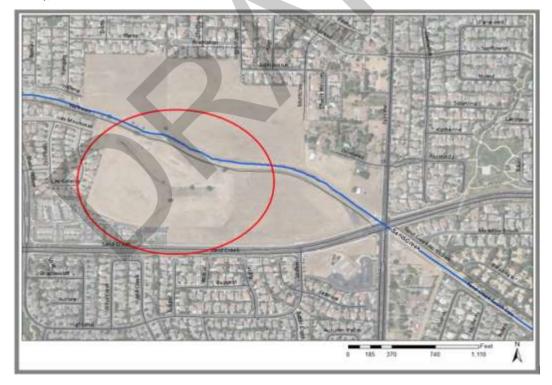
FUNDING SOURCE(S): Drainage Area 130, possible future Federal, State and local grants, Flood Control Zone 1

TOTAL PROJECT COST: \$7,103,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
PROJECT EXPENDITURES:	\$0	\$20,000	\$20,000	\$61,000	\$116,000	\$583,000	\$424,000
FUNDING SOURCE(S):							
Drainage Area 130	\$0	\$20,000	\$20,000	\$61,000	\$116,000	\$583,000	\$424,000

LOCATION: Oakley, Brentwood



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): YES

NOTE:

August 2018 38 / 43

PROJECT NAME: Marsh Creek and Sand Creek Structures Conditions Assessment

WORK ORDER: 8360 ID: 227

PROJECT DESCRIPTION: Hire specialized consultants to assess conditions of existing facilities. Two-phase approach: start with initial

assessment, and proceed to more detailed assessment as warranted.

PROJECT NEED: Need to identify deficiencies and conduct a retrofit plan, if needed.

SUPERVISOR DISTRICT: III

PROGRAM TYPE: <u>System Preservation</u>

PROJECT PRIORITY: 1

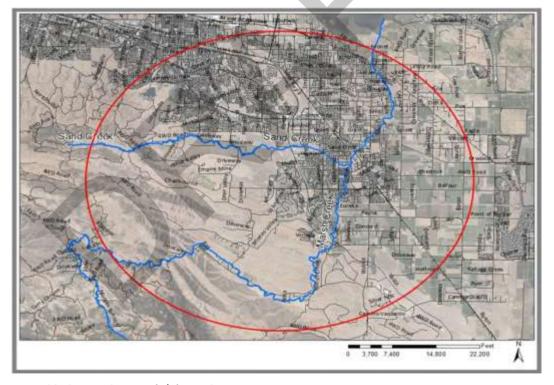
FUNDING SOURCE(S): Flood Control Zone 1

TOTAL PROJECT COST: \$510,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
PROJECT EXPENDITURES:	\$310,000	\$200,000	\$0	\$0	\$0	\$0	\$0
FUNDING SOURCE(S):							
Flood Control Zone 1	\$310,000	\$200,000	\$0	\$0	\$0	\$0	\$0

LOCATION: The Cities of Brentwood and Oakley



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): NO

NOTE:

August 2018 39 / 43

PROJECT NAME: Kellog Conditions Assessment

WORK ORDER: WO TBD ID: 228

PROJECT DESCRIPTION: Hire specialized consultants to assess conditions of existing facilities. Two-phase approach: start with initial

assessment, and proceed to more detailed assessment as warranted.

PROJECT NEED: Need to identify deficiencies and conduct a retrofit plan, if needed.

SUPERVISOR DISTRICT: III

PROGRAM TYPE: System Preservation

PROJECT PRIORITY: 1

FUNDING SOURCE(S): Unfunded TOTAL PROJECT COST: \$23,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
PROJECT EXPENDITURES:	\$23,000	\$0	\$0	\$0	\$0	\$0	\$0
FUNDING SOURCE(S): Unfunded	\$23,000	\$0	\$0	\$0	\$0	\$0	\$0

LOCATION: The Cities of Byron and Discovery Bay



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): NO

NOTE:

August 2018 40 / 43

PROJECT NAME: Marsh Creek Reservoir Emergency Spillway Rehabilitation

WORK ORDER: TBD ID: 232

PROJECT DESCRIPTION: Improve performance of spillway by extending concrete apron to Marsh Creek

PROJECT NEED: To avoid toe erosion upon use of spill way

SUPERVISOR DISTRICT: III

PROGRAM TYPE: System Preservation

PROJECT PRIORITY: 2

FUNDING SOURCE(S): Flood Control Zone 1

TOTAL PROJECT COST: \$1,100,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
PROJECT EXPENDITURES:	\$0	\$0	\$150,000	\$950,000	\$0	\$0	\$0
FUNDING SOURCE(S):							
Flood Control Zone 1	\$0	\$0	\$150,000	\$950,000	\$0	\$0	\$0

LOCATION: Brentwood



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N):

NOTE:

August 2018 41 / 43

PROJECT NAME: San Ramon Creek Watershed Study

WORK ORDER: 8541 ID: 138

PROJECT DESCRIPTION: The Watershed Planning-Engineering group is studying the hydraulics of San Ramon Creek through the use of HEC-

RAS modeling.

PROJECT NEED: The current hydraulics report was created in 1977 and the future hydraulics report will supersede its predecessor.

SUPERVISOR DISTRICT: II

PROGRAM TYPE: System Preservation

PROJECT PRIORITY: 2

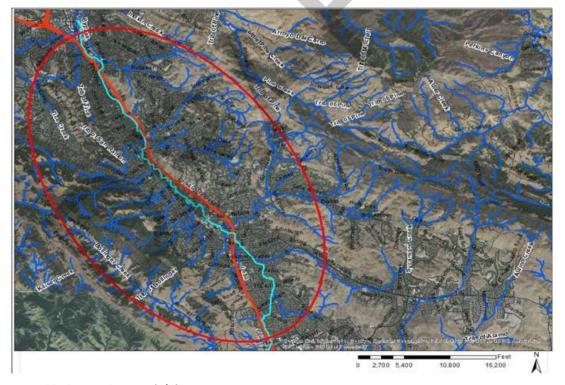
FUNDING SOURCE(S): Flood Control Zone 3B

TOTAL PROJECT COST: \$90,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
PROJECT EXPENDITURES:	\$20,000	\$70,000	\$0	\$0	\$0	\$0	\$0
FUNDING SOURCE(S):							
Flood Control Zone 3B	\$20,000	\$70,000	\$0	\$0	\$0	\$0	\$0

LOCATION: San Ramon



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): N

NOTE: This study is needed to verify the hydraulic performance of the previously improved sections and to gauge the need for future capacity improvements.

August 2018 42 / 43

PROJECT NAME: DA 13 Line F-1 Storm Drainage in Alamo

WORK ORDER: 8303 ID: 139

PROJECT DESCRIPTION:

Construct a drainage line that will connect with the existing drainage network and reduce local flooding issues. The newly created drainage line (Line F-1) will consist of a 30-inch pipe that will run parallel to the Iron Horse Trail Corridor from existing line "F" at Las Trampas Road (1300 ft.), to the intersection of South Avenue. From this point the pipe will extend another 150 ft. to the southwest, to the intersection of South Avenue and La Serena Court (Fig.1). Drainage inlet structures will be placed every 250 feet (as per the County criteria) including: 6 inlets on the Iron Horse Trail, 1 manhole on Las Trampas Road, and 2 inlets in the intersection of South Avenue and La Serena

Court.

PROJECT NEED: To address recurring flooding complications at locations along South Avenue; the intersection of South Avenue and

Wayland Lane, and the intersection of South Avenue and La Serena Court.

SUPERVISOR DISTRICT: II

PROGRAM TYPE: System Expansion

PROJECT PRIORITY: 2

FUNDING SOURCE(S): Drainage Area 13

TOTAL PROJECT COST: \$620,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
PROJECT EXPENDITURES:	\$20,000	\$300,000	\$300,000	\$0	\$0	\$0	\$0
FUNDING SOURCE(S):							
Drainage Area 13	\$20,000	\$300,000	\$300,000	\$0	\$0	\$0	\$0

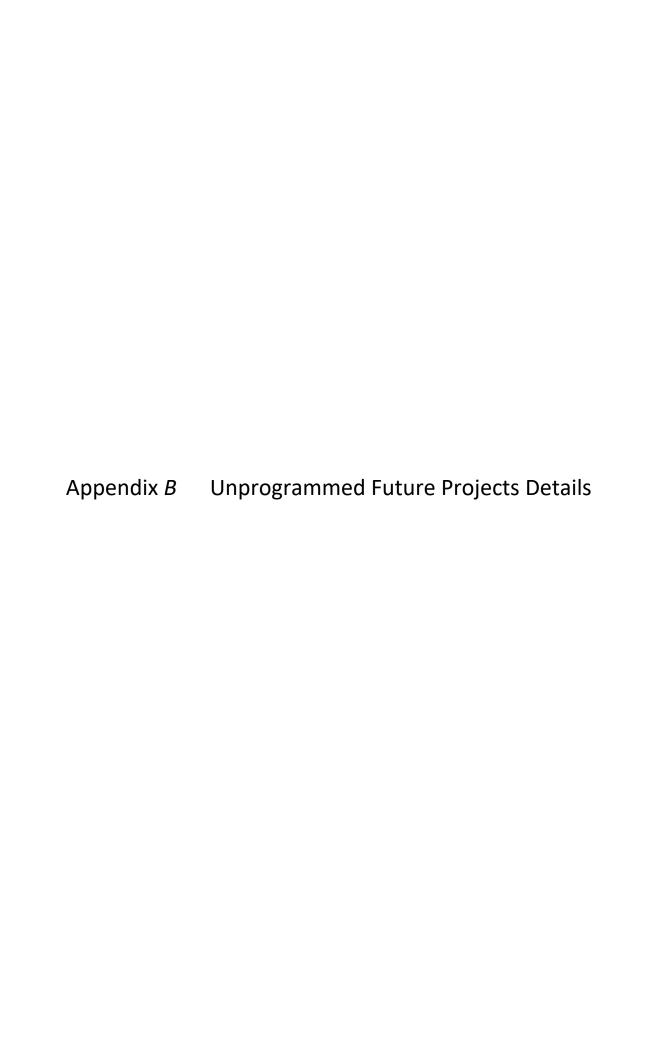
LOCATION: Alamo



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): N

NOTE:

August 2018 43 / 43



PROJECT NAME: Wildcat Creek Habitat Improvements (USACE 1135 Program)

WORK ORDER: 8619 ID: 7

PROJECT DESCRIPTION: Rehabilitate fish ladder, reconfigure and expand sediment basin and improve riparian habitat throughout the limits of

the previous Army Corps of Engineers project.

PROJECT NEED: This project is needed to improve flood control protection and wildlife habitat at Wildcat Creek. The fish ladder at

Wildcat Creek is inoperative and the sediment basin needs to be expanded. Sediment accumulates underneath riparian vegetation that makes its removal impossible. This has reduced the level of flood control protection and increased maintenance costs. The Corps' 1135 program is intended to address these concerns, but progress is

slowed by variable levels of federal funding.

SUPERVISOR DISTRICT:

PROGRAM TYPE: <u>System Preservation</u>

PROJECT PRIORITY: 2

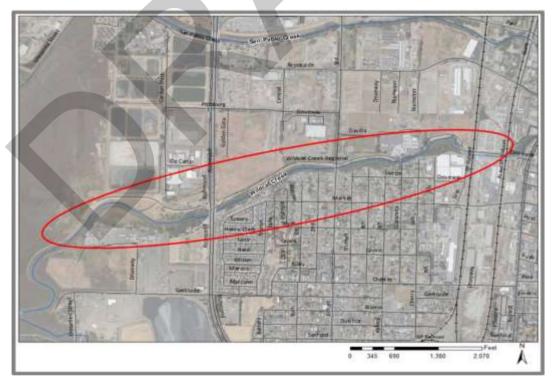
FUNDING SOURCE(S): USACE 1135 Program (75% - \$5M limit)

TOTAL PROJECT COST: \$2,000,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	<u>Future</u>
PROJECT EXPENDITURES:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000,000
FUNDING SOURCE(S):								
Unfunded	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000,000

LOCATION: Richmond



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): NO

NOTE: see also http://www.spn.usace.army.mil/projects/wildcatcreek1135.html. Local match funding is not secured.

August 2018 1 / 17

PROJECT NAME: Wildcat / San Pablo Creeks Phase II

WORK ORDER: WO TBD ID: 9

PROJECT DESCRIPTION: Channel improvements in Wildcat Creek and San Pablo Creek in the City of San Pablo upstream of BNSF railroad tracks

PROJECT NEED: The previous Corps projects stopped at the BNSF railroad. Significant residual flood risk remains in the portions of

San Pablo and Wildcat Creeks in the City of San Pablo upstream of the BNSF railroad. This project would consist of

the coordination needed with the Corps for expansion of the system upstream.

SUPERVISOR DISTRICT:

PROGRAM TYPE: System Expansion

PROJECT PRIORITY: 5

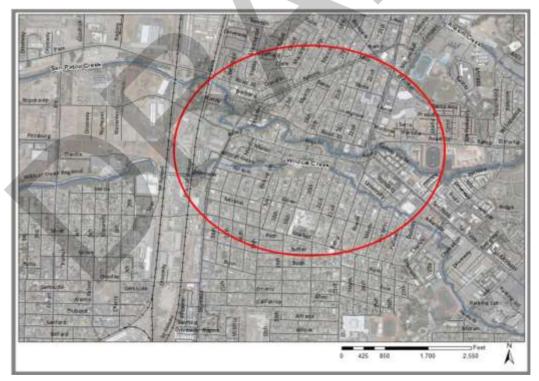
FUNDING SOURCE(S): City of San Pablo, US Army Corps of Engineers

TOTAL PROJECT COST: \$12,045,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	<u>Future</u>
PROJECT EXPENDITURES:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12,045,000
FUNDING SOURCE(S):								
Unfunded	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12,045,000

LOCATION: San Pablo



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): NO

NOTE:

August 2018 2 / 17

PROJECT NAME: Pinole Creek Habitat Restoration (1135 Project)

WORK ORDER: 8493 ID: 12

PROJECT DESCRIPTION: Improve riparian habitat throughout the limits of the previous Army Corps of Engineers project. Remove possible

fish barriers and improve habitat while preserving and expanding flood conveyance. Work within the USACE 1135

Program to ensure federal participation in this project.

PROJECT NEED: The Pinole Creek USACE project is dated and single purpose. Center for Ecosystem Management and Restoration

has identified Pinole Creek as primary steelhead habitat in the west Contra Costa County. Habitat improvements are

needed to ensure migrating steelhead pass successfully through the project area to habitat upstream.

SUPERVISOR DISTRICT: V

PROGRAM TYPE: <u>System Preservation</u>

PROJECT PRIORITY: 5

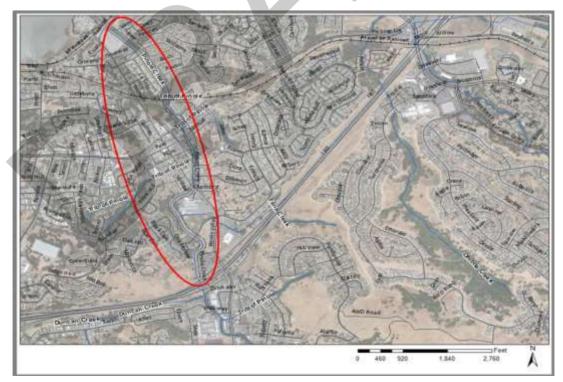
FUNDING SOURCE(S): City of Pinole, USACE 1135 Program (75% - \$5M limit)

TOTAL PROJECT COST: \$6,250,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	<u>Future</u>
PROJECT EXPENDITURES: FUNDING SOURCE(S):	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,250,000
Unfunded	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,250,000

LOCATION: Pinole



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): NO

NOTE:

August 2018 3 / 17

PROJECT NAME: Sustainable Capacity Improvement at Rodeo Creek

WORK ORDER: WO TBD ID: 17

PROJECT DESCRIPTION: Rehabilitate or replace concrete-lined portion of creek to improve conveyance, restore habitat

PROJECT NEED: Rodeo Creek is a 1960s era USACE channel, is devoid of most habitat, and is difficult to keep desilted, especially in the

lowest reach. A new, more sustainable design of the creek is needed, and it has the potential to serve as a catalyst

for further revitalization of the adjacent community. This project would also reduce long term dredging costs.

SUPERVISOR DISTRICT:

PROGRAM TYPE: **System Preservation**

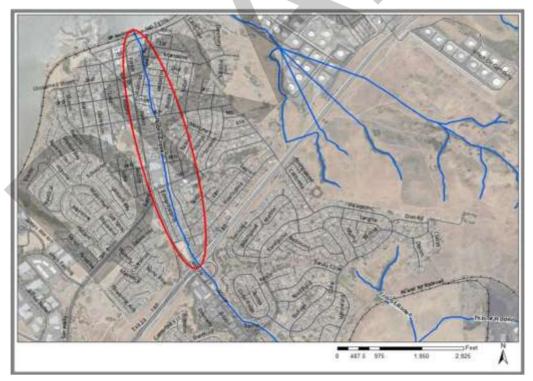
PROJECT PRIORITY:

FUNDING SOURCE(S): Unfunded TOTAL PROJECT COST: \$10,285,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	<u>Future</u>
PROJECT EXPENDITURES:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,285,000
FUNDING SOURCE(S): Unfunded	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,285,000

LOCATION: Rodeo



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N):

NOTE:

August 2018 4/17

PROJECT NAME: DA 67 - Tice Creek Bypass

WORK ORDER: WO TBD ID: 117

PROJECT DESCRIPTION: Construct 66-inch bypass pipe in Tice Valley Boulevard, Meadow Road and Lancaster to provide a bypass for storm

flows in Tice Creek

PROJECT NEED: The 2004 completion of the Rossmoor Detention Basin significantly reduced flood risk for this area providing

approximately a 20-year level of protection from Tice Creek. This long-planned bypass pipe would provide additional

conveyance while allowing Tice Creek to remain in it's natural state.

SUPERVISOR DISTRICT: II

PROGRAM TYPE: System Expansion

PROJECT PRIORITY: 5

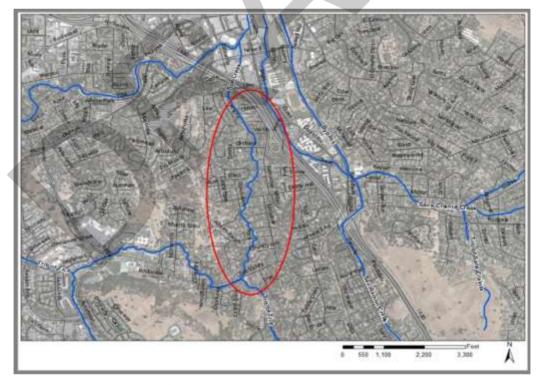
FUNDING SOURCE(S): Grant funds, City of Walnut Creek funds, other funds TBD.

TOTAL PROJECT COST: \$2,481,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	<u>Future</u>
PROJECT EXPENDITURES: FUNDING SOURCE(S):	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,481,000
Unfunded	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,481,000

LOCATION: Walnut Creek, Unincorporated County



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): NO

NOTE:

August 2018 5 / 17

PROJECT NAME: DA 33A Concord Boulevard Culvert Replacement

WORK ORDER: WO TBD ID: 120

PROJECT DESCRIPTION: Replace an undersized 60-inch culvert under Concord Blvd with a 117-inch by 79-inch arch culvert

PROJECT NEED: The existing culvert is undersized and stormwater backs up and inundates Concord Blvd. The replacement culvert

will be able to pass a 25-year storm event, lessening the risk of flooding on Concord Blvd. This is a cooperative project with the City of Concord. Per the 5-24-2005 JEPA, DA 33A will contribute a maximum of 90% of available

funds which is currently approximately \$209k.

SUPERVISOR DISTRICT: IV

PROGRAM TYPE: System Expansion

PROJECT PRIORITY: 4

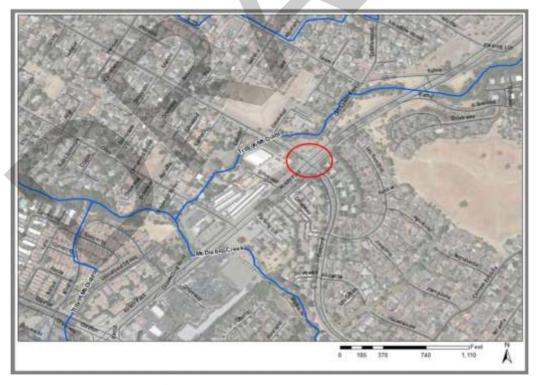
FUNDING SOURCE(S): Drainage Area 33A funds

TOTAL PROJECT COST: \$297,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	<u>Future</u>
PROJECT EXPENDITURES:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$297,000
FUNDING SOURCE(S):								
Drainage Area 33A	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$209,779
Unfunded	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$87,221

LOCATION: Concord



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): NO

NOTE:

August 2018 6 / 17

PROJECT NAME: Pine Creek Reservoir Sediment Removal and Capacity Restoration

WORK ORDER: WO TBD ID: 124

PROJECT DESCRIPTION: Remove accumulated sediment in Pine Creek Reservoir to restore design flood storage capacity. Create wetlands in

new reservoir bottom as mitigation of impacts. Rehabilitate primary and emergency spillways to extend design life.

PROJECT NEED: Another CIP project will first perform a functional assessment to verify continued need for reservoir. If found to still

be needed, then this project will restore design functionality and extend the design life.

SUPERVISOR DISTRICT: IV

PROGRAM TYPE: <u>System Preservation</u>

PROJECT PRIORITY: 4

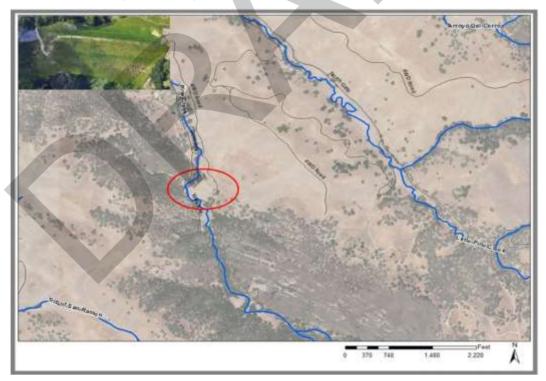
FUNDING SOURCE(S): Flood Control Zone 3B

TOTAL PROJECT COST: \$5,000,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	<u>Future</u>
PROJECT EXPENDITURES: FUNDING SOURCE(S):	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,000,000
Flood Control Zone 3B	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,000,000

LOCATION: Walnut Creek, Unincorporated County



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): NO

NOTE: Seismic evaluation is covered under a separate CIP entry because seismic work will likely be combined with other dams.

August 2018 7 / 17

PROJECT NAME: San Ramon Creek Sediment Removal near San Ramon Bypass

WORK ORDER: WO TBD ID: 125

PROJECT DESCRIPTION: Desilt San Ramon Creek downstream of the San Ramon Bypass diversion structure in Alamo to the bypass channel at

the San Ramon PP Corridor

PROJECT NEED: The San Ramon Creek Bypass Channel has a complex series of weirs allowing both low flows and high flows to

continue down San Ramon Creek. Flows between those extremes are bypassed through the bypass system. The grades in San Ramon Creek downstream of the low flow pipe outfall prevent those low flows from passing into San

Ramon Creek. This project would allow base flows to remain in the natural channel.

SUPERVISOR DISTRICT: IV

PROGRAM TYPE: <u>system Preservation</u>

PROJECT PRIORITY: 4

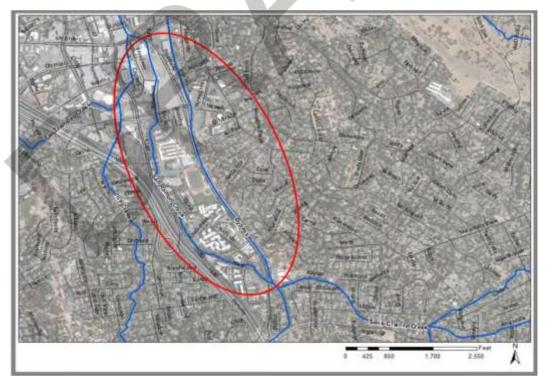
FUNDING SOURCE(S): Flood Control Zone 3B

TOTAL PROJECT COST: \$363,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	<u>Future</u>
PROJECT EXPENDITURES:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$363,000
FUNDING SOURCE(S):								
Flood Control Zone 3B	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$363,000

LOCATION: District IV



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): NO

NOTE:

August 2018 8 / 17

PROJECT NAME: Green Valley Creek Improvements up to 1st Crossing of Diablo Road

WORK ORDER: WO TBD ID: 128

PROJECT DESCRIPTION: Hire specialized consultants to assess conditions of existing facilities. Two-phase approach: start with initial

assessment, and proceed to more detailed assessment as warranted.

PROJECT NEED: The existing channel is incised and lacks the capacity to pass the 100-year flood event. The project is needed to

lower the flood risk to the surrounding neighborhood.

SUPERVISOR DISTRICT: II

PROGRAM TYPE: System Expansion

PROJECT PRIORITY: 4

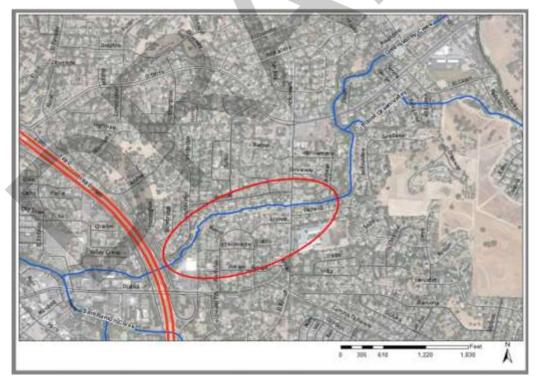
FUNDING SOURCE(S): Flood Control Zone 3B

TOTAL PROJECT COST: \$6,600,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	<u>Future</u>
PROJECT EXPENDITURES: FUNDING SOURCE(S):	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,600,000
Flood Control Zone 3B	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,600,000

LOCATION: Danville



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): NO

NOTE:

August 2018 9 / 17

PROJECT NAME: Green Valley Creek Improvements Upstream of 2nd Crossing of Diablo Road

WORK ORDER: WO TBD ID: 129

PROJECT DESCRIPTION: Hire specialized consultants to assess conditions of existing facilities. Two-phase approach: start with initial

assessment, and proceed to more detailed assessment as warranted.

PROJECT NEED: Green Valley Creek at this location has erosion pressures and capacity issues. Past creek improvements stopped just

downstream. This project will improve erosion and capacity conditions.

SUPERVISOR DISTRICT: II

PROGRAM TYPE: <u>System Preservation</u>

PROJECT PRIORITY: 5

FUNDING SOURCE(S): Flood Control Zone 3B & Town of Danville

TOTAL PROJECT COST: \$2,024,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	<u>Future</u>
PROJECT EXPENDITURES:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,804,000
FUNDING SOURCE(S): Flood Control Zone 3B	ćo	ćo	¢0	¢Ω	¢0	ćo	ćo	¢1 904 000
Flood Control Zone 3B	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,804,000

LOCATION: Danville



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): NO

NOTE:

August 2018 10 / 17

PROJECT NAME: DA 48B Line A at Port Chicago Highway

WORK ORDER: WO TBD ID: 201

PROJECT DESCRIPTION: Design and Construct 595 LF of 84-inch storm drain crossing Port Chicago Highway near Skipper Drive. This is a

portion of DA 48B, Line A.

PROJECT NEED: The existing 60-inch pipe under Port Chicago Highway is undersized and in poor condition. Construction of the

replacement 84-inch storm drain will extend the service life of the facility and reduce flood risk for the surrounding

community.

SUPERVISOR DISTRICT: V

PROGRAM TYPE: <u>System Preservation</u>

PROJECT PRIORITY: 5

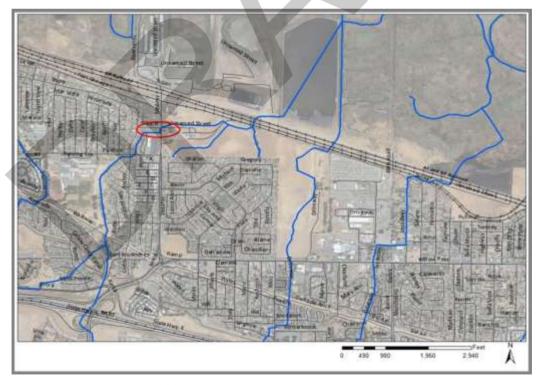
FUNDING SOURCE(S): Contra Costa County Redevelopment, DA 48B

TOTAL PROJECT COST: \$429,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	<u>Future</u>
PROJECT EXPENDITURES: FUNDING SOURCE(S):	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$429,000
Drainage Area 48B	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$429,000

LOCATION: Bay Point



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): NO

NOTE:

August 2018 11 / 17

PROJECT NAME: West Antioch Creek Improvements - L Street to 10th Street

WORK ORDER: WO TBD ID: 203

PROJECT DESCRIPTION: Design and construct channel improvements from the downstream end of "L" Street Crossing to the upstream end of

the 10th Street culverts in conjunction with the City of Antioch

PROJECT NEED: The current channel was constructed only to an interim capacity and currently does not contain a 100-year storm

event. Bottlenecks include the UPRR arch culvert and the narrow channel through the fairgrounds. This project will

need to be constructed prior to constructing the third 10-foot pipe under Highway 4.

SUPERVISOR DISTRICT: V

PROGRAM TYPE: System Expansion

PROJECT PRIORITY: 5

FUNDING SOURCE(S): Drainage Area 55, City of Antioch, Grants, developer funds (upon development of the fairgrounds)

TOTAL PROJECT COST: \$4,906,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	<u>Future</u>
PROJECT EXPENDITURES:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,906,000
FUNDING SOURCE(S): Unfunded	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,906,000

LOCATION: Antioch



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): NO

NOTE: Project needs to proceed before CIP#204.

August 2018 12 / 17

PROJECT NAME: West Antioch Creek Improvements at Highway 4

WORK ORDER: WO TBD ID: 204

PROJECT DESCRIPTION: Complete the storm drain system between "L" Street and Fitzuren Road. Work includes a new headwall

downstream of "L" Street, one 8' by 10' box culvert under "L" Street, a single 10' diameter storm drain up to and under Highway 4 to connect to the exiting 10' pipes just north of Fitzuren Road. This results in a complete, triple 10'

storm drain system.

PROJECT NEED: Caltrans / CCTA has constructed a second bore under the highway as part of freeway widening in 2015. This CIP

project completes the third bore between Fitzuren Road and "L" Street, and should not be constructed until downstream improvements (W. Antioch Creek at 10th Street, and W. Antioch Creek 10th Street to "L" Street) are

constructed. See project #203.

SUPERVISOR DISTRICT: III & V

PROGRAM TYPE: System Expansion

PROJECT PRIORITY: 5

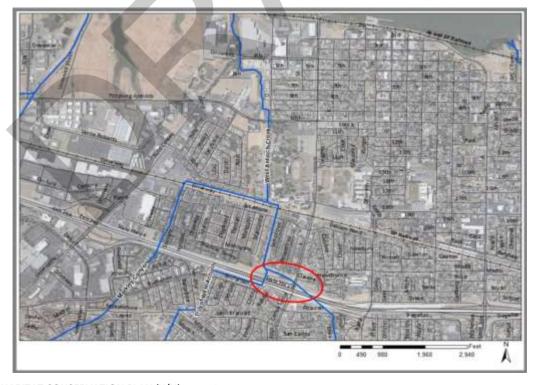
FUNDING SOURCE(S): Drainage Area 55, City of Antioch, Grants

TOTAL PROJECT COST: \$2,200,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	<u>Future</u>
PROJECT EXPENDITURES: FUNDING SOURCE(S):	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,200,000
Unfunded	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,200,000

LOCATION: Antioch



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): YES

NOTE: Project should follow construction of project #203.

August 2018 13 / 17

PROJECT NAME: Fitzuren Road Remainder Parcel

WORK ORDER: WO TBD ID: 205

PROJECT DESCRIPTION: Prepare conceptual plans and facilitate development of three District-owned parcels on Fitzuren Road. Market these

parcels for a commercial use, such as a restaurant or neighborhood retail.

PROJECT NEED: These parcels were purchased in the 1980s to allow the construction of three large storm drains to carry West

Antioch Creek. They were purchased with the intent of developing the unused portion once the storm drains were installed. The storm drain was designed to maximize the unused portion of the parcels and thus maximize the revenue generating potential for the District and DA 55. This project will follow the construction of the final 10'

storm drain through the parcel.

SUPERVISOR DISTRICT: III

PROGRAM TYPE: System Expansion

PROJECT PRIORITY: 5

FUNDING SOURCE(S): Drainage Area 55, Flood Control District

TOTAL PROJECT COST: \$215,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	<u>Future</u>
PROJECT EXPENDITURES: FUNDING SOURCE(S):	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$215,000
Drainage Area 55	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$215,000

LOCATION: Antioch



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): YES

NOTE: Project should follow construction of project #204.

August 2018 14 / 17

PROJECT NAME: East Antioch Creek Marsh Restoration

WORK ORDER: WO TBD ID: 206

PROJECT DESCRIPTION: Design and construct marsh and floodplain improvements on East Antioch Creek downstream of Cavallo Road.

Includes marina outlet channel (or equivalent), hazardous material clean-up on affected portion of Hickmont site,

and three new box culverts under Wilbur Avenue.

PROJECT NEED: Provide flood protection in the lower watershed of East Antioch Creek in accordance with the adopted Drainage Area

56 (DA 56) plan

SUPERVISOR DISTRICT: V

PROGRAM TYPE: System Expansion

PROJECT PRIORITY: 5

FUNDING SOURCE(S): Drainage Area 56

TOTAL PROJECT COST: \$7,585,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	<u>Future</u>
PROJECT EXPENDITURES: FUNDING SOURCE(S):	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,585,000
Unfunded	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,585,000

LOCATION: Antioch



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): Yes

NOTE:

August 2018 15 / 17

PROJECT NAME: DA 109 - Kellogg Creek Project Development

WORK ORDER: TBD ID: 225

PROJECT DESCRIPTION: Re-analyze the Kellogg Creek (Drainage Area 109) Plan and develop projects for future implementation

PROJECT NEED: The current DA 109 plan is conceptual, and while sufficient to collect funds for improvements, the plan lacks the

detail to develop and prioritize projects in the watershed. This effort will re-study the DA 109 plan to define specific

projects for implementation, rank those projects, and then begin implementation in priority order.

SUPERVISOR DISTRICT: III

PROGRAM TYPE: System Expansion

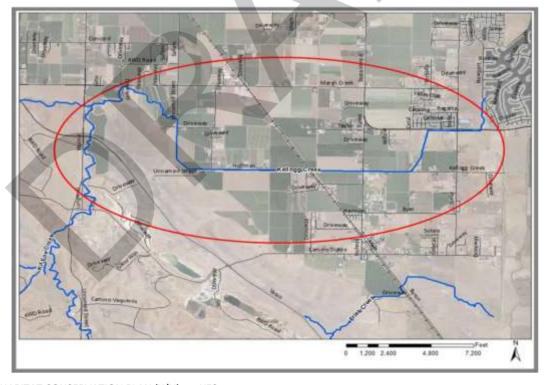
PROJECT PRIORITY: 5

FUNDING SOURCE(S): DA 109 Funds
TOTAL PROJECT COST: \$270,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	<u>Future</u>
PROJECT EXPENDITURES:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$270,000
FUNDING SOURCE(S): Drainage Area 109	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$270,000

LOCATION: Town of Discovery Bay



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N): YES

NOTE:

August 2018 16 / 17

PROJECT NAME: Canada di Cierbo Habitat Improvement

WORK ORDER: WO TBD ID: 23

PROJECT DESCRIPTION: Create a mitigation bank for County and District mitigation needs. Acquire right of way, develop restoration plan,

implement plan and reap benefits.

PROJECT NEED: Public projects often have unavoidable habitat impacts. Often, the remedy is to 'buy in' to a bank which is often

located outside of the county. While this provides habitat mitigation, it does little to actually offset the impacts locally. The west part of CCC is underserved for this type of bank. Canada di Cierbo seeks to remedy this and

provide quality, local mitigation and habitat improvement.

SUPERVISOR DISTRICT: V

PROGRAM TYPE: System Preservation

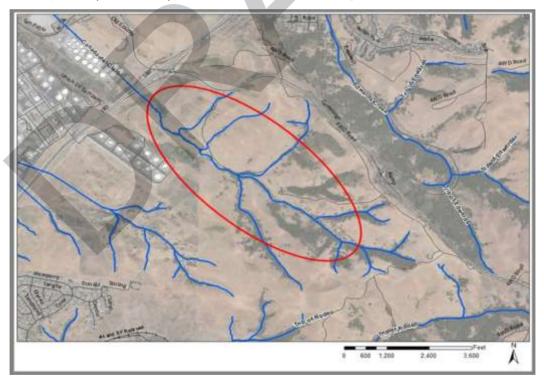
PROJECT PRIORITY: 5
FUNDING SOURCE(S): TBD

TOTAL PROJECT COST: \$3,000,000

PLANNED PROJECT EXPENDITURES AND FUNDING SOURCE(S)

	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	<u>Future</u>
PROJECT EXPENDITURES: FUNDING SOURCE(S):	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,000,000
Unfunded	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,000,000

LOCATION: Crockett, Unincorporated County



EAST COUNTY HABITAT CONSERVATION PLAN (Y/N):

NOTE:

August 2018 17 / 17