

**RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
DESIGN & CONSTRUCTION BUDGET AND FIVE YEAR CIP PROJECT SUMMARY - ZONE 1
FISCAL YEARS 2018-19 THROUGH 2022-23**

Project Number	Stg No.	Project Title	Total Remaining Cost to Deliver Project	Budget Year 1 - FY 2018-19			CIP Years 2 through 5 - FY 2019-23				Total Post-CIP Balance	Total Not District Funded	
				Project Appropriation	Project Specific Funding			Estimated Project Appropriation	Project Specific Funding				
					Tax Revenue	ADP Contrb	Outside Revenue		Tax Revenue	ADP Contrb			Outside Revenue
1-8-00010	90	SANTA ANA RIVER STABILIZATION	\$15,623,805	\$100,000	\$100,000	\$0	\$0	\$15,523,805	\$15,523,805	\$0	\$0	\$0	\$0
1-8-00041	90	BOX SPRINGS DAM OUTLET MODIFICATION	973,368	365,824	365,824	0	0	607,544	607,544	0	0	0	0
1-8-00042	90	SYCAMORE DAM OUTLET MODIFICATION	1,832,483	280,478	280,478	0	0	1,552,005	1,552,005	0	0	0	0
1-8-00045	90	WOODCREST DAM OUTLET MODIFICATION	1,221,818	928,968	928,968	0	0	292,849	292,849	0	0	0	0
1-8-00073	02	MONROE MDP LINE E STG 2 & 3	12,276,104	676,025	676,025	0	0	11,600,079	11,600,079	0	0	0	0
1-8-00220	50	BOX SPRINGS SD-GROUNDWATER RECHARGE	3,346,399	67,407	67,407	0	0	432,593	432,593	0	0	0	(2,846,399)
1-8-00234	01	JURUPA PYRITE MDP LINE A-2	121,469	121,469	121,469	0	0	0	0	0	0	0	0
1-8-09042	00	JURUPA PYRITE 54TH ST DRAINAGE IMPROVEMEN	259,597	43,782	43,782	0	0	215,815	215,815	0	0	0	0
1-8-00043	90	ALESSANDRO DAM OUTLET MODIFICATION	899,208					899,208	899,208	0	0	0	0
1-8-00044	90	PRENDA DAM OUTLET MODIFICATION	1,229,838					1,229,838	1,229,838	0	0	0	0
1-8-00046	90	HARRISON DAM OUTLET MODIFICATION	1,009,418					1,009,418	1,009,418	0	0	0	0
1-8-00071	05	MONROE MDP - MONROE CHANNEL	5,756,553					5,756,553	5,756,553	0	0	0	0
1-8-00102	01	SUNNYSLOPE CHANNEL - PACIFIC AVENUE SD	2,149,099					2,149,099	2,149,099	0	0	0	0
1-8-00180	90	MARY STREET DAM OUTLET MODIFICATION	1,200,728					1,200,728	1,200,728	0	0	0	0
1-8-00240	60	PHOENIX AVENUE SD DRY WEATHER DIVERSION	1,000,000					1,000,000	1,000,000	0	0	0	0
1-8-00250	90	DAY CREEK CH WATER CONSERVATION RESTORA	558,700					558,700	0	558,700	0	0	0
1-8-00289	01	RUBIDOUX-DALY AVE SD	2,998,445					2,998,445	2,998,445	0	0	0	0
1-8-00319	03	SOUTHWEST RIVERSIDE MDP LINE G	537,400					537,400	0	537,400	0	0	0
1-8-09024	00	JURUPA-PYRITE MDP LINE A	500,000					500,000	500,000	0	0	0	0
1-8-09033	00	JURUPA PYRITE MDP LINE A-1	1,708,476					1,708,476	1,708,476	0	0	0	0
1-8-09035	00	PARAMOUNT ESTATES MDP LINES C & C-1	938,972					938,972	938,972	0	0	0	0
1-8-09041	00	BOX SPRINGS MDP LINE N	3,993,670					3,993,670	3,993,670	0	0	0	0
1-8-09043	00	BELLTOWN MDP LINE A	3,343,000					500,000	500,000	0	0	0	(2,843,000)
1-8-09044	00	JURUPA CHANNEL MISSION BLVD SD STG 1 EXT	758,994					758,994	758,994	0	0	0	0
ZONE 1 TOTALS			\$64,237,544	\$2,583,953	\$2,583,953	\$0	\$0	\$55,964,192	\$54,868,092	\$1,096,100	\$0	\$0	(\$5,689,399)

FIVE YEAR CIP SUMMARY

FUND BALANCE FORWARD - JULY 1, 2018:

Zone 1 Fund	\$27,124,131
ADP Sub Fund	1,118,039
Total Fund Balance Forward	\$28,242,169

REVENUE:

Taxes	\$57,194,000
Interest	1,062,000
ADP Fees	5,000
Outside Revenue	0
Rental	775,000
Total Five Year Revenue	\$59,036,000
Total Funds Available	\$87,278,169

APPROPRIATIONS:

D&C Capital Projects Expense	\$58,938,692
Capital Project Cost Inflation @ 2.4%	1,414,529
Uncategorized/Other Contributions	1,650,000
Operating Expenses	23,462,000
Contingencies	1,124,000
Subtotal Appropriations	\$86,589,221

ENDING FUND BALANCE - JUNE 30, 2023:

Zone 1 Fund	\$619,968
ADP Sub Fund	68,981
Total Ending Fund Balance	\$688,949

**RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
OPERATIONS & MAINTENANCE BUDGET AND FIVE YEAR CIP PROJECT SUMMARY - ZONE 1
FISCAL YEARS 2018-19 THROUGH 2022-23**

Project Number	Stg No.	Project Title	Budget Year 1 - FY 2018-19			CIP Years 2 through 5 - FY 2019-23		
			Project Appropriation	Project Specific Funding		Estimated Project Appropriation	Project Specific Funding	
				Tax Revenue	Outside Revenue		Tax Revenue	External Contrib
O&M MAINTENANCE (NON-CAPITAL PROJ) BUDGET - FY 2018-19:								
1-6-00000	00	ZONE 1 MAINTENANCE	\$2,512,574	\$2,512,574	\$0	\$10,050,298	\$10,050,298	\$0
UNCATEGORIZED/OTHER CONTRIBUTIONS:								
1-6-10000	00	FLOOD CONTROL BASIN RETROFIT STUDY	50,000	50,000				
1-6-10020	00	HYDROGEO TECHNICAL ANALYSIS	100,000	100,000				
1-6-10021	00	MISCELLANEOUS WATERSHED PRTCTN PROJS				1,500,000	\$1,500,000	
MAINT (NON-CAPITAL PROJ) BUDGET SUBTOTALS			\$2,512,574	\$2,512,574	\$0	\$10,050,298	\$10,050,298	\$0
UNCATEGORIZED/OTHER CONTRIBUTIONS			150,000	150,000	0	1,500,000	1,500,000	0
ZONE 1 TOTALS			\$2,662,574	\$2,662,574	\$0	\$11,550,298	\$11,550,298	\$0

PROJECT NOTES FY 2018-2019

DESIGN & CONSTRUCTION/CIP PROJECTS

PROJ. NO.	STG.	DESCRIPTION
1-8-00010	90	<p>SANTA ANA RIVER STABILIZATION – Project will ensure that existing levees continue to provide protection to the City of Riverside. The U.S. Army Corps of Engineers (USACE) is expected to initiate restoration of the federally constructed reach of the Santa Ana River Levee system downstream of San Bernardino County line to Tequesquite. Exact form of project not set. Work will likely include repair of groins and toe protection and be funded by USACE.</p> <p>In conjunction with USACE's proposed rehabilitation of the federally constructed Santa Ana River Levee system, the non-federal segment, which begins at the county line and extends 6,165 feet north into San Bernardino County, may also require major reconstruction. This facility was originally constructed in 1938 by the County of Riverside, prior to the formation of the District. Work will include installation of approximately 6,165 lineal feet of grouted riprap revetment. Cost estimate for the District funded portion is based on prorating USACE's costs for the federal portion of the project. Lump sum cost estimate includes planning, engineering and design, construction, construction management, and contingencies.</p>
1-8-00041*	90	<p>BOX SPRINGS DAM OUTLET MODIFICATION – The District is the lead for this project. The goal for this project is to improve safety and operation of this 50+ year old dam by reconstructing the outlet structure to prevent sediment accumulation from blocking the outflow of the dam. The project will also explore several other improvements to the facility similar to those proposed for the Woodcrest Dam Outlet Modification project. This project is funded by the District.</p>
1-8-00042	90	<p>SYCAMORE DAM OUTLET MODIFICATION – The District is the lead for this project. The goal for this project is to construct several improvements to the facility to improve the safety and operation of the dam by reconstructing the outlet structure to prevent sediment accumulation from blocking the outflow of the dam. The project will also explore several other improvements to the facility similar to those proposed for the Woodcrest Dam Outlet Modification project. Additionally the project will include construction of a safer access road into the facility and design for a safer routing of flood waters from the emergency spillway to Central Avenue. This project will be undertaken following completion of the Woodcrest Dam Outlet Modification project. This project is funded by the District.</p>
1-8-00043*	90	<p>ALESSANDRO DAM OUTLET MODIFICATION – The District is the lead for this project. The goal for this project is to improve safety and operation of this 50+ year old dam by reconstructing the outlet structure to prevent sediment accumulation from blocking the outflow of the dam. The project will also explore several other improvements to the facility similar to those</p>

PROJECT NOTES FY 2018-2019

DESIGN & CONSTRUCTION/CIP PROJECTS

PROJ. NO.	STG.	DESCRIPTION
		proposed for the Woodcrest Dam Outlet Modification project. This project is funded by the District.
1-8-00044*	90	PRENDA DAM OUTLET MODIFICATION – The District is the lead for this project. The goal for this project is to improve safety and operation of this 50+ year old dam by reconstructing the outlet structure to prevent sediment accumulation from blocking the outflow of the dam. The project will also explore several other improvements to the facility similar to those proposed for the Woodcrest Dam Outlet Modification project. This project is funded by the District.
1-8-00045	90	WOODCREST DAM OUTLET MODIFICATION – The District is the lead for this project. The goal for this project is to construct several improvements to the facility to improve the safety and operation of the dam. The proposed improvements include a new grated inlet structure to reduce potential for clogging of the outlet works, rehabilitation of the existing outlet gate assembly and control stem, implementation of an automated gate control system, potential rehabilitation of the outlet pipe, restoration of the outlet channel, and erosion controls on the embankment slope. Once completed, this project will serve as an example for performing similar upgrades to the remaining Riverside Reservoir Dams. This project is funded by the District.
1-8-00046*	90	HARRISON DAM OUTLET MODIFICATION – The District is the lead for this project. The goal for this project is to improve safety and operation of this 50+ year old dam by reconstructing the outlet structure to prevent sediment accumulation from blocking the outflow of the dam. The project will also explore several other improvements to the facility similar to those proposed for the Woodcrest Dam Outlet Modification project. This project is funded by the District.
1-8-00071*	05	MONROE MDP - MONROE CHANNEL – District led project to upgrade and provide additional capacity to a portion of the City of Riverside's existing open channel from California Avenue to Colorado Avenue. The new rectangular open channel will be a 10-year facility that will provide a higher level flood protection to the area. The project is funded by the District.
1-8-00073	02	MONROE MDP LINE E – Stages 2 and 3 have been combined into one City led project, funded by the District. This project will reduce flooding along Gratton Street, Hermosa Drive, as well as Dufferin Avenue within the extents defined below for each stage.

The proposed system will collect stormwater along Hermosa Drive and Gratton Street and convey it in an underground storm drain heading northwest along Gratton Street where it will discharge into existing underground

PROJECT NOTES FY 2018-2019

DESIGN & CONSTRUCTION/CIP PROJECTS

PROJ. NO.	STG.	DESCRIPTION
		Monroe MDP Line E storm drain at Lincoln Avenue. It includes Line E-2 along Hermosa Drive east of Gratton Street and Line E-5 along Dufferin Avenue east of Gratton Street.
1-8-00102*	01	SUNNYSLOPE CHANNEL - PACIFIC AVENUE SD – This project is to construct approximately 3,000 feet of underground storm drain within Pacific Avenue, in the city of Jurupa Valley. The project will reduce flooding within Pacific Avenue and provide safer conditions for vehicular and pedestrian traffic adjacent to Rubidoux High School. The project is funded by the District and budgeted presuming the District will lead the design and construction based on preliminary designs previously commissioned by Riverside County EDA.
1-8-00180*	90	MARY STREET DAM OUTLET MODIFICATION – The District is the lead for this project. The goal for this project is to improve safety and operation of this 50+ year old dam by reconstructing the outlet structure to prevent sediment accumulation from blocking the outflow of the dam. The project will also explore several other improvements to the facility similar to those proposed for the Woodcrest Dam Outlet Modification project. This project is funded by the District.
1-8-00220	50	BOX SPRINGS STORM DRAIN - GROUNDWATER RECHARGE AT KANSAS BASIN – This project is being pursued in collaboration with Riverside Public Utilities (RPU). It will construct improvements within the existing Box Springs Drain Retention Basin (aka Kansas Avenue Retention Basin) to enhance the ability to recharge stormwater and dry weather flows into the groundwater. This project will not only enhance local water supplies, but will reduce dry weather discharges and thereby enhance protection of the Santa Ana River, which is currently impaired for bacteria in dry weather flows. The exact form of the project and the roles between the District and RPU are being discussed. The District has budgeted partial funds toward the design and construction of this project, presuming RPU will fund the remainder of the cost.
1-8-00234	01	JURUPA-PYRITE MDP LINE A-2 – This District led project will reduce a long-standing flooding problem at the southerly end of Bellmore Street by providing a route for flood waters to naturally drain from the end of Bellmore Street. Flows will be collected at the end of Bellmore Street and conveyed in a small concrete swale westerly to a culvert under Agate Street. The project is being funded by the District. Once constructed, a majority of the project will be maintained by the District, with the culvert under Agate Street maintained by the City of Jurupa Valley.

PROJECT NOTES FY 2018-2019

DESIGN & CONSTRUCTION/CIP PROJECTS

PROJ. NO.	STG.	DESCRIPTION
1-8-00240	60	PHOENIX AVE STORM DRAIN - DRY WEATHER DIVERSION – This project will be undertaken in collaboration with the City of Riverside to eliminate dry weather discharges to the Santa Ana River from the Phoenix Avenue Storm Drain. This will be accomplished by diverting dry weather flows from the storm drain into an adjacent sewer line operated by the City of Riverside. Initial discussions have begun with the City to define roles and responsibilities. The District intends to fund the construction of this diversion.
1-8-00250	90	DAY CREEK CHANNEL - HABITAT RESTORATION – This project will restore function to a water conservation/habitat area that was constructed with Day Creek Channel, Stage 5, using available funds from the Day Creek Area Drainage Plan. This project is not fully scoped, and the budgeted amount will be refined as more detail becomes available.
1-8-00289*	01	RUBIDOUX-DALY AVE SD – District led project to reduce flooding in the Rubidoux Village area north of Mission Boulevard. The underground storm drain in Daly Avenue proposes to collect 100-year runoff at 34 th Street and convey to the existing storm drain in Mission Boulevard. The storm drain system ranges in pipe diameter from 18 to 60 inches. The project is funded by the District.
1-8-00319*	03	SOUTHWEST RIVERSIDE MDP LINE G – This project is to extend the existing MDP Line G storm drain system further southwest along Myers Street in the city of Riverside, using available funds from the Southwest Riverside Area Drainage Plan (ADP). This project is not fully funded, and can be pursued when sufficient ADP funds become available.
1-8-09024	00	JURUPA-PYRITE MDP LINE A – This District led project is intended to secure an adequate outlet for the proposed ultimate MDP Lines A-1 and A-2, within the city of Jurupa Valley. The budget includes funding to begin preliminary engineering and floodplain acquisition in the area.
1-8-09033*	00	JURUPA PYRITE MDP LINE A-1 – District led project to reduce flooding along Kim Lane and Agate Street in the city of Jurupa Valley. The master planned underground storm drain ranging in pipe diameter from 36 to 54 inches proposes to collect 100-year storm runoff from Agate Street and convey it to the natural wash (designated in the MDP as Line A) west of Pedley Road. The project is funded by the District.
1-8-09035*	00	PARAMOUNT ESTATES MDP LINES C AND C-1 – District led project to provide flood protection to the neighborhood west of Opal Street. The underground storm drain proposes to collect 100-year storm runoff from the existing culverts under the railroad and convey it to the District's existing

PROJECT NOTES FY 2018-2019

DESIGN & CONSTRUCTION/CIP PROJECTS

PROJ. NO.	STG.	DESCRIPTION
		Sunnyslope Channel on the north side of State Highway 60. Construction of the project is funded by the District.
1-8-09041	00	BOX SPRINGS MDP LINE N – This District led project will address flooding at the 14 th Street undercrossing of the railroad east of the 91 Freeway, within the city of Riverside. Flows will be collected at the intersection of Howard Street and 14 th Street, and be conveyed 2,700 feet southwest in an underground storm drain along Howard Street to the existing sump southwest of Date Street. This project will effectively deliver upon the intent of the MDP Line N system, which was originally planned within Commerce Street to the northwest.
1-8-09042	00	JURUPA-PYRITE 54 th STREET DRAINAGE IMPROVEMENTS – This project was requested by the City of Jurupa Valley and Jurupa Community Services District to collect runoff that is conveyed in the abandoned Riverside Canal along the westerly toe of Pedley Hills at 54 th Street. Currently the runoff in this canal overtops the canal affecting adjacent residents. This project will collect those flows and convey them safely to 54 th Street, where street improvements will allow the runoff to flow to a safe outlet.
1-8-09043	00	BELLTOWN MDP LINE A – This project was requested by Riverside County EDA to provide a drainage outlet for an infrastructure being built along Rubidoux Boulevard in the Crestmore Heights area of Jurupa Valley. There are significant topographical challenges that may prevent this project from being constructed within road right of way, so the budget sets aside funds to further study the feasibility of this project. This project is only partially funded.
1-8-09044	00	JURUPA CHANNEL - MISSION BLVD STORM DRAIN, STAGE 1 EXTENSION – This project was requested by the City of Jurupa Valley to address flooding from a Caltrans' owned culvert that discharges onto Mission Boulevard west of Valley Way. The project will collect these waters at Mission Boulevard and convey them in an underground storm drain approximately 1,300 feet easterly along Mission Boulevard to the existing Jurupa Channel - Mission Boulevard Storm Drain, Stage 1.

* Projects with an asterisk following the Project Number are not included in the FY 2018-2019 budget (CIP Year One), but are included in Years Two through Five of the CIP.

PROJECT NOTES FY 2018-2019

OPERATIONS & MAINTENANCE (NON-CAPITAL PROJECTS)

PROJ. NO.	STG.	DESCRIPTION
1-6-00000	00	GENERAL ZONE 1 MAINTENANCE – Annual maintenance of all Zone 1 projects, except major restoration or reconstruction.

PROJECT NOTES FY 2018-2019

UNCATEGORIZED/OTHER CONTRIBUTIONS

PROJ. NO.	STG.	DESCRIPTION
1-6-10000	00	FLOOD CONTROL BASIN RETROFIT STUDY – The District is evaluating existing infrastructure to determine feasibility of stormwater/urban runoff capture. The result of this study could help determine partnerships with Water Districts within Riverside County and help utilize stormwater and urban runoff as resource.
1-6-10020	00	HYDROGEOTECHNICAL ANALYSIS – Resources allocated to hire geotechnical engineers to test existing District facilities for groundwater recharge potential.
1-6-10021	00	MISCELLANEOUS WATERSHED PROTECTION PROJECTS – Resources allocated to the identification and development of potential partnerships for future multi-benefit projects addressing flood hazard reduction, water conservation, water quality and/or other water resource needs.