

**RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT**  
**DESIGN & CONSTRUCTION AND FIVE YEAR CIP PROJECT SUMMARY - ZONE 2**  
**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 Contribution		External Contrib	Tax Revenue	ADP Contribution			External Contrib
2-8-0002	01	MOCKINGBIRD CYN RESTORATION SUB-REACH 1	\$3,684,263	\$458,308	\$0	\$458,308	\$0	\$3,225,956	\$2,611,735	\$614,221	\$0	\$0	\$0
2-8-0052	01	TEMESCAL CREEK FLOOD PLAIN AQ	23,534,000	3,000,000	3,000,000	0	0	20,534,000	20,534,000	0	0	0	0
2-8-00105	00	SANTA ANA RIVER - BELOW PRADO	53,858,742	6,208,360	6,208,360	0	0	4,532,526	4,532,526	0	0	0	(43,117,856)
2-8-00110	90	EL CERRITO CHANNEL RESTORATION	2,194,515	689,381	689,381	0	0	1,505,133	1,505,133	0	0	0	0
2-8-00140	11	NORTH NORCO CHANNEL	6,124,447	384,724	384,724	0	0	5,739,723	5,739,723	0	0	0	0
2-8-00144	01	NORCO MDP LINES N-2, NC & LAT NC-1	3,959,966	72,399	72,399	0	0	3,887,567	3,887,567	0	0	0	0
2-8-00145	03	NORCO MDP LINE NB	2,438,586	1,591,794	1,541,794	0	50,000	846,792	846,792	0	0	0	0
2-8-00150	06	S NORCO CH STG 6/NORCO MDP LNS S-1 & S-5 STG 1	9,763,556	7,069,075	7,069,075	0	0	2,694,482	2,694,482	0	0	0	0
2-8-00155	02	NORCO MDP LINES NA-1 & NA-1A	2,623,589	2,341,131	2,341,131	0	0	282,458	282,458	0	0	0	0
2-8-00209	01	CORONA - SOUTH JOY ST STORM DRAIN	744,966	509,574	509,574	0	0	235,392	235,392	0	0	0	0
2-8-00210	01	CORONA - EAST GRAND BLVD STORM DRAIN	463,500	450,000	450,000	0	0	13,500	13,500	0	0	0	0
2-8-00304	60	EASTVALE MDP LINE D (WTR QUALITY ENHNCMNT)	454,671	54,361	54,361	0	0	400,310	400,310	0	0	0	0
2-8-00350	01	CORONA MDP LINE 52	1,145,000	1,145,000	1,145,000	0	0	0	0	0	0	0	0
2-8-00505	01	COLDWATER WASH- STRUCTURAL IMPROVMNTS	6,005,806	341,626	341,626	0	0	5,664,180	5,664,180	0	0	0	0
2-8-09065	00	CAJALCO ROAD SD (LAKE MATTHEWS)	510,300	100,344	100,344	0	0	0	0	0	0	0	(410,300)
2-8-09068	00	TEMESCAL WASH IMPRVMT AT TEM CYN RD	21,479,971	240,000	240,000	0	0	3,207,321	3,207,321	0	0	0	(18,032,650)
2-8-00002	05	MOCKINGBIRD CYN RESTORATION SUB-REACH 5	10,260,676					10,260,676	10,260,676	0	0	0	0
2-8-00060	02	NORTH MAIN STREET CHANNEL	3,381,000					3,381,000	3,381,000	0	0	0	0
2-8-00150	02	SOUTH NORCO CHANNEL	4,756,416					4,756,416	4,756,416	0	0	0	0
2-8-00164	01	NORCO MDP LINE S-2	990,774					990,774	990,774	0	0	0	0
2-8-00208	01	CORONA - SOUTH VICTORIA AVE STORM DRAIN	847,176					847,176	847,176	0	0	0	0
2-8-00223	03	CORONA MDP SOUTH MAIN ST SD	1,416,815					1,416,815	1,416,815	0	0	0	0
2-8-00230	03	CHANDLER STREET CHANNEL IMPROVEMENTS	3,545,894					3,545,894	0	3,545,894	0	0	0
2-8-00235	01	CORONA DRAINS LINE 9-A	1,238,847					1,238,847	1,238,847	0	0	0	0
2-8-00253	00	BEDFORD CANYON WASH	6,367,946					6,367,946	5,617,946	0	750,000	0	0
2-8-00280	01	CORONA MDP LINE 5	1,528,123					1,528,123	1,528,123	0	0	0	0
2-8-00310	60	EASTVALE MDP LINE E (WTR QUALITY ENHNCMNT)	820,690					820,690	820,690	0	0	0	0
2-8-09041	00	NORCO MDP LATERAL N-5	1,180,252					1,180,252	1,180,252	0	0	0	0
2-8-09058	00	LAKE MATHEWS ESTATES WATER QUALITY POND	2,962,978					2,962,978	2,962,978	0	0	0	0
2-8-09059	00	NORCO MDP LINE N-3	1,725,114					1,725,114	1,725,114	0	0	0	0
<b>ZONE 2 TOTALS</b>			<b>\$180,008,579</b>	<b>\$24,656,077</b>	<b>\$24,147,769</b>	<b>\$458,308</b>	<b>\$50,000</b>	<b>\$93,792,041</b>	<b>\$88,881,926</b>	<b>\$4,160,115</b>	<b>\$750,000</b>	<b>\$0</b>	<b>(\$61,560,806)</b>

**FIVE YEAR CIP SUMMARY**

**FUND BALANCE FORWARD - JULY 1, 2018:**

Zone 2 Fund	\$66,996,301
ADP Sub Fund	4,720,180
<b>Total Fund Balance Forward</b>	<b>\$71,716,481</b>

**REVENUE:**

Taxes	\$91,619,000
Interest	2,654,000
ADP Fees	1,000
Rental	500
<b>Subtotal Revenue</b>	<b>94,274,500</b>
External Contribution	800,000
<b>Total Five Year Revenue</b>	<b>\$95,074,500</b>
<b>TOTAL FUNDS AVAILABLE</b>	<b>\$166,790,981</b>

**FIVE YEAR APPROPRIATIONS:**

D&C Capital Projects Expense	\$119,286,658
Capital Project Cost Inflation @ 2.4%	2,862,880
Water Conservation Projects Expense	12,946,870
Uncategorized/Other Contributions	6,316,545
Operating Expenses	23,282,000
Contingencies	1,761,000
ADP Refund - Lake Mathews ADP to MWD	10,000
<b>Subtotal Appropriations</b>	<b>\$166,465,952</b>

**ENDING FUND BALANCE - JUNE 30, 2023:**

Zone 2 Fund	\$57,592
ADP Sub Fund	267,436
<b>Total Ending Fund Balance</b>	<b>\$325,028</b>

**RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT  
OPERATIONS & MAINTENACE BUDGET AND FIVE YEAR CIP PROJECT SUMMARY - ZONE 2  
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
<b>O&amp;M MAINTENANCE (NON-CAPITAL PROJ) BUDGET - FY 2018-19:</b>								
2-6-00000	00	ZONE 2 MAINTENANCE	\$1,977,100	\$1,977,100	\$0	\$7,908,400	\$7,908,400	\$0
<b>WATER CONSERVATION PROJECTS:</b>								
2-6-10002	50	CORONA TEMESCAL RECHARGE PLAN	500,000	500,000	0			
2-6-10003	50	RECLAIMED WATER PIPELINE - OLD TEMESCAL AVE	257,500	257,500	0			
2-6-10004	50	RECLAIMED WATER PIPELINE - LINCOLN AVE	257,500	257,500	0			
2-6-10005	50	RECLAIMED WATER PIPELINE - WRCRWA BLUFF ST	1,802,500	1,802,500	0			
2-6-10007	50	ARLINGTON BASIN GRANT (WMWD)	1,030,000	1,030,000	0			
2-6-10018	50	WATER CON PARTNERSHIP WITH JCSD	100,000	100,000	0	3,100,000	3,100,000	0
2-6-10012	50	LINCOLN/COTA STREET RECHARGE				1,287,500	1,287,500	0
2-6-10013	50	COLDWATER SUB BASIN ENCHANCED RECHG PROG				2,625,000	2,625,000	0
2-6-10015	50	COMMUNITY CENTER RECYCLED WATERLINE				865,200	865,200	0
2-6-10016	50	SNIPES PARK STORAGE RECLAIMED WATER RESERVIOR				618,000	618,000	0
2-6-10017	50	NORCO COLLEGE RECYCLED WATERLINE				412,000	412,000	0
2-6-10019	50	EASTVALE COMMUNITY PARK WITH JCSD				91,670	91,670	0
<b>UNCATEGORIZED/OTHER CONTRIBUTIONS:</b>								
2-6-10000	00	FLOOD CONTROL BASIN RETROFIT STUDY	200,000	200,000	0	0	0	0
2-6-10020	00	HYDROGEO TECHNICAL ANALYSIS	103,000	103,000	0	0	0	0
2-6-10022	00	NORCO MINOR DRAINAGE IMPROVEMENTS	1,109,786	1,109,786	0	1,997,399	1,997,399	0
2-6-10023	00	NORCO LINE N, S, NB AND EASTVALE LINE E	1,100,486	1,100,486	0	0	0	0
2-6-10024	00	EASTVALE CHANDLER ST LATERAL AGREEMENT	535,000	535,000	0	0	0	0
2-6-10026	00	EASTVALE MDP LINE H EXTENSION	370,874	370,874	0	0	0	0
2-6-10021	00	MISCELLANEOUS WATERSHED PROTECTION PROJECTS				900,000	900,000	0
<b>MAINT (NON-CAPITAL PROJ) BUDGET SUBTOTALS</b>			\$1,977,100	\$1,977,100	\$0	\$7,908,400	\$7,908,400	\$0
<b>WATER CONSERVATION PROJECTS</b>			3,947,500	3,947,500	0	8,999,370	8,999,370	0
<b>UNCATEGORIZED/OTHER CONTRIBUTIONS</b>			3,419,146	3,419,146	0	2,897,399	2,897,399	0
<b>ZONE 2 TOTALS</b>			<b>\$9,343,746</b>	<b>\$9,343,746</b>	<b>\$0</b>	<b>\$19,805,169</b>	<b>\$19,805,169</b>	<b>\$0</b>

**PROJECT NOTES FY 2018-2019**

**DESIGN & CONSTRUCTION/CIP PROJECTS**

<b>PROJ. NO.</b>	<b>STG.</b>	<b>DESCRIPTION</b>
2-8-00002	01	MOCKINGBIRD CANYON RESTORATION SUB-REACH 1 – District led project to provide streambank protection along Mockingbird Canyon Wash. Sub-reach 1 begins at Pennington Place and extends northwest along the existing Mockingbird Canyon Levee. The proposed improvements will provide flood protection to existing homes adjacent to the project, to Mockingbird Canyon Road, and utilities in the road. The drainage improvements consists of a rock-armored open channel sized to convey 100-year storm flows. The project is funded by the District.
2-8-00002*	05	MOCKINGBIRD CANYON RESTORATION SUB-REACH 5 – District led project to provide stream stabilization along Mockingbird Canyon Wash. Sub-reach 5 begins at Greenview Drive and extends north to Van Buren Boulevard. The proposed improvements will provide flood protection to existing homes adjacent to the project, to Mockingbird Canyon Road, and utilities in the road. The drainage improvements consists of an earthen bottom open channel (with rock armored sideslopes) sized to convey 100-year storm flows. Sub-reach 5 also includes a debris basin sized to trap and reduce debris delivered to Mockingbird Reservoir. The project is funded by the District.
2-8-00052	01	TEMESCAL CREEK FLOODPLAIN ACQUISITION – District led project to acquire properties within the FEMA Zone A floodplain along Temescal Wash as a non-structural flood hazard mitigation program. The targeted acquisition area begins at the Zone 2/Zone 3 boundary, just south of Lake Street, and extends north to the upstream terminus of the existing Temescal Creek Channel in Corona. In the long term, the acquired parcels may also provide opportunities for preserving or restoring natural habitat, improving water quality, recharging groundwater aquifers, and/or providing for enhanced recreational opportunities. The project is funded by the District.
2-8-00060*	02	NORTH MAIN STREET CHANNEL – This project will be led by the City of Corona and will upgrade the existing City owned open channel from Cota Street to the confluence with the existing Oak Street Channel. The project will provide flood protection to the existing City owned buildings and facilities adjacent to the channel. A cooperative agreement will need to be developed for this project to formalize roles and responsibilities. The budgeted maximum is based on the City's requested amount for design, permitting, mitigation and construction. The City will lead all aspects of the project, and the District is willing to accept for operations and maintenance portions of the project that meet District requirements and standards.

**PROJECT NOTES FY 2018-2019**

**DESIGN & CONSTRUCTION/CIP PROJECTS**

<b>PROJ. NO.</b>	<b>STG.</b>	<b>DESCRIPTION</b>
2-8-00078 2-8-00080 2-8-00144	01	NORCO MDP LINES N-2, NC & LAT NC-1 – District led project that will install underground storm drains along Sixth Street, Valley View Avenue, and Detroit Street. These laterals will collect the 100-year flow rates to reduce flooding along these streets and convey them into North Norco Channel. These lateral projects are funded by the District and can be pursued once North Norco Channel, Stage 11 is complete. The District is funding these Laterals.
2-8-00105	00	SANTA ANA RIVER BELOW PRADO – This project is being undertaken by the U.S. Army Corps of Engineers (USACE), following their recent/planned capacity improvements at Prado Dam. The overall project will provide flood control and environmental restoration downstream of the Prado Dam to the Orange County Line, and is being funded and constructed in pieces. The overall project is cost shared via Local Cooperative Agreement between USACE, Riverside County, Orange County, and San Bernardino County. Additional funding is expected from the Riverside County Transportation Commission (reimbursement for portions of Phase 2B utility relocations) per an existing agreement.  The current phase of the project is referred to as the BNSF Bridge Protection Project. The District, as local sponsor for this federal project, is required to provide the necessary right of way and utility relocations. Funding included in the budget are the estimated costs to cover these obligations.
2-8-00110	90	EL CERRITO CHANNEL RESTORATION – This District led project will replace a section of an existing undersized concrete trapezoidal channel with a concrete rectangular channel. The project aims to alleviate any flooding that might occur during a 100-year storm event as well as provide an additional two feet of freeboard and ultimately remap the FEMA floodplain. The portion of channel that will be replaced is the most downstream reach of the El Cerrito Channel system beginning at the intersection of El Cerrito Road and Ontario Avenue/Temescal Road and thence downstream past Minnesota Road where it ultimately discharges into Temescal Wash. The project will be funded by the District.
2-8-00140	11	NORTH NORCO CHANNEL – District led project that will improve the existing North Norco Channel between Sierra Avenue and Rose Court to have 100-year flow capacity and significantly reduce the FEMA floodplain along the channel. The improved channel will have concrete sideslopes with an earthen bottom upstream of Valley View, and will be fully concrete lined downstream of Valley View. The project also includes two infiltration basins to reduce pollutants in

**PROJECT NOTES FY 2018-2019**

**DESIGN & CONSTRUCTION/CIP PROJECTS**

<b>PROJ. NO.</b>	<b>STG.</b>	<b>DESCRIPTION</b>
		runoff collected from a total of 34 acres adjacent to the channel. The District is funding this project.
2-8-00145	03	NORCO MDP LINE NB – The District is lead for the project. The goal of the project is to replace the current interim earthen trapezoidal channel with a concrete facility with enough capacity to convey the 100-year flow rates. This will complete the Line NB system providing 100-year flood protection to the area and reducing erosion and associated maintenance costs. The project collects flows from previously constructed Stage 2 at Valley View Avenue and conveys these flows approximately 1,800 feet to the west before discharging into North Norco Channel between Sierra Avenue and Interstate 15. A portion of the project includes an armorflex lined invert that has 20% open area to allow for infiltration of low flows. This project is funded by the District.
2-8-00150*	02	SOUTH NORCO CHANNEL – District led project to upgrade a one mile section of unimproved earthen channel from Hamner Avenue to the confluence with South Norco Channel Line SB just east of River Road. The project will provide flood protection to thirty (30) residences and/or businesses adjacent to the channel, and remove flood insurance requirement for those properties currently within the FEMA Zone A floodplain. The project is funded by the District.
2-8-00150	06	<p>SOUTH NORCO CHANNEL &amp; NORCO MDP LINES S-1 &amp; S-5 – This is a District led project that will reduce flooding and remove properties from the floodplain between Second and Fourth Streets east of Corona Circle. It is expected to benefit both local residences, traffic, as well as benefit Norco Intermediate School and Norco High School.</p> <p>South Norco Channel, Stage 6 – This portion of the project will upgrade an existing interim dirt channel and replace it with 4,100 feet of soft bottom trapezoidal channel with concrete sideslopes. This system begins adjacent to Temescal Avenue at the Norco Intermediate School and conveys flows southerly past Norco High School where it begins to head westerly until it meets the existing improved channel at the intersection of Second Street and Corona Circle.</p> <p>Norco MDP Line S-1 – This lateral will collect runoff along Third Street east of Temescal Avenue, in an underground storm drain roughly 2,300 feet long and discharge this water into South Norco Channel.</p> <p>Norco MDP Line S-5 – This lateral will collect runoff along Hillside Avenue between Kingman Street and Hillside Lane and then convey it</p>

## PROJECT NOTES FY 2018-2019

### DESIGN & CONSTRUCTION/CIP PROJECTS

<b>PROJ. NO.</b>	<b>STG.</b>	<b>DESCRIPTION</b>
		west within Hillside Lane, then southerly around Norco Intermediate School until it discharges into South Norco Channel.
		Total project is approximately two miles in length. District is funding 100% of the design and construction with the exception of certain waterline relocations which the City will fund.
2-8-00155	02	NORCO MDP LINE NA-1 AND LATERAL NA-1A – District led project requested by the City of Norco that will reduce flooding and mud/debris issues in the neighborhood surrounding Crestview Drive and Mt. Rushmore Drive. Line NA-1 will collect runoff from the La Sierra Hills along Crestview Drive in an underground pipe and convey them southerly within Crestview Drive to the District's existing Line NA-1 facility. Lateral NA-1A will collect runoff along Mt. Rushmore Drive in an underground pipe and convey the flows to the proposed Line NA-1 facility at the intersection of Mt. Rushmore Drive and Crestview Drive. This project is funded by the District.
2-8-00164*	01	NORCO MDP LINE S-2 – This project will construct a master planned storm drain to provide flood protection to properties along Second Street. The project consists of an underground storm drain ranging in pipe diameter from 30 to 48 inches. The storm drain will collect runoff just east of Temescal Avenue and convey it to the existing South Norco Channel west of Corona Circle. The project is funded by the District.
2-8-00208	01	CORONA - SOUTH VICTORIA AVENUE STORM DRAIN – City of Corona led project to reduce flooding along Victoria Avenue. The project consists of an underground storm drain pipe ranging in diameter from 24 to 36 inches proposed to collect runoff at 7 <sup>th</sup> Street and convey it to the existing culvert under the 91 Freeway. The budgeted amount allows for a maximum \$826k contribution to the City for the project, based on the District's cost estimates. The City will lead all aspects of the project, and will assume responsibility for operations and maintenance following construction. A funding agreement will need to be developed to formalize the details of the District's contribution toward this project.
2-8-00209	01	SOUTH JOY STREET STORM DRAIN – City of Corona led project to reduce flooding along Joy Street. The project consists of an underground storm drain pipe ranging in diameter from 24 to 36 inches proposed to collect runoff at 6 <sup>th</sup> Street and convey it to the existing culvert under the 91 Freeway. The budgeted amount allows for a maximum \$726k contribution to the City for the project, based on the District's cost estimates. The City will lead all aspects of the project, and will assume responsibility for operations and maintenance

**PROJECT NOTES FY 2018-2019**

**DESIGN & CONSTRUCTION/CIP PROJECTS**

<b>PROJ. NO.</b>	<b>STG.</b>	<b>DESCRIPTION</b>
		following construction. A funding agreement will need to be developed to formalize the details of the District's contribution toward this project.
2-8-00210	01	CORONA - EAST GRAND BLVD STORM DRAIN – Underground storm drain that will reduce flooding along Grand Boulevard from the 91 Freeway upstream to 7 <sup>th</sup> Street. A Cooperative Agreement was executed March 2011. The budgeted amount allows for a maximum \$450k contribution to the City for the design and construction of the project. The City will lead all aspects of the project, and will assume responsibility for operations and maintenance following construction.
2-8-00223*	03	CORONA MDP SOUTH MAIN ST SD – City led project to construct master planned storm drain that will provide flood protection to residences along Main Street. The project includes an underground storm drain ranging in pipe diameter from 24 to 48 inches from Mission Road to the existing Line 1-G storm drain at East Olive Street. A cooperative agreement will need to be developed for this project to formalize roles and responsibilities. The budgeted amount includes a maximum \$1.38M contribution to the City based on the District's cost estimates for the project. The City will lead all aspects of the project, and the District is willing to accept for operations and maintenance portions of the project that meet District requirements and standards. The project is funded by the District.
2-8-00230	03	CHANDLER STREET CHANNEL IMPROVEMENTS – This project would improve the existing Chandler Street Channel west of Archibald Avenue, in the adopted Eastvale MDP/ADP. The project has been included in the District's 5-year CIP to track the current balance of Eastvale ADP funds.
2-8-00235	01	CORONA DRAINS LINE 9-A – City led project to construct a master planned storm drain to provide flood protection to businesses and residences along Magnolia Avenue. The project consists of an underground storm drain ranging in pipe diameter from 24 to 33 inches. The project will collect runoff at Kellogg Avenue and convey it to the existing storm drain in Magnolia Avenue ending at Mt. Wilson. The budgeted amount allows for a maximum \$1.20M contribution to the City for the project, based on the District's cost estimates. The City will lead all aspects of the project, and will assume responsibility for operations and maintenance following construction. A funding agreement will need to be developed to formalize the details of the District's contribution toward this project.

**PROJECT NOTES FY 2018-2019**

**DESIGN & CONSTRUCTION/CIP PROJECTS**

<b>PROJ. NO.</b>	<b>STG.</b>	<b>DESCRIPTION</b>
2-8-00253	01	BEDFORD CANYON CHANNEL – This District led project will construct approximately 2,400 feet of channel downstream (east) of Interstate 15, just south of Cajalco Road. The project will be pursued in partnership with RCTC who is the landowner. The project is primarily District funded, with contributions of land from RCTC.
2-8-00280*	01	CORONA MDP LINE 5 – City led project to construct the master planned storm drain to provide flood protection to businesses along Railroad Street and Sherman Avenue. The project consists of an underground storm drain ranging in pipe diameter from 30 to 54 inches. The storm drain proposes to collect runoff on Sherman Avenue, south of Railroad Street, and then extend westerly in Railroad Street to Smith Street and discharge into an existing City owned storm drain. A cooperative agreement will need to be developed for this project to formalize roles and responsibilities. The budgeted amount includes a maximum \$1.49M contribution to the City based on the District's cost estimates for the project. The City will lead all aspects of the project, and the District is willing to accept for operations and maintenance portions of the project that meet District requirements and standards.
2-8-00304	60	EASTVALE MDP LINE D (WATER QUALITY ENHANCEMENT) – A District led project to alleviate dry weather water quality concerns at its outfall. The proposed improvements are located in Eastvale just west of Interstate 15 where Cobble Creek Drive dead ends near the Santa Ana River. The District is proposing to collaborate with Jurupa Community Services District to install a system that will divert dry weather flows from the channel to a nearby sewer line for treatment. The project is funded by the District.
2-8-00310	60	EASTVALE MDP LINE E (WATER QUALITY ENHANCEMENT) – A District led project to alleviate dry weather water quality concerns at its outfall. The proposed improvements are located in Eastvale just west of Interstate 15 at the intersection of Kern River Drive and Rivertrails Drive. The District is proposing to collaborate with Jurupa Community Services District to install a system that will divert dry weather flows from the channel to a nearby sewer line for treatment. The project is funded by the District.
2-8-00350	01	CORONA MDP LINE 52 – This City led project is an underground storm drain extending north from Third Street along E. Grand Boulevard then under the 91 Freeway to Temescal Creek Channel along Joy Street. Project will reduce flooding along Joy Street and Grand Boulevard. The District is fully funding this project. Project is under construction and anticipated to be complete in the second half of 2018.



**PROJECT NOTES FY 2018-2019**

**DESIGN & CONSTRUCTION/CIP PROJECTS**

<b>PROJ. NO.</b>	<b>STG.</b>	<b>DESCRIPTION</b>
2-8-00505	01	<p>COLDWATER WASH IMPROVEMENTS – District led project proposed to: 1) reduce flood risk and nuisance to traveling public on Temescal Canyon Road at the intersection of Glen Ivy Road; and 2) prevent the migration of the active Coldwater Wash Channel from impacting other public infrastructures. The District hired JE Fuller Hydrology and Geomorphology, Inc., to conduct a geomorphology study and develop a conceptual plan of proposed improvements, if any, needed to address drainage concerns along the wash. Based on the results of the study, the conceptual District improvements would include the potential placement of rock protection for the slopes of the Painted Hills development if their condition worsens in the future, and the construction of a small basin at the western corner of Temescal Canyon Road and Glen Ivy Road to complement a new road culvert proposed to be constructed by the Transportation Department in 2019. Project funding shown in the 5-year CIP is for these improvements plus the cost of two parcels acquired in 2016 which can now be used for the construction of the small basin and potential rock slope protection.</p>
2-8-09041	00	<p>NORCO MDP LATERAL N-5 – This is budgeted as a District led project to construct a master planned storm drain to provide flood protection to residences along Valley View Avenue. The project consists of an underground storm drain ranging in pipe diameter from 30 to 42 inches. The project will collect runoff along Valley View Avenue, south of Fourth Street, and convey it to the existing North Norco Channel at Third Street, west of Interstate 15. The project is funded by the District.</p>
2-8-09058	00	<p>LAKE MATHEWS ESTATES WATER QUALITY POND – District led project to construct water quality pond proposed in the adopted Lake Mathews Area Drainage Plan. The proposed pond is an off-channel diversion facility that would treat nuisance flow or runoff during small storm events, and retain the water to pump it into the irrigation system of the proposed golf course adjacent to the project site. The project is funded by the District.</p>
2-8-09059	00	<p>NORCO MDP LINE N-3 – District led project to construct a master planned storm drain to provide flood protection to residences along 5<sup>th</sup> Street in the city of Norco. The project consists of an underground storm drain along 5<sup>th</sup> Street ranging in pipe diameter from 36 to 66 inches. The project will collect runoff at Corona Avenue and convey it to the existing North Norco Channel on the east side of Interstate 15. The project is funded by the District.</p>
2-8-09065	00	<p>CAJALCO RD STORM DRAIN (LAKE MATTHEWS) – The District has included partial funding toward further scoping of a project that</p>

**PROJECT NOTES FY 2018-2019**

**DESIGN & CONSTRUCTION/CIP PROJECTS**

<b>PROJ. NO.</b>	<b>STG.</b>	<b>DESCRIPTION</b>
		would resolve flooding that occurs to residences along High Res Way and Cajalco Road, south of Lake Matthews.

\* 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)**

<b>PROJ. NO.</b>	<b>STG.</b>	<b>DESCRIPTION</b>
2-6-00000	00	GENERAL ZONE 2 MAINTENANCE – Annual maintenance of all Zone 2 projects, except major restoration or reconstruction.

## PROJECT NOTES FY 2018-2019

### WATER CONSERVATION CONTRIBUTIONS

<b>PROJ. NO.</b>	<b>STG.</b>	<b>DESCRIPTION</b>
2-6-10002	50	CORONA TEMESCAL RECHARGE PLAN – City of Corona project planning effort. The main function of the effort is to plan the optimal way to recharge the Temescal Groundwater Basin. The District will contribute 50% of the City's actual cost for this planning effort, up to \$250,000. A funding agreement will need to be developed to formalize the details of District's contribution toward this project.
2-6-10003	50	RECLAIMED WATER PIPELINE - OLD TEMESCAL AVENUE – City of Corona project to improve the City's reclaimed water network. This project includes the construction of 4,400 lineal feet of reclaimed water pipeline to reduce imported water, conserve the local groundwater supply, and stabilize the Temescal Groundwater Basin. The District will contribute 50% of the construction contract.
2-6-10004	50	RECLAIMED WATER PIPELINE - LINCOLN AVENUE – City of Corona project to improve the City's reclaimed water network. This project includes the construction of 2,500 lineal feet of reclaimed water pipeline to reduce imported water, conserve the local groundwater supply, and stabilize the Temescal Groundwater Basin. The District will contribute 50% of the construction contract.
2-6-10005	50	RECLAIMED WATER PIPELINE - WRCRWA BLUFF STREET – City of Corona project to improve the City's reclaimed water network. This project includes the construction of 5,100 lineal feet of reclaimed water pipeline system to be constructed between the Western Riverside County Regional Wastewater Authority (WRCRWA) Wastewater Treatment Plant and an existing 20-inch reclaimed water pipeline located in River Road at Bluff Street. The project will, as part of the larger system, help reduce imported water, conserve the local groundwater supply, and stabilize the Temescal Groundwater Basin. The District will contribute 50% of the design and construction cost up to \$1.75M.
2-6-10007	50	ARLINGTON BASIN GRANT (WMWD) – Western Municipal Water District project to facilitate the construction of recharge facilities in the Arlington area and the expansion of the Arlington Desalter Project. After multiple locations analyzed in the Arlington area, only one recharge facility was selected. The District will contribute \$1.0 million toward project construction.

**PROJECT NOTES FY 2018-2019**

**WATER CONSERVATION CONTRIBUTIONS**

<b>PROJ. NO.</b>	<b>STG.</b>	<b>DESCRIPTION</b>
2-6-10012	50	LINCOLN/COTA STREET RECHARGE – City of Corona led project to improve the City's stormwater recharge from Temescal Creek Channel to City's existing infiltration ponds. This project could potentially reduce imported water, conserve the local groundwater supply, and stabilize the Temescal Groundwater Basin. The District will contribute 50% of the design and construction cost, up to \$1.25M.
2-6-10013	50	COLDWATER SUB-BASIN ENHANCED RECHARGE PROGRAM – City of Corona led project to improve existing recharge ponds and flooding issues near Glen Ivy Road. The City will take lead on all aspects of this project, including future operations and maintenance. The District will fund 75% of the total cost to complete the project, up to \$2,625,000.
2-6-10015	50	COMMUNITY CENTER RECYCLED WATERLINE – City of Norco led project to improve the City's reclaimed water network. This project includes the construction of 5,600 feet of reclaimed water pipeline to reduce imported water. The system will provide water to parks, schools, and freeway corridor. The District will contribute to the City 50% of the construction contract, up to \$840,000.
2-6-10016	50	SNIPES PARK STORAGE RECLAIMED WATER RESERVOIR – City of Norco led project that will build a 500,000 gallon reclaimed water reservoir at Snipes Park, as well as associated pipelines and booster stations to facilitate delivery of reclaimed water. The District will contribute to the City 50% of the construction contract, up to \$600,000.
2-6-10017	50	NORCO COLLEGE RECYCLED WATERLINE – City of Norco project to improve the City's reclaimed water network. This project includes the construction of 4,000 feet of reclaimed water pipeline to reduce imported water needs. The District will contribute 50% of the construction contract, up to \$400,000.
2-6-10018	50	WATER CONSERVATION PARTNERSHIP WITH JURUPA COMMUNITY SERVICES DISTRICT (JCSD) – JCSD led project for a regional solution to enhance reclaimed water use and distribution. The reclaimed water will be used in Eastvale and other service areas. The District will fund a total of \$3.2 million toward the project, which will help JCSD meet the local match requirements to leverage a \$15M grant.

**PROJECT NOTES FY 2018-2019**

**WATER CONSERVATION CONTRIBUTIONS**

<b>PROJ. NO.</b>	<b>STG.</b>	<b>DESCRIPTION</b>
2-6-10019	50	EASTVALE COMMUNITY PARK WITH JURUPA COMMUNITY SERVICES DISTRICT (JCSD) – JCSD project of a community park. The District budgeted funding is for the construction cost of the park's water quality post construction structural best management practices.

**PROJECT NOTES FY 2018-2019**

**UNCATEGORIZED/OTHER CONTRIBUTIONS**

<b>PROJ. NO.</b>	<b>STG.</b>	<b>DESCRIPTION</b>
2-6-09068	00	TEMESCAL WASH IMPROVEMENTS AT TEMESCAL CANYON ROAD – This project is being led by the City of Lake Elsinore to replace the Temescal Canyon Road bridge. As part of the bridge replacement project, portions of Temescal Wash will be acquired from private landowners, and the wash will be improved to ensure that the adjacent infrastructure is protected. This project also advances the District's goal of securing floodplain within Temescal Wash. The budget allows the District to contribute partial funding toward advancing this \$21M project. Details will be developed into a funding agreement with the City.
2-6-10000	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.
2-6-10020	00	HYDROGEOTECHNICAL ANALYSIS – Resources allocated to hire geotechnical engineers to test existing District facilities for groundwater recharge potential.
2-6-10021	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.
2-6-10022	00	NORCO MINOR DRAINAGE IMPROVEMENTS – City of Norco led projects to design and construct drainage improvements within the Norco Master Drainage Plan. The District has agreed to contribute funding toward construction of the proposed drainage facilities as follows: <ul style="list-style-type: none"><li>• Andalusian Drive at Reservoir Numbers 6 and 7. (\$110,000)</li><li>• Burger Basket Lateral from Hamner Avenue, east approximately 400 feet to Westside Channel. (\$150,000)</li><li>• Bluff Street from River Road, east approximately 2,000 feet. (\$575,000)</li><li>• Corona Avenue approximately 650 feet south to MDP Line SA. (\$200,000)</li><li>• Norco MDP Line N-1C – Extension of Norco MDP Line N-1C southerly on Pedley Avenue approximately 1,460 feet. (\$650,000)</li></ul>

**PROJECT NOTES FY 2018-2019**

**UNCATEGORIZED/OTHER CONTRIBUTIONS**

<b>PROJ. NO.</b>	<b>STG.</b>	<b>DESCRIPTION</b>
		<ul style="list-style-type: none"> <li>• Norco MDP Line ND – Extension of Norco MDP Line ND southerly on California Avenue approximately 975 lineal feet. (\$330,000)</li> <li>• Line N-7 Phase 2 – Approximately 1,800 feet from Reservoir Drive to Interstate 15. (\$915,000)</li> <li>• Riverview Elementary School – In Pedley Avenue approximately 500 feet north to MDP Lateral ND-1. (\$140,000)</li> <li>• Crestview Drive – In Crestview Drive approximately 1,500 feet from Eighth Street north to Arlington Avenue. (\$450,000)</li> <li>• Parmenter Park – Park is on Reservoir Drive; storm drain line would be approximately 600 feet north to MDP Lateral NB-3. (\$250,000)</li> <li>• Catch Basin Retrofit Pilot Project – This pilot project will retrofit trash capture devices within select catch basins within the city. Funding agreement to be developed based on 50/50 cost split for installation, with the District contribution not to exceed \$25,000.</li> </ul> <p>Upon completion of construction, the City will accept sole responsibility for the ownership, operations and maintenance of the facilities.</p>
2-6-10023	00	<p>NORCO LINES N, S, NB, AND EASTVALE LINE E – City of Norco led project to design and construct several underground storm drains within the Norco Master Drainage Plan. The proposed drainage facilities include:</p> <ul style="list-style-type: none"> <li>• Norco MDP Line N-7 – A storm drain system from Valley View Avenue westerly approximately 200 lineal feet to an existing storm drain system.</li> <li>• Norco MDP Lateral S-5A – A storm drain system from Kingman Drive southwesterly for approximately 250 lineal feet to Hillside Lane.</li> <li>• Norco MDP Line S-6 – A storm drain system from Temescal Avenue north of Second Street (approximately at Norco High School) westerly approximately 600 lineal feet to the existing South Norco Channel.</li> <li>• Norco MDP Line NB-2 – Approximately 750 lineal feet of storm drain system located in Temescal Avenue from south of Wrangler Way to the District's existing Norco MDP Line NB.</li> <li>• Norco MDP Line N-1A – Approximately 1,200 lineal feet of storm drain system located in Center Avenue south of the intersection of Center Avenue and Seventh Street.</li> </ul>



**PROJECT NOTES FY 2018-2019**

**UNCATEGORIZED/OTHER CONTRIBUTIONS**

<b>PROJ. NO.</b>	<b>STG.</b>	<b>DESCRIPTION</b>
		<ul style="list-style-type: none"> <li>• Norco MDP Line N-IB – Approximately 1,685 lineal feet of storm drain system located in Hillside Avenue south of the intersection of Hillside Avenue and Seventh Street.</li> <li>• Norco MDP Line N-IE – Approximately 450 lineal feet of storm drain system located in Center Avenue from north of Seventh Street.</li> <li>• Eastvale MDP Line E-3 – Approximately 1,500 lineal feet of storm drain system in Hamner Avenue from north of Citrus Street.</li> </ul> <p>The flood control facilities will improve drainage within the city. Upon completion of construction, the City will accept sole responsibility for the ownership, operation and maintenance of the flood control facilities. The District will fund up to \$2,946,000 total toward the design and construction of the drainage facilities. A portion of these funds have already been expended by the City, the amount currently budgeted reflects the remainder of the total commitment.</p>
2-6-10024	00	<p><b>EASTVALE CHANDLER STREET LATERAL AGREEMENT –</b> City of Eastvale led project to design and construct several underground storm drains within the Eastvale Master Drainage Plan. The proposed drainage facilities include:</p> <ul style="list-style-type: none"> <li>• Chandler Street Channel: Hall and Selby Avenue Laterals</li> <li>• Eastvale Master Drainage Plan Line F-1: Hall and Selby Avenue Laterals</li> <li>• Eastvale Master Drainage Plan Line E: 58<sup>th</sup> Street and Swan Lake Laterals</li> <li>• Eastvale Master Drainage Plan Line E: Hamner Avenue Laterals</li> <li>• Santa Ana River-Presido Road Storm Drain: Citrus Street Laterals</li> </ul> <p>The proposed flood control facilities will resolve flooding/ponding issues that were not addressed when developer constructed projects were built. Upon completion of construction, the City will accept sole responsibility for the ownership, operation and maintenance of the flood control facilities. The District will fund up to \$2,000,000 toward the design and construction of the drainage facilities.</p>
2-6-10026	00	<p><b>EASTVALE MDP LINE H EXTENSION –</b> City of Eastvale led project that will extend an existing storm drain in Hamner Avenue, between Schleisman Road and A Street to provide flood protection within</p>

**PROJECT NOTES FY 2018-2019**

**UNCATEGORIZED/OTHER CONTRIBUTIONS**

<b>PROJ. NO.</b>	<b>STG.</b>	<b>DESCRIPTION</b>
		Hamner Avenue and adjacent public facilities. The District will contribute funding to the project pursuant to a funding agreement.