

# ANNUAL REPORT

2019  
2020



REGIONAL FLOOD CONTROL DISTRICT  
CLARK COUNTY, NEVADA

# MISSION

To improve the protection of life and property for existing residents, future residents and visitors from the impacts of flooding while also protecting the environment.

# VISION

Premier regional agency providing a community safe from the devastation of floods while protecting the surface water environment.

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# DISTRICT MESSAGE

## LARRY BROWN

Clark County Regional Flood Control Board Chairman



To say the past fiscal year is unprecedented is an understatement. Rapid economic growth fueled months of sales tax performance exceeding expectations. Then it stopped on a dime as Nevada closed off tourism, shut down businesses and everyday citizens were forced to stay home in the wake of a global pandemic.

The Clark County Regional Flood Control District took immediate steps to analyze the unknown. While the immediate shutdown impacted revenues, sales tax began trickling back in and exceeded the conservative pandemic estimates.

This District, like our region, is resilient and built for the long-term. Three decades of sound financial management and effective construction projects have stewarded in an era of flood resiliency for our community. In 2009, the District weathered the Great Recession through careful planning and execution of long-term strategies. This pandemic will be no different, and in fact, will help guide us through coming generations.

Immediate cost-saving measures, including a one-year five percent salary concession, have been implemented in the short term to keep the District on an even course until the economy recovers. Development of key infrastructure and approval of 10-year plans for construction continues, as it did during Southern Nevada's last economic crisis. Each project creates or sustains jobs, further kickstarting the economy.

And while our meetings in the last quarter of the fiscal year went virtual and much of our staff worked from home, nothing slowed the progress toward our ultimate goal of bringing flood protection to every neighborhood throughout Clark County.

A handwritten signature in blue ink that reads "Larry Brown". The signature is written in a cursive style with a horizontal line underneath the name.

# AUTHORITY OF THE DISTRICT

The Regional Flood Control District was created by legislative act in 1985 to develop a coordinated and comprehensive Master Plan to solve flooding issues. Funding for flood control construction and maintenance comes from one-quarter of one cent sales tax.

The Regional Flood Control District is a distinct local government agency. The District is led by a General Manager and Chief Engineer responsible for analyzing the extent of flood control problems, presenting solutions and recommendations to a Board of Directors.

The Board includes two representatives each from Clark County and the City of Las Vegas and one representative from Henderson, North Las Vegas, Boulder City and Mesquite. Board leadership is elected annually among these members.

Public meetings of the Board are generally held the second Thursday of the month to enact policy and consider other flood control matters.

The District contracts with Clark County for various legal and administrative services provided by departments including the Comptroller, District Attorney, General Services, Human Resources, Information Systems and Treasurer.

# BOARD OF DIRECTORS

**LAWRENCE L. BROWN III**  
Chair | Commissioner  
Clark County



**DEBRA MARCH**  
Vice Chair | Mayor  
City of Henderson



**STAVROS ANTHONY**  
Councilman  
City of Las Vegas



**ISAAC BARRON**  
Councilman  
City of North Las Vegas



**GEORGE GAULT**  
Councilman  
City of Mesquite



**JAMES GIBSON**  
Commissioner  
Clark County



**CAROLYN GOODMAN**  
Mayor  
City of Las Vegas



**KIERNAN McMANUS**  
Mayor  
City of Boulder City



# TECHNICAL ADVISORY COMMITTEE

## TAC MEMBERSHIP AS OF JUNE 2020

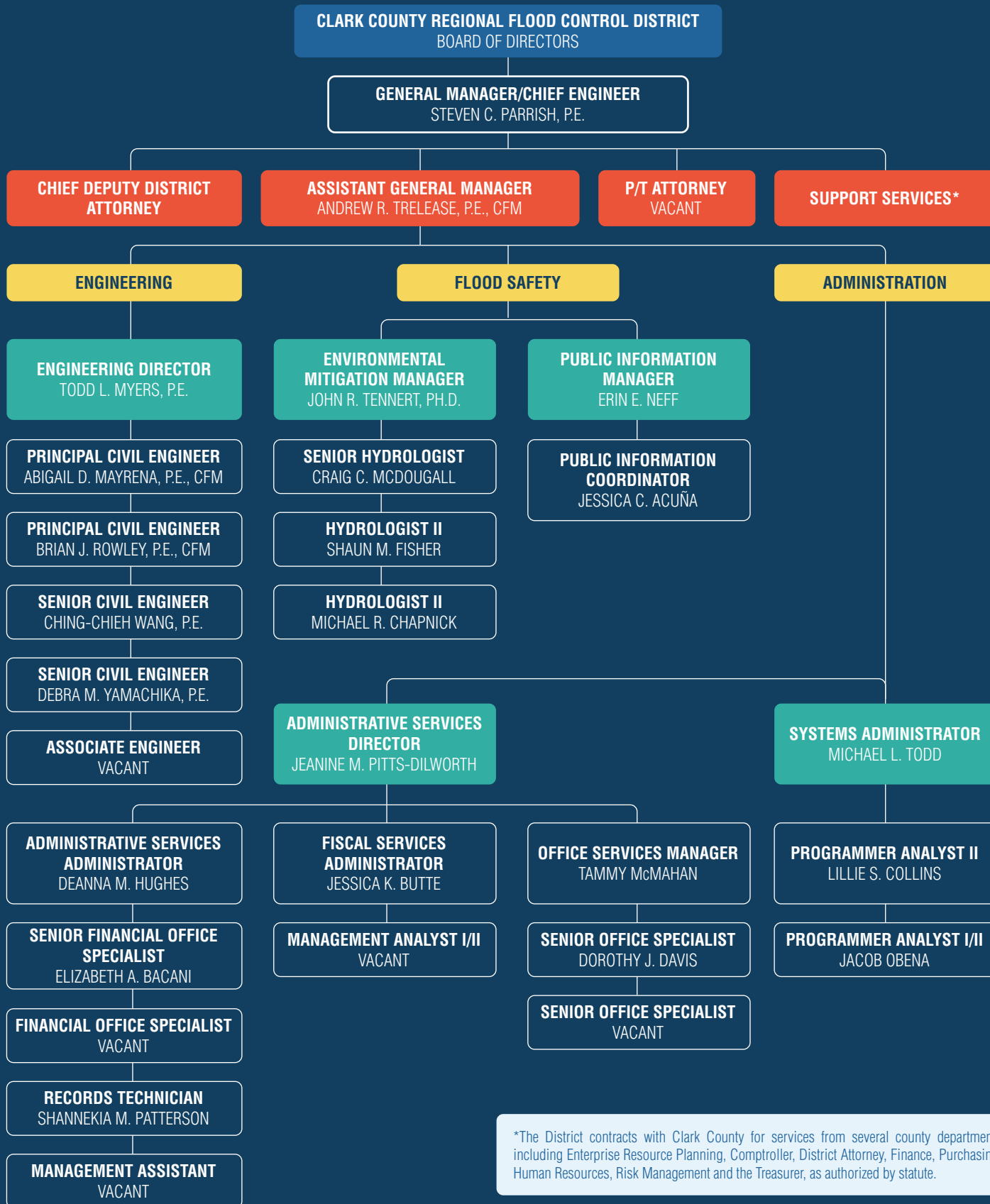
<b>Ed McGuire</b>	Chair	Henderson	Director, Public Works
<b>Steve Ford</b>	Vice-Chair	Las Vegas	City Engineer
<b>Travis Anderson</b>	Member	City of Mesquite	Director, Public Works
<b>Denis Cederburg</b>	Member	Clark County	Director, Public Works
<b>Dale Daffern</b>	Member	City of North Las Vegas	Director, Public Works
<b>Mike Janssen</b>	Member	City of Las Vegas	Director, Public Works
<b>Keegan Littrell</b>	Member	City of Boulder City	Director, Public Works
<b>John Solvie</b>	Member	Clark County Water Reclamation District	Manager Water Quality Compliance
<b>Thomas Brady</b>	Alternate	City of North Las Vegas	Director of Utilities
<b>Tom Davy</b>	Alternate	City of Henderson	City Engineer
<b>Mike Hudgeons</b>	Alternate	City of North Las Vegas	Manager Engineering and Construction Services
<b>Jim Keane</b>	Alternate	City of Boulder City	City Engineer
<b>Oh-Sang Kwon</b>	Alternate	City of Las Vegas	Engineering Project Manager
<b>Joseph Leedy</b>	Alternate	Clark County Water Reclamation District	Principal Planner, Water Quality
<b>Lance Olson</b>	Alternate	City of Henderson	Assistant Director Public Works
<b>Richard Secrist</b>	Alternate	City of Mesquite	Director Development Services
<b>Mark Sorensen</b>	Alternate	City of Las Vegas	Engineering Program Manager
<b>Robert Thompson</b>	Alternate	Clark County	Deputy Director, Public Works

# CITIZENS ADVISORY COMMITTEE

## CAC MEMBERSHIP AS OF JUNE 2020

<b>Ronald Newell, Chair</b>	Clark County
<b>William J. Starmer, Vice Chair</b>	City of Las Vegas
<b>Norman Ashford</b>	City of Mesquite
<b>Karina Barragan</b>	City of North Las Vegas
<b>Harshal Desai</b>	City of Henderson
<b>James Houts</b>	City of Boulder City
<b>Jim Jordano</b>	City of Henderson
<b>Jeffrey Lastofka</b>	City of Boulder City
<b>Larry Schultz</b>	Clark County
<b>Ed Uehling</b>	Clark County
<b>Brian Wilson</b>	City of Las Vegas

# ORGANIZATIONAL CHART



\*The District contracts with Clark County for services from several county departments including Enterprise Resource Planning, Comptroller, District Attorney, Finance, Purchasing, Human Resources, Risk Management and the Treasurer, as authorized by statute.

# MONITORING THE WEATHER

The District maintains a vast network of rain, water and weather gauges throughout the county to measure weather in real time. Each year, staff performs about 430 site visits for preventive maintenance and technical upgrades. In the past fiscal year upgrades totaled \$39,500, improving data quality, speed and reliability.



STATION OWNER	STATION TYPE	NUMBER	ALERT 1	ALERT 2
Regional Flood Control District	Repeater	5	0	5
	Rainfall	49	20	29
	Full Weather Station	45	20	25
	Water Level	116	108	8
	Total w/o Repeaters	210	148	62
	Total w/ Repeaters	215	148	67

# RECENT WEATHER EVENTS

Clark County has a long history of disastrous flash flood events with many of the incidents occurring before current infrastructure was in place. However, even when water flows in washes and channels designed to carry it, it can prove deadly.

On March 12, 2020 a winter storm saturated a wide area of the Las Vegas Valley, with up to two inches of rain reported in some areas. Water rose rapidly in channels, washes and detention basins. Two people were tragically swept away from an area in Flamingo Wash where they had been sheltering. The coroner determined both drowned. A third person also was swept away but never located.

Another storm on July 31, 2019 resulted in street flooding in a residential neighborhood in Mountain's Edge. Gauges recorded 1.1 inches of rain with higher levels falling upstream of the Upper Duck Creek Detention Basin. As water discharged from the basin, a dirt berm eroded, sending the muddy flow into the neighborhood. Maintenance crews repaired the berm by the next afternoon and a homebuilder has subsequently finished work to reinforce the barrier.

# KEEPING THE COMMUNITY INFORMED



## ANNUAL PRESS CONFERENCE JULY 8, 2019

on Anniversary of 1999 Las Vegas Flood



## SOCIAL MEDIA OUTREACH

Facebook, Twitter, Instagram, YouTube, LinkedIn



## FLASH FLOOD

Safety Proclamations



## VIRTUAL REALITY

Award-winning experience with 4 million views



## \$1 MILLION

Advertising Campaign



## 44 SCHOOL

Presentations Reaching 5,678 Students

# ENHANCING INFORMATION SYSTEMS

The District's information systems team provides information technology solutions to both District staff and the general public.

In the past fiscal year staff worked to ensure a seamless migration to a new website ([RegionalFlood.Org](https://RegionalFlood.Org)) building new content and ensuring old data was consistent and available on the new platform.

Day-to-day maintenance and troubleshooting were immediately re-framed as the team moved to set up remote access capabilities for employees and establish remote work protocols. Staff also had

to secure Internet-accessible servers and set up and stream public meetings.

Even during a sudden shift in how District business was being conducted, the team installed an ArcGIS portal and updated a major server. A number of internal staff applications and upgrades were also completed.



# KEEPING OUR WATERS CLEAN

Rain that falls in the Las Vegas Valley travels untreated to the Las Vegas Wash and Lake Mead, our primary drinking water source. In an effort to make sure stormwater is as clean as possible, the District works with Clark County and the cities of Henderson, Las Vegas and North Las Vegas to develop and implement a comprehensive stormwater quality management program.

Residents can help prevent stormwater pollution by reporting the improper disposal of chemicals and pollutants into the storm sewer system. Clogged storm drains and washes, littered with debris, create pollution in addition to flooding problems. The District has developed a comprehensive public outreach program to educate the public about the importance of not polluting our desert environment. The public outreach program encourages residents to report clogged storm drain inlets, fertilize appropriately, properly dispose of pet waste and use commercial car washes.

The District is also committed to ensuring that construction, operation and maintenance of flood control facilities complies with all applicable environmental laws and regulations.

# FLOODPLAIN MANAGEMENT

In addition to fulfilling environmental regulations, the elements of a comprehensive floodplain management program include a regulatory program, the Community Rating System, flood control master planning and land development. The following sections briefly describe each of these.



## REGULATORY PROGRAM



## FLOOD CONTROL MASTER PLANNING



## THE COMMUNITY RATING SYSTEM



## LAND DEVELOPMENT REVIEWS





## REGULATORY PROGRAM

### National Flood Insurance Program (NFIP) members in Clark County

Boulder City, Clark County, Fort Mojave Indian Reservation, Cities of Henderson, Las Vegas, Mesquite and North Las Vegas.

### NFIP Benefits to the Community

- Minimum standards for development (Uniform Regulations for the Control of Drainage; Hydrologic Criteria and Drainage Design Manual)
- Floodplain Mapping
- Flood Insurance
- Disaster assistance



## THE COMMUNITY RATING SYSTEM

The Federal Emergency Management Agency sponsors the Community Rating System (CRS) To offer reduced flood insurance premiums in areas for which community activities exceed the NFIP's minimum standards.

The District cooperates with Clark County and the cities of Henderson, Las Vegas, Mesquite and North Las Vegas to help citizens realize up to 25 percent reduction in flood insurance premiums. These communities received credit for the following District activities:

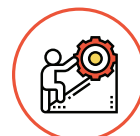
- Public information program
- Maintenance funding
- Remapping efforts
- The Flood Threat Recognition System
- The Flood Control Master Plans
- The Hydrologic Criteria and Drainage Design Manual and the Uniform Regulations for the Control of Drainage



## FLOOD CONTROL MASTER PLANNING

Flood control Master Plans include an inventory of existing flood control facilities in the community as well as locations, descriptions, and cost estimates of proposed future facilities.

The District's Board of Directors adopted an update to the flood control Master Plan for the Outlying Areas of Clark County in February 2020. The Master Plan Update for the Moapa Valley (Muddy River) is ongoing and expected to be completed by the end of 2020.



## LAND DEVELOPMENT REVIEWS

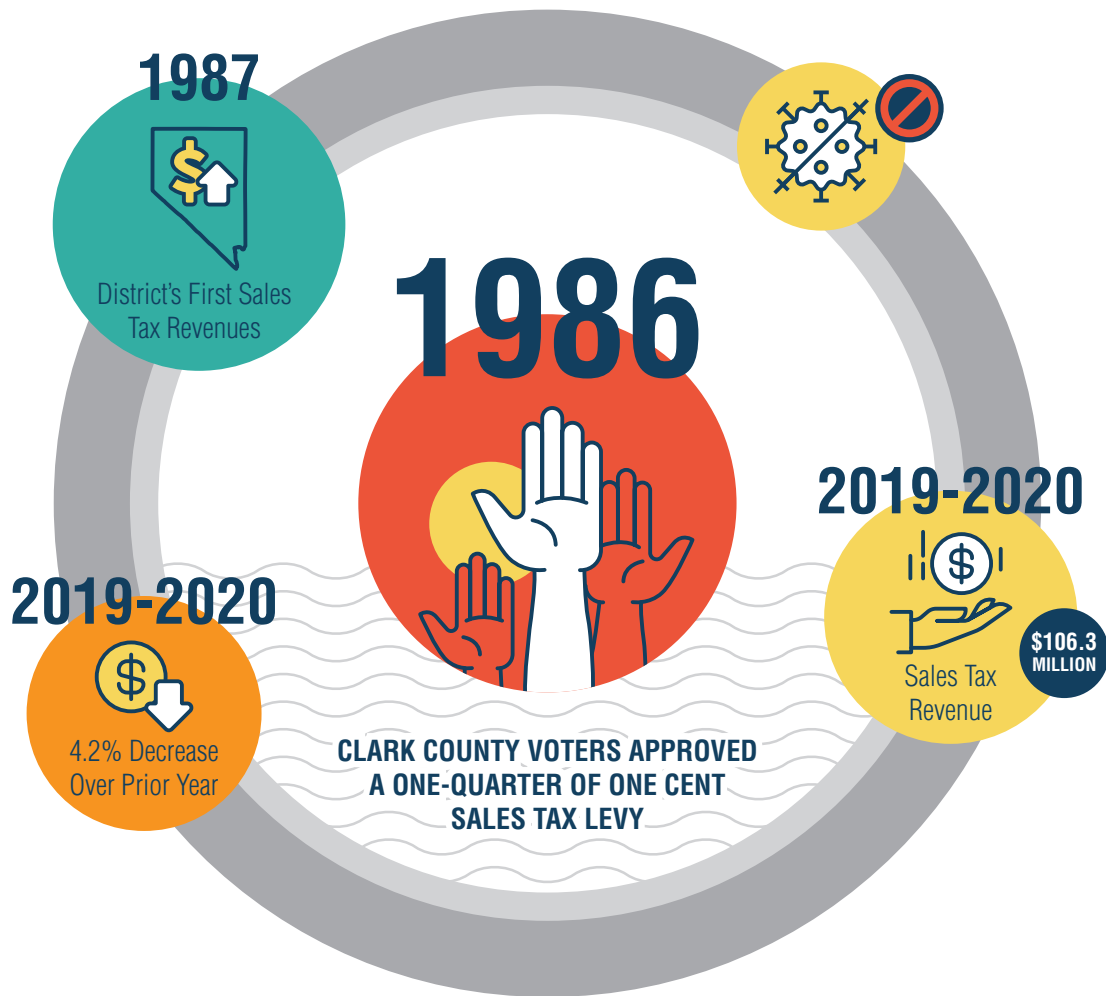
The District performs reviews of proposed land development projects to ensure compliance with local and federal regulations.

If the development impacts the implementation of the flood control Master Plan or lies within a FEMA-designated Special Flood Hazard Area, District staff will review the drainage study and addenda once approval is obtained from the local community.

This past year, the District received 234 drainage studies and 398 addenda related to the development of private properties. Reviews by the District resulted in the issuance of 237 concurrence letters and 25 related comment letters.

# DEMONSTRATING FISCAL INTEGRITY

In 1986, Clark County voters approved a one-quarter of one cent sales tax levy to fund flood control improvements. The District's first sales tax revenues were received in May of 1987 after becoming effective in March of 1987. For fiscal year 2019-2020 sales tax revenue was \$106.3 million, a 4.2 percent decrease over the prior year (2018-2019). The decrease is the result of the impacts of the COVID-19 shutdowns in Southern Nevada.



For the past few years up until March 2020, Southern Nevada continued to grow and expand. However, the statewide closure of all schools and non-essential businesses beginning March 18, 2020, due to the pandemic, took its toll in Clark County. These closures dramatically impacted revenues during the last three months of the fiscal year. To offset likely revenue shortfalls, the District immediately used cost containment measures until the short-term impacts on revenues were known.

More than 90 percent of sales tax revenue continues to be used to design, build and maintain flood control projects and pay for the associated debt service. During fiscal year 2019-2020, the District expended approximately \$80.5 million for flood control projects and flood control maintenance.

Another large share of sales tax revenue was spent on debt service in the amount of \$160.9 million, of which \$115.6 million was paid from a self-funded escrow account from the issuance of the 2017 General Obligation Advanced Crossover Refund Bonds for the completion of the Build America Bond Refunding.

Remaining sales tax revenue is used for salaries and benefits, professional services and other administrative expenses. In fiscal year 2019-2020, \$7.3 million was spent for these operating expenses.

The District has been awarded the Distinguished Budget Presentation Award by the Government Finance Officers Association of the United State and Canada every year for the past 26 years. This significant achievement reflects the District's commitment to meet the highest principles of governmental budgeting.

Annually, the District continues to receive favorable audit opinions determining the District's financial statements are presented fairly in all material respects. These positive opinions advise stakeholders the District is following proper accounting principles and procedures.

The District's ability to fund projects depends largely on sales tax and, in turn, Clark County's economy. Since sales tax is the District's primary source of revenue, adverse changes in the economy can negatively impact tax receipts. Tourism and gaming are the driving force of the local economy. For Fiscal Year 2020-2021, we are projecting a recovery in Southern Nevada. The District continues to utilize cost containment measures to review all purchases ensuring they are critical to the District's mission. Since inception, the District has overseen the design and construction of approximately \$2.1 billion in flood control improvements throughout Clark County.

## FISCAL INTEGRITY - FUTURE OUTLOOK

The extent of the economic impacts of COVID-19 are still unknown at this time and we expect to see volatility in the months to come. The District anticipates the local economy will start to recover from the effects of the COVID-19 shut-downs in the next few months and we will start to move back towards an upward economic trend in Southern Nevada. The District will continue to monitor the dynamics of this fluid situation and adjust accordingly.



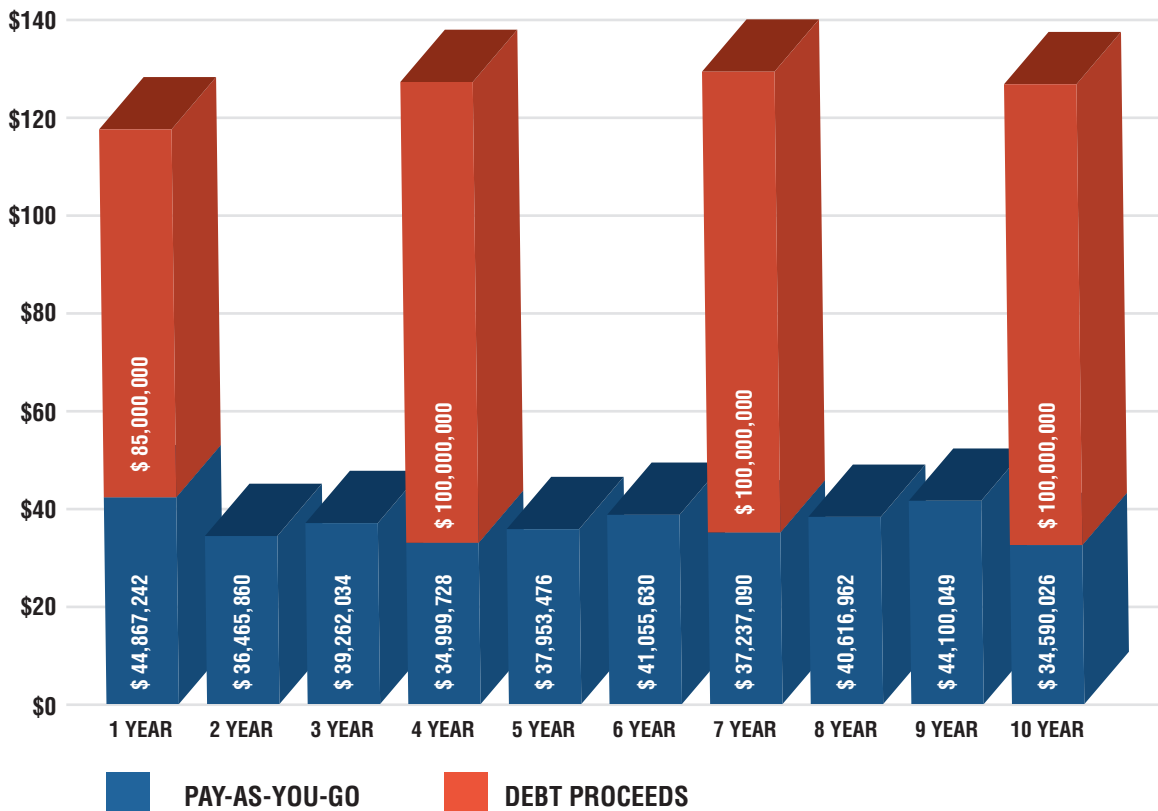
# TEN-YEAR CONSTRUCTION PROGRAM

Each year, in conjunction with the development of the Ten-Year Construction Program (TYCP), a 10-year forecast of project funding is developed. The forecast incorporates sales tax revenues, interest earnings, bond proceeds from the issuance of debt and proposed expenditures.

This long-range financial plan drives the TYCP project funding schedule including the planning of upcoming design and construction projects. Approximately \$350 million in resources are available for programming projects in the first year of the TYCP,

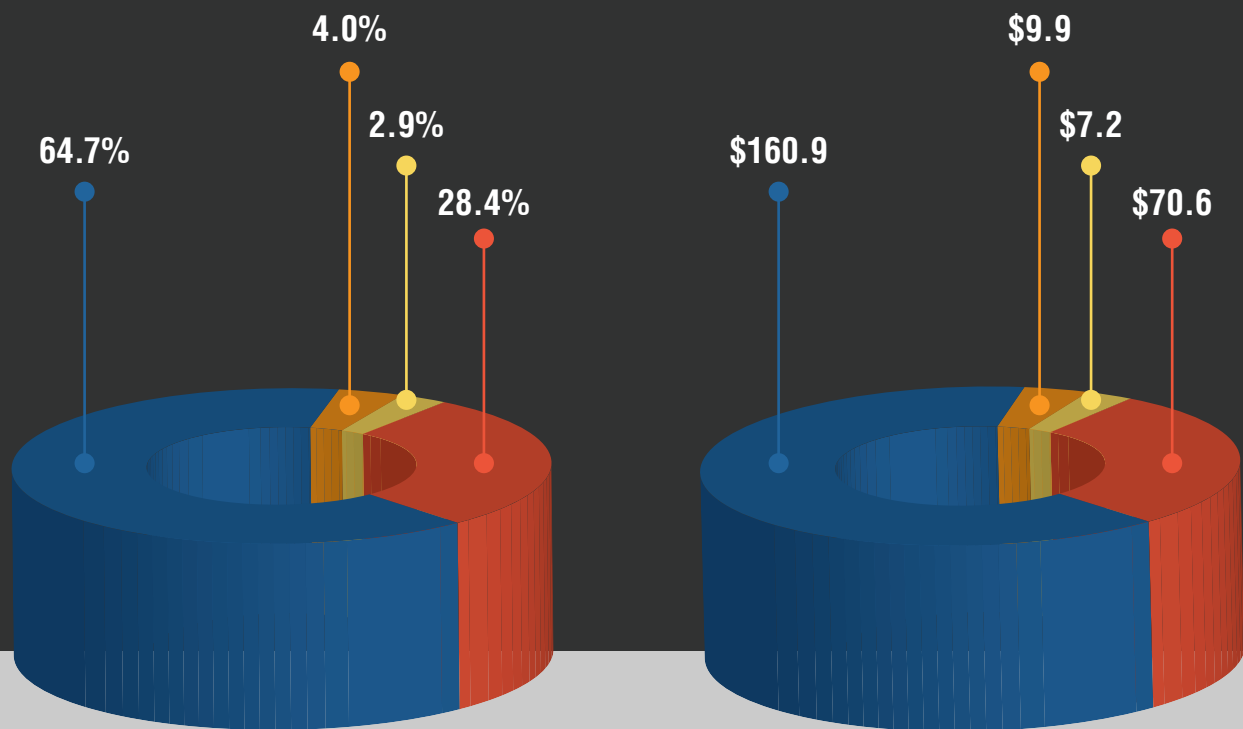
which includes previously approved projects and new projects planned for FY 2020-2021.

Total available resources for the TYCP are estimated to be \$807.6 million, including the issuance of bonds programmed in the amount of \$385 million. To expedite flood control project design and construction, from 1991 to present, the District has issued a total of \$870 million in general obligations, of which \$572.1 million remains outstanding.



# REGIONAL FLOOD CONTROL DISTRICT EXPENDITURES

<ul style="list-style-type: none"> <li>● Debt Service: Fund 3300*</li> <li>● Facilities Maintenance: Fund 2870</li> </ul>	<ul style="list-style-type: none"> <li>● Operating: Fund 2860</li> <li>● Capital Improvement: Funds 4430/4440</li> </ul>
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• Dollars in Millions

• \*\$115.6 million was paid from a self-funded escrow account from the issuance of the 2017 General Obligation Advanced Crossover Refund Bonds for the completion of the Build America Bond Refunding.

# MAINTAINING FLOOD CONTROL FACILITIES

The Board has adopted an Operations and Maintenance Manual to establish performance standards and guidelines for the maintenance of flood control facilities located within the District's service area. Each of the separate entities in Clark County is provided funds by the District to maintain the regional flood control facilities within their respective jurisdictions.

The District worked with the member entities to develop the fiscal year 2019-2020 Maintenance Work Plans and Budgets, which were approved by the Board on June 13, 2019 in the amount of \$12,354,700.

The Board approved one supplemental budget request for FY 2019-2020 totaling \$1.6 million. The City of Henderson

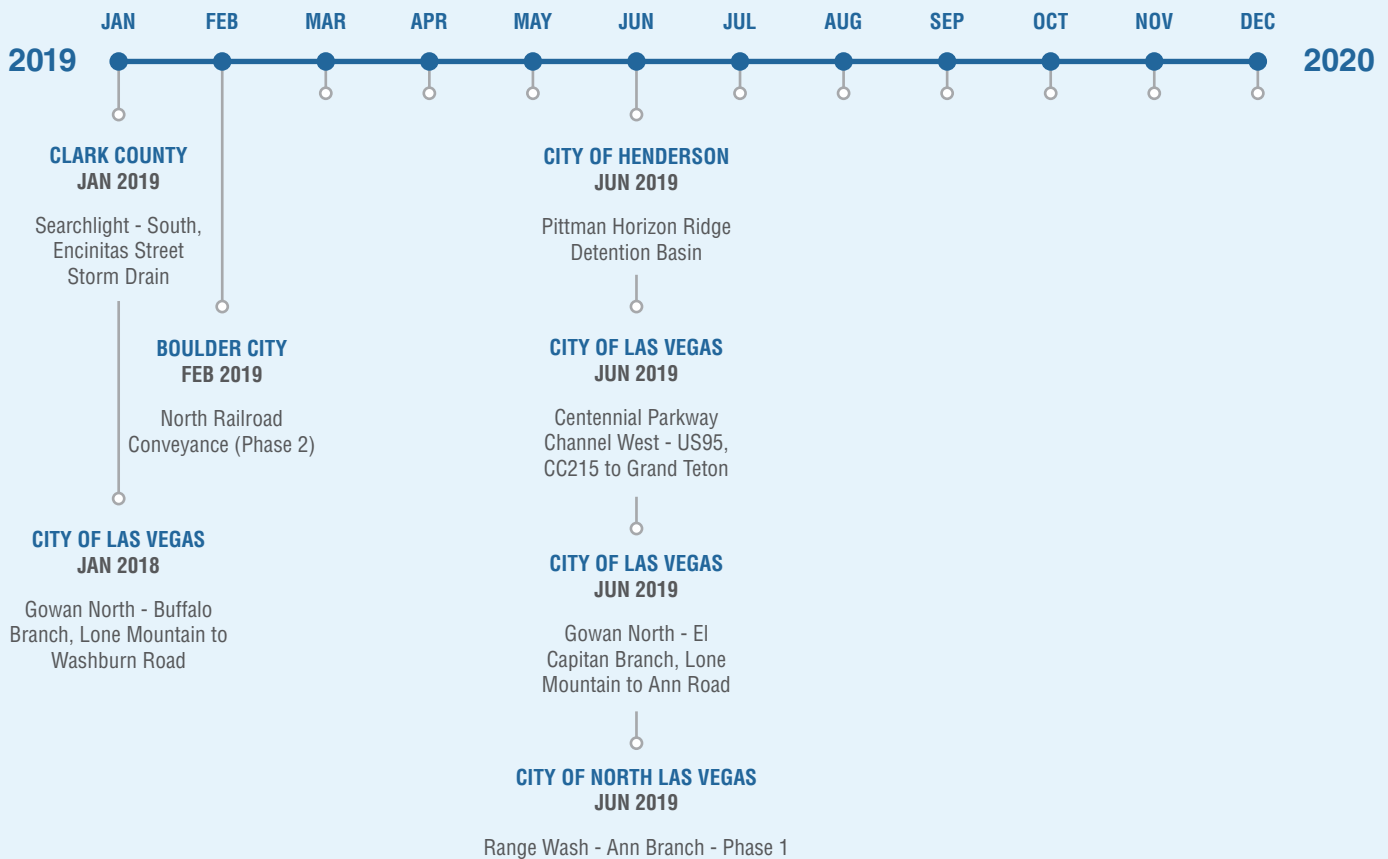
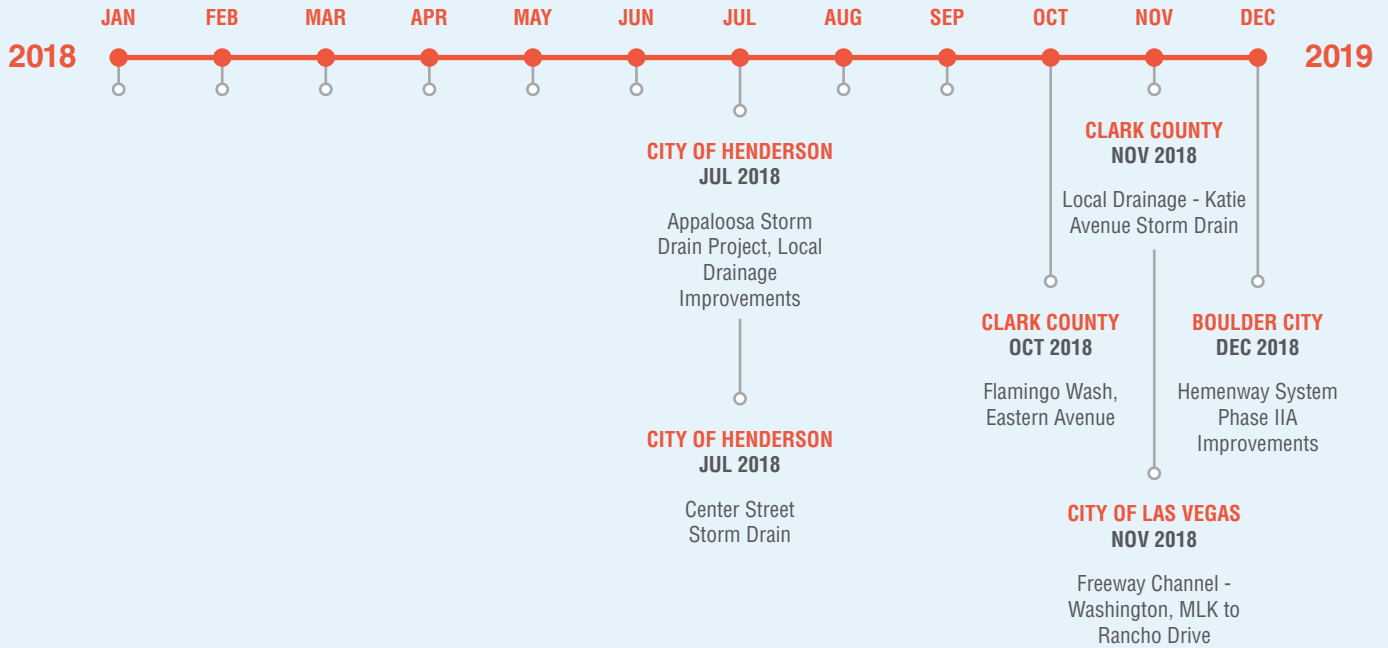
requested an increase in the amount of \$1.6 million for additional funding needed to complete work on recently advertised projects and miscellaneous maintenance work activities.

With approval of the supplemental budget request, the total approved budget for all entities was \$13,954,700 for FY 2019-2020.

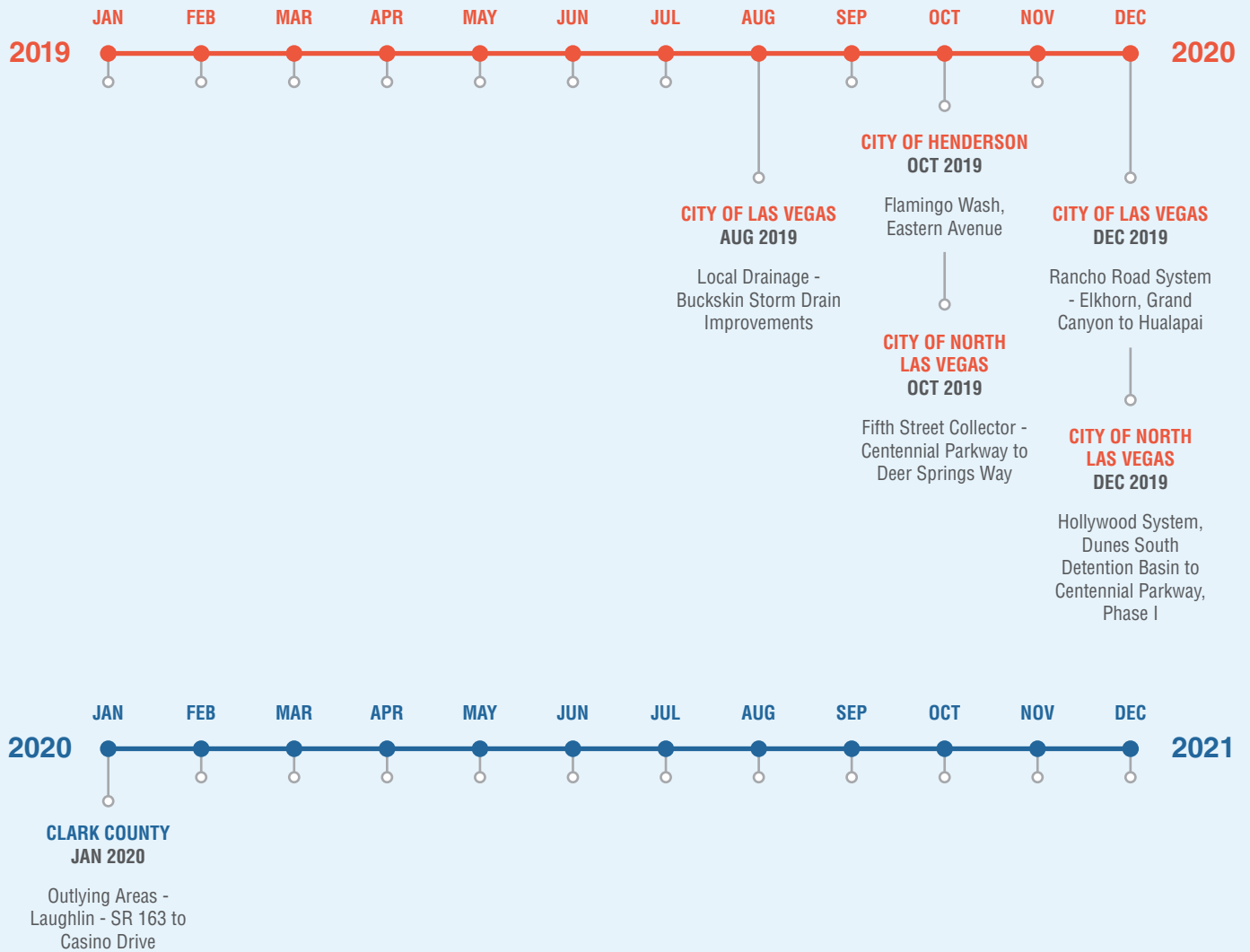
Flood control facility maintenance was performed using a combination of private contractors and entity maintenance staff. During this year, District staff inspected and/or maintained numerous facilities throughout the District service area including 102 detention basins and 661 miles of channel and underground storm drains, of which 140 miles are natural washes.

	\$ BUDGET	\$ EXPENDED	% EXPENDED
Boulder City	400,000	166,209	41.55%
Clark County	4,274,700	1,821,579	42.61%
Henderson	3,850,700	2,772,524	72.00%
Las Vegas	2,825,000	2,824,841	99.99%
Mesquite	769,800	769,800	100.00%
North Las Vegas	1,834,500	1,527,576	83.27%
	<b>\$13,954,700</b>	<b>\$9,882,529</b>	<b>71%</b>

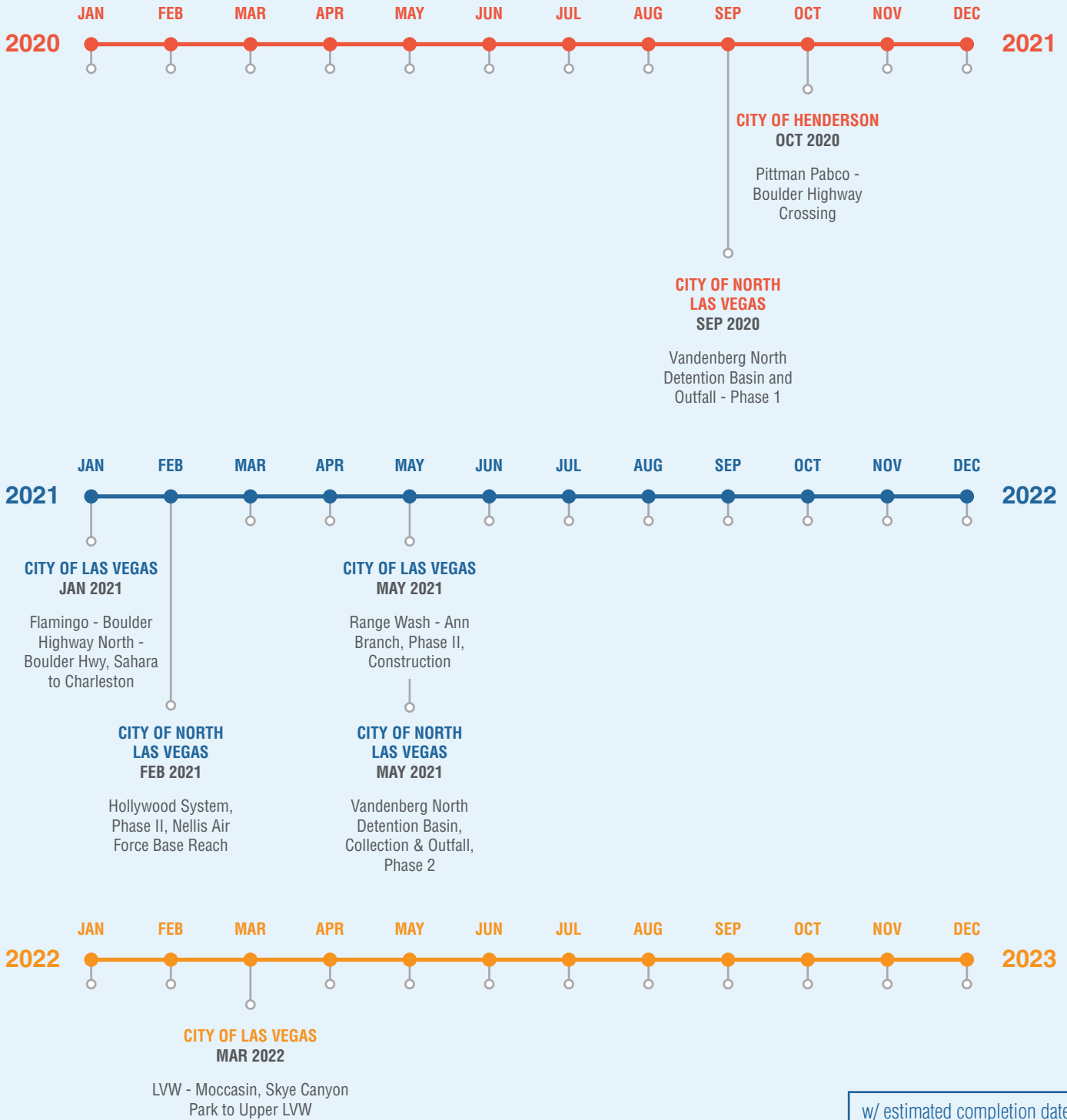
# PROJECTS COMPLETED DURING FY 2018-19



# PROJECTS COMPLETED DURING FY 2019-20

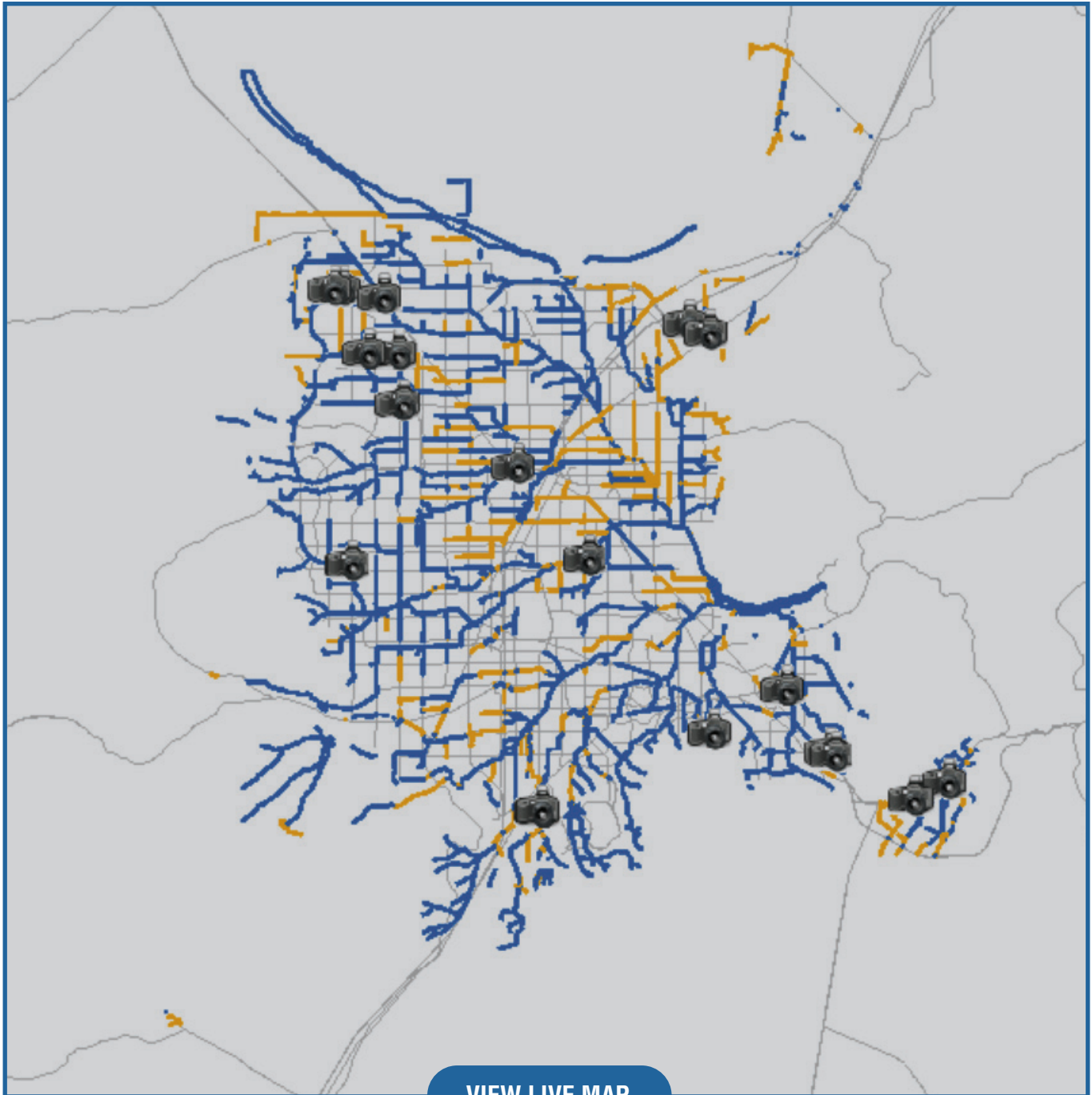


# PROJECTS UNDER CONSTRUCTION OR ABOUT TO START



w/ estimated completion date

# INTERACTIVE MAP





## REGIONAL FLOOD CONTROL DISTRICT CLARK COUNTY, NEVADA

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Las Vegas, NV 89106-4511 702-685-0000

[www.regionalflood.org](http://www.regionalflood.org)



@RegionalFlood



RegionalFloodControlDistrict