

ANNUAL REPORT

2020/2021





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

The last 18 months have been one of the most challenging times in the nation's history. The pandemic fueled an economic rollercoaster for all public agencies and private companies throughout the country, including here at home in Clark County. Efforts to control the pandemic resulted in emergency directives to limit human interaction that included mask mandates, social distancing and temporary closures of businesses. Those efforts created a rapid downhill economic slide for several months, which were followed by several months of surging economic conditions with businesses reopening following favorable reductions in COVID cases.

The Clark County Regional Flood Control District's careful examination of trends and forecasts helped us weather the initial hit to revenue and adjust business operations accordingly to keep us ready to fund much-needed capital improvement projects. Construction operations were deemed essential through the pandemic so projects underway continued without delay. District policies require funding for each project to not depend on future resources, so each construction project was able to continue construction through the pandemic.

Each project creates or sustains good, high-paying jobs at the same time it makes our community more flood resilient. Only through our shared regional governance can we claim success throughout the different areas of Clark County's sprawling 8,000-square miles.

In the urban core, flood control improves commutes and keeps neighborhoods from flooding. In suburban parts of the Las Vegas Valley, we have watched flood control projects spur residential, commercial, and industrial development. And our master planning is charting a course to protect everyone from rural towns to urban cores.

The pandemic has presented challenges to all aspects of our work, but we look forward to continuing our mission of improving Clark County resiliency to the dangers of flooding as we rise out of grips of the pandemic. We will learn and grow from these challenges to better prepare us for future challenges and allow us to continue to provide drainage improvements protecting our community for generations to come.

Since the District's inception three decades ago, we've funded \$2.4 billion in projects including 102 detention basins and 667 miles of channels. The vast network, which proved beneficial during flooding in the last fiscal year, is still a work in progress. With our shared vision for a flood-resilient community, we know finishing the network will be possible with more progress each year.

Mayor Debra March, City of Henderson
Clark County Regional Flood Control District Board Chair

Steven Parrish, General Manager and Chief Engineer, P.E.
Clark County Regional Flood Control District





AUTHORITY OF THE DISTRICT

The Nevada Legislature authorized creation of flood control districts in 1985. The Clark County Regional Flood Control District was established a year later to develop coordinated and comprehensive master plans to solve flooding problems. Funding design, construction and maintenance for flood control facilities comes from one-quarter of one percent sales tax.

The Clark County Regional Flood Control District is a distinct local government agency. The District is led by a General Manager/Chief Engineer responsible for analyzing the extent of flood control problems and 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 the cities of 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



DEBRA MARCH
Chair/Mayor

CITY OF HENDERSON



JUSTIN JONES
Vice-Chair/Commissioner

CLARK COUNTY



STAVROS ANTHONY
Mayor Pro Tem

CITY OF LAS VEGAS



ISAAC BARRON
Mayor Pro Tem

CITY OF NORTH LAS VEGAS



GEORGE GAULT
Councilman

CITY OF MESQUITE



CAROLYN GOODMAN
Mayor

CITY OF LAS VEGAS



KIERNAN MCMANUS
Mayor

CITY OF BOULDER CITY



TICK SEGERBLOM
Commissioner

CLARK COUNTY

TECHNICAL ADVISORY COMMITTEE



Travis Anderson	Dale Daffern	Ed McGuire	Joseph Leedy	Keegan Littrell	Steve Ford	Denis Cederburg
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TAC MEMBERSHIP AS OF JUNE 2021

MEMBER	TITLE	ENTITY	ALTERNATE	TITLE	ENTITY
Steve Ford, Chair	City Engineer	Las Vegas	Tom Brady	Director of Utilities	North Las Vegas
Travis Anderson, Vice-Chair	Director, Public Works	Mesquite	Tom Davy	City Engineer	Henderson
Denis Cederburg	Director, Public Works	Clark County	Mike Hudgeons	Manager of Engineering	North Las Vegas
Dale Daffern	Director, Public Works	North Las Vegas	Jim Keane	City Engineer	Boulder City
Mike Janssen	Director, Public Works	Las Vegas	Oh-Sang Kwon	Engineering Project Manager	Las Vegas
Keegan Littrell	Director, Public Works	Boulder City	Joseph Leedy	Principal Planner, Water Quality	Clark County Water Reclamation District
Ed McGuire	Director, Public Works	Henderson	Jeremy Leavitt	Engineering Program Manager	Las Vegas
John Solvie	Manager, Water Quality Compliance	Clark County Water Reclamation District	Lance Olson	Deputy Director, Public Works	Henderson
			Richard Secrist	Director, Developmental Services	Mesquite
			Kaizad Yazdani	Deputy Director, Public Works	Clark County

CITIZENS ADVISORY COMMITTEE



Back Row, from left to right:

Norman Ashford	William Starmer	Jim Jordano	Brian Wilson
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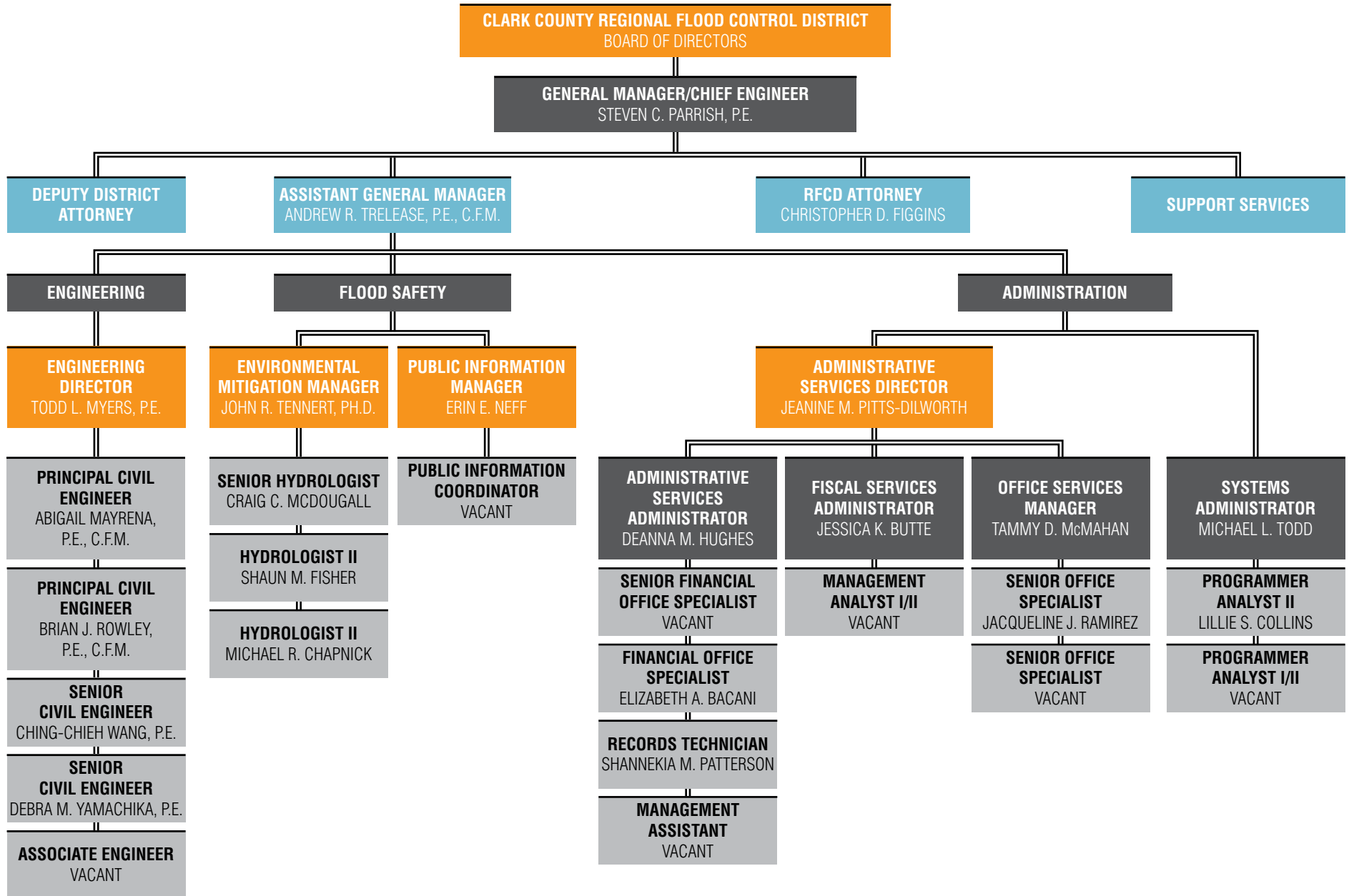
Front Row, from left to right:

Bertha Gutierrez	Ronald Newell	Karina Barragan	Harshal Desai
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CAC MEMBERSHIP AS OF JUNE 2021

MEMBER	ENTITY
Ronald Newell, Chair	Clark County
William J. Starmer, Vice-Chair	City of Las Vegas
Norman Ashford	City of Mesquite
Karina Barragan	City of North Las Vegas
Harshal Desai	City of Henderson
Bertha Gutierrez	Clark County
James Houts	City of Boulder City
Jim Jordano	City of Henderson
Larry Karr	City of Boulder City
Brian Wilson	City of Las Vegas

ORGANIZATIONAL CHART

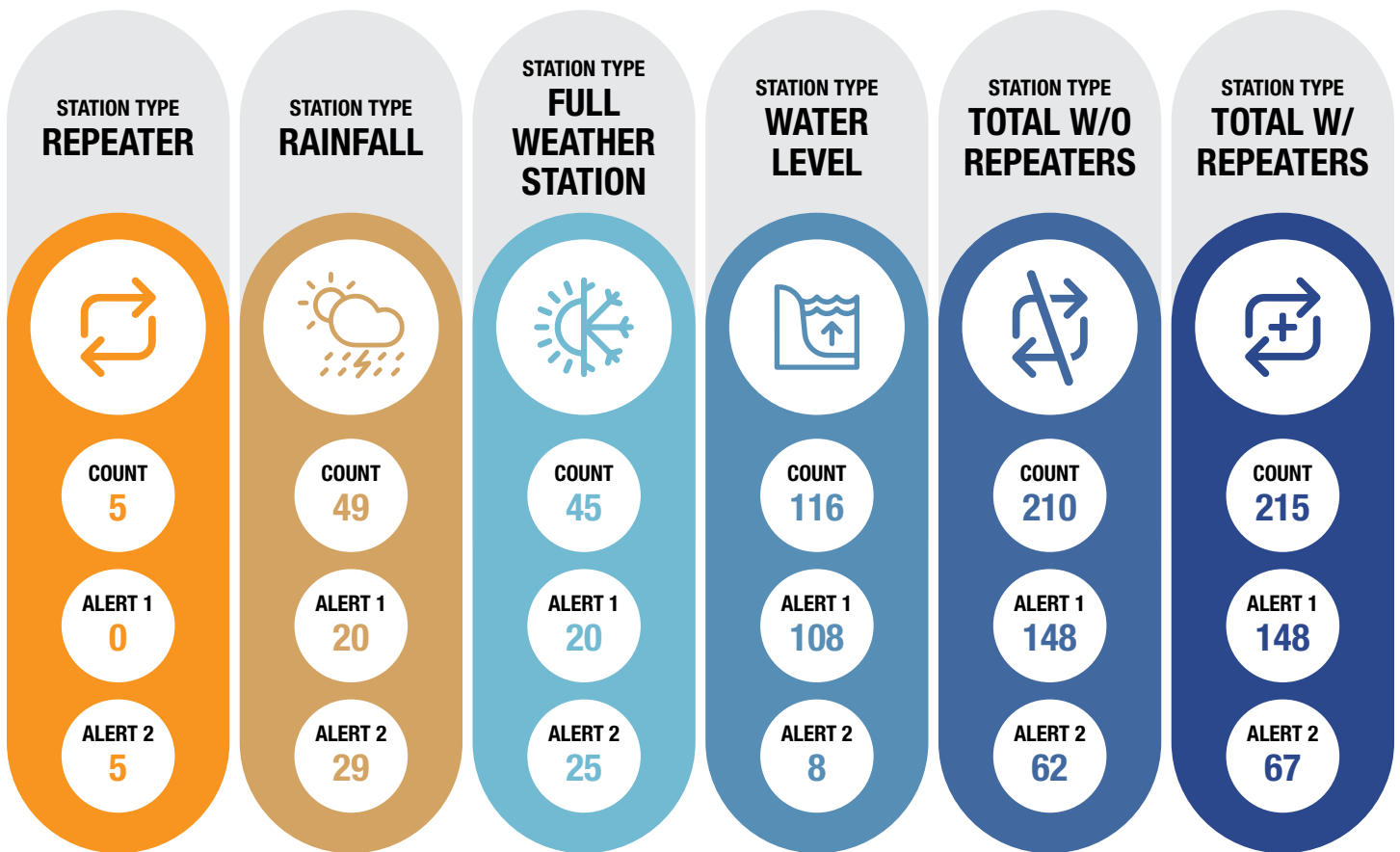


MONITORING THE WEATHER

The District maintains a vast network of rain, water level and weather gauges throughout Clark County to measure weather in near real time. Each year, staff performs 438 site visits for system upgrades and preventive maintenance with additional visits for needed repairs. In the past fiscal year, upgrades totaled \$99,000 including installation of two new radio repeater sites to replace an existing repeater at a location with limited access.

The National Weather Service recalculates the average annual rainfall every 10 years. The current average is 4.18 inches, down from 4.19 a year ago.

STATION OWNER CLARK COUNTY REGIONAL FLOOD CONTROL DISTRICT



EACH YEAR
STAFF PERFORMS
438
SITE VISITS

PAST FISCAL
YEAR UPGRADES
\$99,000
INSTALLATION

WATER LEVEL AND
WEATHER GAUGES
MEASURE WEATHER
IN NEAR REAL TIME



RECENT FLOOD EVENTS

Despite the so-called “non-noon” of 2020, in which the Las Vegas Valley experienced a record-breaking 240 days without measurable rainfall, rain did occur in other parts of Clark County.

On August 22, 2020, the National Weather Service estimated 1-2 inches of rain fell in Lee Canyon’s Deer Creek Basin, including on the Mahogany Fire burn scar. The resulting ash-laden runoff flowed downhill eventually reaching and overtopping southbound US 95 and Corn Creek Road.

A series of early season thunderstorms occurred on June 29, 2021. As these storms moved southward into Clark County, they triggered new thunderstorm development with moderate intensity. The rainfall over Logan Wash in Logandale, Nevada reached 50-year intensity. Several properties had water and mud damage from the runoff, and widespread street flooding occurred in Logandale and Overton, Nevada.

KEEPING THE COMMUNITY INFORMED

ANNUAL PRESS
CONFERENCE
JULY 1, 2020 HELD
VIRTUALLY



\$1 MILLION
ADVERTISING
CAMPAIGN



SOCIAL MEDIA OUTREACH
(FACEBOOK, TWITTER, INSTAGRAM,
YOUTUBE, LINKEDIN, TIKTOK)



VIRTUAL REALITY
EXPERIENCE
6.6 MILLION VIEWS



VIRTUAL SCHOOL
PRESENTATIONS
REACHED AT LEAST
1,400 STUDENTS



THE FLOOD
CHANNEL
7 VIDEOS



ENHANCING INFORMATION SYSTEMS

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

Over the past fiscal year, staff worked on many diverse projects to maintain the computer infrastructure as well as to improve the District's ability to provide information to staff, the public, and its member entities. The District updated and enhanced GIS systems to provide better internal and external support for mapping and construction project tracking.

Our new website continues to provide information about the District's goals and engage with the community. The District is constantly updating the website to ensure timely and accurate information reaches everyone in Clark County.

Most of the desktop and web applications were updated over the past fiscal year to accommodate advancements in technology and future-proof our data dissemination. As technology improves and underlying code frameworks are updated, the need to keep applications aligned with those changes becomes paramount.

Cloud technology has advanced over the years and the District has started moving data and processes into the cloud. This will improve stability, accessibility, and security of all of the data and information the District provides.





KEEPING OUR WATERS CLEAN

The District is committed to ensuring construction, operation and maintenance of flood control facilities complies with all applicable environmental laws and regulations. Compliance with applicable environmental permitting is required as a condition of District funding for projects.

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

During the past fiscal year, the District began the process of renewing the National Pollutant Discharge Elimination System (NPDES) permit for the regional municipal separate storm sewer system in the Las Vegas Valley. This permit

requires the stormwater program of the local municipalities, Clark County, and the District to reduce the amount of non-point source pollution entering the storm sewer system to the maximum extent practicable. The Nevada Division of Environmental Protection (NDEP) is responsible for finalizing and issuing the permit. The existing permit expired in 2015 but NDEP extended it until a new permit is issued.

The District is also taking the lead on a unique project to ensure compliance with state and federal environmental regulations regarding selenium in the Las Vegas Wash. The project involves a cooperative effort with NDEP and local stakeholders to develop water quality standards. Selenium is a metal that occurs naturally in the soils of the Las Vegas Valley, and is then mobilized by groundwater. In sufficiently high amounts, selenium can be harmful to some fish and birds. The District is working to develop standards which protect fish in the Las Vegas Wash in accordance with formal guidance from the U.S. Environmental Protection Agency.

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

National Flood Insurance Program (NFIP) members in Clark County: Clark County, Fort Mojave Indian Reservations, cities of Boulder City, Henderson, Las Vegas, Mesquite and North Las Vegas.

NFIP Benefits to the Community

- Minimum standards for development (Hydrologic Criteria and Drainage Design Manual)
- Floodplain Mapping
- Flood Insurance
- Disaster assistance

COMMUNITY RATING SYSTEM

The Federal Emergency Management Agency (FEMA) sponsors the Community Rating System (CRS), offering 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 a 15 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 Plan
- 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 Moapa Valley (Muddy River and Tributaries) in March 2021. The Master Plan Updates for the City of Mesquite and the Town of Bunkerville are ongoing and expected to be completed by Spring 2022.



LAND DEVELOPMENT REVIEWS

The District performs reviews of proposed land development projects to ensure compliance with the Uniform 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 232 drainage studies and 278 addenda related to the development of private properties. Reviews by the District resulted in the issuance of 229 concurrence letters and 17 related comment letters.



DEMONSTRATING FISCAL INTEGRITY



March 1987

DISTRICT'S FIRST SALES TAX REVENUES

2020-2021

\$ 115.3 MILLION SALES TAX REVENUE



1986



CLARK COUNTY VOTERS APPROVED

A ONE-QUARTER OF ONE PERCENT SALES TAX LEVY



OVERSEEN

\$ 2.4 BILLION FOR DESIGN AND CONSTRUCTION

2019-2020

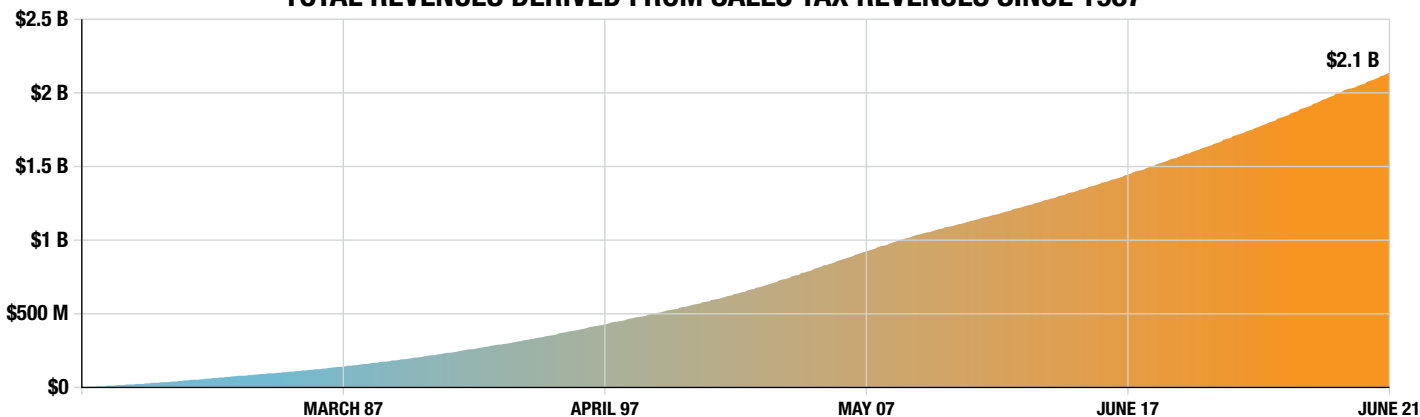
SALES TAX REVENUES 8.5% INCREASE OVER THE PRIOR YEAR



In 1986, Clark County voters approved a one-quarter of one percent 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 (FY) 2020-2021 sales tax revenue was \$115,316,530 million, a 8.5 percent increase over the prior year (2019-2020). Since inception, the District has overseen the design and construction of approximately \$2.4 billion in publicly-funded flood control improvements throughout Clark County.

After nearly five decades of steady population and construction growth, Southern Nevada, like most of the United States, was hard hit by the economic downturn in 2020. However, unlike many other economic downturns, recovery started much faster because it was not a typical recession, but one caused by the pandemic and closure of businesses. During the last months of the fiscal year, Clark County has begun to emerge from the COVID-19 cloud. Pent-up demand and economic stimulus payments have launched the economy into a robust period of recovery. After a year of quarantines, curfews, shutdowns, stay-at-home orders and missed experiences, travelers are returning to Southern Nevada for an escape once again.

TOTAL REVENUES DERIVED FROM SALES TAX REVENUES SINCE 1987



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.

Traditionally, the driving force in the Southern Nevada economy has been the tourism and hospitality industry. In 2020 and into 2021, these sectors were drastically impacted. To offset a decrease in revenues, the District utilized cost containment measures and ensured all expenditures were critical to the District's mission.

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 FY 2020-2021, the District expended approximately \$12.5 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 \$47.5 million, of which \$10.1 million was paid from a self-funded escrow account from the issuance of the 2020A General Obligation Advanced Refund Bonds for the completion of the 2013 General Obligation Bond and 2014 General Obligation Bond refundings.

Remaining sales tax revenue is used for salaries and benefits, professional services and other administrative expenses. In FY 2020-2021, \$6.6 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 States and Canada every year for the past 27 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 that the District's financial statements are presented fairly in all material respects. These positive opinions advise the public the District is following proper accounting principles and procedures.

FISCAL INTEGRITY - FUTURE OUTLOOK

Southern Nevada's economy, much like the rest of the country, rebounded far faster than predicted. Typically, gaming and tourism are notoriously slow to recover after economic downturns, but these sectors surged this spring 2021 after capacity restrictions were eased. The Southern Nevada economy has entered a period of supercharged growth and could potentially remain stronger than it was during the pre-pandemic era into 2023.

For FY 2021-2022, we are projecting conservative sales tax revenues of \$113.9 million, keeping in mind any form of recurrence of COVID or related strains could result in a slowdown in the economy. Although data indicates an upward economic trend, the District will continue to monitor the dynamics of this fluid situation and adjust as needed.

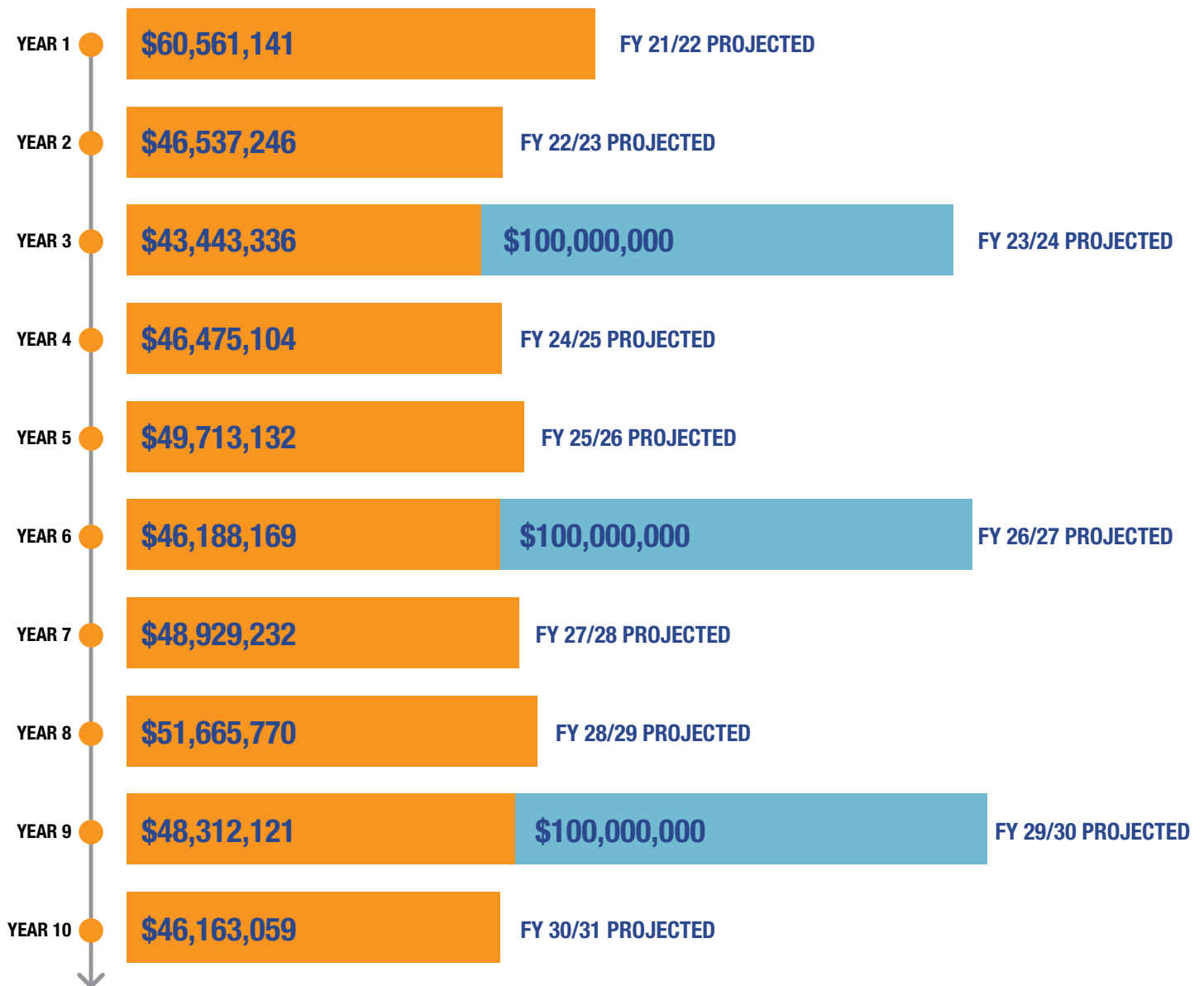


TEN-YEAR CONSTRUCTION PROGRAM

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.

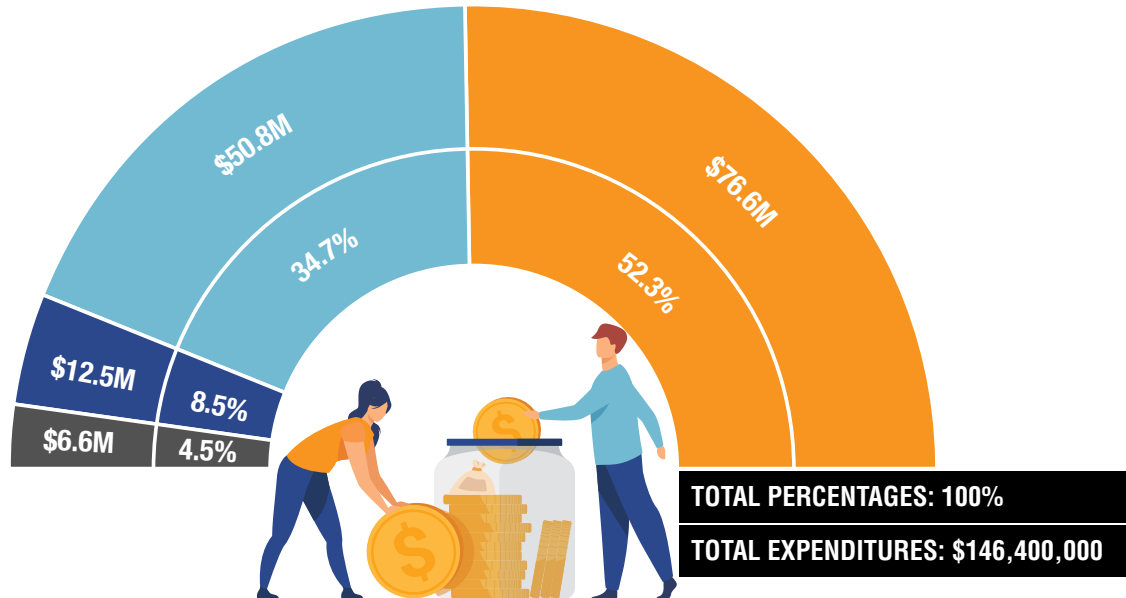
This long-range financial plan drives the TYCP project funding schedule including the planning of upcoming design and construction projects. Approximately \$376.1 million in resources are available for projects in FY 2021-22, which includes previously approved projects and new projects.

Total available resources for the TYCP are estimated to be \$863.6 million including the issuance of bonds programmed in the amount of \$300 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 \$667.6 million remains outstanding.



PAY-AS-YOU-GO TOTAL IS \$487,988,311 **DEBT PROCEEDS TOTAL IS \$300,000,000** **TOTAL AVAILABLE RESOURCES FOR FUNDING \$787,988,311**

CLARK COUNTY REGIONAL FLOOD CONTROL DISTRICT FUNDING



Clark County Regional Flood Control District Governmental Funds - Fiscal Year 2020-2021 Sources and Uses of Funds Summary - Unaudited [1]	OPERATING FUND 2860	FACILITIES MAINTENANCE FUND 2870	DEBT SERVICE FUND 3300	CAPITAL IMPROVEMENT FUND 4430	TOTAL REGIONAL FLOOD CONTROL DISTRICT FUNDS
Beginning Balance (July 1, 2020)	\$16,854,109	\$8,276,087	\$18,385,601	\$242,288,847	\$285,804,644
Sources of Funds					
Sales Tax Revenue	\$115,316,530	-	-	-	\$115,316,530
Interest/Other	\$273,439	(\$104,423)	(\$1,420,430)	\$571,593	(\$679,821)
Bonds Issued	-	-	\$186,349,887	\$84,115,113	\$270,465,000
Premium on Bonds Issued	-	-	\$985,689	\$9,896,640	\$10,882,329
Transfers from Other Funds	\$920,898	\$8,000,000	\$46,692,591	\$40,000,000	\$95,613,489
Total Sources of Funds	\$116,510,867	\$7,895,577	\$232,607,737	\$134,583,346	\$491,597,527
Uses of Funds					
Salaries and Wages	(\$2,378,676)	-	-	-	(\$2,378,676)
Employee Benefits	(\$971,345)	-	-	-	(\$971,345)
Services and Supplies	(\$3,115,469)	(\$12,453,976)	(\$1,500)	-	(\$15,570,945)
Capital Outlay	(\$148,889)	-	-	(\$76,597,392)	(\$76,746,281)
Principal	-	-	(\$19,150,000)	-	(\$19,150,000)
Interest	-	-	(\$28,378,618)	-	(\$28,378,618)
Bond Issuance Costs	-	-	(\$3,230,611)	-	(\$3,230,611)
Transfers to Other Funds	(\$94,692,591)	-	-	(\$920,898)	(\$95,613,489)
Total Uses of Funds	(\$101,306,970)	(\$12,453,976)	(\$50,760,729)	(\$77,518,290)	(\$242,039,965)
Fiscal Year Net Change	\$15,203,897	(\$4,558,399)	\$181,847,008	\$57,065,056	\$249,557,562
Ending Balance (June 30, 2021)	\$32,058,006	\$3,717,688	\$200,232,609	\$299,353,903	\$535,362,206

[1] Audited financial statements are expected to be available in November 2021

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 District funds to maintain the regional flood control facilities within their respective jurisdictions.

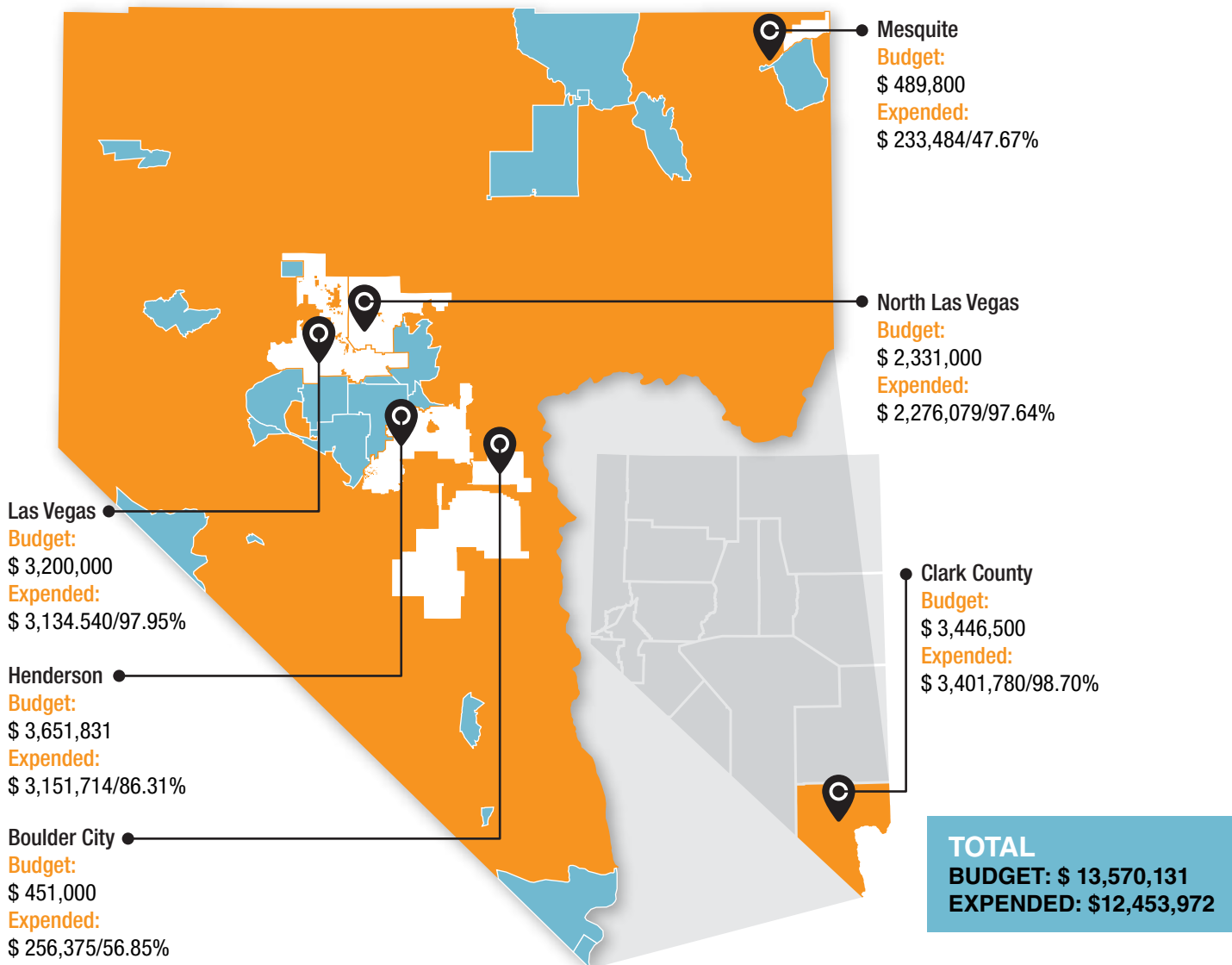
The District worked with member entities to develop the Fiscal Year 2020-2021 Maintenance Work Plans and Budgets, which were approved by the Board on June 11, 2020 in the amount of \$13,073,558.

The Board approved two supplemental budget requests for Fiscal Year (FY) 2020-2021 totaling \$496,573. North Las Vegas requested an increase in the amount of \$176,573 to provide funding for

maintenance of the Las Vegas Wash within the jurisdiction of Clark County. Clark County requested an increase in the amount of \$320,000 for additional funding needed to cover homeless encampment clean-up within the facilities.

With approval of the supplemental budget requests, the total approved budget for all entities is \$13,570,131.

Flood control facility maintenance was performed using a combination of private contractors and entity maintenance staff. During this fiscal year, District staff inspected and/or maintained numerous facilities throughout the District service area including 102 detention basins and 667 miles of channel and underground storm drains, of which 140 miles are natural washes.



PROJECTS COMPLETED DURING FY 2019-2020

2019

August 2019
CITY OF LAS VEGAS

Local Drainage -
Buckskin Storm Drain Improvements

October 2019
CITY OF NORTH LAS VEGAS

Fifth Street Collector -
Centennial Parkway to Deer Springs Way

October 2019
CITY OF HENDERSON

Pittman North Detention Basin
and Outfall - Phase III

December 2019
CITY OF LAS VEGAS

Rancho Road System -
Elkhorn, Grand Canyon to Hualapai

December 2019
CITY OF NORTH LAS VEGAS

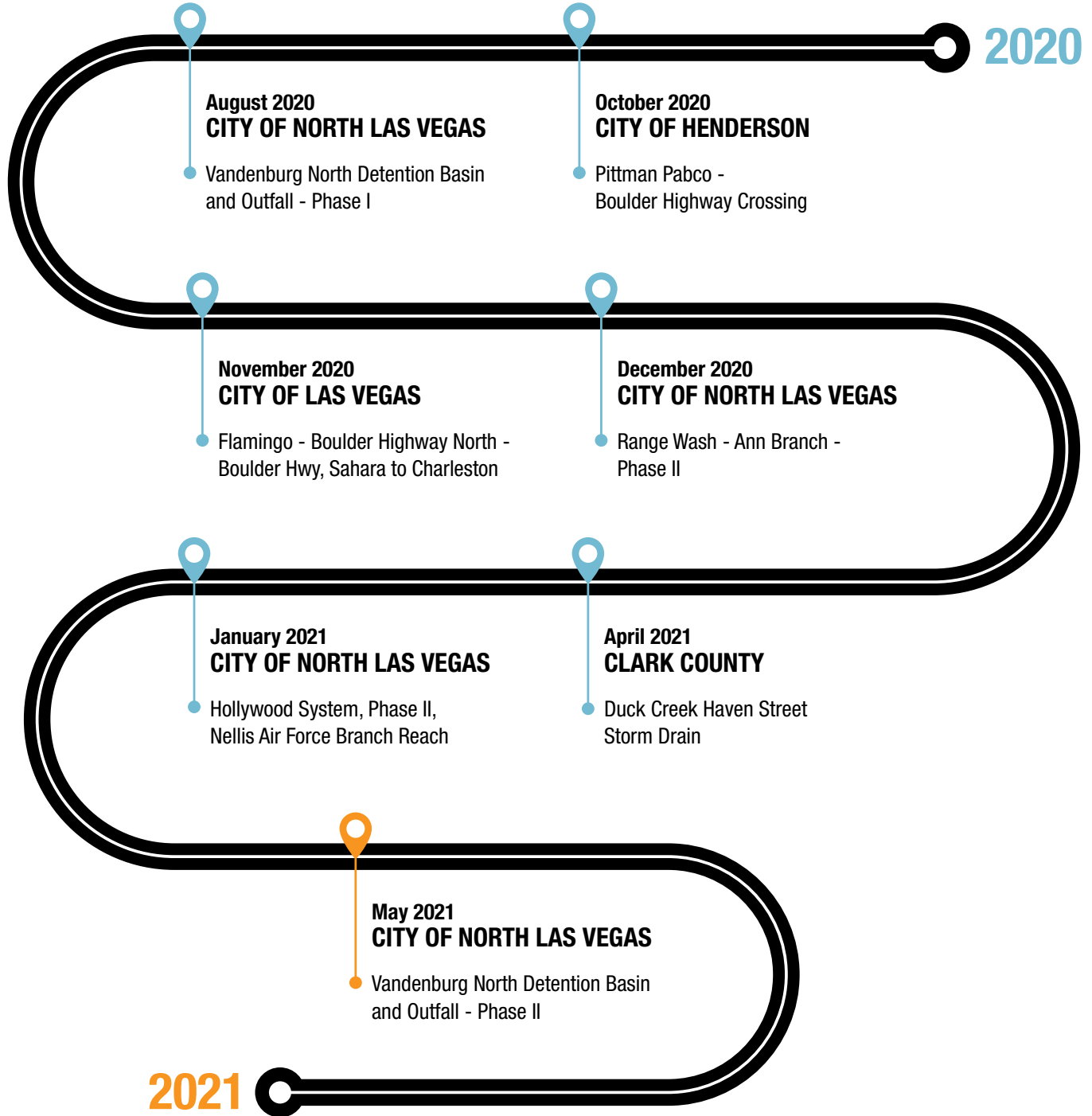
Hollywood System, Dunes South Detention
Basin to Centennial Parkway, Phase I

January 2020
CLARK COUNTY

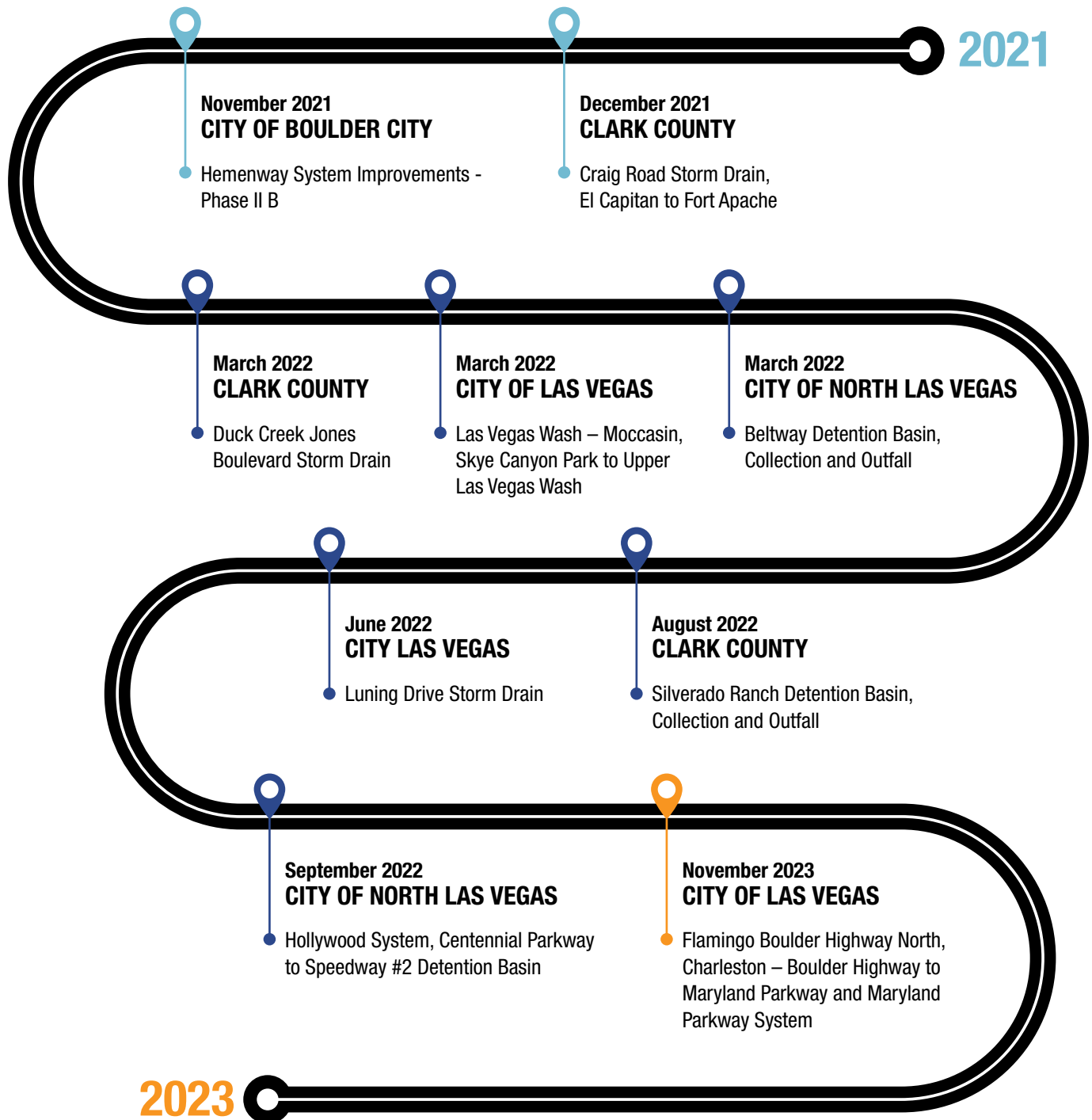
Outlying Areas - Laughlin -
SR 163 to Casino Drive

2020

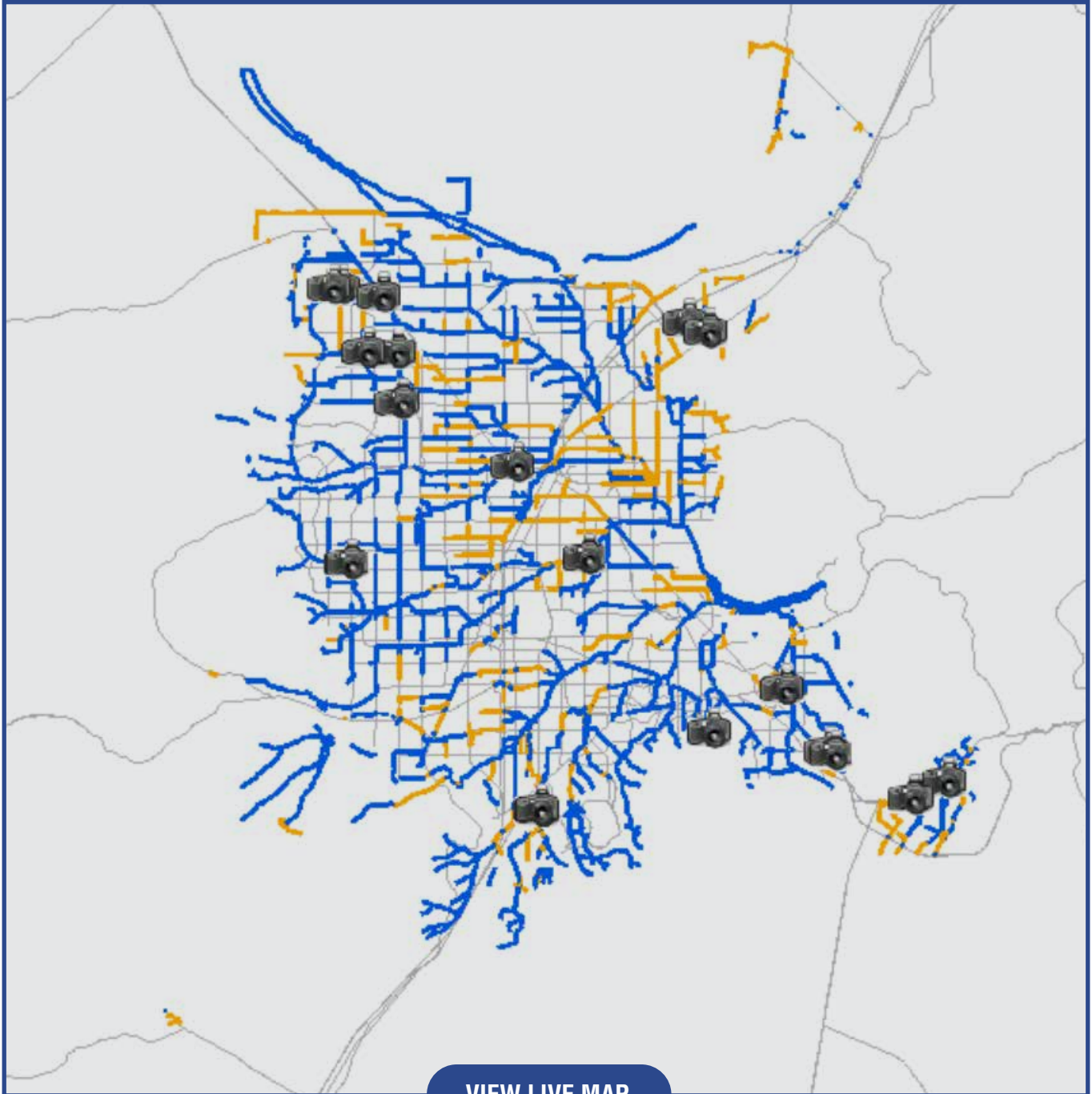
PROJECTS COMPLETED DURING FY 2020-2021



PROJECTS UNDER CONSTRUCTION OR ABOUT TO START (JUNE 30, 2021)



INTERACTIVE MAP OF DISTRICT FACILITIES



[VIEW LIVE MAP](#)



**REGIONAL FLOOD CONTROL DISTRICT
CLARK COUNTY, NEVADA**

600 South Grand Central Parkway, Suite 300
Las Vegas, NV 89106-4511

702-685-0000

www.RegionalFlood.org



@RegionalFlood



RegionalFloodControlDistrict