2022-2023 ANNUAL REPORT

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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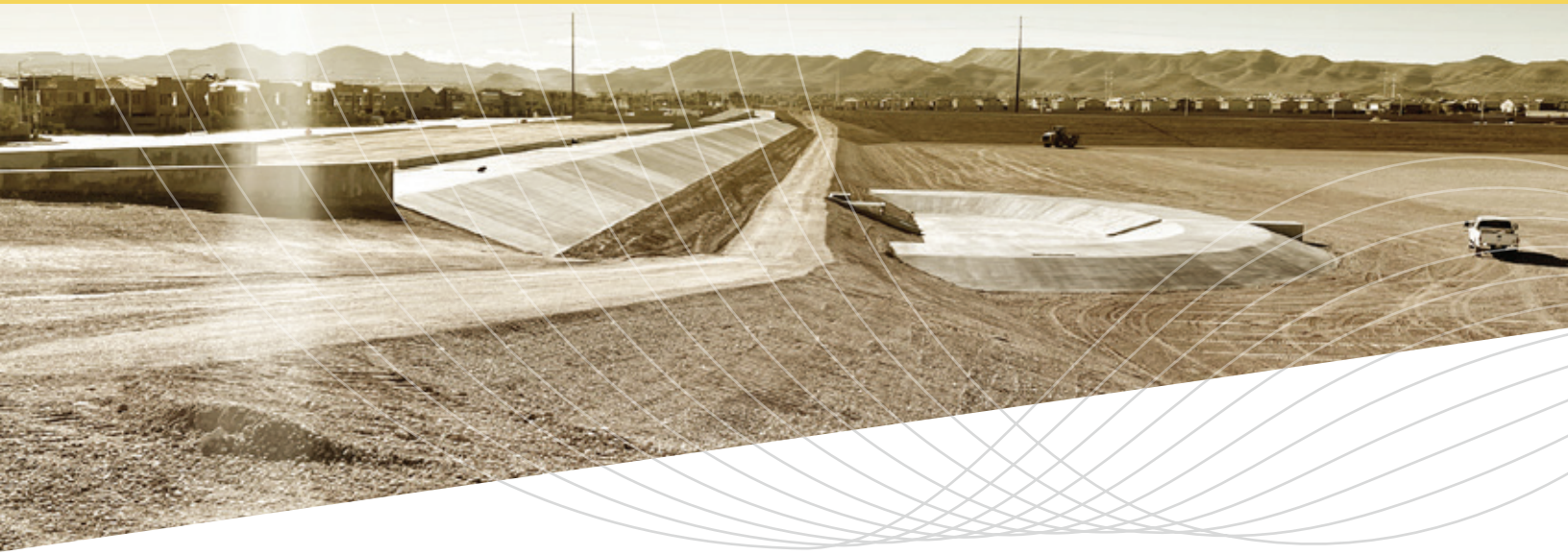
CLARK COUNTY

REGIONAL FLOOD CONTROL DISTRICT

BUILDING A FLOOD RESILIENT COMMUNITY SINCE 1986

Since the District's inception more than three decades ago, we've funded $2.5 billion in projects including 106 detention basins and 684 miles of channels and storm drains. 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.

DISTRICT MESSAGE



EVERY DAY THE REGIONAL FLOOD CONTROL DISTRICT (DISTRICT) WORKS TO KEEP FLOODS AWAY FROM PEOPLE AND PEOPLE AWAY FROM FLOODS. WE FULFILL THIS MISSION BY PLANNING AND FUNDING THE DESIGN, CONSTRUCTION, AND MAINTENANCE OF FLOOD CONTROL INFRASTRUCTURE THROUGHOUT CLARK COUNTY TO KEEP FLOODS AWAY FROM PEOPLE. WE WORK TO KEEP PEOPLE AWAY FROM FLOODS THROUGH OUR OUTREACH EFFORTS TO EDUCATE THE PUBLIC ON THE DANGERS OF FLOODING.

One of many highlights over the past year was the completion of the Silverado Ranch Detention Basin Collection and Outfall project, located near Decatur Boulevard and Silverado Ranch Boulevard. This essential project will reduce the threat of flooding along Silverado Ranch Boulevard and protect many existing homes and businesses in the area. This is one of six projects that completed construction over the last year totaling $44.51 million in construction funding provided by the District.

Over 75 percent of the flood control Master Plan has been completed. However, there is still much work to do. We estimate that it will take roughly 30 more years to finish all flood control improvements, including another 38 detention basins and 210 miles of channels and storm drains.

AS OF JUNE 2023, 684 MILES OF FLOOD CONTROL CHANNELS AND STORM DRAINS AND 106 DETENTION BASINS HAVE BEEN BUILT IN CLARK COUNTY.

A direct benefit of the flood control facilities built to date is the removal of 65 square miles of federally designated Special Flood Hazard Areas (SFHA). Not only are the residents of Clark County better protected from flooding risks, but many receive substantial savings on flood insurance premiums each time a Federal Emergency Management Agency (FEMA) SFHA is removed. Each project built also puts people to work and protects businesses, homeowners, and visitors.

Our public information team works to keep people away from floods by implementing an advertising campaign to educate residents and visitors about the dangers of flash flooding. This team continues to educate hundreds of Clark County elementary school students each year by using tools such as our new interactive flood table to help teach students how to stay safe during rain events. This year, we partnered with the Children's Discovery Museum to showcase our animated spokesman Drainger Danger re-imagined as a fortune telling gypsy in a real-life Zoltar machine, talking to parents and children about the dangers of flash flooding.

In addition to building flood control facilities and educating the public about flood safety, the District is committed to helping keep stormwater runoff clean as it travels untreated to the Las Vegas Wash and Lake Mead, the community's 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 practicable. This involves developing and implementing a comprehensive stormwater quality management program. Each year we make more progress towards our goal of protecting the residents of Clark County from the dangers of flooding. The District will continue to work with our local, State, and Federal partners to fulfill that mission and help make Clark County more resilient to the dangers of flooding for generations to come.

JUSTIN JONES

CHAIR
REGIONAL FLOOD CONTROL DISTRICT CHAIR

OVER 75% OF THE FLOOD CONTROL MASTER PLAN HAS BEEN COMPLETED

TOTAL OF $2.52B SPENT IN LOCAL AND FEDERAL FUNDING FOR FLOOD CONTROL INFRASTRUCTURE

THE DISTRICT STAFF WORKS WITH LOCAL PUBLIC WORKS DEPARTMENTS TO ENSURE ALL PROJECTS ARE EXECUTED SEAMLESSLY

DISTRICT SPENDS LESS THAN 10% OF ANNUAL REVENUE ON OVERHEAD COSTS INCLUDING SALARIES & CONSULTING FEES

THE REMOVAL OF 65 SQUARE MILES OF FEDERALLY DESIGNATED SPECIAL FLOOD HAZARD AREAS (SFHA)

ENSURING THAT OUR COMMUNITY IS WELL-EQUIPPED TO HANDLE FLOODS NOW AND IN THE FUTURE

HISTORY OF THE DISTRICT

THE DISTRICT BOARD OF DIRECTORS INCLUDES TWO REPRESENTATIVES FROM CLARK COUNTY AND THE CITY OF LAS VEGAS, AND ONE 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 on the second Thursday of the month to enact policy, authorize expenditures, and consider other flood control matters. A series of high-profile floods in the **Las Vegas Valley during the 1970s and early 1980s led to requests for a coordinated response and uniform solutions to flooding.** The Nevada Legislature authorized the creation of flood control districts in 1985. The Clark County Regional Flood Control District was established a year later to develop and implement coordinated and comprehensive master plans to solve flooding problems in Clark County. Funding for designing, constructing, and maintaining flood control facilities comes from one-quarter of one percent sales tax in Clark County.

PUBLIC BOARD MEETINGS ARE HELD ON THE SECOND THURSDAY OF EACH MONTH TO AUTHORIZE CRITICAL DISTRICT OPERATIONS AND EXPENDITURES

The District is a distinct local government agency 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. In addition to the general manager/chief engineer, there are **27 full-time equivalent staff positions** in engineering, flood safety, and administration. The District contracts with Clark County for various legal and administrative services including Comptroller, District Attorney, Enterprise Resource Planning, Finance, Purchasing, Risk Management, Human Resources, and Treasurer.

DISTRICT STAFF

1	MICHAEL CHAPNICK	6	REGINA MORALES	11	JESSICA HONOUR	16	CAROL TRUJILLO
2	ANDREW TRELEASE	7	DEBRA YAMACHIKA	12	JUSTIN KIM	17	JOHN TENNERT
3	ABIGAIL MAYRENA	8	MICHAEL TODD	13	MICHELLE FRENCH	18	BRIAN ROWLEY
4	DEANNA HUGHES	9	TODD MYERS	14	DOMINIQUE CARTER	19	CHING WANG
5	PAULINA VELEZ	10	LILLIE COLLINS	15	STEVEN PARRISH	20	BRITTNEY DUNCAN

NOT PICTURED

CHRIS FIGGINS

BOARD OF DIRECTORS

BOARD OF DIRECTORS AS OF JUNE 30, 2023

JUSTIN JONES

CHAIR
CLARK COUNTY

BRIAN KNUDSEN

MAYOR PRO TEM
CITY OF LAS VEGAS

ISAAC BARRON

VICE-CHAIR
CITY OF NORTH LAS VEGAS

TICK SEGERBLOM

COMMISSIONER
CLARK COUNTY

CAROLYN GOODMAN

MAYOR
CITY OF LAS VEGAS

DAN SHAW

COUNCILMAN
CITY OF HENDERSON

JOE HARDY

MAYOR
CITY OF BOULDER CITY

PAUL WANLASS

COUNCILMAN
CITY OF MESQUITE

TECHNICAL ADVISORY COMMITTEE

TAC MEMBERSHIP AS OF JUNE 2023

MEMBER	ENTITY
1 **Travis Anderson** Director, Public Works	City of Mesquite
2 **Denis Cederburg** Director, Public Works	Clark County
3 **Lance Olson** Director, Public Works	City of Henderson
4 **Rosa Cortez** City Engineer	City of Las Vegas
5 **Jamie Curreri, Vice-Chair** Director, Public Works	City of Boulder City
6 **Dale Daffern, Chair** Director, Public Works	City of North Las Vegas
Mike Jannsen Director, Public Works	City of Las Vegas
John Solvie Manager, Water Quality Compliance	Clark County Water Reclamation District

ALTERNATE	ENTITY
Tom Brady Director of Utilities	City of North Las Vegas
Mike Hudgeons Manager of Engineering	City of North Las Vegas
Jim Keane City Engineer	City of Boulder City
Oh-Sang Kwon Engineering Project Manager	City of Las Vegas
7 **Joseph Leedy** Principal Planner	Clark County Water Reclamation District
Jeremy Leavitt Engineering Program Manager	City of Las Vegas
Keegan Littrell City Engineer	City of Henderson
Richard Secrist Director, Developmental Services	City of Mesquite
Kaizad Yazdani Deputy Director, Public Works	Clark County

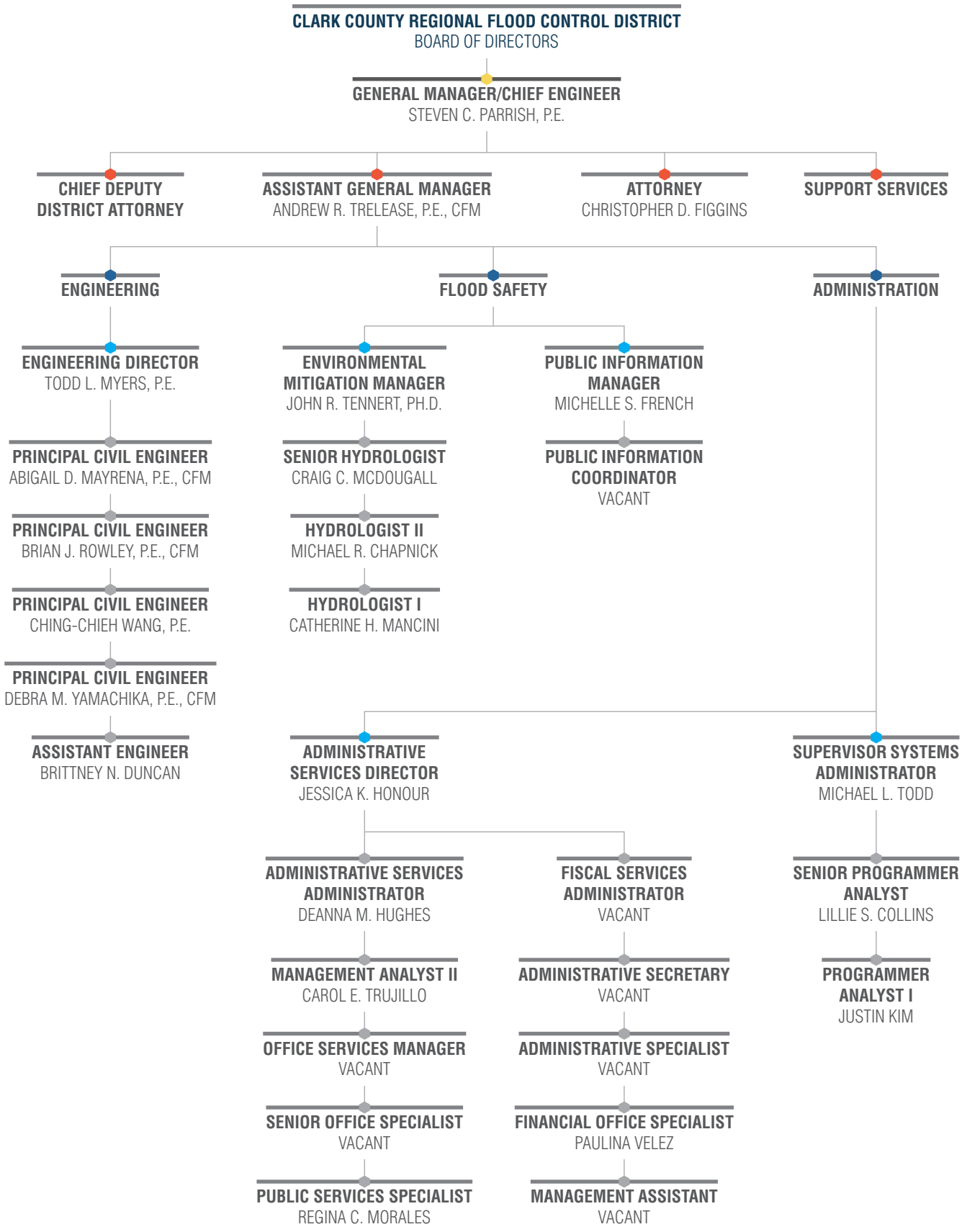
CITIZENS ADVISORY COMMITTEE

CAC MEMBERSHIP AS OF JUNE 2023

MEMBER	ENTITY
2 RONALD NEWELL CHAIR	CLARK COUNTY
WILLIAM STARMER VICE-CHAIR	CITY OF LAS VEGAS
3 NORMAN ASHFORD	CITY OF MESQUITE
4 KARINA BARRAGAN	CITY OF NORTH LAS VEGAS
HARSHAL DESAI	CITY OF HENDERSON
BERTHA GUTIERREZ	CLARK COUNTY

MEMBER	ENTITY
1 JIM JORDANO	CITY OF HENDERSON
7 LARRY KARR	CITY OF BOULDER CITY
JESSICA PRESTON	CITY OF BOULDER CITY
5 LARRY SCHULTZ	CITY OF LAS VEGAS
6 JOSHUA WILKERSON	CITY OF NORTH LAS VEGAS

ORGANIZATIONAL CHART



ABOUT OUR REGION

THE CLIMATE IN CLARK COUNTY IS TYPICAL OF THE SOUTHERN NEVADA DESERT, WITH HOT, DRY SUMMERS AND MILD WINTERS. THE AVERAGE ANNUAL PRECIPITATION IS 4.18 INCHES AND GENERALLY OCCURS AS THE RESULT OF TWO STORM TYPES:

LONGER-DURATION, LOW-INTENSITY WINTER EVENTS

SHORTER-DURATION, HIGH-INTENSITY SUMMER THUNDERSTORMS

Winter storms in this area are typically associated with low-pressure systems that form over the Pacific Ocean and move eastward. The precipitation from these storms is generally widespread but only occasionally intense.

On the other hand, summer storms typically occur between July and September and are characterized as localized convective thunderstorms that can often be very intense. **During these hot summer months, moist and unstable air from the Gulf of Mexico is rapidly forced upwards by hot air currents.** This process often results in spectacular displays of lightning in the desert sky. Unfortunately, it can also lead to severe thunderstorms with intense rainfall on steep mountain slopes and armored or caliche-laden desert surfaces. The rainwater runs off rapidly and concentrates in urbanized areas at lower elevations that can be extremely dangerous for anyone within or adjacent to the path of the flood water.

Clark County is geographically diverse, from small rural towns like Moapa and Overton and incorporated cities of Boulder City and Mesquite, to the thriving urban Las Vegas metropolitan area and cities of Las Vegas, Henderson, and North Las Vegas.

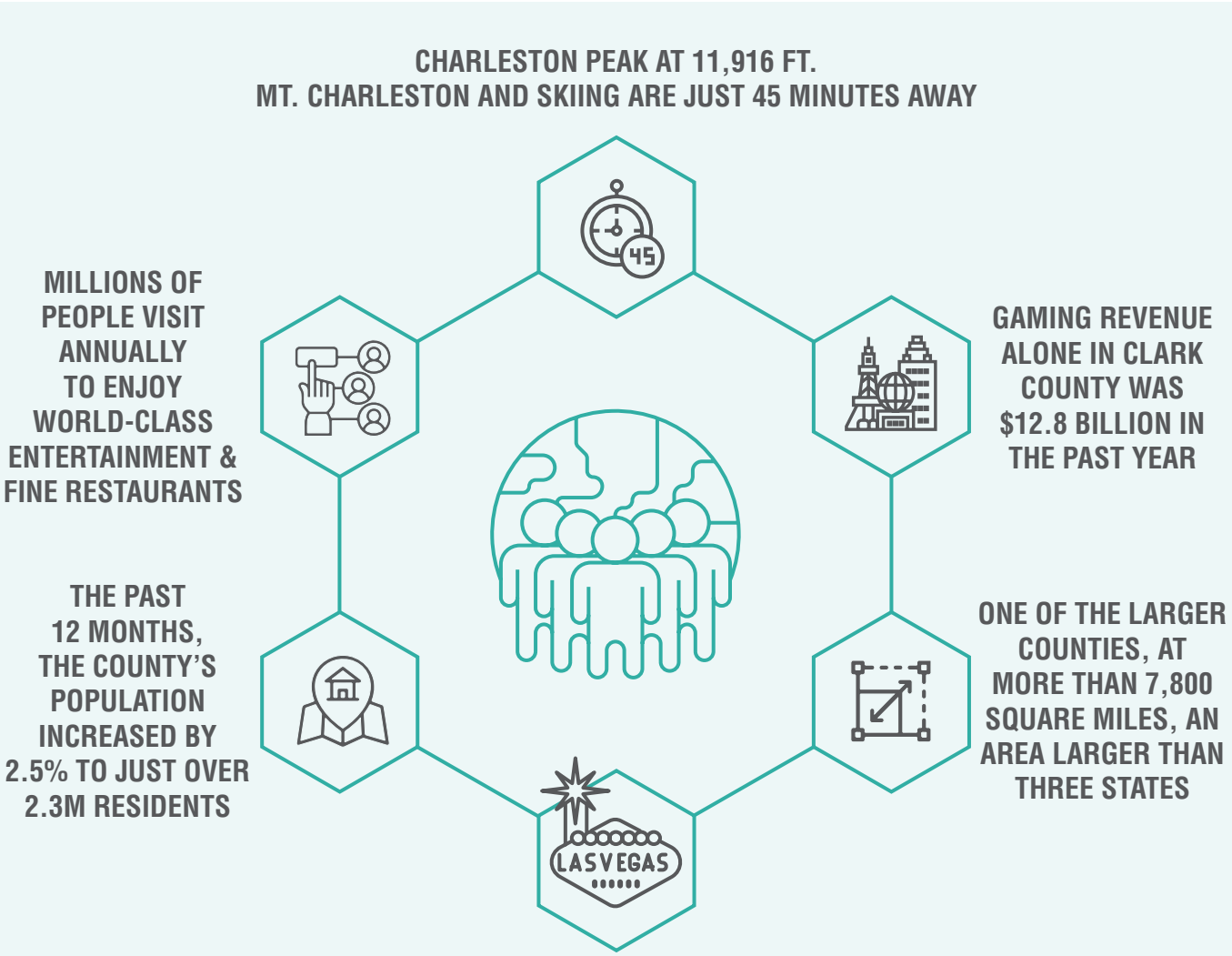
The famed Las Vegas Strip sits at the heart of Clark County, featuring unparalleled attractions like dancing fountains, a replica of the renowned Eiffel Tower, a giant illuminated sphere, and some of the world's largest and most beautiful resorts.

Millions of people visit annually to enjoy fine restaurants, shop in a dazzling array of stores, and relax at luxurious spas. **Las Vegas boasts over 151,000 hotel rooms and is among the world's top convention destinations.**

The Las Vegas Valley is surrounded by mountains that provide excellent recreation opportunities, from biking the hills or climbing in Red Rock Canyon to escaping the summer heat in the **Spring Mountains, topped by Charleston Peak at 11,916 feet. Mt. Charleston and skiing are just 45 minutes away,** and Red Rock National Conservation Area beckons on the western fringe of the Las Vegas Valley. **Lake Mead National Recreation Area, located 30 miles southeast of Las Vegas,** caters to boaters, swimmers, anglers, hikers, wildlife photographers, and roadside sightseers.

According to the Las Vegas Convention and Visitors Authority, **Las Vegas continues to be a worldwide destination for tourists and conventioneers, with 38.8 million visitors in 2022. Gaming revenue alone in Clark County was $12.8 billion in the past year.**

Over the past 12 months, **the county's population increased by 2.5% to just over 2.3 million residents.** People continue to move to Clark County, **the nation's 11th most populous county, up from 14th in 2020. It's also one of the larger counties, at more than 7,800 square miles,** an area larger than the three smallest American states.



HISTORY OF FLOODING IN CLARK COUNTY

THE DRY, HOT REGION OF CLARK COUNTY HAS EXPERIENCED PERIODS OF INTENSE RAINFALL AND SUBSEQUENT FLASH FLOODING. IN A SPECIAL REPORT ENTITLED "HISTORY OF FLOODING, CLARK COUNTY, NEVADA 1905-1975," THE U.S. SOIL CONSERVATION SERVICE DOCUMENTED 184 FLOODING EVENTS THAT DAMAGED PRIVATE PROPERTY AND PUBLIC FACILITIES.

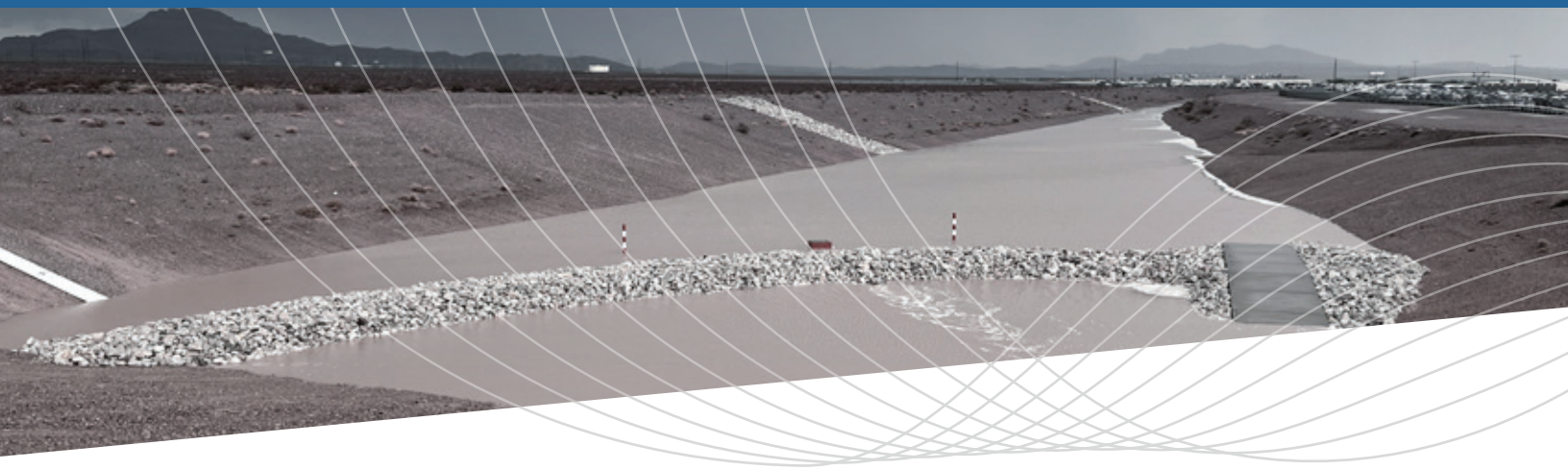
Since the District's inception in 1986, the area has experienced at least 12 floods that resulted in more than $1 million in property damage. In that same period, 24 lives were reportedly lost in 24 separate flash flood events.

While floods can and have occurred every month of the year, the most damaging storms typically happen between July and September in the monsoon season. Some residents and visitors are unaware of the flood potential or never see flooding occur until it is too late. These storms can be potentially deadly and cause significant property damage. But they can also create inconveniences such as flooded roadways and debris accumulation.

1905-1975, THE U.S. SOIL CONSERVATION SERVICE DOCUMENTED 184 FLOODING EVENTS THAT DAMAGED PRIVATE PROPERTY & PUBLIC FACILITIES.

The average annual rainfall in the Las Vegas Valley is **4.18 inches, nearly equally divided between the summer and winter.** The arid southwest landscape with steep slopes, poor soil, and urbanization can create rapid storm runoffs during periods of intense rainfall. Reports describing notable rainfall and flood events, as well as all the data collected by the District's Flood Threat Recognition System (FTRS), can be found on the District's website: **regionalflood.org**

MONITORING THE WEATHER



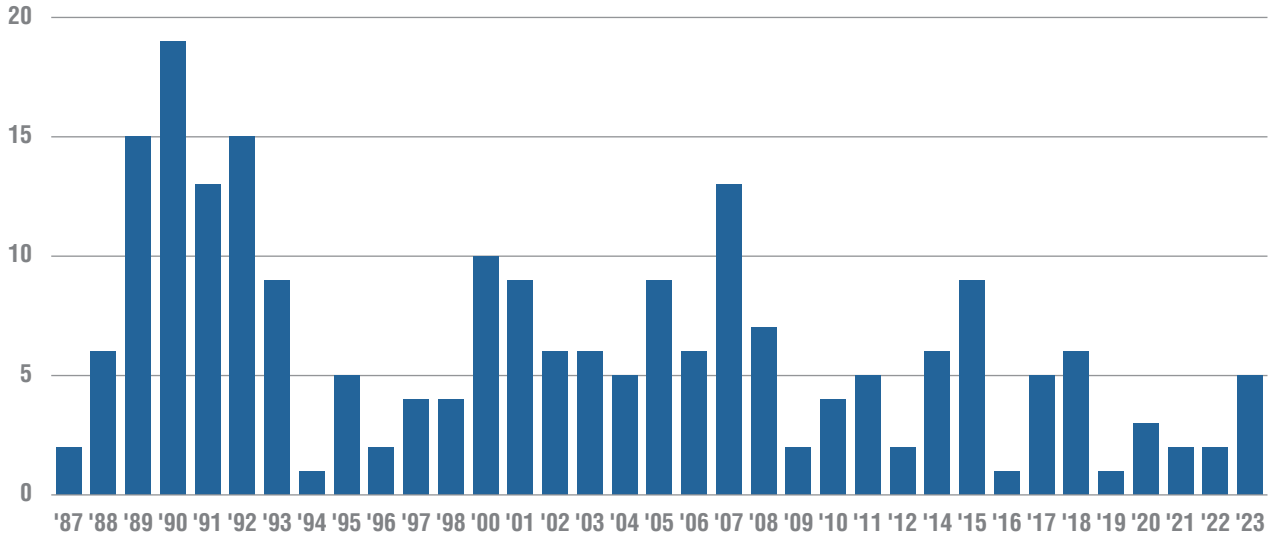
The District maintains a vast network of rain, water level, and meteorological gauges throughout Clark County to measure weather in near real-time, referred to as the Flood Threat Recognition System (FTRS). **Each year, the District's hydrology staff performs more than 450 site visits** for system upgrades and preventive maintenance, with additional visits for needed repairs.

During the past year, four ALERT 1 water level sites were upgraded to ALERT 2, which allows more reliable data reception. Additionally, four water level monitoring stations were installed around the Las Vegas Valley and a new rain gauge was installed in Henderson. Two water level monitoring stations near Centennial Hills have been temporarily decommissioned until site improvements are made to deter vandalism. Vandalism mitigation at a third site has allowed it to continue functioning.

CCRFCD STATIONS

STATION TYPE	COUNT	ALERT 1	ALERT 2
Repeater	7	0	7
Rainfall	50	17	33
Full Weather Station	45	18	27
Water Level	124	103	21
Total w/o Repeaters	219	138	81
Total w/ Repeaters	226	138	88

GAUGE INSTALLATIONS BY YEAR

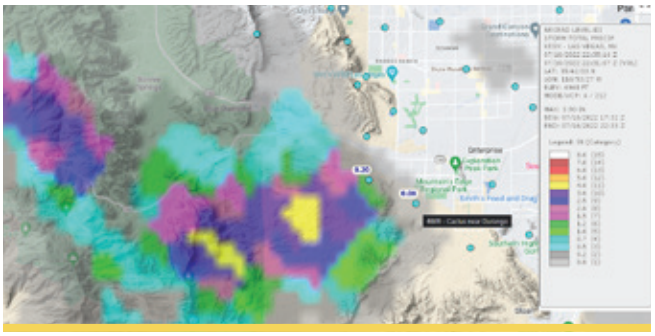


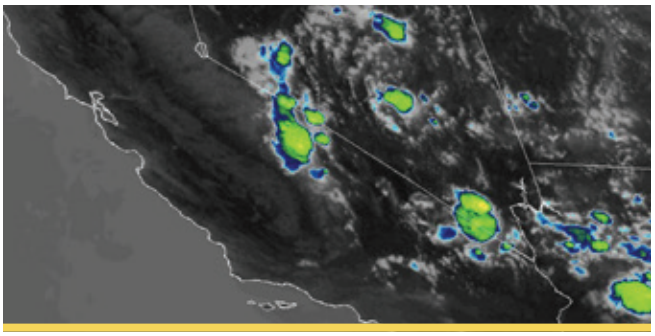
2022 STORM EVENTS

JULY 16, 2022

UPPER DUCK CREEK DETENTION BASIN

Monsoon moisture had been in place for several days before a vigorous thunderstorm developed west of Upper Duck Creek Detention Basin (UDCDB) around 5:00 p.m. At 5:40 p.m., the storm quickly collapsed, creating strong winds that blew across the valley. National Weather Service (NWS) radar estimated that 2.62 inches of rain fell west of UDCDB. Runoff from the storm entered UDCDB, and sufficient impoundment occurred at 6:30 p.m. to register on the water level sensor, with an estimated depth of 2.30 feet at the outlet works. The interim outfall channel was sufficient to keep the basin's discharge away from downstream properties.





JULY 18, 2022

SPRING MOUNTAINS

On the evening of July 18, an area of thunderstorms developed rapidly in the Spring Mountains. The District's Rainbow Canyon gauge first detected rain at 6:13 p.m. Within 27 minutes rainfall accumulation reached 1.34 inches. When precipitation stopped falling at the gauge by 7:36 p.m., the gauge recorded 2.36 inches. Despite the rain amounts that have typically produced flooding conditions in the Rainbow Canyon subdivision, the unusually low precipitation in the Spring Mountains in 2022 created dryer-than-normal soil conditions that likely absorbed more runoff than normal. Also, in the nine years since the Carpenter One fire that destroyed much of the area's vegetation, numerous dead trees have since fallen, creating barriers to the sheet runoff, which may have allowed more time for the parched soil to absorb the precipitation.

JULY 25, 2022

SOUTHWESTERN LAS VEGAS VALLEY

The morning of July 25, 2022, was hot and humid as southeasterly winds brought abundant monsoon moisture into Southern Nevada. Daytime heating initially triggered thunderstorms in the southwestern Las Vegas Valley and at Apex.

In the southwest valley, the District rain gauge at Cactus Avenue near Durango Drive reported a rainfall total of 0.98 inches. To the northeast, the gauge at Apex and I-15 reported a total of 2.05 inches while the District's newest gauge near the Las Vegas Motor Speedway showed 1.02 inches on its first day of operation. Impacts from the storm included the closure of Silverado Ranch Boulevard between Dean Martin Drive and Decatur Boulevard. Deep water on the road resulted from outflow draining from an upstream detention basin, and some motorists had to be rescued when their vehicles stalled while going through the water. Other parts of the southwest valley reported water ponding on local roadways.

JULY 27 – JULY 28, 2022

STORMS IN MESQUITE

Storms in Lincoln County, Nevada, and Washington County, Utah, began rapidly moving southwestward toward Mesquite, Nevada. By 7:00 p.m., storms had reached the Valley of Fire with most District Flood Threat Recognition System gauges reporting 0.50 inches of rain or less (one exception was Bunkerville, registering 0.98 inches). At 7:30 p.m., showers developed over Frenchman Mountain, east of Nellis Air Force Base. By 8:00 p.m. severe thunderstorms, with winds exceeding 58 mph, were developing around the Las Vegas Valley.

One impact from this evening involved backed-up runoff in the Whitney Channel causing damage to nearby properties. The channel was under construction to increase the capacity of the structure to carry additional storm runoff.

Runoff entered a residential property near Athens Avenue and Racetrack Road in Henderson. Rainfall rates and totals were similar to those at Whitney Ranch. The District's FTRS repeater transmit antenna in Mesquite was damaged during the storm. It was repaired a week later.

JULY 28, 2022

I-15/US 95 CORRIDORS

The second night of storms originated from the north and northeast of Clark County. One unique feature of the evening was that the line of thunderstorms that developed over the Sheep Mountains moved directly southward. It is more common to see storms moving towards Las Vegas to arrive along the I-15 corridor or occasionally via the US 95 corridor.

At 6:30 p.m. storms again began forming in the Gold Butte area as additional storms in Lincoln County, Nevada, and Washington County, Utah, were moving towards Las Vegas. By 8:15 p.m. a line of north-to-south-orientated severe thunderstorms storms over the Sheep Range were moving southward into North Las Vegas and would eventually reach downtown Las Vegas. At 9:00 p.m. the District's downtown weather station began reporting rainfall. Thunderstorms over downtown Las Vegas begin merging with the storms from Gold Butte, adding additional energy and thus creating new storms in the southern Las Vegas Valley and Boulder City.

STORM IMPACTS

- A swift water rescue involving a woman who fell into Lower Las Vegas Wash near Craig Ranch Park. She was rescued by emergency responders near Losee Road after traveling approximately two miles.
- Nevada Power reported 7,300 residents were without power in the central and eastern valley, including The Fremont Street Experience.
- Rain entered the Circa, Caesars Palace, and Planet Hollywood casinos, primarily as leaks through the ceilings.
- North Las Vegas Police reported 15 intersections and/or streets closed due to excessive water on the roads.
- The City of Las Vegas reported 330 calls for service and rescues.
- Clark County Fire Department reports they performed six swift water rescues.
- Eight vehicle crashes were reported around the valley.
- One vehicle was reported underwater in the Charleston Boulevard underpass near Commerce Street.

AUGUST 11, 2022

DOWNTOWN LAS VEGAS

Unfortunately, the very active summer monsoon of 2022 claimed two lives. Thunderstorms that formed in Lincoln County, Nevada, began moving into Clark County in the late afternoon. Around 7:00 p.m. new storms began forming over Yucca Forest in the Sheep Mountains and approached the northern CC-215 beltway by 8:30 p.m. These thunderstorms intensified as they crossed the beltway moving southward towards downtown Las Vegas and the Strip. At the same time, a new storm development was initiated immediately north of downtown Las Vegas.

By 10:00 p.m. Tropicana North Detention Basin reported 0.75 inches of rainfall in 23 minutes, and at 9:50 p.m. the rainfall rate equaled a 10-year return interval event. The one-hour radar screenshot at the end of this report shows one inch of rainfall occurring roughly over a one-square-mile area just west of where the first drowning victim was recovered. The Clark County Coroner's office relayed the following description of the attempted rescue:

On August 11, 2022, a 64-year-old male who was experiencing homelessness became entangled in a metal trash grate in a runoff culvert/wash southeast of Giles Street and Mandalay Bay Road. He was rescued by firefighters, transported from the scene, and pronounced deceased due to drowning. A second deceased person was found the next day near the same location. The cause of death has also been determined to be accidental drowning.

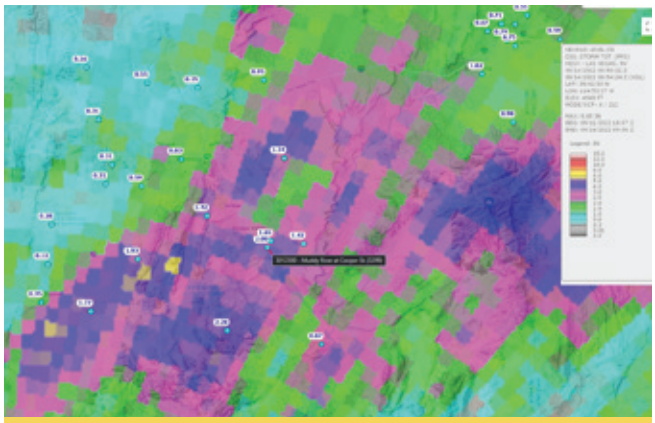
SEPTEMBER 13, 2022

US 93 SOUTH OF COYOTE SPRINGS, NEVADA

Hurricane Kay moved northwestward in the Pacific Ocean and paralleled the western coast of Baja, Mexico the previous week. Counter-clockwise flow from the hurricane pushed warm tropical moisture up the Colorado River Valley into Clark County. By Tuesday, September 13, the remnants of Tropical Depression Kay moved into southern Nevada, which enhanced thunderstorm intensities during the afternoon and evening hours.

The NWS-Las Vegas office issued multiple Flash Flood Warnings and Advisories throughout the day, primarily for the north-central and northeastern portions of Clark County. During the afternoon, flooding occurred along US 93 south of Coyote Springs, Nevada.

At 6:32 p.m., NWS issued a Flash Flood Warning that included the areas of Moapa Valley and the Towns of Moapa, Overton, and Logandale. Long-duration rains resulted in a swift water rescue of two people from their van on Nevada State Route 169 in Overton. A big rig truck driver was also rescued in the area. Hidden Valley Road and the Ute exit from I-15 were also closed due to flood waters from California Wash.



2023 STORM EVENTS

MARCH 2023

NORTHEASTERN CLARK COUNTY

The winter of 2022-2023 saw higher than normal snowfall throughout the western United States. A warm winter storm moved through Nevada and Utah on the weekend of March 11-12 bringing widespread rain, which triggered rapid melting of the snowpack in the Virgin River and Meadow Valley Wash basins.

Elevated flow in the Virgin River was first detected on March 11 and an alarm was triggered by a water level sensor at Scenic Bridge, Arizona, on March 12th. After consulting with the local National Weather Service and the Colorado River Basin Forecast Center, District hydrologists informed City of Mesquite Public Works of the increased flow that was in progress and more snowmelt runoff was expected. The local United States Geological Survey (USGS) office measured a peak flow of 9,200 cfs at the Virgin Narrows gauge. Virgin River bank erosion and damage to a couple of properties were noted.

Rapid snowmelt also filled the nearly depleted Echo Canyon Reservoir in Lincoln County, Nevada, to the point where flow overtopped the spillway. At one point, emergency managers were concerned the berm could potentially fail, which fortunately did not occur. Water flow in the normally dry section of Meadow Valley Wash was observed by a District gauge, roughly 7 miles north-northeast of Glendale, Nevada, for over one week.

Figure 1 - Echo Canyon Reservoir March 18, 2023

Figure 2 - Flow at Meadow Valley Wash near Glendale, NV

MARCH 15, 2023

LAUGHLIN

On March 15th a storm impacted Laughlin, NV and Bullhead, Arizona. Data suggests this was a sizeable, but isolated, event that occurred in an area where the District does not have any rain gauges. District gauges did pick up some rainfall, but none of them recorded enough rain to warrant much concern at the time. Radar information gathered after the storm indicated the rain seemed to be concentrated in the area upstream (west) of Casino Drive near Bruce Woodbury Parkway. Stormwater runoff overwhelmed Bruce Woodbury Parkway and went through an existing storm drain pipe that is under capacity. This caused a significant amount of water to pass over Casino Drive and flow through the parking areas of the Aquarius, Edgewater and Colorado Belle hotels. There is some dramatic video of water draining down the slopes into the Colorado River, which is expected for this kind of rain event. There are reports of swift water rescues by the Clark County Fire Department including five people who were rescued out of a sport utility vehicle when the driver tried to cross the stormwater passed over Casino Drive and got stuck. A man in Bullhead City, AZ was rescued out of a flood channel. He was hanging on a tree and a ladder truck had to extend out to rescue him. There were no reports of deaths during this event. The Clark County Building Department did not receive complaints or concerns about any structural damage to homes or businesses. Although there were no reports of damage to casino buildings, there was some damage reported to ancillary buildings that were in the flow path of the runoff.

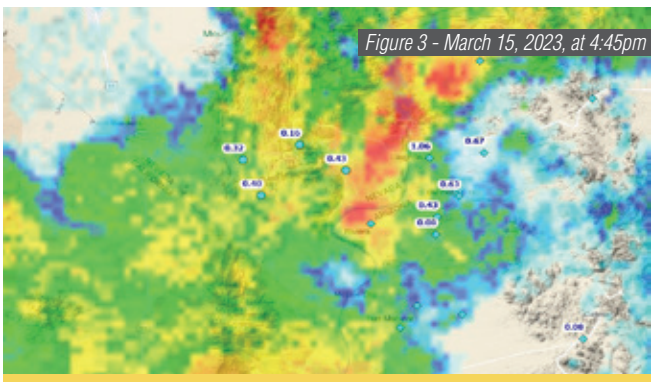
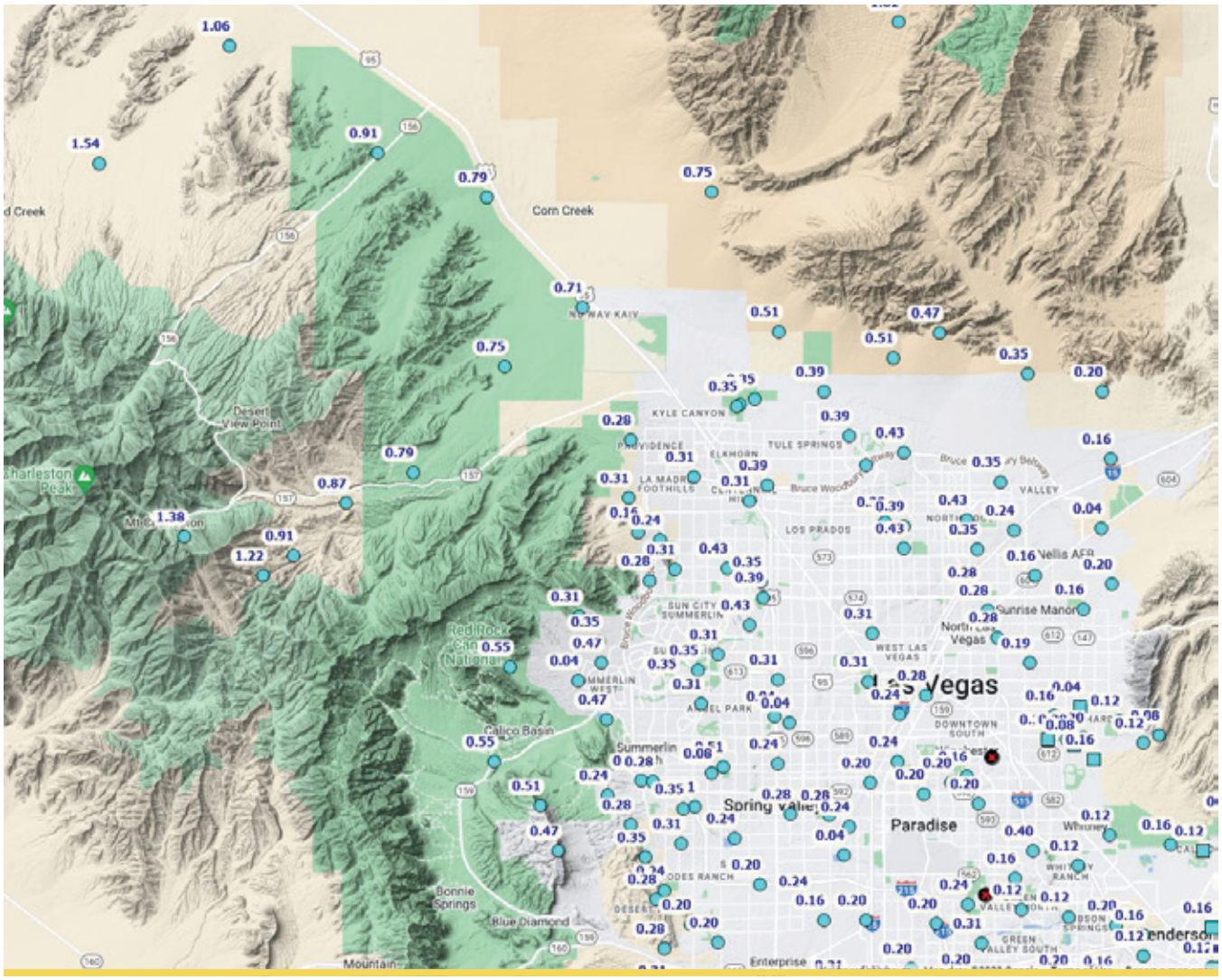


Figure 3 - March 15, 2023, at 4:45pm

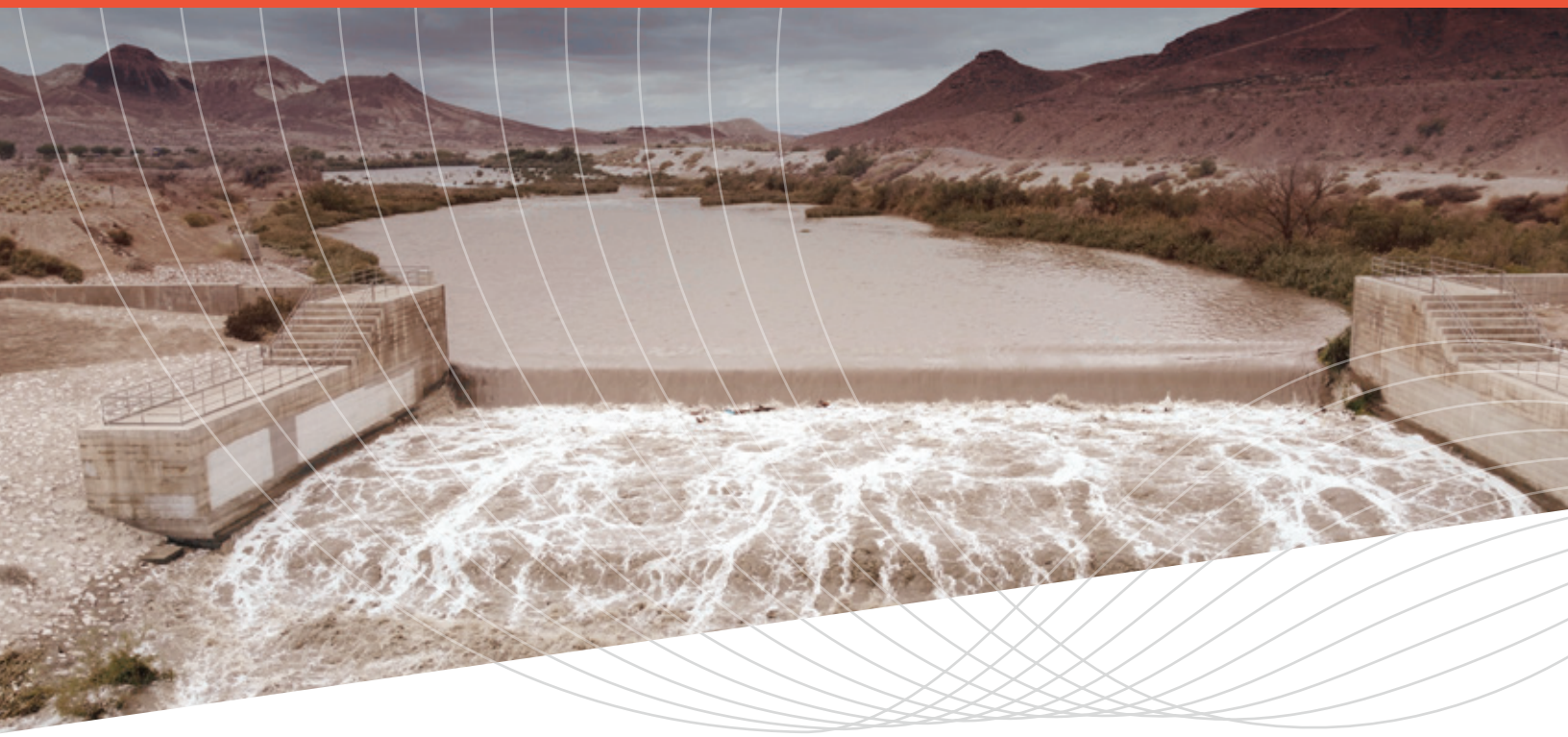
JUNE 15-16, 2023

LAS VEGAS VALLEY

Climatologically, June is the driest month of the year in Clark County as the average rainfall at Harry Reid International Airport is only 0.04 inches. An unusually late-season winter storm moved inland from the southern California coast and slowly passed through Clark County. Precipitation gauges in the Las Vegas valley reported rainfall amounts around 0.10 inches in the east to 0.50 inches in the west. Rainfall totals exceeding one inch were reported in the Spring Mountains. Fortunately, the relatively long duration of this storm resulted in lower rainfall intensities and fewer opportunities for flooding occurred in the area.



KEEPING OUR WATER CLEAN



THE DISTRICT IS COMMITTED TO ENSURING FLOOD CONTROL FACILITIES' CONSTRUCTION, OPERATION, AND MAINTENANCE OF FLOOD CONTROL FACILITIES COMPLIES WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL ENVIRONMENTAL LAWS AND REGULATIONS.

MORE THAN 150 CONTRACTORS ATTENDED STORMWATER QUALITY TRAINING, PROVIDING ATTENDEES WITH INFORMATION ON HOW TO COMPLY WITH STATE AND LOCAL ENVIRONMENTAL REGULATIONS AND ORDINANCES ON AN ACTIVE CONSTRUCTION SITE.

Compliance with appropriate environmental regulations is required as a condition of District construction and maintenance funding for flood control projects. Rain that falls in the Las Vegas Valley travels untreated to the Las Vegas Wash and Lake Mead, the community's 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 practicable.** This involves developing and implementing a comprehensive stormwater quality management program.

The District conducted several outreach activities during the past fiscal year to educate the construction community about various environmental regulations associated with the construction industry. In partnership with the local municipalities and Clark County, the District facilitated four training sessions to educate construction contractors about applicable stormwater regulations and how construction activity can affect stormwater runoff. More than 150 people attended the training, providing attendees with information on how to comply with state and local regulations and ordinances, including an overview of stormwater quality practices and nonpoint source pollution. When rain falls on an active construction site, a variety of pollutants could be picked up by stormwater and discharged into the storm sewer system if active measures – referred to as Best Management Practices or BMPs – are not implemented.

To help prevent stormwater pollution from reaching the Las Vegas Wash and Lake Mead, owners/operators of construction sites are required to comply with a stormwater discharge permit administered by Nevada Division of Environmental Protection (NDEP).

The District also continued to work to ensure compliance with state and federal regulations regarding selenium in the Las Vegas Wash and channels tributary to the Las Vegas Wash. The project involves a cooperative effort with NDEP and local stakeholders to develop water quality standards for selenium that protect fish in the Las Vegas Wash. Selenium is a metal that occurs naturally in the soils of the Las Vegas Valley and is mobilized by groundwater. In sufficiently high amounts, selenium can harm some fish and birds. In December 2022, the Nevada State Environmental Commission adopted standards for selenium in the Las Vegas Wash based on the recommendation of NDEP and Southern Nevada stakeholders. The standards are currently pending review by the EPA.

Finally, the District continued to partner with Clark County to develop an in-lieu fee habitat mitigation program for Southern Nevada.

The purpose of this program is to provide long-term mitigation certainty for impacts to regulated "waters of the United States" (WOTUS) that result from the construction of flood control and other facilities in Clark County. Once established, the in-lieu fee program will allow public and private entities to purchase habitat mitigation credits in exchange for impacts on the WOTUS. The funding from the credits is then used to restore habitat and wetlands in other areas of Clark County, such as the Muddy and Virgin Rivers or the Pittman Wash. During the 2023 Nevada Legislative Session, the Legislature approved, and the Governor signed, Senate Bill 115 which updated the authority for Clark County to develop and implement an in-lieu fee program. The project is in the early stages of development and is expected to become operational within the next 12-18 months.

THE DISTRICT CONTINUES TO WORK WITH THE NDEP TO RENEW THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FOR THE MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) IN THE LAS VEGAS VALLEY. THIS PERMIT REQUIRES THE LOCAL MUNICIPALITIES, CLARK COUNTY, AND THE DISTRICT TO REDUCE THE AMOUNT OF NONPOINT SOURCE POLLUTION [1] ENTERING THE STORM SEWER SYSTEM TO THE MAXIMUM EXTENT PRACTICABLE. NDEP IS RESPONSIBLE FOR FINALIZING AND ISSUING THE PERMIT, WHICH IS ANTICIPATED TOWARDS THE END OF 2023.

[1]According to the U.S. Environmental Protection Agency (EPA), nonpoint source pollution occurs when runoff from rain and snowmelt carries pollutants into waterways such as rivers, streams, lakes, wetlands, and even groundwater. The name **"Nonpoint Source Pollution"** is derived from the concept that there is no single point from which the pollution comes; it comes from everyone and everywhere. Nonpoint Source Pollution. is the nation's and the state's highest threat to water quality.

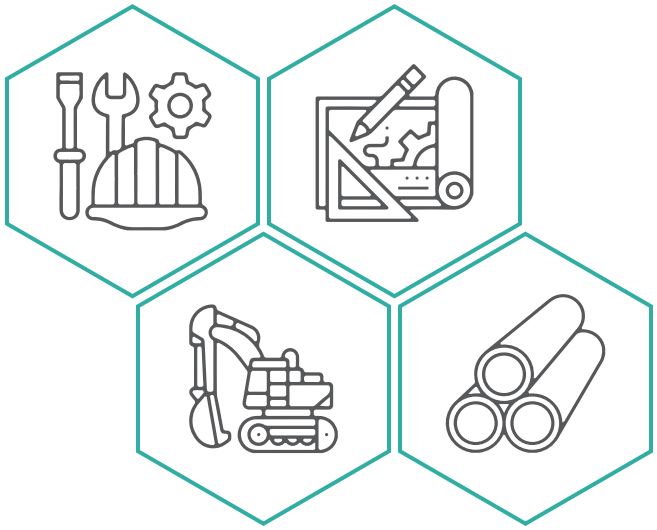
DISTRICT WORKS WITH CLARK COUNTY AND THE CITIES OF HENDERSON, LAS VEGAS, AND NORTH LAS VEGAS TO MAKE SURE STORMWATER IS AS CLEAN AS PRACTICABLE

TO HELP PREVENT STORMWATER POLLUTION FROM REACHING THE LAS VEGAS WASH, AND LAKE MEAD, OWNERS/OPERATORS OF CONSTRUCTION SITES ARE REQUIRED TO COMPLY WITH A STORMWATER DISCHARGE PERMIT ADMINISTERED BY NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

IN DECEMBER 2022, THE NEVADA STATE ENVIRONMENTAL COMMISSION ADOPTED STANDARDS FOR SELENIUM IN THE LAS VEGAS WASH BASED ON THE RECOMMENDATION OF NDEP AND SOUTHERN NEVADA STAKEHOLDERS

FLOODPLAIN MANAGEMENT

A COMPREHENSIVE FLOODPLAIN MANAGEMENT PROGRAM INCLUDES A REGULATORY PROGRAM, THE COMMUNITY RATING SYSTEM (CRS), FLOOD CONTROL MASTER PLANNING, AND LAND DEVELOPMENT REVIEWS. THE FOLLOWING SECTIONS BRIEFLY DESCRIBE EACH OF THESE.



REGULATORY PROGRAM

FEMA established the National Flood Insurance Program (NFIP) in 1968 to make flood insurance available at a reasonable cost for properties located in participating communities. NFIP members in Clark County: Clark County, Fort Mojave Indian Reservation, cities of Boulder City, Henderson, Las Vegas, Mesquite, and North Las Vegas.

NFIP BENEFITS TO THE COMMUNITY

- Minimum standards for development (Uniform Regulations for the Control of Drainage)
- Floodplain mapping
- Flood insurance
- Disaster assistance

THE COMMUNITY RATING SYSTEM

FEMA sponsors the CRS, offering reduced flood insurance premiums in areas where 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 potentially 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
- Flood Control Maintenance Funding
- Flood Hazard Mapping and Remapping
- Flood Threat Recognition System
- Flood Control Construction Funding
- 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 community flood control facilities and locations, descriptions, and cost estimates of proposed future facilities. The Nevada Revised Statutes requires the District to update the Master Plans every five years to assess the progress and identify changes.

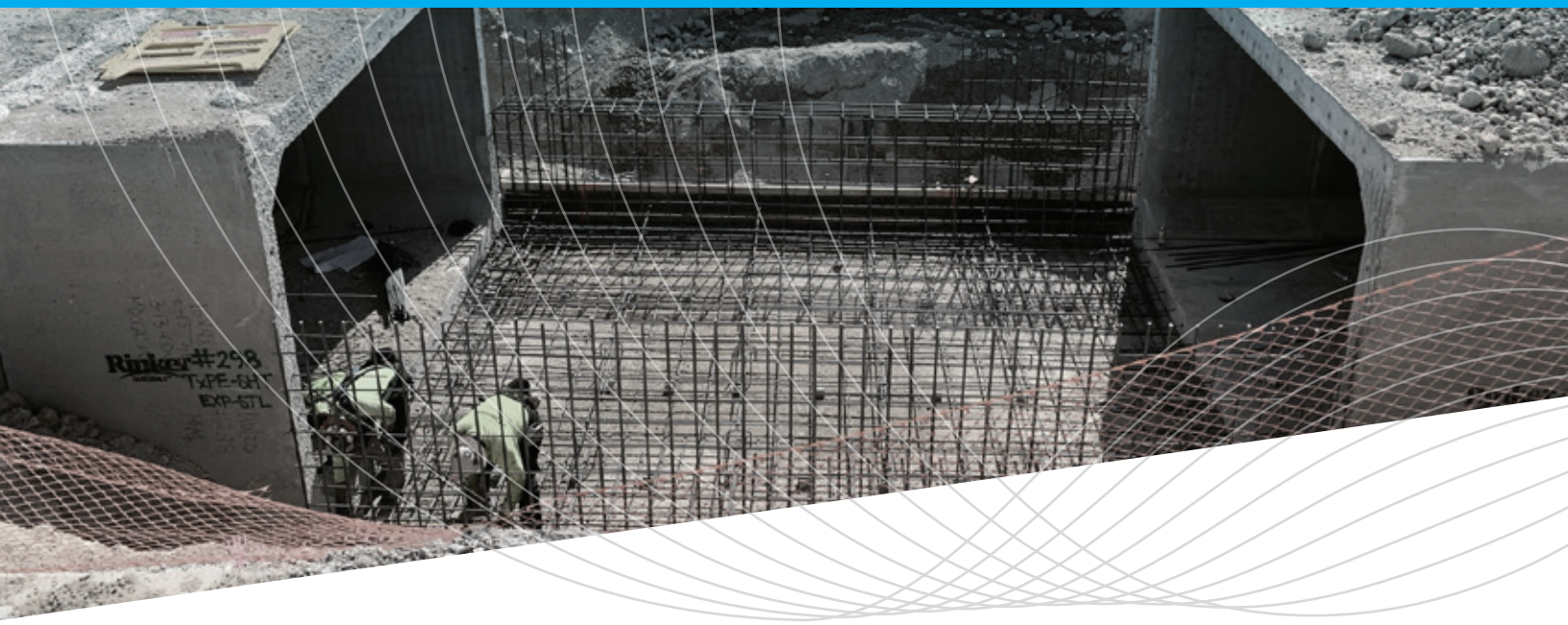
The Master Plan Updates for the City of Mesquite and the Town of Bunkerville have been completed and were adopted by the District's Board of Directors in August 2022. The Master Plan Update for the City of Boulder City was also completed and adopted in December 2022. The Master Plan Updated for the Las Vegas Valley is currently ongoing and is expected to be completed by the end of 2023.

LAND DEVELOPMENT REVIEWS

The District reviews proposed land development projects to ensure compliance with the Uniform Regulations for the Control of Drainage. If a 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 221 drainage studies and 337 addenda related to the development of private properties. Reviews by the District resulted in the issuance of 256 concurrence letters and 24 related comment letters.

DEMONSTRATING FISCAL INTEGRITY



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 1987 AFTER BECOMING EFFECTIVE IN MARCH 1987. FOR THE FISCAL YEAR 2022-2023, SALES TAX REVENUE WAS $154,269,560, A 6.68 PERCENT INCREASE OVER THE PRIOR FISCAL YEAR (2021-2022). SINCE ITS INCEPTION, THE DISTRICT HAS OVERSEEN THE DESIGN AND CONSTRUCTION OF APPROXIMATELY $2.52 BILLION IN PUBLICLY FUNDED FLOOD CONTROL IMPROVEMENTS THROUGHOUT CLARK COUNTY.

SALES TAX REVENUE CONTINUES TO BE USED TO DESIGN, BUILD, AND MAINTAIN FLOOD CONTROL PROJECTS

DISTRICT EXPENDED APPROXIMATELY $82.99 MILLION IN 2022-2023 FOR FLOOD CONTROL PROJECT CONSTRUCTION AND MAINTENANCE

SALES TAX REVENUE WAS SPENT ON DEBT SERVICE IN THE AMOUNT OF $47.23 MILLION

Traditionally the driving force in the Southern Nevada economy has been the tourism and hospitality industries. Although made famous for its world-class casinos and entertainment offerings, this region now includes a variety of major league sports teams (with perhaps more on the way), and has planned big-name events such as Formula One Grand Prix and the NFL Super Bowl. The economy has expanded beyond hospitality and amenities that reach far beyond The Strip and continues to attract outdoor enthusiasts from throughout the country. The Las Vegas Convention and Visitors Authority reported visitor volume through **June 2023 increased 9.40 percent and convention center attendance was up 30.70 percent compared to the previous year.** The economic impact of tourism, including accommodations, transportation, entertainment, and attractions, directly influences the District's revenue.

Real estate activity, directly and indirectly, impacts sales tax collections as homeowners tend to buy merchandise or spend money on home improvements for their new and existing residences. Once ground zero for a collapsing housing market in the wake of the financial crisis of 2007-08, in more recent years the Las Vegas housing market slowly rebounded and then spiked along with the rest of the country from mid-2020 to mid-2022 as mortgage rates reached historic lows. Since then, while median home sale prices have fallen as mortgage rates jumped, the housing market has shown recent signs of leveling out, potentially giving buyers a final chance to jump in while they still have the power to ask for price cuts and other sales incentives.

The District's ability to fund projects depends mainly on sales tax and, in turn, Clark County's economy. We have seen significant growth in the last several months and received record sales tax receipts. However, this level of growth may not be sustainable. Sales tax is the District's primary source of revenue, and we are mindful that adverse economic changes can negatively impact tax receipts.

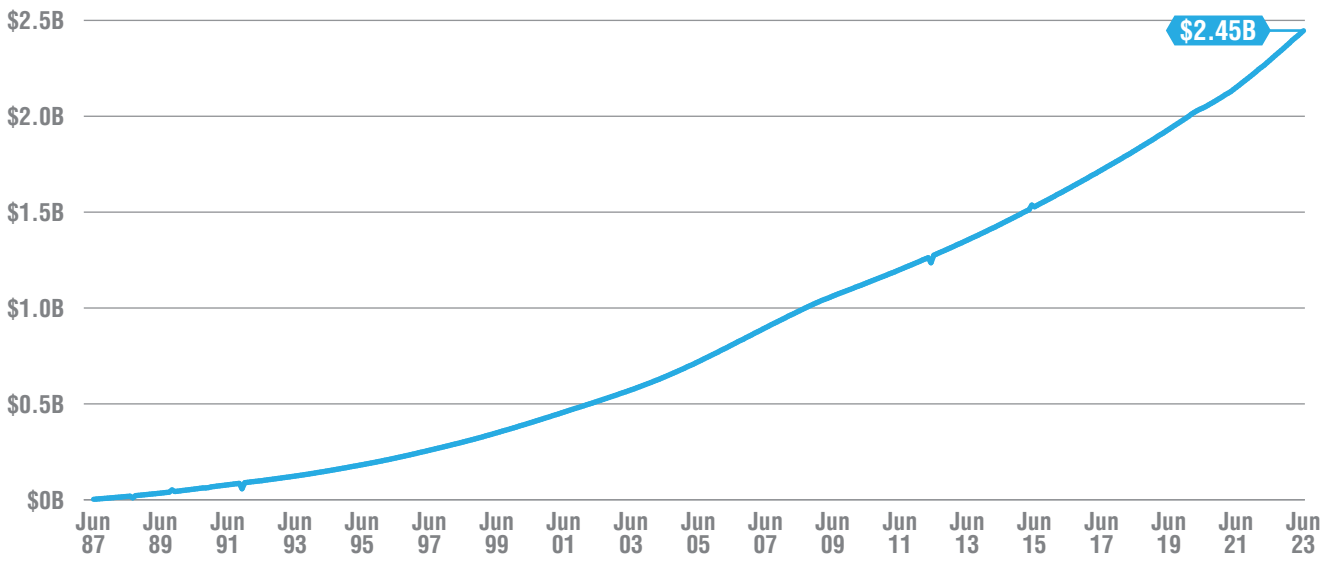
More than 90% of sales tax revenue continues to be used to design, build, and maintain flood control projects, and pay for the associated debt service. During FY 2022-2023, the District expended approximately **$82.99 million for flood control projects and maintenance.**

Another large share of sales tax revenue was spent on debt service in the amount of $47.23 million. The remaining sales tax revenue is used for salaries and benefits, professional services, and other administrative expenses. In FY 2022-2023, $7.91 million was spent on these operating expenses.

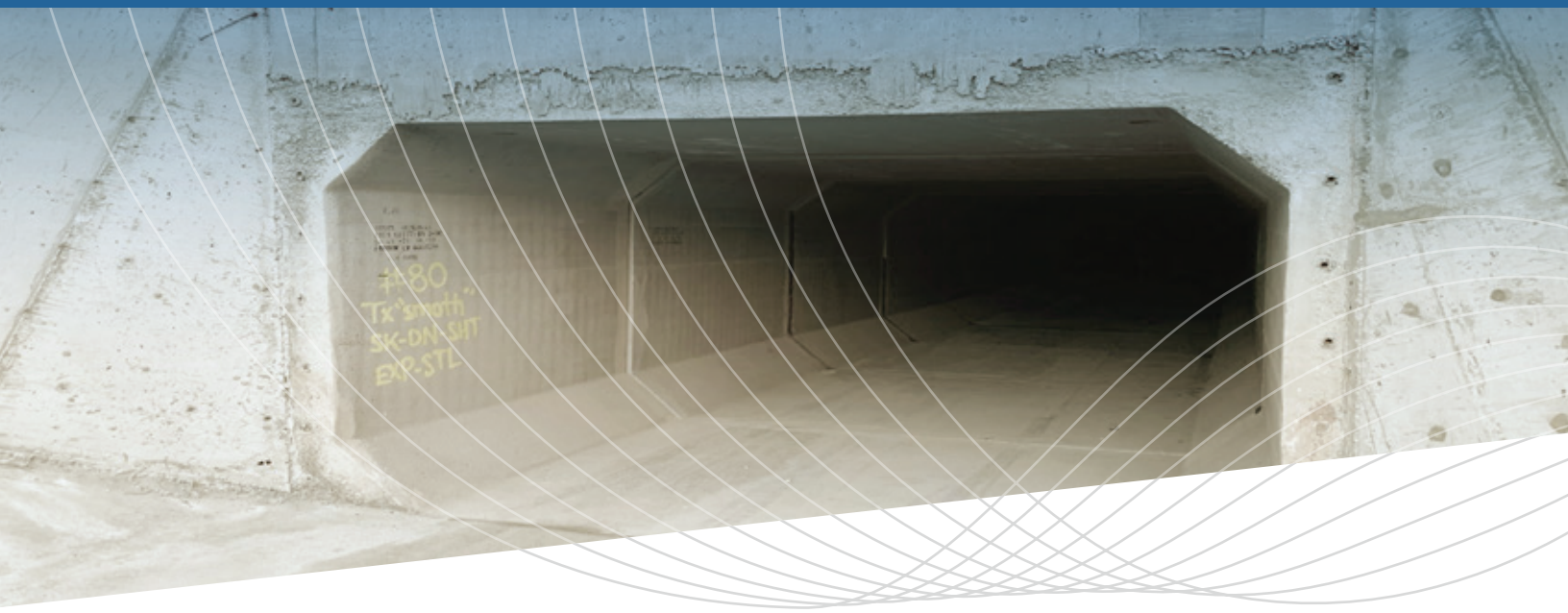
The District has been awarded the **Distinguished Budget Presentation Award by the Government Finance Officers Association (GFOA) of the United States and Canada every year for the past 29 years.** This significant achievement reflects the District's commitment to meeting the highest principles of governmental budgeting.

Annually, the District continues to receive favorable audit opinions demonstrating 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.

TOTAL REVENUES DERIVED FROM SALES TAX SINCE 1987



FISCAL INTEGRITY – THE FUTURE OUTLOOK



SOUTHERN NEVADA'S ECONOMY HAS BECOME MORE RESILIENT. FOR EXAMPLE, THE HOSPITABILITY INDUSTRY ALONE IS MORE DIVERSIFIED THAN IT HAS BEEN IN THE PAST AND IS IN A POSITION TO CONTINUE ON A PATH OF GROWTH WITH STRONG SALES TAX REVENUES. RECENT DATA INDICATES AN UPWARD ECONOMIC TREND IN THE NEAR FUTURE. AS A RESULT, THE DISTRICT ANTICIPATES SALES TAX REVENUE TO MODESTLY INCREASE NEXT FISCAL YEAR TO $158.90 MILLION, HOWEVER, ECONOMIC INDICATORS WILL CONTINUE TO BE MONITORED AND ADJUSTED AS NEEDED.

DISTRICT ANTICIPATES SALES TAX REVENUE TO MODESTLY INCREASE NEXT FISCAL YEAR TO $158.90 MILLION

THE DISTRICT IS IN A POSITION TO CONTINUE ON A PATH OF GROWTH WITH STRONG SALES TAX REVENUES

RECENT DATA INDICATES AN UPWARD ECONOMIC TREND IN THE NEAR FUTURE

TEN-YEAR CONSTRUCTION PROGRAM

EACH YEAR, IN CONJUNCTION WITH THE DEVELOPMENT OF THE TEN-YEAR CONSTRUCTION PROGRAM (TYCP), A 10-YEAR FORECAST OF DISTRICT PROJECT FUNDING IS DEVELOPED BY STAFF. THE FORECAST INCORPORATES SALES TAX REVENUES, INTEREST EARNINGS, BOND PROCEEDS FROM DEBT ISSUANCE, AND PROPOSED EXPENDITURES.

This long-range financial plan drives the TYCP project funding schedule, including planning upcoming design and construction projects. Approximately **$102.70 million in new resources were available for programming projects in FY 2022-23.** Total available resources for the TYCP were estimated to be **$1.02 billion, including the issuance of bonds totaling $300 million.** To expedite design and construction of flood control projects from 1991 to the present, the District has issued **$955 million in general obligation bonds,** of which **$619.29 million remains outstanding.**

$102.70M NEW RESOURCES AVAILABLE FOR PROGRAMMING FOR FY 2022-23

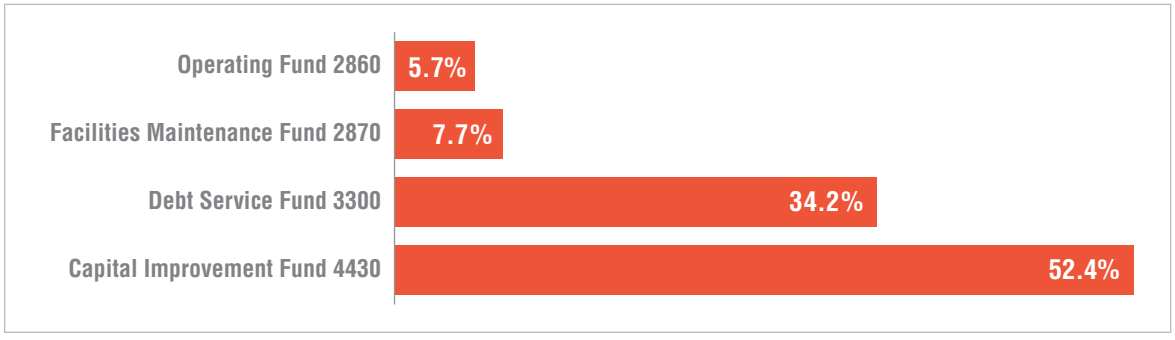
$955M IN BONDS ISSUED SINCE 1991 TO EXPEDITE FLOOD CONTROL PROJECT DESIGN AND CONSTRUCTION

CLARK COUNTY REGIONAL FLOOD CONTROL DISTRICT FUNDING

CLARK COUNTY REGIONAL FLOOD CONTROL DISTRICT GOVERNMENTAL FUNDS - FISCAL YEAR 2022-23 SOURCES AND USES OF FUNDS SUMMARY - UNAUDITED [2]	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, 2022)	$43,058,475	$3,055,450	$24,054,646	$293,953,083	$364,121,654
SOURCES OF FUNDS					
SALES TAX REVENUE	$154,269,560	-	-	-	$154,269,560
INTEREST/OTHER	$611,543	$257,548	$352,630	$4,481,118	$5,702,839
TRANSFERS FROM OTHER FUNDS	$1,168,750	$16,000,000	$46,205,003	$98,161,586	$161,535,339
TOTAL SOURCES OF FUNDS	$156,049,853	$16,257,548	$46,557,633	$102,642,704	$321,507,738
USES OF FUNDS					
SALARIES AND WAGES	($2,780,331)	-	-	-	($2,780,331)
EMPLOYEE BENEFITS	($1,053,684)	-	-	-	($1,053,684)
SERVICES AND SUPPLIES	($3,898,686)	($10,613,424)	($1,750)	-	($14,513,860)
CAPITAL OUTLAY	($186,078)	-	-	($72,375,013)	($72,561,091)
PRINCIPAL	-	-	($24,735,000)	-	($24,735,000)
INTEREST	-	-	($22,491,334)	-	($22,491,334)
TRANSFERS TO OTHER FUNDS	($160,366,589)	-	-	($1,168,750)	($161,535,339)
TOTAL USES OF FUNDS	($168,285,368)	($10,613,424)	($47,228,084)	($73,543,763)	($299,670,639)
FISCAL YEAR NET CHANGE	($12,235,515)	$5,644,124	($670,451)	$29,098,941	$21,837,099
ENDING BALANCE (JUNE 30, 2023)	$30,822,960	$8,699,574	$23,384,195	$323,052,024	$385,958,753

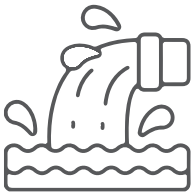
[2] Audited financial statements are expected to be available in December 2023.

TOTAL PERCENT OF EXPENDITURES



LAND DEVELOPMENT REVIEWS

The District reviews proposed Regionally significant land development projects to ensure compliance with the Uniform Regulations for the Control of Drainage. Examples include land development projects which impact the implementation of the flood control Master Plan or lie within a FEMA-designated Special Flood Hazard Area. In that case, District staff will review the technical drainage study and associated addenda once approval is obtained from the local community. This past year, **the District received 221 drainage studies and 337 addenda related to the development of private properties. Reviews by the District resulted in the issuance of 256 concurrence letters and 24 related comment letters.**



THIS PAST YEAR, THE DISTRICT RECEIVED 221 DRAINAGE STUDIES AND 337 ADDENDA RELATED TO THE DEVELOPMENT OF PRIVATE PROPERTIES

PROJECTS COMPLETED DURING FY 2022-2023

RFCD COST	$42,774,959

TOTAL COST	$49,823,771

DUCK CREEK-JONES BOULEVARD STORM DRAIN

This project included approximately 4,700 feet of reinforced concrete box culvert within Jones Blvd from Pyle Avenue to Irvin Avenue.

CONSTRUCTION COST	$3,328,864
START DATE	JUNE 2021
COMPLETED	SEPTEMBER 2022

SILVERADO RANCH DETENTION BASIN, COLLECTION AND OUTFALL

This project consisted of a 294 acre-foot detention basin, reinforced concrete box collection facilities, reinforced concrete pipe outlet, and a reinforced concrete box outfall facility in Silverado Ranch Boulevard extending east to the I-15, then north along the I-15 to an existing facility at Meranto Avenue.

CONSTRUCTION COST	$16,620,745
START DATE	AUGUST 2021
COMPLETED	DECEMBER 2022

WHITNEY RANCH CHANNEL REPLACEMENT

This project removed approximately one mile of undersized and deteriorated open channel facilities along the Whitney Ranch Wash alignment and replaced it with open channel and reinforced concrete box facilities from the Pittman Wash-Duck Creek channel at Stephanie Street to approximately 800-feet east of the Arroyo Grande Boulevard alignment.

CONSTRUCTION COST	$18,773,227
START DATE	NOVEMBER 2021
COMPLETED	FEBRUARY 2023

ANTHEM PARKWAY - HORIZON RIDGE TO SIENA HEIGHTS

This project constructed approximately 1,100 feet of reinforced concrete box culvert connecting to existing culvert crossings at Sienna Heights Drive and Horizon Ridge Parkway.

CONSTRUCTION COST	$3,350,057
START DATE	MARCH 2022
COMPLETED	MARCH 2023

CHICKASAW STORM DRAIN

Construction of approximately 1,950 feet of reinforced concrete box culverts and appurtenant facilities along the Chickasaw Drive alignment from the Equestrian Drive to Latigo Street.

CONSTRUCTION COST	$2,252,370
START DATE	JUNE 2022
COMPLETED	APRIL 2023

BLUE DIAMOND CHANNEL 02, DECATUR-LE BARON TO RICHMAR PHASE 1

This project included approximately 980 feet of a reinforced concrete box culvert along Decatur Boulevard connecting to the Silverado Ranch Detention Basin north inflow facility.

CONSTRUCTION COST	$1,780,000
START DATE	FEBRUARY 2022
COMPLETED	JUNE 2023

PROJECTS COMPLETED DURING FY 2021-2022

2021-2022 CONSTRUCTION COMPLETION

SEP 2021

CITY OF LAS VEGAS
LVW - Moccasin, Skye Canyon Park to Upper LVW

NOV 2021

CITY OF LAS VEGAS
Luning Drive Storm Drain, Local Drainage Improvements

DEC 2021

CLARK COUNTY
Craig Road Storm Drain - El Capitan to Fort Apache

DEC 2021

BOULDER CITY
Hemenway System, Phase IIB Improvements

MAR 2022

CITY OF NORTH LAS VEGAS
Beltway Detention Basin, Collection and Outfall

MAY 2022

CITY OF NORTH LAS VEGAS
Hollywood System, Centennial Parkway to Speedway #2 DB

PROJECTS COMPLETED DURING FY 2022-2023

2022-2023 CONSTRUCTION COMPLETION

SEP 2022

CLARK COUNTY
Duck Creek - Jones Boulevard Storm Drain

DEC 2022

CLARK COUNTY
Silverado Ranch Detention Basin, Collection and Outfall

FEB 2023

CITY OF HENDERSON
Whitney Ranch Channel Replacement

MAR 2023

CITY OF HENDERSON
Anthem Parkway Channel, Horizon Ridge to Siena Heights

APR 2023

CITY OF HENDERSON
Chickasaw Storm Drain, Local Drainage Improvements

JUN 2023

CLARK COUNTY
Blue Diamond Channel 02, Decatur - Le Baron Channel to Richmar, Phase 1

PROJECTS UNDER CONSTRUCTION OR ABOUT TO START (AS OF JUN 30, 2023)

2023-2024 ANTICIPATED CONSTRUCTION COMPLETION

AUG 2023

CLARK COUNTY
Blue Diamond Wash - Arville Street to I-15

OCT 2023

CLARK COUNTY
Wagon Trail Channel - Sunset to Teco

OCT 2023

CITY OF LAS VEGAS
Gowan North - El Capitan Branch, Ann Road to Centennial Parkway

DEC 2023

CITY OF LAS VEGAS
Flamingo - Boulder Hwy. North, Charleston - Boulder Hwy. to Maryland Parkway and Maryland Parkway System

JAN 2024

CLARK COUNTY
Outlying Areas - Fairgrounds Detention Basin and Outfall

OCT 2024

CLARK COUNTY
Harry Reid Airport Peaking Basin - East Outfall, Construction

OCT 2024

CITY OF NORTH LAS VEGAS
Gowan Outfall, Alexander Road, Decatur Blvd to Simmons Street and Simmons Street to Clayton, Construction

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 MEMBER 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 2022-2023 Maintenance Work Plans and Budgets. The Board approved the budget on June 9, 2022, in the amount of $16,154,820, which included a funding allocation for the annual Las Vegas Wash Long-Term Operating Plan Interlocal Agreement.

Flood control facility maintenance was performed using a combination of private contractors and entity maintenance staff. During this fiscal year, **entity staff inspected and/or maintained numerous facilities throughout** the District service area including **106 detention basins and 684 miles of channel and underground storm drains, of which 140 miles are natural washes.**

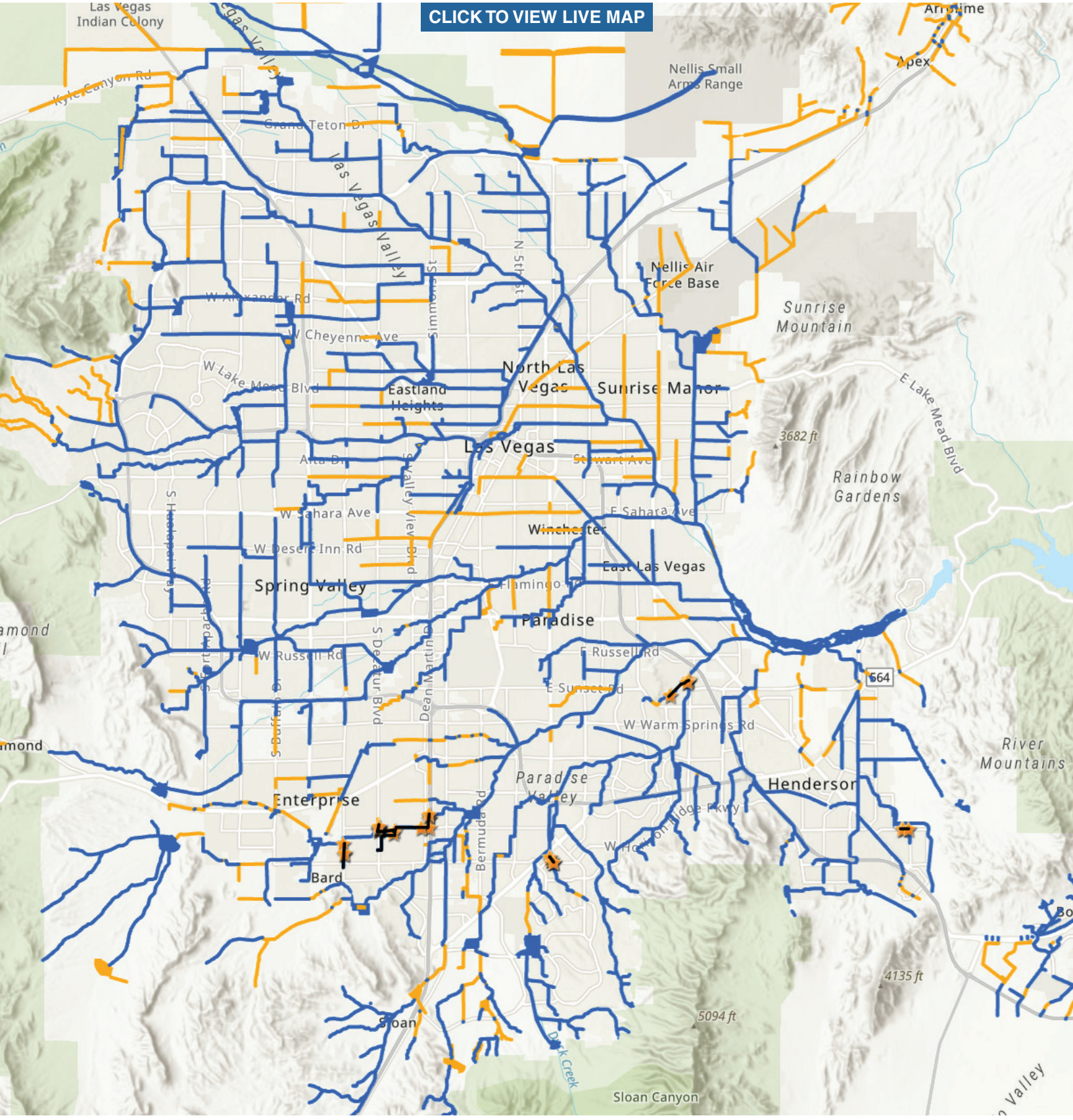
	BUDGET	EXPENDED	% EXPENDED
BOULDER CITY	$563,500	$355,220	63.04%
CLARK COUNTY	$5,050,000	$3,791,697	75.08%
HENDERSON	$3,770,400	$1,825,298	48.41%
LAS VEGAS	$3,200,000	$2,804,177	87.63%
MESQUITE	$419,800	$401,700	95.69%
NORTH LAS VEGAS	$2,571,000	$855,208	33.26%
LAS VEGAS WASH ACTIVITIES	$580,120	$580,120	100.00%
	$16,154,820	$10,613,420	

IN JUNE 2022, THE BOARD APPROVED MAINTENANCE WORK PLANS AND BUDGETS IN THE AMOUNT OF $16,154,820.

FLOOD CONTROL FACILITY MAINTENANCE WAS PERFORMED USING A COMBINATION OF PRIVATE CONTRACTORS AND ENTITY MAINTENANCE STAFF

PUBLIC WORKS STAFF ARE RESPONSIBLE FOR MAINTAINING 106 DETENTION BASINS AND 684 MILES OF CHANNEL AND UNDERGROUND STORM DRAINS

MAP OF THE DISTRICT



ENHANCING INFORMATION SYSTEMS

THE DISTRICT'S INFORMATION SYSTEMS TEAM PROVIDES INFORMATION TECHNOLOGY (IT) INFRASTRUCTURE AND MAINTAINS THE COMPUTERS AND SERVERS.

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

The District's website, **regionalflood.org**, continues to provide information about District projects and engage with the community. The District is constantly updating the website to ensure timely and accurate information reaches the Clark County community.

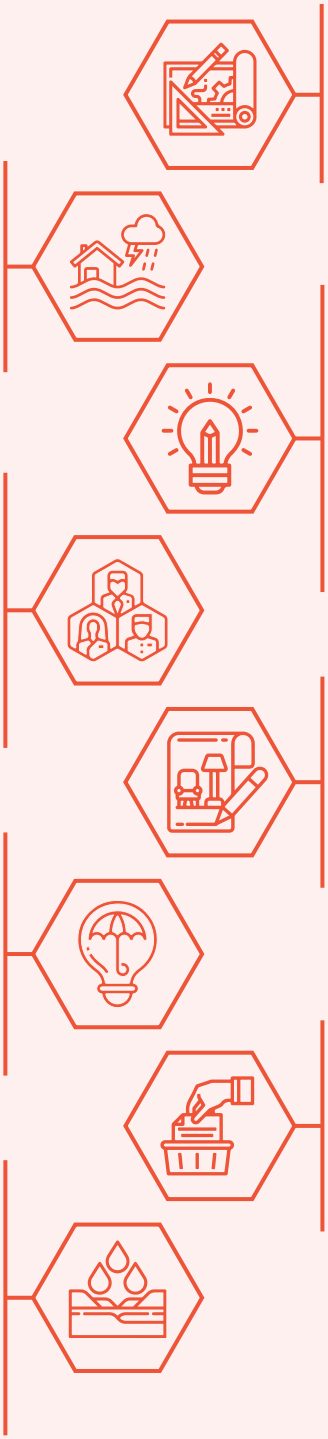
Several desktop and web applications were updated over the past fiscal year to accommodate technological advancements. These advancements make the District's programs and services more robust. As technology improves and underlying code frameworks are updated, keeping applications aligned with those changes becomes paramount.

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

PUBLIC INFORMATION EFFORTS: KEEPING THE COMMUNITY INFORMED

THE DISTRICT'S PUBLIC INFORMATION PROGRAM FOCUSES ON EDUCATING THE PUBLIC ABOUT THE DANGERS OF FLASH FLOODING AND INFORMING THE COMMUNITY ABOUT THE PROGRESS OF FLOOD CONTROL INFRASTRUCTURE IN CLARK COUNTY. THE PROGRAM ALSO EDUCATES THE COMMUNITY ABOUT STORMWATER QUALITY AND HOW RESIDENTS CAN HELP IMPROVE THE QUALITY OF URBAN RUNOFF TO LAKE MEAD.

SEVERAL ONGOING PROGRAMS PRESENT INFORMATION ABOUT DRAINAGE IMPROVEMENTS AND FLOOD SAFETY THROUGHOUT THE YEAR.



Creative artwork featuring the animated character Drainger Danger and flood safety messages reminded motorists to stop and think before entering flooded streets. District staff complemented this campaign with social media and earned media efforts.

The Board of Directors designated July as "Flash Flood Awareness Month" and held a news conference kicking off Flash Flood Season in June 2022. The event was covered by all major news media and helped increase public awareness of the heightened potential for flash floods during the summer months.

The District and the Discovery Children's Museum partnered on a new mechanical Drainger Danger fortune teller exhibit. The exhibit opened on October 1, 2022, with a day dedicated to flood safety awareness for museum attendees. The exhibit features Drainger Danger reminding kids to stay out of storm drains. It is entertaining and educational as he speaks to kids and their families in either English or Spanish. Plus, every 500th fortune from Drainger receives a prize package from the District.

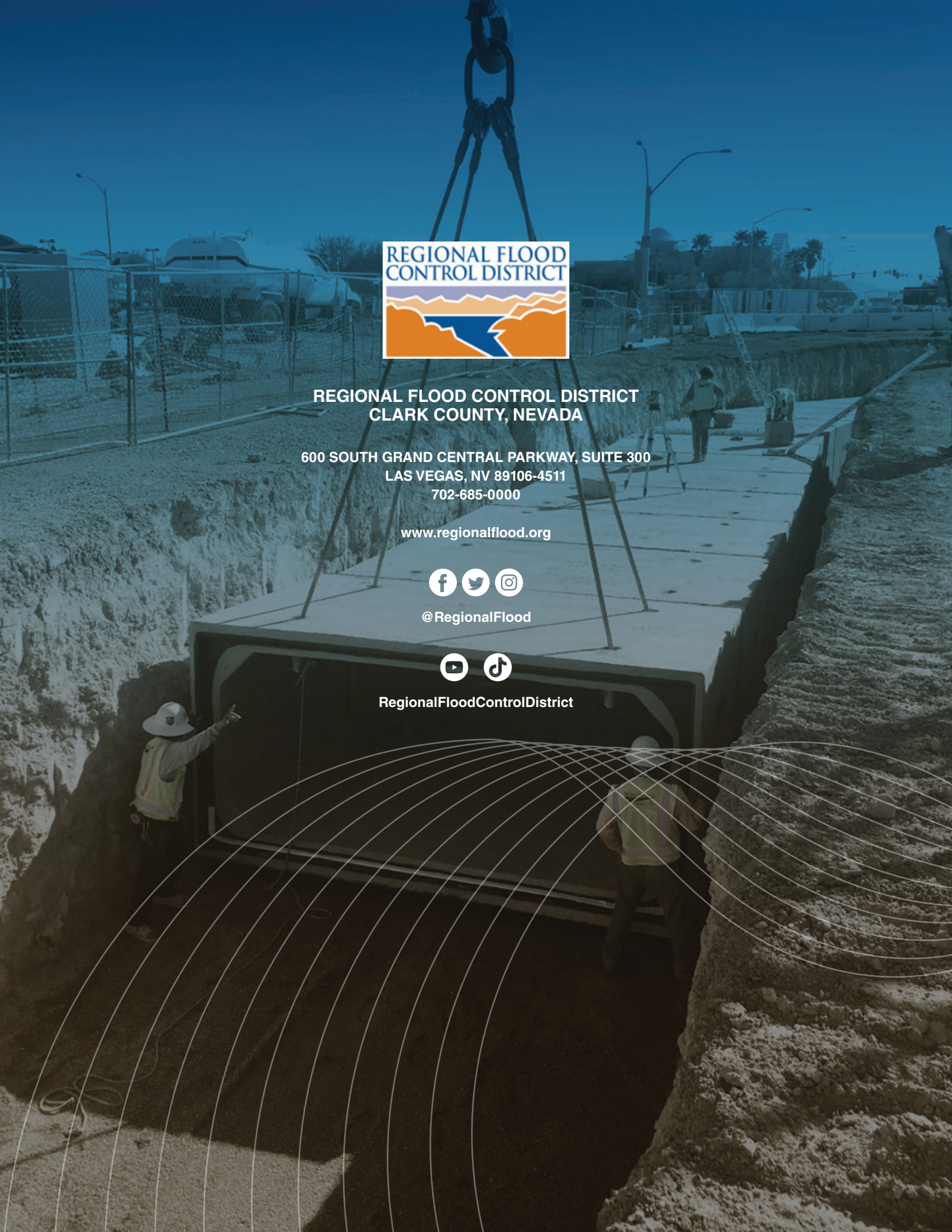
The District taught elementary students the dangers of playing in floodwater and to avoid entering drainage facilities. The staff returned to in-person presentations, visiting 13 schools and educating nearly 2,000 Clark County students. This year, a hands-on flood table was incorporated into the classroom presentation. Students learned about the functions of detention basins and the power of moving water in storm drains and washes.

The District continued producing The Flood Channel, a 30-minute informational television program airing on local government access stations, Cox Cable Channels 2, 4, and Sun City Anthem TV. Each episode informs the public about flood control construction progress, flood safety, and environmental issues.

Since June 2022, over 1,000 new Clark County employees received flash flood safety and stormwater quality information during onboarding training. The new employees, ranging from those who have lived here their entire lives to people who recently moved to the County, learn about District programs and operations and how to avoid being injured in a flash flood.

The Public Information Program staff, advertising consultant Robertson Partners, and our community partners attended numerous local events throughout the year to distribute flood safety messages, stormwater quality information, and branded souvenir swag to Clark County residents and visitors.

The District launched a Stormwater Quality Advertising Campaign from March through May for spring storms and Flood Safety Awareness between July and September, when heavy rain and flash flooding are more likely to occur. The flood safety campaign used social media, billboards, radio, television, and print media to inform residents of the dangers of flooding utilizing the theme Water Always Wins.



REGIONAL FLOOD CONTROL DISTRICT
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