



# Flood Control District of Maricopa County

## Flood Control Advisory Board

**Meeting Minutes March 23, 2022**

**Board Members Present:** Hemant Patel, Chairman; Richard Schaner, DeWayne Justice, Daniel Worth, Ray Dovalina and Kyle Tilghman

**Staff Members Present:** Michael Fulton, Director; Wayne Peck, General Counsel; Kristine Rabe; Clerk of the Board, Scott Vogel, Don Rerick, Karen Scott, Scott Vogel, Matthew Oller, Hasan Mushtaq, Harry Cooper, Joe Wagner, Afshin Ahouraiyan

**1) CALL TO ORDER**

Chairman Hemant Patel called the meeting of the Flood Control Advisory Board (FCAB) to order at 2:00 p.m. on Wednesday, March 23, 2022.

**2) ACTION ITEM - APPROVE THE MINUTES OF DECEMBER 1, 2021 MEETING**

**ACTION:** It was moved by Mr. Schaner and seconded by Mr. Worth to approve the minutes as submitted. The motion carried unanimously, and the minutes were approved.

**3) ACTION ITEM – FISCAL YEAR 2023 OPERATING (FUND 991) AND GRANT BUDGET (FUND 989) AND FISCAL YEAR 2023 – FISCAL YEAR 2027 CAPITAL IMPROVEMENT AND MAJOR MAINTENANCE PROGRAM BUDGET (FUND 990).**

Presented by Karen Scott, Finance and Contracts Division Manager and District Staff

**STAFF RECOMMENDS THE FOLLOWING ACTION:** Endorse and recommend the District’s proposed Fiscal Year 2023 and Fiscal Year 2024 – Fiscal Year 2027 Capital and Major Maintenance Program including Fund 989 (Flood Control Grant Fund), Fund 990 (Flood Control Capital Fund) and Fund 991 (Flood Control District Fund), subject to adjustments made to reflect Board of Directors policy determinations.

Ms. Scott presented the requested revenue for Fiscal Year 2023. Fiscal Year 2023 requested revenue is as follows: Property Tax - \$74,808,597; Intergovernmental - \$5,995,000; Interest Income - \$900,000; Miscellaneous - \$241,191; Licenses and Permits - \$375,000; and Grants - \$70,000 for a total of \$82,389,788 in requested revenue for Fiscal Year 2023. Fiscal Year 2022 Revised Revenue is \$94,775,952 so the variance for Fiscal Year 2023 is

(\$12,386,154). Mrs. Scott and Mr. Fulton pointed out that the District is proposing a \$0.02 decrease in the secondary property tax rate.

Ms. Scott then went on to share the requested expenditures for Fiscal Year 2023 which include the following: Fund 989 – Grants - \$55,000; Fund 991 – Operating - \$35,836,487; Fund 991 – Non-Recurring - \$7,111,166; Fund 991 – Vehicle Replacement - \$1,440,000; Fund 991 – Major Maintenance Facilities - \$2,557,000; Fund 990 – Capital Improvement Projects - \$58,701,668; Fund 990 – Major Maintenance – Capital - \$3,797,304; and Fund 990 – West Yard Building - \$7,500,000. Total requested expenditures for Fiscal Year 2023- \$116,998,625. The Fiscal Year 2022 Revised Expenditures totaled \$137,686,716 so the variance for Fiscal Year 2023 is (\$20,688,09).

Mrs. Scott then went on to share further details on the requested Fund 990 Expenditures for Fiscal Year 2023 which include the following: Capital Improvement Projects - \$51,798,750; Small Project Assistance - \$4,202,918; Floodprone Property - \$2,700,000; Major Maintenance - \$3,797,304; Facilities Capital – West Yard - \$7,500,000 with \$69,998,972 in requested Fund 990 requested expenditures in Fiscal Year 2023. Fiscal Year 2022 Revised Expenditures totaled \$92,462,596 with a variance of (\$22,463,624) in Fiscal Year 2023.

The next slide that Mrs. Scott shared broke down the requested Fund 990 Expenditures by Phase for Fiscal Year 2023. The phases included the following: Design - \$5,142,000; Land - \$5,137,000; Construction - \$58,027,668; and Labor - \$1,692,304.

Mr. Hasan Mushtaq then presented the Planning Branch Fiscal Year 2023 Program Highlights for the Planning and Project Management Division.

Mr. Mushtaq started by sharing the ongoing and Fiscal Year 2023 Studies (Area Drainage Master Study/Plans (ADMS/P)). There are three new Studies starting in Fiscal Year 2023 and are: Durango ADMP Update; Rio Verde ADMP Update; and Glendale Maryvale ADMS Update.

Mr. Mushtaq then shared in depth details on several of the ongoing studies. The Fountain Hills ADMS/P Update will continue in Fiscal Year 2023. The study watershed is approximately 31 square miles and coordination with the Town of Fountain Hill is ongoing. Work Assignment #1 is currently under negotiation and target Notice to Proceed is May 2022.

The Arizona Canal Diversion Channel (ACDC) West ADMS/P Update will also continue in Fiscal Year 2023. The study watershed is 70 square miles and coordination with the City of Phoenix is ongoing. New LiDAR mapping is complete and Surface Characterization is underway. Work Assignment #1 is currently under negotiation and target Notice to Proceed is April 2022.

The Durango ADMP Update will commence in second quarter of Fiscal Year 2023. The watershed is 46 square miles and coordination is with the Cities of Avondale, Phoenix and Tolleson. New LiDar mapping will be completed during the fourth quarter of Fiscal Year 2022. The consultant selection process will start during the first quarter of Fiscal Year 2023.

The Glendale Maryvale ADMS Update will commence during the second quarter of Fiscal Year 2023. The study watershed is approximately 98 square miles and coordination with the Cities of Avondale, Glendale, Peoria and Phoenix is ongoing. LiDar mapping will be completed during the fourth quarter of Fiscal Year 2022. The consultant selection process will start during the first quarter of Fiscal Year 2023.

Board Member Dick Schaner asked Mr. Mushtaq to give a brief explanation of LiDar maps. Mr. Mushtaq explained that LiDar maps are developed using modern technology of remote sensing to create the existing terrain/ground elevations for the purposes of computer modeling mapping. LiDar stands for Light Detection and Ranging. It uses laser techniques to capture the ground elevations.

There were no further questions from the Board.

Mr. Harry Cooper then presented Fiscal Year 2023 highlights for the Planning and Project Management Division Landscape Architecture and Water Conservation Branch.

The Landscape Architecture and Water Conservation Branch has three main program areas: Landscape Architecture, Water Conservation (Water Resources Management), and the management of the Native Plant Nursery. The Branch is responsible for the inclusion of landscape architecture and water conservation elements into District projects. This includes landscape restoration, construction mitigation, sediment and erosion control, as well as native trees and seeding, alternative stormwater management strategies, inclusion of GI/LID features in District projects, structural aesthetics and multiple use.

Mr. Cooper mentioned several of the notable projects in Fiscal Year 2023 that the Branch would be involved in which included: Rawhide Wash, McMicken Dam and the outfall channel, Oak Street Storm Drain and Basin, Paradise Ridge Channel, Sun Valley ADMS, Superstition Springs retrofit project in the EMF and the North Peoria ADMP.

The Durango Campus Water Conservation Retrofit is in the final design. Plans/construction documents to be completed March 2022. Construction will begin early in Fiscal Year 2023. Monitoring and performance assessment is ongoing.

Mr. Cooper then discussed land and water resources management activities. The Branch is working with an on call consultant for the Arizona Canal Diversion Channel Landscape

and Irrigation Assessment which is a guidance document for facility updates to address: landscape replacements, irrigation system upgrades; stormwater management (capture/reuse, erosion, water quality, debris); potable water use reductions in outdoor landscaping; and land stewardship and community outreach. One of the goals is to retrofit problem areas in conjunction with O&M.

Another area the Branch will be working on is the Upper East Fork of Cave Creek Renovation in which the focus will be irrigation removal/update and revegetation with native plants.

The Branch will also produce another guidance document regarding the Development of Landscape Standards and Guidelines which will address revegetation, Green Infrastructure and Low Impact Development (GI/LID) applications, multiple use, site stabilization, and structure aesthetics in a single reference document for District use.

Board Member Dick Schaner asked if there was any benefit of the District working with any of the local colleges, like Arizona State University (ASU), on any of these projects? Mr. Cooper replied the District has been coordinating with ASU on the Durango retrofit project for some time and are looking to institutionalize an agreement with ASU to have the Design School and the Sustainability School collect data on water quality, stormwater management, and to understand how stormwater management practices could benefit the District as well as assist in addressing water use and landscape availability.

There were no other questions from the Board for Mr. Cooper.

Mr. Don Rerick, Planning and Project Management Division Manager then went over several Capital Improvement Projects that will be continuing or starting in Fiscal Year 2023.

McMicken Dam Rehabilitation Phase 1 and 2 will provide 100-year flood protection. The Dam is owned and maintained by the District. Phase 1 construction continues through Fiscal year 2023. Phase 2A final design will be completed in Fiscal Year 2023 with construction estimated to start June/July 2023. Phase 2B final design will be completed in early Fiscal Year 2024. Phase 2B construction Notice to Proceed will be issued in Fiscal Year 2024. Phase 1 cost is \$23 Million.

Oak Street Basin and Storm Drain is a drainage element for the Spook Hill Area Drainage Master Plan. The project involves the construction of a basin and storm drains and will provide 100-year protection to residents in Unincorporated Maricopa County and City of Mesa. The project plans and specs are complete, and construction will start in Fiscal Year 2023. Construction completion is scheduled in Fiscal Year 2024. This is a unilateral Flood Control District (FCD) project with 100% FCD funded.

The final project Mr. Rerick highlighted was Rawhide Wash. The Rawhide Wash Drainage Improvements were identified in the Pinnacle Peak West Area Drainage Master Study. The project will remove 1,873 acres of land from the floodplain and 870 homes and other structures in Phoenix and Scottsdale. New floodwalls, improving the existing floodwalls to meet FEMA standards, and access for people and wildlife are the main objectives of the project. Construction will start in early Fiscal Year 2023 and CMAR will be used for construction. The total estimated project cost is \$18 Million with the following project cost share: FCD – 50%, Phoenix – 40%, and Scottsdale – 10%.

There were no questions from the Board.

Mr. Joe Wagner, Mapping, Surveying and CAD Branch Manager for the Engineering Division presented information on Unmanned Aircraft Systems at the District. Drones have been in use at the District for approximately four years and they are used for the following: storm event inspection and documentation; aerial photography of existing structures; surveying and mapping for engineering and design; Construction Management project monitoring; and inspections of District Dams and Levees.

Drones are used to evaluate and document storm events. Video and pictures can be taken immediately after an event to document the level and location of flooding. Many times, the access to gauges are cut off to O&M personnel and drones are used to read high water marks and staff gauges to determine water levels behind dam structures.

Drones are also used to photograph existing structures and building. The imagery has been used for project reports and stakeholder publications.

Drones are used by the District to produce design scale contour mapping and orthophotography on in-house design projects.

Mr. Wagner shared that drones are also used to document District projects as the construction phase is in progress. Drones are also commonly used on District O&M projects to document the work being done by both District staff and consultants. District projects are flown and photographed for use as training material for future projects.

Drones are used as a supplement to dam/levee inspections. Drone footage can be obtained days before District staff perform their dam/levee inspections. Staff can view the video and spot problem areas beforehand. Using drone footage provides a perspective not currently available to inspectors and provides a measure of safety when walking along the face of a dam or levee.

There were no questions for Mr. Wagner from the Board.

Mr. Afshin Ahouraiyan, Floodplain Permitting Division Manager, shared Floodplain Permitting Division Fiscal Year 2023 Program Highlights from each of the four branches in the Division.

The Floodplain Permits Branch reviews and issues Floodplain Use Permits for 14 communities. They also review and issue Sand and Gravel Floodplain Use Permits for Unincorporated Maricopa County and the 14 communities. There were 575 applications received in 2021 compared to 381 in 2020. The branch granted 381 floodplain use permits in 2021 compared to 294 in 2020. Since the start of 2022, the division has received 93 applications and granted 47 floodplain use permits. In Fiscal Year 2023, the Branch will be making enhancements to the County's on-line permit submittal portal.

Mr. Ahouraiyan went on to highlight the Code Compliance Branch. The Branch conducts floodplain code compliance for Unincorporated Maricopa County and the 14 communities. The Branch responded to 93 citizen complaints on code compliance matter in 2021 and performed 696 site inspections in 2021 (599 inquiries/complaints, 79 Sand and Gravel Permits, 18 Floodplain Permits). In Fiscal Year 2023, the Code Compliance Branch will continue providing floodplain code compliance for 14 communities as well as Unincorporated Maricopa County.

The Hydrology and Hydraulics Branch provide Hydrologic and Hydraulics Modeling and review for all District Studies/Projects. The Branch continued with technical review on all on-going planning and design studies. In Fiscal Year 2023, the Branch will continue to provide Hydrologic and Hydraulics Modeling and review for all District Studies/Projects.

The Floodplain Delineation Branch conducts floodplain delineation analysis based on approved budget. The Branch assisted more than 2,600 customers with floodplain, permit, and general questions. On-going delineation studies include: Sunland Avenue floodplain re-delineation study; North Gilbert delineation study update; Floodplain delineation study in Mesa to remove Zone D; Myrtle Avenue Wash; Vekol Wash; and City of Phoenix floodplain evaluations. The Branch completed re-delineation of Hassayampa floodplain from Gila River to Jackrabbit Wash which will be submitted to FEMA. In Fiscal Year 2023, the Floodplain Delineation Branch will conduct Floodplain Delineation Analysis based on community needs/requests and assist customers with questions on floodplains and general questions.

Mr. Ahouraiyan then shared that there are four floodplain delineation studies that are budgeted to start in Fiscal Year 2023: Buchanan and CAP Wash and CAP Wash East Update; Central Mesa; West Valley Zone A delineations; and Wickenburg 500-year floodplain delineations.

There were no questions for Mr. Ahouraiyan from the Board.

Matthew Oller, Operations Branch Manager shared the Operations and Maintenance Division Fiscal Year 2023 Program Highlights. The Division has several Major Maintenance Projects scheduled in Fiscal Year 2023.

One project is the 48<sup>th</sup> Street Drain and repair, upgrade and improvements of District maintenance area are planned. This area was identified as part of the freeway improvements that the Arizona Department of Transportation (ADOT) is doing and through and IGA with ADOT, O&M will gain improved maintenance access to the Drain.

Another project scheduled is the Guadalupe FRS Principal Outlet. A temporary intake structure for the principal outlet will be installed to ensure operation until rehab design is complete. This area is continually monitored because it is on a public golf course.

The next project Mr. Oller shared was the ACDC Water Conservation Landscaping Rehab Project. District owned parcels, as part of the Arizona Canal Diversion Channel, are in decline reaching the landscaping life cycle along the structure. The project will focus on areas identified to reduce maintenance and promote native desert landscaping utilizing District water conservation efforts.

The next project mentioned was the Aqua Fria River Safety Railing and Crest repair – left levee Reach 3 north of Van Buren. The District will be partnering with Avondale and Buckeye.

The last project mentioned was the Salt River Levee Toe Road Thinning/New River Wash Northern to Olive. Operations and Maintenance will be performing vegetation thinning along levee toe, maintenance/emergency access to river bottom, levee certification.

There were no questions from the Board for Mr. Oller.

**ACTION:** It was moved by Mr. Justice and seconded by Mr. Worth to endorse and recommend the District’s proposed Fiscal Year 2023 and Fiscal Year 2024 – Fiscal Year 2027 Capital and Major Maintenance Program including Fund 989 (Flood Control Grant Fund), Fund 990 (Flood Control Capital Fund) and Fund 991 (Flood Control District Fund). The motion carried unanimously.

#### **4) INFORMATION ITEM – GILA BEND UPDATE**

Presented by Mr. Michael Fulton, Director

Mr. Fulton started by discussing the Scott Avenue Wash Repairs. Restore pre-flood capacity to Scott Avenue Wash culvert north of SR85. The District anticipates NRCS award of approximately \$500K through their Emergency Watershed Protection program (IGA pending). Contracting for design and construction complete. Property acquisition is

underway. Current schedule: repairs completed by the end of 2022/early 2023. Current estimate is approximately \$1M. The land acquisitions will be in addition to this estimate.

Mr. Fulton then went on to speak about the Floodprone Property Assistance Program (FPAP). Eight property owners within floodways of Scott Avenue and Sand Tank Washes are interested in the FPAP. Appraisals have been completed and offers have been made. Acquired homes will be demolished and the land transferred to the Town of Gila Bend for maintenance as open space. Current estimate is approximately \$2M for acquiring the eight properties.

The longer-term project is the Capital Improvement Project. Nearing contract approval for design of the levee system adjacent to the south side neighborhood and improvements to Sand Tank Wash/Bender Wash crossings. Project will take several years to complete depending on project complexity and the level of cooperation realized by adjacent property owners. Gila Bend design contract is in the negotiation phase for potential award. Current guesstimate of cost is approximately \$20M.

The final project that Mr. Fulton shared was the Gila Bend Flood Response Plan. Development of this plan was in the works before the August 2021 flood. In collaboration with the Town of Gila Bend, Maricopa County Emergency Management, Maricopa County Sheriff's Office and others, it's purpose is to: identify flood threats and needs for flood detection; make clear how flood emergency and warning information will be disseminated to the public; agree to emergency response procedures and participants; develop joint training exercise plans. The Plan is anticipated to be completed by June.

There were no questions from the Board.

**5) COMMENTS FROM THE DIRECTOR**

Presented by Michael Fulton, Director

PURPOSE: Information and discussion item only. No formal action required.

Mr. Fulton remarked that his comments would be included in agenda item 6.

**6) SUMMARY OF RECENT ACTIONS BY THE BOARD OF DIRECTORS**

Presented by Michael Fulton, Director

PURPOSE: Information and discussion item only. No formal action required.

At the Board of Directors meeting on December 8, 2021, the Board of Directors approved the Resolution for the Pima Road Drainage Channel Project. The Board adopted



Resolution FCD 2021R003 and the Project will provide 100-year flood protection to 56 structures and will reduce the frequency of flooding and flood damage for 73 structures. This is a joint project with the City of Scottsdale and the estimated total Project cost is \$8,500,000.

On December 8, 2021, the Board also approved a temporary construction easement for the 27<sup>th</sup> and Olney Avenues Storm Drain Project.

At the Board of Directors meeting on January 12, 2022, the Board of Directors approved the Amendment to Authorization to Award for Sun City Drains Improvement. Authorizes the District to award contract FCD 2021C015 to the lowest bidder, whose amount is 12.9% above the engineer's estimate. The cost of construction components have increased recently and are leading to increased costs.

Intergovernmental Agreement (IGA) FCD 2021A006 for the Design, Rights-of-Way, Acquisitions, and Utility Relocations for 51<sup>st</sup> Avenue and Dobbins Road Storm Drain Project between the City of Phoenix and the Flood Control District. The Project includes regional basins, storm drains and inlets, lateral pipes and outfall pipes.

On January 12, 2022 the Board of Directors also adopted Resolution FCD 2022R001 for the Gila Bend Drainage Improvements Project. The Project is located within the Town of Gila Bend and once implemented the Project will reduce the flood hazard by constructing a series of levees, channels, basins and other drainage improvements in the area. Estimated costs for this Project is \$20,000,000.

At the meeting on January 12, 2022, the Board also approved two temporary construction easements for the 27<sup>th</sup> and Olney Avenues Storm Drain Project.

At the Board of Directors meeting on February 23, 2022, the Board approved an amendment to contract with Coffman Specialties, Inc. for Buckeye FRS No. 1 Phase 2B Rehabilitation Project. This amendment will increase the Final Draft Guaranteed Maximum price (GMP) to \$21,409,739. The previous amount was \$21,000,000.

On February 23, 2022, the Board also approved listing agreements with ROI Properties, LLC authorizing ROI to list and market real property to the public that has been declared as excess to the needs of the District.

At the Board of Directors meeting on March 23, 2022, the Board approved Intergovernmental Agreement FCD 2021A011 for the Oak Street Basin and Storm Drain Project between the City of Mesa and the Flood Control District.

On March 23, 2022, the Board also approved Intergovernmental Agreement FCD 2021A008 between the Flood Control District and Town of Queen Creek for the

conveyance of fee and permanent easement held as part of the Rittenhouse Channel Drainage improvements.

At the March 23, 2022, the Board also approved temporary construction easements for Scott Avenue Wash Emergency Repair.

There were no questions from the Board.

**7) OTHER BUSINESS AND COMMENTS FROM THE PUBLIC**

Mr. Fulton posed the question to the Board regarding their preference for Flood Control Advisory Board meetings going forward - Should they be virtual, in person or a hybrid of the two? The consensus from the Board members was that meetings going forward should be in a hybrid format. Mr. Fulton confirmed that going forward the Flood Control Advisory Board meetings would be offered in person and virtually as long as allowed by public health guidance.

There were no further comments by members of the public.

Chairman Hemant Patel adjourned the meeting at 3:11 p.m.