



FMP PLANNING COMMITTEE MEETING NO. 2 MINUTES
Floodplain Management Plan 2020 Update
Wednesday, October 24, 2019 9:00 AM – 12:00 PM
Flood Control District Operations Building Conference Room

Introduction

- Welcome
 - Logistics and Intros
 - Rally point – Out the building and into the covered parking area
- Around-the-room introductions (Flooding concerns sought to be addressed)
 - Sam Patton – Arizona Department of Transportation [ADOT]
 - Tice Supplee – Audubon Arizona (Non-structural solutions)
 - Mark Edelman – Arizona State Land Department
 - Brandon Espinoza – Gila Bend (Floodplains in Town)
 - David Fritz – Maricopa County Department of Transportation [MCDOT]
 - Nuning Lemka – City of Surprise
 - Sami K – Central Arizona Project [CAP] (How CAP can help)
 - Bob Eroh – City of Buckeye
 - Melody Zyburt – City of Mesa
 - Ray Dovalina – City of Phoenix
 - Patti Trice – Citizen/South Mountain-Laveen area (Prevent local flooding)
 - Pete Weaver – Town of Gilbert
 - Greg Monger – Arizona Rock Products Association [ARPA] (Permitting and mineral reserve to planning)
 - Sydney Stauffer – ARPA
 - Ken Vonderscher – Maricopa County Parks and Recreation
 - Randy Goettsche – Citizen/Rio Verde area
 - Mike Shelton – Arizona Department of Water Resources [ADWR]
 - Jesus Haro – Maricopa County Department of Emergency Management [MCDEM]
 - Nicole Smart – Town of Youngtown
 - Dan Nissen – City of Peoria (How the FMP helps with the ADMP's in area)
 - Tony Angueira – Yavapai County
 - Lynn Whitman – Yavapai County
 - Kelly Hargadin – City of Glendale
 - Ed Taylor – Citizen/New River-Desert Hills area
 - Hasan Mushtaq – Flood Control District of Maricopa County [FCDMC]
- Agenda for this meeting
 - Goals for this meeting – flood hazards for the county
 - Historical flooding impacts to each community
 - Quantify and record to develop actionable items for the 2020 Floodplain Management Plan (FMP) update
 - Impacts of Hazards During Storms
 - Group breakout
 - Discussion
 - Close out discussions from groups

- Next Steps
 - Upcoming meeting and public meeting November 4th (3:00 to 6:00 PM)
- Safety Moment
 - Texting and driving
 - Avoid texting and driving – it can wait!
- Overview of October 3rd, 2019 Meeting – FMP Committee Meeting #1
 - Review of FCDMC Programs
 - FCDMC provided overview of featured District programs and opportunities
 - How they are set-up and actively assisting the communities
 - Hazards Identified in 2015 Plan
 - Structural, Non-Structural, Regulatory, and Human-caused
 - What the risks were identified
 - Status of 2015 Goals and Action Plan
 - Where We Want to be for 2020 FMP Update
- **Flood Control District Budget – Karen Scott**
 - District Funding
 - Tax revenue – largest portion of funding
 - Secondary tax – 0.1792%
 - Intergovernmental Agreements
 - Partner submits project to Capital Improvement Program (CIP) to create project. Cost share – usually 50/50
 - Interest
 - Currently FCDMC is separate entity from other Maricopa County agencies.
 - Allowed to carry money and can generate interest.
 - Permits
 - Use permits
 - Inspection fees
 - Miscellaneous
 - Data sells, rent on properties, land sales, etc.
 - Earlier this year sold a piece of land near Cave Buttes Dam for \$26M
 - Tax revenue about 91% of revenue for fiscal year 2019
 - Tax rate has remained the same for years, but with the increase in home values the tax revenue will increase.
 - Miscellaneous second most and Intergovernmental Agreement third. Intergovernmental Agreement was smaller in fiscal year 2019 due to projects that were not progressing as they were anticipated. Permits is smallest portion – but increased over 20% from previous year.
 - FCDMC Expenditures
 - Fiscal year – July to June
 - Spent \$52.8M – spent about 54% of what was budgeted
 - About 6 things FCDMC does – IT (5%), Admin (12%), Identification (10%), Regulation (3%), Education (4%), and Remediation (66%)
 - Education includes outreach, schools, STEM events
 - Water simulator model – used to educate children

- 355 Weather stations
 - Stream, Impoundment, and Rain gages
 - Identification – looking at watersheds, where the water runs, and where is it a problem. Plans are developed that lead to projects. Floodplain delineations are a part of identification too.
 - Regulation – can justify based on the identification where people can and can't build.
 - Remediation – build structures, often with partners. Maintenance is also a portion of remediation.
- CIP
 - Fiscal year 2019 – Projects over \$1M
 - White Tanks Flood Retarding Structure (FRS) #4, Rawhide Wash, South Phoenix and Laveen (Hidden Valley)
 - Technical Problems – geotechnical, archeological, environmental, permitting complications, and regulation changes.
 - Powerline, Vineyard, and Rittenhouse FRS's
 - Federal partners said to stop in April 2017. Wanted to see complete plans and this is still being worked on. Still awaiting funding.
 - Durango Regional Conveyance Channel and Northern Avenue Parkway
 - Met budgets
 - Granite Reef Wash Drainage Improvements
 - Partner was not able to receive funding for fiscal year 2019, but did receive funding for going forward
 - Mandan Street, Palm Lane, and 27th Avenue/Olney
 - Partner was trying to obtain FEMA grants and recently were successful in getting them. This project will be moving forward.
 - Cave Buttes Dam and McMicken Dam
 - FCDMC leading on their own without partners. FCDMC inherited and maintaining currently. Rehabilitation is needed with oversight from ADWR. FCDMC struggles to answer some questions from ADWR.
 - Major Maintenance Projects
 - Included for first time in fiscal year 2019
 - Projects that could not be accommodated in operating budget. Projects that did not escalate to CIP level.
 - Spent 56% of what was budgeted.
 - Arizona Canal Diversion Channel (ACDC) Fencing
 - 20-foot (*varies) drop into ACDC
 - Fencing has deteriorated to where some portions are falling in.
 - FCDMC discovered they needed a different procurement method for the replacement of the fencing.
 - Went before Flood Control Advisory Board and approved
 - Now has escalated to the point of being part of the CIP
 - FCDMC Revenue, Expenditures, and Fund Balance
 - History of the FCDMC bank account balance – ebbs and flows
 - Currently on an upward tick for the bank account balance

- End of fiscal year 2018 approximately \$91M and approximately \$109M in the bank account
- Projecting a balance of approximately \$90M at the end of fiscal year 2020 based on current budgeted expenditures
- Comment from participants that funds should be expended for public safety, not held back.
- Fiscal Year 2019 versus Fiscal Year 2020 Budget Comparison
 - Revenue
 - Increase in revenue by about \$5M due to increase in property values
 - Intergovernmental agreement was reduced by about \$3M
 - Net effect is about 3% increase in revenue
 - Expenditures
 - Operating fund increase by about \$5M
 - Usually pretty steady but this last year went and asked for different appropriations for purchasing of equipment and maintenance of buildings. Buildings built in early 1990's and need to have some improvements.
 - Chillers replaced for FCDMC building – originally budgeted as \$600K and is not about \$1.7M. Cost creep.
 - Equipment
 - Vehicles and large field equipment can vary year-to-year.
 - CIP
 - Increase by about \$25M due to projects carried over from fiscal year 2019, project rolling continues.
 - Hoping to be able to spend the allocated money in fiscal year 2020
- Questions/Comments
 - (Patti Trites) – Are there shovel ready projects that FCDMC has that are ready for when partner agencies have the money? It is a public safety issue and FCDMC has only spent 54% of what their budget is.
 - FCDMC is special funded – it is not use it or lose it
 - (Ray Dovalina) – Ultimately, cities and towns do not have dedicated funding source. The dedicated funding source is a much bigger issue at hand. Glendale has it and Kelly Hargadin said other groups try to steal the funding.
 - (Randy Goettsche) Problem getting construction going due to the busy contractors and escalating prices.
 - The biggest struggle is the increase in cost. Construction companies can find the people to build it, but costs are increasing. Buckeye project and the price increase year-over-year.
 - (Randy Goettsche) Thinking about pushing out projects to slower construction periods to mitigate rising costs?
 - No, want to move along due to public safety.
- **Communications and Public Outreach – Lisa Blyler**
 - Mitigating flood risk through education and outreach
 - What do we do?
 - Art – not necessarily science

- Concise, timely, accurate, and consumable information to the right people in the right place at the right time
- Interface between FCDMC and the Public
 - Public meetings – moderating and facilitating
- Multiple ways of communicating
 - Changes by audience
 - Match message to method
- STEM Program
- Emergency communications
- STEM Curriculum
 - Focus education on children
 - Lessons aligned to the Arizona Science Standards
 - Inquiry-based, hands-on lessons
 - Meteorology, emergency planning, and engineering
 - Children are great messengers to their family
 - Raise awareness to risks
- Emergency Communications
 - Keep community engaged and informed
 - Message coordination
 - Maricopa County Department of Emergency Management (MCDEM)
 - Internal FCDMC Staff
 - Media
 - Make sure FCDMC staff can do their jobs as the media comes for questions
 - Social media
 - How to talk to people in the right way
- We see things a little differently
 - Convey complex, technical information to wide audience
 - Figure out a way the information is consumable for the public
 - Every communication is an opportunity
 - How do you make use of the limited time you will get with people?
 - Educate
 - Inform
 - Effect behavior
 - Creative content to reach community in new ways
 - Videos, flyers, fact sheets, etc.
- Right people, Right Place, Right Time
 - One size does not fit all
 - Public expectations and timelines have changed
 - The public needs to be able to find information when they want
 - Not only new construction projects
 - Maintenance activities
 - Created brochure to hand out as to why they are doing their maintenance (tree removals, fencing repairs, etc.)
 - Drone flights
 - Proactive educational efforts
 - Partnership with other agencies

- Partnership to help push messaging by using agency methods for outreach as well
- Keep people engaged
 - Keep on timelines so when messages are necessary, they show up on their feeds
- Website
 - All social media posts draw people back to the website to get the information
 - Give people the information they are wanting
- Ways to follow
 - Facebook, Twitter, Instagram, and YouTube
- Questions/Comments
 - (Kelly Hargadin) For outreach, are judges are needed for STEM events?
 - No.
 - FCDMC goes to schools. D-backs had a STEM night. ASU West for Science Fest.
 - FCDMC goes to hosted events and usually don't sponsor events
 - (Patti Trites) Going through HOA's to electronically send information. HOA's can disperse information to their groups. HOA can be another layer to reach out to and get to the areas that a frequent flooding areas.
 - Good suggestion, FCDMC needs to develop a list of active HOA's and points of contact for communications.
 - (Kelly Hargadin) City is responsible for getting together HOA list. Sent out information and got less than half response.
 - It is a struggle to find the "change maker" to push the message.
 - (Randy Goettsche) Lists for unincorporated, who maintains the HOA lists?
 - FCDMC does this.
 - When and how? What is sent?
 - (Pete Weaver) Directs requests to social media and the news media picks it up. Pot holes images and locations can be tweeted, and the City will respond back through social media to get a response unit out. Phones are ringing less because a lot is done digitally. Solved in days, not months.
 - It has changed. The methods of outreach have changed.
 - Media – do television spots during monsoon season. Already meeting with media outlets to get messaging set for 2020 monsoon season.
 - Can target zip codes and demographics through the media. Taken the approach of more is better but have to be cognizant of when is too much.
 - (Ed Taylor) As FCDMC is developing message for next year, could direct people to find local HOA or local community organization to know where they can go to for information. NextDoor posts help get real time information out to people.
 - Good idea. Keep connection with community. FCDMC can only reach so many people but can help point people to right place.

Flood Hazard Identification

- Review Maps and 8 FMP watersheds
 - Divided to support where water flows to the 5 major water courses
 - The 8 overall watersheds are then broken down even more by FCDMC to determine projects for ADMP's and other mitigation projects
 - Done to help organize data within the county for the FMP
 - Before the breakout group session, committee members brainstormed ideas on what "Flood Threat" means to them.

- Around the Room: Define "Flood Threat"
 - Not defined in state statutes – looking to see what communities think "Flood Threat" means. What does "Flood Threat" mean to you?
 - Group 1 – Agua Fria River Watershed
 - Wildcat developments – not defined flood protection at all. "I don't like that wash I am going to build something there to move it"
 - Group 2 – Cave Creek/Salt River and Verde River Watersheds
 - When remediation is needed after a flood event. Flowing water may be inconvenience, but damage to home is a bigger concern.
 - New River – new development. Wash in the area get channelized and the neighbors start getting water on property and home that have never had issues in decades. New development diverting water to where it previously did not go. Interface between new development/prior development and regulations. What is going on downstream when new development comes in- existing and future analysis. No regard for the downstream areas when new development comes in. Does not look outside of property boundaries. Should be better controlled- can't rely on single county permit.
 - Public information concern – landscaping done to alter the flow of water and the people do not realize they need permits for this.
 - Emphasis on rain harvesting – zoning issue. More of an incentive for builders or regulation to help educate people to maintain a small retention area. This would help recharge water. Underground tanks for irrigation has been encourage in New River. Rain harvesting could help attenuate the flow. Encouragement from zoning and government to get builders to do this, especially on lot splits. Give them an incentive to put in rain harvesting systems. Would help with water shortage and excess flood waters.
 - Adoption of GI/LID techniques throughout county
 - Group 3 – Gila River/Queen Creek Watershed
 - Flood warning, flooded washes – stay out of the washes
 - Water in the street is not a flood threat, it is acceptable to a certain level.
 - Flood threat is a public safety issue.
 - Floods are not always floodplain related
 - Flooding of a home.
 - Property damage.
 - Identifying the threat before you build there. Development opportunities.
 - Look at map and in flood zone X and development occurs in undeveloped lands where it never flooded. The displacement occurs that does end up causing flooding. New homeowners do not know they are within a potential flood threat because there have never been homes there.

- When you purchase properties, identify and communicate in writing the flood threat to people. (washes, dams, levees, etc.)
- Unregulated lot splitting.
- Need data – getting more gages in the right places. Getting data is important to get the historical information in the area. Being able to gather data because rain comes so sporadically in areas so the threat can be identified.
- Incorrect design and elevations of homes based on markers that had subsided in the area. Have not seen the impacts of this yet but forecast flooding impacts.
- Maintenance issues – a lot of time the maintenance is not done, and this is a real flood threat. Infrastructure cannot perform to its optimum potential.
- Data in the last 60 to 80 years the design standards have changed because more information has become available. Utilize the data we not have to determine improvements to the design standards.
- The design standards need to change, which will be tough to do. Politically it will be difficult. FCDMC should lead the charge.
- Group 4 – Centennial Wash and Hassayampa River Watersheds
 - Best Management Practices for flood measures
- Group 5 – Lower Gila River and Waterman Wash Watersheds
 - Risk to property, life, and infrastructure due to rising floodwaters
 - Having some interface with planning and zoning so there are no hard edges between where events can occur and where people are living.
 - Sheet flooding that is not understood.
 - Elevated home could create island effect because roadways are not elevated
 - Pima County has done a study where ordinances came out for desert washes that dealt with development concerns. FCDMC should consider similar approach.

Break – All participants

Impacts of Hazards During Storms – Assessing the Problem

(Note: FMP 2020 focus is for unincorporated Maricopa County, but group should indicate all known flooding problems)

- FCDMC Project Managers in to help answer questions
 - Theresa Pinto
 - Spencer Bolen
 - Mark Frago
- Breakout Exercise – Groups to focus on each watershed
 - Grouped based on locations of communities within the watersheds
- Objectives - Mark up watershed maps and use worksheet to identify flooding problems
 - Overall objective – work through the handout on the floor
 - Write a structure definition of “Flood threat”
 - Flood hazards –a reference list was developed per 2015 findings, however please include any additional information that is a flood threat to your community not listed. Mark off if that is a threat to your community or not for the listed hazards.
 - Markup map locations with problems associated with hazards.
- **Groups Report Out**

- Group 1 – **Agua Fria River Watershed**
 - Flood Threat
 - Need to be aware of areas that flood. If you know the area floods, know how much water causes the flooding. Watch the gages to know when to take action for locations with known problems.
 - Key Hazards
 - Alluvial Fans
 - Development creeping toward alluvial fans (would like to see something in Wittmann ADMP Update)
 - Wildcat development (single-lot developments)
 - CAP Canal – ponding upstream
 - Old inactive mine in New River where water ponds – water stays there for months at a time
 - Tailwater
 - Development downstream – defined outfall locations
 - Local/Urban flooding
 - Major issue within Glendale
 - Unmaintained drainage facilities
 - Maintained by HOA’s – not sure what they are responsible for – need better understanding of maintenance requirements.
- Group 2 – Cave Creek/Salt River and Verde River Watersheds
 - Flood Threat
 - Interruption of transportation and emergency service during storm events
 - Key Hazards
 - **Verde River Watershed**
 - Repetitive losses on roadways
 - Head-cutting of roadways and banks
 - Single-lot development – hardscape and un-natural landscaping
 - **Cave Creek and Salt River Watershed**
 - Street flooding – no storm sewers in area
 - Building below street grade
 - Outdated infrastructure feeding into canals
 - Multiple jurisdictions – SRP in control of canals and city storm sewers
 - No impoundment areas as it is older part of City of Phoenix
 - Hardscaped roads, houses, and others preventing infiltration
 - Action – build more storm sewers in the area
- Group 3 – **Gila River/Queen Creek Watershed**
 - Flood Threat
 - Public safety – which encompasses hospitals, emergency services, water treatment facilities, airports
 - Key Hazards
 - Flash flooding and transportation
- Group 4 – **Centennial Wash and Hassayampa River Watersheds**
 - Flood Threat

- Risk to life, structures, and economic development.
- Key hazards
 - Limited infrastructure
 - At-grade crossing leading to flooding of transportation corridors
 - Development in the areas – large areas
 - Management of alluvial fans (More in Hassayampa Watershed)
- Group 5 – **Lower Gila River and Waterman Wash Watersheds**
 - Flood Threat
 - Risk from mapped and unmapped areas on structures, life, and infrastructure.
 - Land use conversion without consideration of impacts. Mainly in areas that were historically agriculture.
 - Key Hazards
 - Gila Bend – areas that are not SFHA but should be. Inflow of areas that get pooled by embankments – highways and railroad.
 - Major flood events on the Gila River – breakouts along the river. Infrequent high-volume events.
 - Split flow in Hassayampa and Centennial tributaries.
 - At-grade crossings severely damaged during monsoon events.
 - Single-lot developments
 - El Rio Masterplan for Gila River – good coordination with communities has helped with development in the area. Levee constructed in the area recently done in conjunction with the Maricopa Trail.
 - Suburban-Urban Interface
 - Tamarisk – fire threat, impact to capacity of waterways, and impacts to flow patterns.
 - Wildlife areas – Game and Fish areas. Natural resource value.
 - Additional hazards not identified elsewhere
 - Urban Development and Densification
 - Subsidence and Fissures
 - Block Walls or Fences
 - Fill in Washes
 - Flood Warning Signage and Depth Gauges

Next Steps

- **Public Meeting** on **November 4, 2019** at District – Main Building
 - 3:00 to 6:00 PM
 - Online survey if you are unable to make it
 - Kelli Sertich will send out link to survey to committee members to share with communities / agencies to solicit additional feedback.
- **Committee Meeting #3 November 14, 2019** – Set FMP Goals
 - 9:00 AM to 12:00 PM
 - Send committee reminder for meeting week of event.
- **Committee Meeting #4 December 5, 2019** – Review Possible Activities
 - Send committee reminder for meeting week of event.