



PLANNING COMMITTEE MEETING MINUTES
Floodplain Management Plan 2020 Update
Wednesday, October 3, 2019 9:00 AM – 12:00 PM
Flood Control District Adobe Conference Room
Recorded by Black & Veatch Corporation

Welcome

Introduction

- Around-the-room Introductions
 - Kelli Sertich
 - Policy, Planning & Coordination Branch Manager
 - Flood Control District of Maricopa County (FCDMC)
 - Mark Fountain
 - Water Resources Regional Planning Leader
 - Black & Veatch
 - Dan Nissen
 - Deputy Engineering Director
 - City of Peoria
 - Sami Korpelainen
 - Supervisor – Civil/Mechanical Engineering
 - Central Arizona Project (CAP)
 - Ken Vonderscher
 - Planning and Development Manager
 - Maricopa County Parks and Recreation
 - Tice Supplee
 - Director of Bird Conservation
 - Audubon Society of Arizona
 - Lance Webb
 - Deputy Engineer
 - City of Mesa
 - Kelly Hargadin
 - Engineering Project Manager
 - City of Glendale
 - CRS Program, Grants, Drainage Projects
 - Brandon Espinoza
 - Development Services & Code-Compliance Officer
 - Town of Gila Bend
 - Mark Edelman
 - Planning and Engineering Manager
 - Arizona State Land Department
 - Tony Angueira
 - Yavapai County Flood Control District
 - Patti Trites
 - Citizen – South Mountain/Laveen area
 - President of Southern Hills Homeowners Association and member of South Mountain Village Planning Committee
 - Flooded twice in 2014
 - Ray Dovalina
 - Assistant Public Works Director

- City of Phoenix
- Sam Patton
 - Project Manager Multimodal Planning Division Corridor Planning Group
 - Arizona Department of Transportation (ADOT)
- Gregory Arrington
 - Community Development Manager
 - Town of Youngtown
- Lynn Whitman
 - Flood Control District Director
 - Yavapai County Flood Control District
- Tom Ewers
 - Division Manager Plan Review – Chief Building Official
 - Maricopa County Planning and Development
- Nuning Lemka
 - Public Works Manager
 - City of Surprise
- Robert (Bob) Eroh
 - Project Engineer
 - City of Buckeye
- Jesus Haro
 - Emergency Services Planner
 - Maricopa County Emergency Management
- Liz Foster
 - Executive Director
 - Maricopa County Farm Bureau
- Brian Cosson
 - Arizona Department of Water Resources (ADWR) National Flood Insurance Program (NFIP) and Flood Warning Coordinator
 - ADWR
- Mike Shelton
 - Floodplain Risk Map Coordinator
 - ADWR
- Bassem Naba
 - Senior Drainage Engineer
 - Maricopa County Department of Transportation (MCDOT)
- Randy Goettsche
 - Citizen
 - Rio Verde area
- Ed Taylor
 - Citizen
 - President of New River Desert Hills Community Association
- Matt Hann
 - Water Resources Engineer
 - Black & Veatch
- Steve Waters
 - Hydrometeorologist and Flood Warning Program Manager
 - FCDMC
- Don Rerick
 - Planning and Project Management Division Manager
 - FCDMC
- Cathy Register
 - Floodplain Permitting Division Manager

- FCDMC
- Scott Vogel
 - Chief Engineering and General Manager; Engineering Division Manager
 - FCDMC
- Lisa Blyler
 - Information, Outreach and Support Division Manager
 - FCDMC
- Charlie Klenner
 - Operations and Maintenance Division Manager
 - FCDMC
- Hasan Mushtaq
 - Planning Branch Manager
 - FCDMC
- Safety Moment
 - Flu Season
 - 4 more upcoming meetings – want everyone to keep healthy through the remainder of the year.
 - Rally Point
 - Out in parking lot under shade structures
- Future Meeting Attendance
 - Alternates are requested if current participants cannot attend
- Welcome from Michael Fulton
 - Updating the plan is more than just an exercise – helps to identify flooding hazards in Maricopa County
 - Brought in a diverse group of individuals and stakeholders to gather information on the different interests with flooding to help with the development of the plan
- Overview of Agenda
 - Review of program and background
 - Overview of District Programs
 - Hazards Identified in 2015 Floodplain Management Plan (FMP)
 - Action Items from 2015 FMP
 - Where are we going with the 2020 FMP
 - Leadership in the County
 - Next steps for forthcoming meetings
- Overview of the National Flood Insurance Program (NFIP)
 - In the late 1960's, Congress created the NFIP – maps were necessary to identify hazards and a regulatory process was needed
 - Maricopa County joined in 1970
 - NFIP requires flood hazards/regulation
 - Community Rating System (CRS) developed by NFIP to provide incentives for floodplain management activities done by the communities
 - County programs assist in the involvement of the CRS
 - Flood Insurance
 - Community Rating System (CRS) – Class 4 Community
 - Up to 30% flood insurance discount for residents in unincorporated Maricopa County
 - FMP Committee Process started in 2015 and continuing forward with the development of the 2020 FMP Update
 - Overview of changes within the NFIP and CRS
 - 2012 major reform – rates and map changes
 - 2014 tweaks to NFIP

- Reauthorizations over the years and recently Congress voted to continue NFIP to November 21, 2019 as they work through potential reform
 - CRS – Task force meets and updates manual frequently – they seek input from the different regions throughout the country
- Overview of the FMP
 - Guiding document to help Maricopa County with floodplain management for the next 5 years
 - Seeks to identify hazards and set action items for how Maricopa County will proceed forward to mitigate flood hazards throughout the county
 - Development process
 - A plan has been in place since 1985 – State statute requires all Flood Control Districts to have a comprehensive plan
 - 2015 was first standalone FMP outside of comprehensive plan – used committee process
 - Community input helps to improve the FMP development – committee helps provide additional input that will also be incorporated into the Comprehensive Plan
 - Talks about projects that will be done and how funding will come about
 - FCDMC Strategic Plan will be updated in the next year and the FMP will be used to help guide that document.
 - Your role as a participant
 - Feedback is very important in the development of the FMP
 - Review of FMP Committee Timeline
- Other concurring plans – Comprehensive Report & Program, Strategic Plan

Overview of Featured District Programs

- Hazard Identification Studies and Plans, Programs/Projects – Don Rerick
Planning and Project Management Division
Cradle to Grave
 - Hazard Identification through project design and construction
 - Helps with communication
 - Helps reduce change orders
 - Fiscal Year 2020 Funding
 - \$81M capital funding
 - \$37M operating fund
 - Cradle to grave
 - Hazard identification
 - Potential mitigation solutions
 - Prioritization
 - If recommended, Inter-Governmental Agreement (IGA) to Project Design
 - Project construction
 - Project turnover
 - Hazard ID phase
 - FLO-2D to identify hazards
 - Helps to identify hazards that solution is needed for
 - 12 studies currently underway
 - Example – Lower Indian Bend Wash Study Report
 - Hazard identification within study
 - Cities help provide input
 - Area Drainage Master Plans (ADMP's)
 - Partnerships to develop cost efficient measures
 - Example – South Mountain/Laveen

- Updated about 1 years ago from the 1994 ADMP
- 6 different mitigation areas
- Some underway currently in one phase or another
- Capital Improvement Plan Prioritization Process (CIPPP)
 - Formal annual process that agencies can submit projects for formal evaluation
- Evaluation committee reviews and then gets approval from FCDMC Director
- Advisory Board for final approval
- Recommended for implementation – will not be pushed forward until IGA for cost sharing has been developed and agreed to
 - CIPPP Scoring
- Broken down into multiple elements for scoring prioritization
 - Develop/Transition
- Design Concept Report (DCR) or mini-ADMP may be needed
- Timeline and budgets
- If partner available, IGA pushed forward for design
 - Design
- Includes landscape architecture and water conservation
- Includes utility work – utilities could be the biggest issue for a project
- Right of way acquisition
 - McMicken Dam Example
- Currently under construction
 - Landscape Architecture and Water Conservation
- Encourages Green Infrastructure (GI) and Low Impact Development (LID) and alternative stormwater measures
- Structural aesthetics – do not want to have plain concrete within projects
 - Dam Safety Program
- 22 dams operated and maintained by FCDMC
- Multiple structures within Pinal County
- Rehabilitation is important due to age of structures – NRCS and USACE structures
 - McMicken Dam (built in the 1950's)
 - Buckeye FRS 1
 - Powerline FRS, Vineyard FRS, and Rittenhouse FRS
 - Cave Buttes Dam
 - All under design/construction
 - Construction
- Construction Management is done with FCDMC staff primarily – sometimes it is contracted out
- Encourage partnering with contractors to get good relationship from beginning
- Encourage value engineering
- Example – 115th Ave and Union Hills (Completed with Peoria and Surprise)
 - 6% change order due to changes in field – minimally due to design or specs issues
- Pass operation and maintenance on to partner agencies after construction is complete
- Questions
 - (Dan Nissen – City of Peoria) Are the Levee and Dam Safety Program the same?
 - No, levees are separate and headed by Frank Brown and dams by Tom Renckly

- (Tice Supplee) Is there a process after turnover to partner agency for the success of the project and design and come back with reworks and modifications short of a disaster response?
 - In 2014 and 2015 not one structure malfunctioned or failed
 - Challenge is when the structures work the citizens do not know why they do not get flooded – but when they do not work, which is rare, they (citizens) do get flooded
 - Rarely have reasons to go back and do rework on projects
 - (Patti Trites) When you prioritize projects, how do they get elevated? Is it based on if the city has funding?
 - Yes, when the CIPPP process was started it was thought once the project got recommended it immediately went into design and construction. Have a backlog of projects recommended as far back as 2002 that have still not been implemented because the agency requesting has not found the need to implement it.
 - When the city comes to FCDMC, based on recommendations for a project to be implemented and they are ready to sign an IGA to help fund the project then it moves forward.
 - If the above are met, the project can move forward.
 - Yes there are projects that have been designed but no IGA has been made to push project forward
 - (Brian Cosson) Does it matter where funding comes from (Cosson)
 - No, it does not matter where the secondary funds come from
- Operations and Maintenance – Charlie Klenner (Division Manager)
 - O&M Overall budget \$1.9M
 - 22 Purchases this year
 - Taking care of a lot of aging infrastructure
 - Help manage facilities
 - HVAC in Durango facility
 - Facilities upgrades for break rooms, rest rooms
 - Major maintenance
 - New to the budget
 - Example – Fall protection needed for structural features
 - People and homes are within areas of safety concern - it is important they are included
 - Levees are a big concern – fall hazards from crests with no protection
 - Arizona Canal Diversion Channel (ACDC) – Fencing failing along canal and erosion concerns – getting contractor to take care of the fence replacement since doing it in-house took too long. \$5.5M
 - New River Channel Maintenance
 - Modeling done to show there was too much growth in some areas
 - Took 1.5 years to clear up – needed Section 404 permitting to get completed
 - Reems Road Channel after Maintenance Cycle
 - Updated channel with vegetation to make it more aesthetically pleasing
 - Questions
 - (Kelli Sertich) How many structural items are maintained by District?
 - 22 dams and over 80 miles of levees
 - Michael Fulton directed committee to look at the exhibits to see the structures maintained by FCDMC

- Managing aging infrastructure is a budget issue
- Have a lot of infrastructure to manage daily to have it function when it is needed – flap gates, vegetation removed, etc.
- Sun City Drains are needed to be upgraded and will be a \$25M job to keep them operating as they should
- (Patti Trites) Budget – is it all out of taxes?
 - Yes
- (Patti Trites) Is Maricopa County seeing a growth in budget as Maricopa County has grown?
 - Yes and no – the funds come from a secondary property take and it varies based on values of properties. The rate was set by Board a couple years ago and brings in around \$70M. Approximately \$30M operating budget for salaries and other overhead items. Remaining is available for projects to be shared 50/50 with cities.
- It is not only about quantity it is also about valuation
- Get some revenue from partnerships from the Federal government if the manage projects
- Dam rehabilitations projects at \$100M projects that need Federal partnerships to have pushed forward
- Cities have their items to manage and the District is one of the items in pile
- (Tice Supplee) Del Webb (Sun City) example – do new developments have to be responsible for developing floodplain management items? Is there any communication with FCDMC engineers to make sure they convey the flows and meet design standards?
 - County Planning and Development reviews plans
 - Goals for Sun City improvements is to keep Sun City infrastructure the same size and replace like-for-like
- (Dan Nissen) For the maintenance of New River and it is known when the District is in there – is there a better way to notify the public that maintenance is going on to reduce citizen phone calls to cities? Joint message was developed and sent out after and might have been better to send out early.
 - Yes, this will be addressed later in the presentation for opportunities between the communities and FCDMC
- (Lance Webb) Challenges the cities have is educating the public about drainage related maintenance. Have FCDMC ever put together a manual or guidelines for how maintenance should be done by the community residents?
 - Yes, there was a flyer showing who was responsible for what, but not sure if much has been done with it lately
- (Lance Webb) Mesa went through and documented ownership of maintenance. That was the first part of it, but what does Mesa do to maintain their infrastructure. General HOA boards do not know what needs to be done. Mesa has talked with the HOA boards to include the maintenance and cleaning of drainage infrastructure within their landscaping contracts. Often asking how often they should be doing maintenance. Has FCDMC taken a lead to develop something to help the general public with maintenance programs?
 - Flood control is everyone’s responsibility and FCDMC has the role to communicate how citizens and cities can mitigate flood risks
 - GI and LID guidelines have been developed for communities, but a better outreach plan could be developed

- The data is available in different documents and it would need to be combined for the public to use
- Permitting and Delineations – Cathy Register
 - Floodplain permits
 - Provides floodplain management for 14 communities within Maricopa
 - Review Conditional Letter of Map Revision (CLOMR) and Letter of Map Revision (LOMR) for 14 communities and un-incorporated MC
 - Seen a 30% increase permits applications in the last year
 - Online permit program developed to submit applications online to facilitate submissions
 - Can check status and receive permit from online application
 - Been in place since July 2019 for testing and working on removal of bugs
 - Encourage online only submittals going forward
 - Team is tasked with responding to requests from the public about floodplains and general information
 - Get about 2,000 questions a year from the public – staff expected to respond within 24 hours of receipt. A full answer is not always provided within 24 hours, but a notice of receipt of question and that it is being worked on is sent back.
 - Code enforcement/Inspections
 - Coordinate prior to any action
 - Team does around 400 inspections per year – with about 75 open cases currently.
 - Floodplain delineations
 - Several studies currently under review at the Federal Emergency Management Agency (FEMA)
 - Several underway currently
 - Hassayampa River (underway)
 - USGS has looked at stream gage data in the area and updated the flow rates – decreased between 20 to 30%
 - New delineation done based on new flow rates
 - Gila Bend area (planning)
 - Zone A re-delineations
 - 2013 FEMA looked at all railroad embankments and placed Zone A's along embankments with potential for failure
 - Looking to see if Zone A delineations are warranted or if it base flood elevations need to be developed
 - Currently developing an approach for study
 - Sunland Avenue Tributary (planning)
 - 99th Avenue to 115th Avenue, north of the Salt River
 - Current delineation is likely no longer accurate due to development done within area
 - Developing approach for study
 - Revision of a Zone D within City of Mesa
 - Zone D flood insurance is not mandatory, but expensive if purchased
 - Goal of the delineation is to identify flood hazard to remove a majority of the Zone D area
 - Future study to look at area south of Elliot Road
 - Questions

- (Tice Supplee) Why are new delineations done on the Hassayampa River with lower flows when we are in a 20-year drought?
 - River flow data is based on 60+ years of recorded data
 - Change in development within watershed could warrant a re-delineation.
 - When does FCDMC decide there has been enough change to warrant a re-delineation? This is a big issue and needs to be thought about when looking at re-delineations.
 - (Tice Supplee) Some of the new delineations are within areas of proposed green space. Could this be included into the re-delineation to both re-delineate and provide mechanism for green space preservation?
 - Delineations are blind to the current land use but may be helpful to where green space and open space projects may be applicable. This goes beyond the re-delineation of the floodplain.
- Engineering Division Program Highlights – Scott Vogel – Chief Engineer
 - Focus on Emergency Action Plans (EAP's) for Dams/Levees and Flood Warning Program
 - FLO-2D Web Access Tool
 - 11 studies added to the tool
 - Video tutorials are ready to be loaded to the site
 - Will continue to place future studies online as they are completed
 - Displays flow depths and direction of flow
 - Special log-in for technical personnel to get more data to use
 - Drainage Design Manuals – Updated Fall 2018
 - Hydrology, Hydraulics, Erosion control
 - Dam Fill-Time and Outflow Forecasting Tool
 - Developed recently to predict the time of dam fill/peak
 - During a storm, based on real time feedback and parameters developed for the watershed/contributing area
 - Levee Safety Program
 - 24 District Levees – 35 miles in length
 - Program developed to keep levees in operational shape and FEMA certified
 - Program now allows for assistance through the United States Army Corps of Engineers (USACE) Rehabilitation and Inspection Program
 - Right-of-Way Use Permitting
 - Resolution to work in FCDMC Right-of-Way recently updated
 - USACE Section 408 Permission
 - Any impact to structure to be reviewed by USACE
 - Have monthly conference calls with USACE to discuss permits going to USACE
 - Mapping and Survey
 - LiDAR data has saved FCDMC time and money on overall mapping services
 - Started Drone Mapping and Imagery
 - Good for certain applications, such as where it may be difficult or unsafe to get surveyors to
 - In-house Design and Review
 - Done for smaller CIP projects as well as Operation and Maintenance repair projects
 - Helps with turnaround of reviews
 - Emergency Action Plans

- For dams and levees managed by FCDMC
 - Potential emergency conditions at structure and what actions should be taken in case of emergency condition
 - 22 FCDMC Dams that surround the valley
 - Around 23 other dams in Maricopa County operated by others
 - Why EAP's?
 - Minimize the loss of life and property during storm events
 - Laws require this for significant hazard potential dams
 - FEMA requires them to keep structures certified
 - NFIP CRS Dam and Levee credits
 - USACE required FCDMC to have EAP's in place for structures
 - Minimize loss of life and property damage
 - EAP Content
 - Identifies potential emergency conditions – impoundment, spillway flow, breach, etc.
 - Actions that are taken for emergency condition
 - Could be crews sent to field to observe structure
 - All the way up to evacuation recommendations
 - Flow Chart for FCDMC actions are included in each EAP to identify staff actions for emergency conditions
 - Lists who is responsible and who should be notified and when
- Questions
 - (Mark Fountain) How many EAP's are being updated currently?
 - All are reviewed annually. Currently have one or two being updated – Two types of updates are administrative updates (contacts updates, new critical structure, etc.) and larger updates every 7 years or so with updates to hydrology or dam rehabilitations
 - (Dan Nissen) How often are table top exercises done for each EAP?
 - One to two table top exercises done every year with cities and other agencies
 - Full scale once a year
 - (Lance Webb) What constitutes the threshold for internal design?
 - Internal design staff to help out – Example would be plans for Operation and Maintenance staff for requested information
 - Smaller CIP tasks if staff is available
- ALERT and Flood Response Plans – Steve Waters
 - Should be used day-to-day, design, irrigation, anything you may have
 - Elements of Flood Warning program
 - Planning – where do gages go to best represent rainfall and stream flows in areas the system is set up
 - Detection – rainfall, streamflow, weather stations.
 - Communication – how do people receive the info?
 - Action – How do people respond when they receive info?
 - Maintenance of Equipment and Plans
 - Exercises – table top and full scale
 - Responsibilities
 - To the District's structures
 - Dams, Levees, Channels, and Basins
 - In late 1970's during major floods, there was no option for real time information, unless person sent to field with radio

- In 1980's, District started the ALERT system to collect data and put into format people could read and use
- MCDOT
 - TO help close at grade crossings
- Other County Departments
 - MCDOT, Maricopa County Sherriff's Office (MCSO), Maricopa County Department of Emergency Management (MCDEM), Cities, ADOT
 - FCDMC not responsible for warning the public directly
- Partners
 - County Transportation & Emergency Management
 - USGS
 - National Weather Service
 - ADWR
 - Various land agencies (Bureau of Land Management, US Forest, State Land Department, Tribes)
- FCDMC ALERT System
 - Picked up at gage
 - Send to ALERT, MCDEM, and National Weather Service(NWS)/PHX/AFWS
 - Sent out for real time data information
- Installations
 - Requested by multiple agencies over the course of the past 30+ years – sometimes done with a cost share
- FCDMC ALERT System Inventory
 - Covers 12,044 square miles
 - Gages outside the county since water comes into the county from outside
 - 71 sensors on dams and basins
 - Not just FCDMC structures – includes others such as Phoenix, CAP, etc.
- Incremental ALERT Rain Gage Installations
 - Increase of gage installations after years of severe storms
- Flood Detection
 - Meteorology and hydrology go hand-in-hand
- Meteorological Services Program (MSP) Outlooks
 - Sent to more than 1,400 clients per day for general weather information for critical services
- Weather Outlook
 - Example provided to show outlook for the coming days, when rain may occur, and what maximum depth may be
 - The messages play into the flood response plans
- Flood response plans
 - Developed several over the years – areas in Maricopa County that have more flood hazards than other and this does not mean only structures but also at grade crossings
 - Relies heavily on support from FCDMC and NWS
 - Broken down into 4 parts
 - What gets it going – what gets people looking at plan and making actions
 - What are the actions required – what are people supposed to do when triggered

- Potential trouble areas – where they may be structures or at grade crossings
- Critical times – how much time do they have to perform actions based on how wash would respond
- South Mountain/Laveen Flood Response Plan (FRP)
 - Maps and online interface to provide dispatchers and police the ability to look at in real-time
 - Provides Red Alert condition areas
 - Anecdotal information for flooding and transportation corridors that have flooded
- Automated Flooded Roadway Warning Assemblies
 - Several locations throughout Maricopa County
 - Can be activated from FCDMC computers and also activated by a stream gage upstream of crossing
 - Locations for the Automated Flooded Roadway Warning Assemblies are at a distance away from MCDOT facilities – done to make it easier to notify people in case MCDOT cannot respond in time to close the road
 - Intrusion alarm in cabinet in case it is opened without authorization
- Questions
 - (Dan Nissen) Who comes out for FCDMC to help train agencies on how to navigate through webpage to read the information provided?
 - Done on a as requested basis to have FCDMC come out
 - Prior to monsoon season a meeting/webcast is held to showcase new developments and take questions on how things operate

Hazards Identified in the 2015 Plan

- Thinking about influences inside and outside the County boundaries
- 21 total identified hazards previously identified – structural, regulatory, natural, and human-caused
 - Committee has the influence to identify new hazards
 - This list is not all encompassing
 - Structural
 - Dams and FRS
 - Overtopping of the CAP and other canals
 - Risks to downstream properties
 - Designed to convey certain return intervals through infrastructure
 - Levees
 - FCDMC's Levee Program was developed to keep levees operational and FEMA certified
 - Adjacent developments have created hazards to dams (illegal taps, vandalism, etc.)
 - At-grade crossings
 - Flashing signs and depth gages
 - Identify risks to public before they enter the crossing
 - Transportation Corridors
 - Example – September 2014 storm – the flooding of the I-10, US-60, and I-17
 - ADOT inspecting structures – debris and public waste get into pumps and cause issues
 - MCDOT operations and maintenance
 - Regulatory
 - Single-lot development – no coordinated drainage system

- Lack of communication from rural standpoint from influx of new residents that do not understand the risks and change property to increase risks to themselves or others. May not understand why they may make things work.
- Educating the public about guidelines available from FCDMC
- Special Flood Hazard Areas
 - Transitioning from approximate/indeterminate risks to better identified risks
 - Velocity is a risk that is not included within the floodplain mapping
 - FCDMC maps to show depths and velocities to provide flood risk hazards to different levels
- In-channel Activities (e.g. recreation)
 - Open space for recreation within channels/washes
 - People using washes for recreation (dirt bikes, UTV's, pedestrian)
- Repetitive loss properties
 - CRS program issues
 - How are we communicating the risk to the areas of repetitive loss
- Natural Hazards
 - Flash flooding
 - High runoff potential of some soils
 - Split Flows
 - Alluvial Fans
 - FCDMC studies to better understand behaviors of alluvial fans
 - Better understand for development within areas
 - Lateral migration and erosion of natural streams
 - Sediment-laden floodwaters
 - Drought
- Human-Caused
 - Changed flow characteristics due to urbanization
 - Changed flow paths due to farming
 - Loss of habitat for both animals and vegetation
 - Subsidence and earth fissures
 - Wildfires (also a natural hazard)

Where We are Now – Status of 2015 Plan Goals & Action Plan

- Coordination and Accountability
 - FCDMC has the charge to effectively communicate information in a timely manner
 - STEM program to educate kids early
- Prevention Efforts
 - Preserving areas of open space to help mitigate flood prone areas
- Property Protection
- Natural Resource Protection
 - Preservation of open space, green spaces, wildlife corridors, in addition to floodplain purposes
- Groundwater Recharge
 - Used to be a fee to use FCDMC land for recharge – recent change to make it a partnership with the District to capture and recharge the water
 - Need to see the runoff as a resource
- Emergency Services
 - Effective and timely responses of emergency service resources

- Structural Projects
 - FCDMC CIP shows where the structures are being rehabbed and constructed
- Public Information Activities
 - FCDMC takes a proactive approach with agencies and developers – flood objectives and land use
 - Developers need to know the floodplains are there and a risk
 - Use FCDMC tools to provide risk information to the public – online maps
- Resource Development
 - FLO-2D Web Tool, Design Manuals, and Design Guidance
 - Trainings
 - STEM Program
 - How do we share information that has been developed?
- Quality of Life
 - FCDMC responsibility is to preserve and protect – each agency has a different idea of what their role is
- Lessons Learned 2015
 - Flood preparedness and awareness
 - Location of emergency service and response times
 - Stockpiles of materials – could people get mobilized the materials
- Change of Communications
 - Change of staff within FCDMC and agencies – communication and body of knowledge changes
 - How is this going to change the direction and ability to meet goals?

Where We Want to Be – 2020 Plan

- Leverage information developed within the 2015 FMP
- Strengthen the role of Regional Leadership
 - FCDMC to use this committee platform to collect information to determine what else needs to be done. New documents to educate
- Update and identify hazards in Maricopa County
 - FCDMC has a number of ADMS/P updates underway, but the updates may not be in an area of interest to certain committee members
 - May need to focus on another area
 - Developments could change the characterization of risks
 - To the public and the FCDMC structures
- Understand the problems associated with the hazards
 - Public not thinking about the risks associated with structures or flooding
 - Think the structures will never fail
 - EAP's to help communicate and direct individuals
- Establish new goals and actionable timelines
 - Priorities of different agencies and provide actionable goals – new goals to be documented and communicated into the FMP update
 - Annual review by FCDMC to ensure the goals are been tracked and achieved.
 - A table of actions will be developed to assist in the tracking of the FMP progress
- Evaluate potential actions and known challenges for new goals
 - Mechanism of tracking progress and get feedback on how to do so
- Prepare a five-year action plan with progress tracking metrics
 - Input from all on how this can be done
- Adopt and Implement the plan
 - Changes to the plan that are contributed by the whole committee
 - Make sure actions/goals are implementable
- Frequent monitoring of progress toward goals
 - Cannot create the FMP and let it go onto a shelf – additional coordination with the District and agencies are needed to ensure actions are moving forward

Next Steps

- 2020 Plan
 - Identify hazards
 - Understand problems caused by hazards
 - Set goals
 - Develop/evaluate potential actions
 - Prepare five-year plan
 - Monitor progress
- Collect and incorporate hazard and mitigation data for Maricopa County
 - Send questions and comments to Kelli Sertich so they can be documented and included into the FMP update
- Ongoing coordination with FMP Committee
 - Prefer full participation from group going forward – need quorum to make the FMP committee meetings happen
 - Provide input on FMP development with breakout sessions
 - Review of Draft FMP in Spring 2020
 - May influence further questions, comments, concerns to be included
- Conduct Public and Stakeholder Involvement – Specific Audiences
 - Areas that may need targeted meetings – if the committee members has areas that fit this let Kelli/Mark know so this can be documented and action developed

Open Discussion

- (Tice Supplee) Data or info available after levee or water barrier, like a road – downstream risk to subsidence?
 - ADWR has publicly available information to show where areas subject to subsidence and known earth fissures locations
- (Tice Supplee) A GIS Greenprint is available from the Desert Botanical Garden
- Budget and Public Outreach/Information presentations will occur at next meeting
- (Dan Nissen) Has FCDMC incorporated LID into Design Manuals?
 - Included some principles in the Manual updates a few years ago.
 - Still coming together with MCDOT and other agencies to develop details and other standards
 - Greater Phoenix Metro Green Infrastructure Guide

- **Adjourn**

Next Meeting:

Thursday, October 24, 2019

9:00 AM – 12:00 PM

FCD OPS Building