



Flood Control District of Maricopa County

Flood Control Advisory Board

Meeting Minutes for May 25, 2016

Board Members Present: Melvin Martin, Chairman; Richard Schaner, Vice Chairman; Gregg Monger, Secretary; Hemant Patel; Bob Larchick

Board Members Absent: DeWayne Justice; Ray Dovalina.

Staff Members Present: William D. Wiley, P.E., Chief Engineer and General Manager; Wayne Peck, General Counsel; Bobbie Ohler; Valerie Swick; Afshin Ahouraiyan

1) **CALL TO ORDER**

The meeting of the Flood Control Advisory Board (FCAB) was called to order at 2:00 p.m. on Wednesday, May 25, 2016.

2) **PLEDGE OF ALLEGIANCE**

The Pledge of Allegiance was recited.

3) **APPROVE THE MINUTES OF APRIL 27, 2016**

ACTION: It was moved by Mr. Schaner and seconded by Mr. Larchick to approve the minutes as submitted. The motion carried unanimously.

4) **ACTION ITEM - EL RIO BUCKEYE LEVEES DESIGN CONCEPT REPORT (DCR)**

Presented by Bobbie Ohler, PPM Project Manager

STAFF RECOMMENDS THE FOLLOWING ACTION: It is moved that the Flood Control Advisory Board endorse and recommend that the Board of Directors approve IGA FCD 2016A013 between the District and the City of Buckeye.

Ms. Ohler presented a map of the project area and reviewed the past authorizations. The background of the project included the El Rio Watercourse Master Plan, the Lower Gila River Flood Plain Delineation Study, The Flood Hazard Mitigation Study, the Vegetation Management Plan, the Sediment Transport Modeling Study, and the El Rio Design Guidelines and Planning Standards. The purpose for the DCR was reviewed. The IGA provides that the District and Buckeye each pay 50 percent of the estimated design cost of \$750,000. The District would be the lead agency. The project would be designed to protect for the 100-year flood with a target completion date of March 31, 2017.

Board Member Larchick asked if there would be shared responsibility for ongoing maintenance. Chief Engineer Wiley responded stating that it was presently undetermined. The City of Buckeye is hoping to get some federal cost sharing moving forward. The alternatives that were looked at ran from \$350 million to \$550 million. It was anticipated that the land owners would have some responsibility for what would happen. There has been a lot of interest in the project with Senator McCain visiting Buckeye twice and Senator Flake and Representatives Grijalva and Gosar are also involved in the project. As clearing was not a very feasible option and a complete levee would be too costly, they were looking for an alternate option. This study will try to move this forward so the City of Buckeye may work with their federal and local partners on the next step.

Board Member Monger asked if this IGA supplemented the existing flood hazard mitigation plan and the vegetation management plan. Ms. Ohler responded those were ongoing, and this IGA was for a design concept report to focus in on alternatives for levees and vegetation management to protect the Buckeye Slough area. The other studies are almost complete, and completion is anticipated prior to beginning work on this design. Chief Engineer Wiley added that Buckeye wanted to move this forward as there was so much interest at the federal level. This IGA was solely with Buckeye, which is why they were focusing on the Buckeye Slough area.

ACTION: It was moved by Mr. Patel and seconded by Mr. Monger to approve the item as submitted. The motion carried unanimously.

5) AHWATUKEE ADMS UPDATE

Presented by Valerie Swick, PPM Project Manager

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

Ms. Swick presented a map of the study area and reviewed the purpose and goals of the study. The data collection report had been completed and the flood hazards identified. Public involvement was the number one priority. A community working group had been established and public meetings conducted. Among the key findings were that the overall storm water drainage system worked well, but there were several local areas with flooding issues. The September 2014 storm allowed the hydrology modelers to observe field conditions and compare them to the models. There was little variation between the actual storm situation and the new FLO-2D model. The flood hazard evaluation criteria was applied to evaluate the flood hazard areas. Flooding was found to be caused by undersized channels and outlets, homes built below grade, and trapped flows. Potential solutions would be either structural or non-structural. Implementation of any recommendations would be based upon prioritization of the individual problem areas and potential modifications to the City of Phoenix permitting process.

The 2014 Mandan Street flooding was also reviewed. District staff met with the residents several times and discussed solutions to their flooding. The City of Phoenix, with District support has applied for a FEMA grant which could be available this November. The solution to build a small wall on park property was approved by the Parks Board and City Council in April and May. Pending approval of the FEMA grant, the preparation of an IGA for design and construction and the pre-design process could start by the end of this calendar year.

The next steps for the main Ahwatukee ADMS project are to prioritize the flooding problems, develop solutions, continue outreach, and begin to seek funding opportunities.

In response to a question from Chairman Martin on the Mandan Street property, Ms. Swick stated that city parks had approved the design concept and they were still working on finalizing the plan.

6) **LAVEEN AREA DRAINAGE MASTER STUDY UPDATE**

Presented by Afshin Ahouraiyan, PPM Project Manager

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

Mr. Ahouraiyan gave an overview of the background of the study. Aerial maps of the study area from 1991, 2002, and 2015 were presented. In 1991 when the area was originally studied, the study area was all agricultural land; in 2002 the area had been a bit more developed; and in 2015 the area became well developed. A 2014 storm map was reviewed with the problem areas identified. With new developments and the flooding issues that occurred in 2014 it was decided to update the study. New two-foot contour maps have been completed, a consultant has been hired to work on the analysis, and partial preliminary results have been obtained. In addition, the consultants looked at the previous drainage improvement ideas to determine whether or not there was a need to move some of the drainage improvements to an area that was actually going to capture water. The next steps will be to finalize the models for the entire study area, present the results and ideas to the public, continue to assess past alternatives, and to propose new alternatives as needed.

Board Member Larchick asked if there was anything to prevent development from occurring where it shouldn't be happening. Mr. Ahouraiyan responded that as long as the plans were in place the developers would be aware of the studies and potential flooding, then they can plan for potential drainage issues. Because the city and the FCD did not have the funding to purchase some of the proposed impoundment parcels right away, developers have purchased the sites. Development could not be stopped, and the best thing that could be done with the drainage master studies was to provide information to the developers.

Chief Engineer Wiley added that the maps showed the dramatic difference in land use from when the studies were originally done in 1991 and what had been developed since then and the current studies show a better depiction of the floods. The tragedy of 2014 was that people got flooded. Thankfully we have models now that show the flooding and these models are quite accurate. After the 2014 storm, Maricopa County communities came back with \$2.3 billion worth of needs. The area of this study was in the \$100 million plus range for projects if the problems were to be solved alone. Thus it was important to make the tools available to the developers and the communities. The City of Phoenix now has good models that show where flooding happens along with depth, flow, and direction, which is an important service to provide.

Vice Chairman Schaner asked if the area was 80 percent or more developer development, or if it was lot split development. Mr. Ahouraiyan responded that there were one acre lots in the county area, and in the City of Phoenix portion it was mainly master development.

Chairman Martin stated there was also a retention area at 21st Avenue south of Broadway. Mr. Ahouraiyan said that area would be part of the study. Eventually the entire study would be looked at and if there were any needs even in the upper part between Baseline and the river, more improvements would be proposed. Chairman Martin asked, with regards to 27th Avenue where the water coming down Baseline was being forced into the retention area upstream, if they were catching any of the water coming down 27th. Mr. Ahouraiyan stated that was part of the future plans that were in place and that was the basin they were talking about. As part of the original plans, there were storm drains along 27th Avenue to capture the water and bring it into the basin. There was another storm drain at South Mountain to bring the flows into the basin as well. In order to bring in storm drains, an outlet was necessary first. They were also looking at whether or not they could bring more flows into the basin as it had a pretty high capacity. Chairman Martin stated this was designed to take the overflow water off of Baseline, force it uphill into the retention area, and when it was full, reverse the flow and run it back down into the drainage area. Mr. Ahouraiyan responded that the storm drain on Baseline didn't have enough capacity, and it was carrying the extra flows into the basin and then putting it back into the storm drainage outlet. Eventually, there would be inlets into the basin which would bring in more flows. Chairman Martin stated that was a project that really needed to be done, and it wouldn't take much to do it. Mr. Ahouraiyan responded they needed to talk to the City about funding, as that was the biggest issue they were having now.

7) COMMENTS FROM THE CHIEF ENGINEER AND GENERAL MANAGER

Presented by William D. Wiley, P.E., Chief Engineer and General Manager

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

Mr. Wiley stated that Joy Rich had been appointed the new County Manager. At some point, he wanted to bring her to FCAB.

There was also a lot happening at the federal level from financing with their partners. The Water Resource Development Act, the act that primary funds the Corps of Engineers, just passed the House Transportation Infrastructure Committee the previous day. Congress is currently passing budget bills using continuing resolutions. WRDA could have some implications on whether or not the Corps would be able help on projects such as El Rio and McMicken Dam. Senator Flake introduced a bill called the Western Water Supply and Planning Enhancement Act of 2016 because of the drought issues in Arizona. Flood water is mentioned in the bill. Senator McCain testified for the bill, and there were five other Senators supporting it. The bill is similar to drought bills that were being pushed by California.

The Flood Insurance Market Parity and Modernization Act, HR 2901, deals with flood insurance. Flood insurance is expensive and often does not cover all of the costs. The National Flood Insurance Program is up for reauthorization next year, and there is a lot of talk about what could be done to fix the program. Frontline released an investigative report recently which looks at the difficulties of the flood insurance programs associated with Hurricane Sandy and flood disasters.

On May 16, the Board of Directors passed our tentative budget. For the Flood Control District, an additional \$0.02 in secondary tax has been approved to support CIP projects. On June 20, the final budget would be voted on. After that, they would need to implement the tax levy through a

vote in August.

8) SUMMARY OF RECENT ACTIONS BY THE BOARD OF DIRECTORS

Presented by William D. Wiley, P.E., Chief Engineer and General Manager

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

Mr. Wiley reported that FCD had sold the lot on 27th and Durango to the County for \$365,000. There had been some progress on one of the Wickenburg properties. There is an IGA with MCDOT to share the cost of installing flood warning signs on Maricopa County roadways in hard to see areas where flashing signs might be used. There are 20 different locations identified that need signs.

Chairman Martin asked if the flashing signs were solar driven. Mr. Wiley did not know for sure. Theresa Pinto stated she believed the flashing signs were solar, as the sign at Patton Road was solar. The flashing signs would have a connection with a stream gauge upstream and would be triggered based on specific information for the site.

9) OTHER BUSINESS AND COMMENTS FROM THE PUBLIC

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

There were no comments from the public.

The meeting adjourned at 2:50 p.m.