Minutes
Flood Control District Advisory Committee/Public Review
March 17, 2021

Committee Members Present: Jennifer Flood, Galo Galovale, Chris Langham, Herman Lopez, James MacAdam, Gus Myers, Mark Murphy, John Spiker, John Wallace, Ann Youberg

Flood Control District Staff Present: Eric Shepp, Deputy Director; Brian Jones, Floodplain Division Manager; Joseph Cuffari, Program Coordinator; Greg Saxe, Environmental Planning Manager

Others Present: N/A

The meeting was held via Microsoft Teams

APPROVAL OF MINUTES
The Committee approved the January 20, 2021 minutes, as amended by Mark Murphy to clarify that he mentioned “television stations, not fire stations.”

QUERY TO THE AUDIENCE
N/A

NEW BUSINESS

Floodplain Management Plan and Program for Public Information Update

The District will meet with Floodplain Management Committee in the summer.

Joseph Cuffari gave an update on the Program for Information (see attached).

CONTINUING BUSINESS

Regulatory Updates – State and Federal
N/A

Report from Committee Members

Black Mountain and Oro Valley FEMA Work Overviews
The purpose of this project is to perform a hydrologic-hydraulic analysis for the region downstream to the north of the Black Mountain topographic feature (Township 15 South, Range 13 East, Sections 19-21). The analysis will evaluate the existing conditions based on 2015 topography, and identify the 10-year and 100-year peak discharges for both “with-berm” and “without-berm” conditions (see attached).

REPORT FROM FLOOD CONTROL DISTRICT STAFF

BOS Action Summary

March 2, 2021

✓ Kings Barn Properties, L.L.C., to provide for an Agreement to Donate Real Property and Special Warranty Deed, Tax Parcel Nos. 226-33-009L, 226-33-174C and 226-27-027C, located on the west side of Silverbell Road, north of Ina Road, in Section 35, T12S, R12E, G&SRM, Pima County,
Arizona, Flood Control Non-Bond Projects Fund, contract amount $12,300.00 for closing costs (CT-PW-21-307). Approved

Regional Flood Control District Projects and Programs Update

CIP Update
The District held their first deliberation with the County Administrator. Once the CIP is developed for next year, it will be shared with the Advisory Committee.

CALL TO THE AUDIENCE
N/A

AGENDA ITEMS – April 21, 2021 MEETING
1. Sonoran Institute Santa Cruz River Outreach – Luke Cole
2. CIP Update
3. Monsoons 2021

The meeting adjourned at 9:19 a.m.
National Flood Insurance Program (NFIP) Community Rating System (CRS 330)  
Program for Public Information  
2021 Annual Update

Background:
The CRS ranks a community’s flood risk reduction activities that exceed the minimum standards of the National Flood Insurance Program in order to establish insurance rates. Within federal Special Flood Hazard Areas (SFHA), rates may be discounted up to 45%, with 10% reductions in FEMA Other Flood Areas (OFAs). In unincorporated Pima County, our designation as a Class 5 community results in a 25% flood insurance discount within SFHA and 10% in OFAs.

The District has always had a robust outreach program, but prior to 2016 had never evaluated outreach activities as an overall effort, just as similar but separate activities. The District identified a CRS activity to develop a Program for Public Information (PPI) as an opportunity for the District and group of interested stakeholders to evaluate our outreach activities as a collective effort. In addition to an updated and more effective outreach effort, the PPI is part of the District’s continuing effort to maintain and possibly improve this rating in the face of changing standards and increased rates. The 2020 PPI Document was adopted by the Board on April 7, 2020.

Intent:
The intent of the PPI is to evaluate, update and expand the flood risk and flood insurance coverage outreach and to coordinate the outreach efforts to relevant audiences and areas through collaborative District and stakeholder delivery.

PPI Committee:
The District was fortunate to have the following participants on the 2020/2021 Committee. The PPI guidance establishes a list of appropriate stakeholders. The participants meet the guidance requirements:

1. Luke Cole, Associate Director of Resilient Communities and Watersheds, Sonoran Institute
2. Christopher Gerton, Insurance Agent, Country Financial
3. Steve Huffman, Government Affairs Director, Tucson Association of REALTORS®
4. Patrick Marum, Southern Arizona Home Builders Association Member
5. Patrick McNamara, Communications Specialist, Pima County Communications Office
6. Eric Shepp, P.E., Deputy Director, Pima County Regional Flood Control District
7. Rebecca Steinecker, Homeowner and public representative
8. Steve Van De Beuken, Mortgage Lender, Sunstreet Mortgage

In addition, the District provided staff to assist the Committee in its work, including:

9. Joseph Cuffari, CFM, Program Coordinator, Floodplain Management Division
10. Brian Jones, CFM, Chief Hydrologist, Floodplain Management Division Manager
11. Greg Saxe, PhD, MRP, Environmental Planning Manager and Pima County Community Rating System Coordinator, Floodplain Management Division

Floodplain Management Plan (FMP) Committee
In 2019 and 2020, the District formed a floodplain management planning committee to help establish an action plan related to District goals specific in each community watershed and prior to FMP approval, the PPI was added as an appendix to the FMP. By combing these two documents both plans now share committee membership and are on the same annual review and approval schedules. It is anticipated that the FMP/PPI Committees will meet during the summer of 2021 for official review and approval of both documents.

Flood Insurance Coverage Assessment:
The need to evaluate flood insurance coverage provided the opportunity for the District to obtain information from FEMA regarding the extent of coverage as well as flood insurance claim information. The difficulty in receiving this information in the past always seemed contrary to performing effective floodplain management activities. The information led to a few conclusions, data is shown below:

1) Lack of contents only coverage: The flood insurance coverage information revealed that there are no policies for contents only, even though renters make of 36% of occupied homes regionally. This suggests that renters in floodprone areas are not being adequately informed about flood risk.
2) While the number of claims is going down, the frequency of years with numerous claims is going up.
3) Although the number of policies in force is small, the value of coverage seems adequate.

<table>
<thead>
<tr>
<th>Insurance by Flood Zone</th>
<th>Policies in Force</th>
<th>Premium</th>
<th>Insurance in Force</th>
<th>Number of Paid Losses</th>
</tr>
</thead>
<tbody>
<tr>
<td>A01-30 &amp; AE</td>
<td>425</td>
<td>$573,955.00</td>
<td>$97,758,600.00</td>
<td>52</td>
</tr>
<tr>
<td>A</td>
<td>255</td>
<td>$322,025.00</td>
<td>$47,789,600.00</td>
<td>27</td>
</tr>
<tr>
<td>AO</td>
<td>457</td>
<td>$260,241.00</td>
<td>$84,503,30000</td>
<td>14</td>
</tr>
<tr>
<td>AH</td>
<td>6</td>
<td>$3,809.00</td>
<td>$621,800.00</td>
<td>0</td>
</tr>
<tr>
<td>D</td>
<td>1</td>
<td>$1,508.00</td>
<td>$300,000.00</td>
<td>0</td>
</tr>
<tr>
<td>B, C &amp; X - Standard</td>
<td>161</td>
<td>$120,299.00</td>
<td>$45,930.00</td>
<td>17</td>
</tr>
<tr>
<td>B, C &amp; X - Preferred</td>
<td>727</td>
<td>$278,756.00</td>
<td>$217,953.00</td>
<td>34</td>
</tr>
<tr>
<td>Total</td>
<td>2,032</td>
<td>$1,560,593.00</td>
<td>$494,856,500.00</td>
<td>145</td>
</tr>
</tbody>
</table>

*Insurance Coverage by Zone (ADWR September, 2019 data)*
Table 4 - Flood Risk Exposure and Insurance Coverage for All Properties Containing Structures With or Without Flood Insurance Policies

<table>
<thead>
<tr>
<th>Flood Zone Type</th>
<th>Assessor's Full Cash Value</th>
<th>Exposed Value*</th>
<th>Coverage in Force</th>
<th>Exposed Value Covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEMA Special Flood Hazard Areas</td>
<td>$1,852,370,377</td>
<td>$240,808,149</td>
<td>$226,406,600</td>
<td>94%</td>
</tr>
<tr>
<td>FEMA Other Flood Hazard Areas</td>
<td>$656,468,969</td>
<td>$85,340,965</td>
<td>$1,490,100</td>
<td>1.75%</td>
</tr>
<tr>
<td>Detailed Local Studies</td>
<td>$4,984,457,220</td>
<td>$647,973,438</td>
<td>$39,475,000</td>
<td>6%</td>
</tr>
<tr>
<td>Approximate Local Sheet Flow</td>
<td>$912,117,121</td>
<td>$118,575,225</td>
<td>$6,335,000</td>
<td>5%</td>
</tr>
<tr>
<td>Total</td>
<td>$8,405,413,687</td>
<td>$1,092,703,779</td>
<td>$273,706,700</td>
<td>25%</td>
</tr>
</tbody>
</table>

* Exposed Value is defined as Assessor's Full Cash value times .65 to estimate building value, times .2 to estimate potential damage costs.

Note: A Routine Use Letter for flood insurance data was approved by Pima County Attorneys (February, 2021) and satisfied FEMA’s requirements of how and when to use confidential information - such as flood insurance. The District is currently waiting for updated flood insurance information from the Insurance Services Organization (ISO), and once obtained the District will update all relevant tables.
Target Areas and Audiences:
Perhaps the most valuable exercise in the process was identification of specific target areas and audiences for outreach by the PPI Committee followed by evaluation of our existing collection of outreach materials and efforts as to effectiveness. The target areas and audiences are as follows:

Target Areas - Riverine floodplains & sheet flood areas

Target Audiences - All residents; flood prone property owners and residents; repetitive loss area residents; residents without all-weather access; riparian area residents and property owners; new county residents; the development community, non-governmental organizations, land-owners and designers; real estate agents, insurance agents and lenders; schools, children and educators; and government partners.

Messages:
In 2017, the stakeholder committee chose the following additional messages:

- **Topic 7 - Seasonal Flooding** - This topic includes summer monsoon storms and sustained winter rains, both of which are historical causes of flooding within Pima County. Due to severity, rapid development and other characteristics, flash flooding caused by monsoon storms is a major concern. Sustained winter rains typically because our most widespread flooding. It is important that people learn about and understand the characteristics of these risks.

- **Topic 8 - Low Impact Development and Green Infrastructure (LID/GI)** - This topic includes protecting existing flood prone areas and constructing water storage and recharge enhancements that provide public safety, drainage and water supply benefits. It also benefits riparian habitats which provide flood attenuation and recharge while simultaneously reducing flood risk. Because the techniques and benefits of LID/GI are not widely known within the development and landowner communities, the District will depend on its own expertise, the expertise of other knowledgeable professionals and the expertise of NGO stakeholders to disseminate important information about the benefits of adopting LID/GI practices.

- **Topic 9 - Local Hazards** - This topic includes some of the unique flood hazards in Pima County: alluvial fan flooding, sheet flow flooding, and channel migration. Much of the recorded flood damage in Pima County has been associated with the lateral erosion of watercourses undermining structures, buildings and public infrastructure.

- **Topic 10 - All Weather Access** - This topic covers the lack of safe access to certain areas during times of flooding. Many complaints to the District and the County’s Department of Transportation originate from such areas. Awareness of these hazards and active emergency planning are critical for public preparedness in the event of lost access during a flood. There was wide agreement on the Committee that planning flood-safe
routes and improving private roadway construction are very important topics for outreach.

These are in addition to the six topics required:

1. Know Your Flood Hazard
2. Insure Your Property
3. Protect People from the Hazard
4. Protect Your Property from the Hazard
5. Build Responsibly
6. Protect Natural Floodplain Functions

The message exercise resulted in requests for additional projects from Committee stakeholders, these include a newcomer orientation packet for major employers and a creditable course curriculum for real estate professionals. The below tables summarize the most recent PPI Committee approval of areas to focus on for outreach.

### 2020 Expansion of Existing Outreach Projects

<table>
<thead>
<tr>
<th>New Outreach Project</th>
<th>Topics and Messages Covered</th>
<th>Message Delivery by Stakeholders</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Curriculum (OP 51)</td>
<td>1, 3, 4, 6, 7, 9 &amp; 10</td>
<td>RFCD, Schools</td>
<td>Provided schools with a curriculum or materials related to various flood hazards and emphasize road safety</td>
</tr>
<tr>
<td>Automated Local Evaluation in Real Time (ALERT) inundation mapping messaging (OP 53)</td>
<td>1, 2, 3, 4, 6, 7, 9 &amp; 10</td>
<td>RFCD, first responders</td>
<td>Worked with first responders on education and response related to real time flood events</td>
</tr>
<tr>
<td>Floodplain Management Plan Support (OP 58)</td>
<td>1-10</td>
<td>RFCD, various stakeholder groups and individuals</td>
<td>Supported the District’s Floodplain Management Plan for watershed management</td>
</tr>
</tbody>
</table>
The District anticipates suggesting to the FMP/PPI Committee that the below activities and outreach projects be prioritized for the upcoming calendar year:

### 2021 Outreach Efforts

<table>
<thead>
<tr>
<th>New Outreach Project</th>
<th>Topics and Messages Covered</th>
<th>Message Delivery by Stakeholders</th>
<th>Goal Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floods Follow Fires (OP 59)</td>
<td>1, 2, 3, 4, 7, 9 &amp; 10</td>
<td>RFCD, NWS, NGOs, other jurisdictions, various stakeholder groups and individuals</td>
<td>Provide information to business and property owners on flood hazards post-wildfires</td>
</tr>
<tr>
<td>Flood Insurance Brochure (OP 60)</td>
<td>1, 2, 5</td>
<td>RFCD, insurance agents</td>
<td>Provide information specific to flood insurance</td>
</tr>
</tbody>
</table>

### 2021 Annual Update Overview of Changes:

- Page 5 - Committee meeting members and dates updated - TBD
- Pages 16 - 21 – Updated various data figures including total acreage of regulatory floodplains, insurance policy counts, and tables - TBD
- Page 26 – Updated proposed 2021 outreach projects as approved by the PPI Committee
- Page 35 & 36 – Updated PPI Committee meeting agenda - TBD
- Page 37, Appendix C - Updated map using newer available data
- Page 40, Appendix E - Updated to reflect proposed 2020 outreach projects
- Page 42, Appendix G - Updated map using newer available data and queries
- Page 47, Appendix J - Updated to summarize 2020 outreach efforts

### Adoption:

The final step in development, prior to implementation, is the adoption of the updated PPI by the Board of Directors. The District requests a recommendation of support of the 2021 PPI Document from the Flood Control District Advisory Committee to further support outreach efforts performed by the District, and eventual approval by the Board of Directors.
Figure 1.1 (Draft). Location Map
Figure 1.2 (Draft). Flow Depth Map of With Berm Model for the 10-year Rainfall Event