- 2021 OFMA Fall Conference
- 2 | Words from the Chair
- Call for Presenters
- OFMA DRT Corner
- FEMA Offers Free Virtual Flood Insurance Workshop
- 6 | Winners of our Turn Around Don't Drown Flood Safety Poster Contest
- 8 | BRIC Funding Announcement Leaves Many Disappointed and Discouraged
- 10 | OIG: FEMA Has Not Prioritized Compliance with the Disaster Mitigation Act of 2000
- 11 | BFE Masthead and Officers

BFE*

BASE FLOOD ELEVATION

2021 OFMA Fall Conference

Janet Meshek, CFM, PE, SR/WA | The BFE Editor

Please join us in Norman for our annual fall conference, IN PERSON!!! We have put together an agenda of workshops, meetings, and presentations that will provide our members' ideas for improving our local programs, information on what is going on in the State and Region 6, and entertainment as always! We are requesting speaker abstracts through August 13th as well (see page 3).

We are looking forward to catching up with our pre-COVID OFMA family, having our annual business meeting, electing new officers, meeting with our Regional Representatives and Committee Chairs. and hearing about what is going on in the Stormwater Management world! On Monday night, we will have a vendor social in Legacy Park, across the street from the hotel, sponsored by Wood Group and Meshek. Tuesday night will be our awards banquet. The hospitality suite will be open starting Sunday night, September 19th, sponsored by Freese & Nichols.

Registration is open – be sure to make your room reservations by September 3rd to receive the \$96/night room rate! You can register online at www.okflood.org or download the forms and mail to OFMA at PO Box 8101, Tulsa, OK 74101-8101. Please send your nominations for scholarships and awards to carrie.evenson@normanok.gov. Awards and nomination forms can be found at okflood.org/awards/

See you in Norman!

The Changing Climate of Floodplain Management 2021 OFMA Annual Conference

SAVE THE DATE

When: September 19-22, 2021

Where: Embassy Suites 2501 Conference Drive Norman, OK 73069

Presentation Topics:

- ♦ Floodplain Management
- Hazard Mitigation
- Stormwater Quality

Hosted By:



For more information, visit Http://www.okflood.org or contact Carrie Evenson, carrie.evenson@normanok.gov, (405) 329-2524

3



Words from the Chair
Ron Johnson, CFM | OFMA Chair

My heart and prayers go out to the families from my home state that has encountered such tragedies during these floods. I have experienced firsthand the damage caused by flash flooding during my time as a firefighter in Arizona. It is with a very heavy heart, I write this article, but I pray in doing so, lives might be saved!

Faith Moore was trapped on top of her car in a low water crossing Saturday night in Arizona. As floodwater rushed around her, the 16-year-old girl dialed 911, officials in Cottonwood, a town 19 miles west of Sedona, said. The water rose quickly. When she made the call for help, the water was knee level, Yavapai County Sheriff's Office said in a Facebook post-Sunday. An hour later, the fast-moving flood rose to eight feet, officials said.

Triggered by seasonal monsoons, counties across Arizona experienced heavy rain, flash floods, and thunderstorms over the weekend. And Moore wasn't the only person to get caught in flash floods.

A 4-year-old girl in southeastern Arizona was swept away in moving water after her family's car was trapped in a wash Thursday night. The family of six climbed on top of their vehicle, but the girl, later identified as Maci, slipped away. Her body was discovered Monday morning, Pima Police Department told Arizona's Family.

Another person was trapped in a tree over the Agua Fria River in Avondale on Sunday, Arizona's Family reported. The man climbed up the tree to avoid getting washed away by floodwater and was then rescued by a helicopter.

Meanwhile, the search for Moore continues. Numerous agencies have joined search efforts along with dozens of volunteers.

Officials said she has "strong ties to the community" because she is the granddaughter of Verde Valley Fire District, recently retired fire chief, as well as a now-retired EMS Chief from Verde Valley Ambulance. She's also the niece of a Cottonwood firefighter .

"YCSO wants to stress again to the public how dangerous running water can be, even when it looks shallow. A simple decision to cross a road with running water can easily and quickly turn tragic," Yavapai County Sheriff's Office said in a Facebook post-Sunday.

Update: The 16-year-old's body was discovered Wednesday afternoon, according to officials.



Call for Presenters

Oklahoma Floodplain Managers Association

2021 Annual Conference

The Changing Climate of Floodplain Management

September 19-22, 2021

Embassy Suites, Norman, OK

Abstracts Due By August 13, 2021

OFMA is inviting speakers to present at our 2021 Annual Conference to be held in Norman, Oklahoma. Topics of discussion at the basic or advanced level should relate to one of the following:

- 1) Rural Floodplain Management, GIS, Hydrology and Hydraulics;
- 2) Hazard Mitigation, Risk Reduction, Case Studies;
- 3) Community Rating System, Recent Changes, Cycle Visits, Case Studies; and
- 4) Stormwater Quality Issues or Projects, Green Infrastructure, Watershed Studies, Stormwater Research

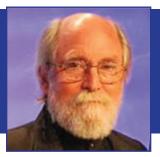
Speakers will be allocated up to 40 minutes, followed by a 5-minute question/answer period, but longer presentations may be accommodated. If you are interested in presenting or know someone who would, please submit an abstract to Carrie Evenson at carrie.evenson@normanok.gov. Selection of speakers will be made by August 27, 2021. You are encouraged to submit topics early to secure your speaking selection. Speakers will be required to register for the workshop. Any questions please call Carrie Evenson at (405) 329-2524.

OKLAHOMA FLOODPLAIN MANAGERS ASSOCIATION

community's

has changed.

flood risk



OFMA DRT Corner Rev. W. B. "Bill" Smith, PE, CFM | OFMA DRT Coordinator

We had some pretty good rains this spring, and several communities had localized flooding of streets, buildings, overbank areas, etc. At my house, I had a 500-yr.+ storm (3.5 inches in less than 10 minutes).

We received a request to assist the Okmulgee County FPA with Substantial Damage Assessments. Unfortunately, my request for volunteers went without response, except for our DRT Co-Coordinator. However, I went to Okmulgee County and found that the issue was not in Okmulgee County as much as it was in the City of Okmulgee. Tim Craigton, FPA for Okmulgee Co., also acted as FPA for the City due to vacation scheduling.

Before we went to the field, we sat and looked at the location of the flooded structures and overlaid the SFHA. None of the structures in the northwest side of the City that flooded were in the SFHA, so there were no SDEs to evaluate. There was only one structure reported in the County, and that structure was elevated and had no inundation inside the residential house – only inundation of two outbuildings. Again, no SDE is required.

The point of this dissertation is localized flooding can occur with extremely heavy rainfall (13 inches + in less than 2 hours) due to inadequate storm drainage systems. Remember Kingfisher in 2007 when the remnants of Hurricane Ike (as a tropical storm) deluged the downtown area with five to 11 inches of rainfall and cause Kingfisher Creek to rise 25 feet. However, I know of no communities that design a storm drainage system for greater than a 1% (100-Yr) storm, and most are historically built to the 5-Yr or 10-Yr events. These extreme storm events cause flooding, and I suggest that local FPAs educate their citizens that just because you live outside the limits of the SFHA, you still might be flooded. Remember that nationwide, about 25%+ of all flooding is outside the SFHA. Homeowners' insurance will not cover this type of damage, and unshaded Zone, X policies are some of the least expensive to obtain to protect your citizens' investment. FPAs need to educate their communities. This event was a real-time example of what can happen and likely will happen in the future.

As I have "preached" over the years, we only have a little over 100 years of weather records. The earth has been around millions of years, and so the climate which has occurred in the past, of which we have no record, will likely repeat. There was minimal ice on the Arctic over 2.6 million years ago during the last map gap in Arctic ice and about 10,000 years BP (Before Present) during the middle of the Holocene period, proven by isotopic testing of grass found in borings of the sub-surface soils. So, the melting of the ice cap that is currently ongoing is not a new phenomenon but is a repeat of history that we know very little about. That does not mean that we don't need to take care of the gifts we have been given, but there is a larger picture, and it is not all about us.

So, as a former Boy Scout leader – Be Prepared.

Lastly, if you are a current OFMA DRT Volunteer, please send me an email (wbsmith@hisinc.us) to verify the email I have on file. If you are a registered DRT Volunteer and do not wish to participate - please let me know and return your equipment. If you are not an OFMA DRT volunteer and want to do so, please send me an email, and I will get you signed up. I will be doing a training session at the Annual Conference.

FEMA Offers Free Virtual Flood Insurance Workshop

August 3, 2021

Flood risk is changing in Oklahoma. In some areas, preliminary flood maps (Flood Insurance Rate Maps, or FIRMs) have been or soon will be released. In other areas, the preliminary maps are now effective. With the release of new flood maps, residents and business owners may find their flood risk has changed. Some will find they are at a higher risk than they thought, and others will see that their flood risk is lower.

To help better understand these changes, FEMA is hosting a 2-hour online workshop on how map changes can affect building and flood insurance requirements and insurance options. During the workshop, attendees

- Hear about the different mapping projects ongoing in Oklahoma.
- Learn about the potential impacts on flood insurance and building requirements.
- Hear more about the National Flood Insurance Program's (NFIP) current insurance rating options and what changes when the NFIP's new Risk Rating 2.0 begins.
- Review recent related changes to the NFIP, including Risk Rating 2.0.
- Walk away with online tools and resources to assist you.

This information is valuable to community officials, floodplain administrators, insurance agents, real estate professionals, lenders, builders, surveyors, and others living and/or working throughout Oklahoma. Be prepared to send property owners to the best resources when maps are being updated in your

Please register below and join us!

Tuesday, August 3, 2021, 10 a.m. – 12 p.m. (CT)

TRAINING OPPORTUNITIES				
Course Provider	Course Subject	Date		
FEMA	Newly Mapped Impacts to Insurance and Updates on Risk Rating 2.0	Region 6 Free 2-hour Training		
Visit fema.gov to register		August 8, 2021		



Congratulations to the winners of our Turn Around Don't Drown Flood Safety Poster Contest

OFMA appreciates all the hard work of teachers, parents, and many others who supported this year's poster contest. The students who entered also deserve our thanks. We hope that by working together to spread the Turn Around Don't Drown© message. Floodwaters will harm fewer people in Oklahoma.



This year, more than 70 participants competed for the four statewide awards. This year's winners are:

CONTEST WINNERS

IST PLACE Rosalie Lindly, Jay Upper Elementary School

2ND PLACE Susannah Irvine, Epic Charter School

3RD PLACE Kevin Mathis, Home School

HONORABLE MENTION

Sterling Roberts, Canyon Elementary School

First, second and third place winners receive cash awards in the amount of \$150, \$100, and \$50, respectively. The top 13 posters in the state are published in the OFMA Turn Around Don't Drown calendar. Each student participant is awarded a certificate of participation. Teachers receive a letter of appreciation.

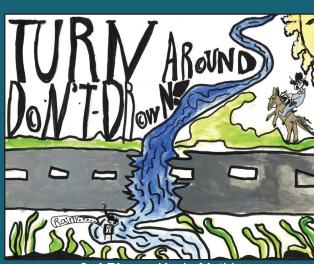
Special thanks to the following schools for supporting student participation in this year's program:

- Bridge Creek Intermediate School, Blanchard
- Epic Charter School, Oklahoma City
- Grove Upper Elementary School, Grove
- Jay Lower Elementary School, Jay
- Lindbergh Elementary School, Tulsa
- Stone Canyon Elementary School, Owasso









3rd Place - Kevin Mathis



Honorable Mention - Sterling Roberts

BRIC Funding Announcement Leaves Many Disappointed and Discouraged

Author: Mary Bart

From the August 2021 issue of ASFPM's News & Views newsletter

FEMA's much-anticipated announcement of subapplications for the \$700 million in hazard mitigation funding ended in disappointment for many communities hoping to strengthen their resilience and reduce the impacts of flooding, wildfires, and other natural disasters.

Analysis from Headwaters Economics found that 94% of the \$500 million available in the new Building Resilient Infrastructure and Communities (BRIC) program will likely go to states on the East Coast (\$279M) and West Coast (198.5M) with California expected to see the highest amount at more than 20% of all funding. Meanwhile, states in the Midwest (\$22.4M), Mountain West (\$4.9M) and Gulf Coast (\$3.2M) will see far less.

FEMA still needs to conduct programmatic reviews of the selected subapplications before making a final decision on funding, which is expected in September 2021.

"Given the geographic breakdown of projects that were selected for further review, it is clear that BRIC funding is largely benefiting the coastal regions, as well as metropolitan and highercapacity communities,"

-Kris Smith wrote in the summary by Headwater Economic.

It was a common refrain on social media as well. People felt discouraged that after all the time and effort spent navigating the complex application process, not only did they not receive any funding, but similar communities — in terms of geography and resources — were also shut out.

"It is hard to give hope... when I can't point to a single successful application of a similar small town in the Midwest," one person commented.



Summary of Building Resilient Infrastructure and Communities Assistance The critical need for a program like BRIC is evidenced by the sheer number of applications to the program in its first year. For Fiscal Year 2020, FEMA received 991 subapplications requesting more than \$3.3 billion in funding.

FEMA identified 406 subapplications submitted by 93 applicants for further review. The summary of these include:

43 selected regular projects and 272 capability and capacity building projects.

139 planning projects include 98 project scoping projects.

69 associated management cost subapplications.

This includes the tribal set-aside from 38 federally recognized tribal nations: 21 planning, 19 project, and 18 management cost subapplications.

The top five project types selected for BRIC by total project cost are:

- Flood Control, \$550 million
- Utility/Infrastructure Protection, \$91.3 million
- Wildfire Management, \$49.3 million
- Relocation, \$21.9 million
- Saferoom/shelters, \$15.2 million

As authorized under the Disaster Recovery Reform Act of 2018, the BRIC program aims to categorically shift the federal focus away from reactive disaster spending and toward research-supported, proactive investment in community resilience.

In analyzing the winners and losers of the funding, E&E News noted that the largest single BRIC grant of \$50 million is going to Menlo Park, Calif., for a flood

State	REIC Funds Requested	Selected for Further Review	Percent Selected
Texas	\$322,288,011	\$643,570	0.20%
Virginia	\$220,328,261	\$677,466	0.31%
Florida	\$145,241,161	\$702,168	0.48%
Louisiana	\$119,339,602	\$634,950	0.53%
Source: Headwaters Eco	nomics.		

protection project in an affluent stretch of Silicon Valley along the San Francisco Bay. Menlo Park's median household income is \$160,784.

Some states that have sustained some of the nation's worst flood damage received relatively little and had some of the lowest success rates for the BRIC grant program.

Numbers courtesy of Headwaters Economics. See complete list of the 10 states with low success rates.

A full breakdown of BRIC subapplication status is available on the FEMA site.

Summary of Flood Mitigation Assistance For FY20, \$200 million from 117 FMA subapplications have been identified for "Further Review" and were submitted by 20 applicants. The summary of these include:

- Six planning projects, three technical assistance, and 20 applicant management costs.

 Mingation Reconstruction, \$6.5 million

 As authorized by the **National Flood Insurance Act of 1968**, FMA's goal is to reduce or eliminate claims
- Included in the 26 selected planning projects are 18 community flood mitigation advance assistance projects that were slated as Priority 1 for FY19.
- Included in the 94 selected regular projects are

four community flood mitigation projects that were slated as Priority 1 for FY19. Community flood mitigation projects integrate cost effective localized floodplain restoration solutions that benefit communities with high participation and favorable standing in the National Flood Insurance Program (NFIP).

The top five project types selected for FMA by total project cost are:

- Flood Control, \$187.7 million
- Elevation, \$159.3 million
- Acquisition, \$75.2 million
- Relocation = \$11.8 million
- Mitigation Reconstruction, \$8.3 million

As authorized by the **National Flood Insurance Act of 1968**, FMA's goal is to reduce or eliminate claims under the NFIP through long-term mitigation actions. The NFIP provides the funding for the FMA program.

A full breakdown of FMA subapplication status is available on the **FEMA site**. fema.gov

The 2021 BRIC and FMA Webinar Series in now underway.

OIG: FEMA Has Not Prioritized Compliance with the Disaster Mitigation Act of 2000

Author: Mary Bart

From the August 2021 issue of ASFPM's News & Views newsletter

FEMA has not prioritized compliance with Section 205(b) of the Disaster Mitigation Act of 2000 (DMA 2000) and, as a result, continues to spend federal taxpayer money to repair repetitively damaged roads and bridges that should have been strengthened, according to an audit by the Department of Homeland Security, Office of Inspector General.

The DMA 2000 repealed and replaced prior mitigation planning provisions with new requirements, primarily to authorize a program for pre-disaster mitigation, streamline administration of disaster relief, and control the federal costs of disaster assistance. The OIG conducted the audit to determine to what extent FEMA is complying with the DMA 2000 by implementing regulations and policies to identify and reduce repetitive damages to roads and bridges.

The audit found that FEMA has not published regulations and related policies, as required by the DMA 2000, to provide an incentive to reduce repetitive damages to facilities, including roads and bridges, through mitigation. Additionally, the report says FEMA has overlooked and not resolved issues with two key aspects of program implementation: limitations in data collection and tracking and impediments to applicants' mitigation efforts.

"Our analysis of FEMA's PA records showed that, because FEMA did not prioritize and publish implementing regulations and policies according to Subsection 205(b) of the DMA 2000, it obligated about \$1.9 billion for repetitive damages to roads and bridges from 2009 through 2018," the audit states. "This amount represents the federal share obligated for category C projects for three or more separate declared disasters during our scope period. For example, an applicant in Region VIII received \$4.6 million in federal funds for repairs or replacement of roads and bridges for the same damages under seven different declared disasters between 2009 and 2017."



For category C grants, FEMA funds at least 75% of repair, restoration, reconstruction, or replacement as the federal share. The state and applicant are responsible for the remaining 25 percent or less. The DMA 2000 directed FEMA to cut its reimbursement to 25% for facilities damaged on more than one occasion in the preceding 10 years, by the same type of event,

if the owner did not implement appropriate mitigation measures to address the hazard that caused the damages.

The OIG report noted that FEMA has promoted the availability of mitigation funding in various ways, including informational presentations at post-disaster meetings. However, in discussions with DHS OIG, applicants identified four main challenges to mitigation efforts to reduce repetitive damages to roads and bridges:

- Applicants were not aware of or had limited familiarity with the mitigation options available.
- Applicants, especially those in rural areas, found it difficult to prove the benefits of a road or bridge mitigation project would outweigh the cost.
- Requirements such as environmental and hydraulic studies complicated the mitigation requests, making them more costly and time-consuming.
- Most applicants were not able to pay their cost share for a mitigation project.

Addressing these hazard mitigation challenges was one of the four recommendations to come out of the report. In its written response, FEMA agreed with the recommendations and has begun to address them. As a result of FEMA's responses, OIG considers the two recommendations related to database system improvements resolved and open, pending receipt of evidence, and two recommendations yet to be resolved.

Download the 32-page report from the DHS OIG.

Funding Acknowledgment

Funds to produce The BFE come in part from the National Flood Insurance Program and State Support Services Element of the Community Assistance Program, which is administered by the Federal Emergency Management Agency.

The BFE is published by the Oklahoma Floodplain Managers Association, Inc. Information and opinions contained herein do not necessarily reflect the views of the Board of Directors. Items for publication and other editorial matters should be directed to:

Editor, The BFE | PO Box 8101 | Tulsa, OK 74101

Chair

Ron Johnson, CFM McClain County 102 E. Center Road Goldsby, OK 73093 405.288.2064 mcclain.em@gmail.com

Region I Representative

Lincoln Irvine, PE, CFM 14000 Quail Springs Parkway No. 500 Oklahoma City, OK 73134 405.242.6277 lincoln.irvine@benham.com

Region V Representative

David Smith, CFM
City of Woodward
1009 Ninth St.
Woodward, OK 73801
580.254.8522
dsmith@cityofwoodward.com

Ex Officio

Julie Cunningham
Executive Director
OWRB
3800 N. Classen Blvd.
Oklahoma City, OK 73118
405.530.8800

Vice Chair

Carrie Evenson, PhD, PE, CFM City of Norman 201A W. Gray PO Box 370 Norman OK 73069 405.366.5453 carrie.evenson@normanok. gov

Region II Representative

Joseph Remondini, PE, CFM Corps of Engineers—Retired 3225 S. Detroit Tulsa, OK 74105 918.361.8636 jremondini@aol.com

State NFIP Coordinator Yohanes Sugeng, PE, CFM

OWRB
3800 N. Classen Blvd.
Oklahoma City, OK 73118
405.530.8800
yohanes.sugeng@owrb.ok.gov

Honorary Board Member

Ken Morris OWRB—Retired 5400 E. Tecumseh Road Norman, OK 73026 405.573.7990

Secretary

Rachael Cooper, PE, CFM Wagoner County 307 E. Cherokee St. Wagoner, OK 74467 918.485.7979 rcooper@wagonercounty ok.gov

Region III Representative

James Kuykendall Town of Kingston PO Box 638 Kingston, OK 73439 903.814.2839 kingstonfd@hotmail.com

Past Chair

Brandon Claborn, PE, CFM Meshek & Associates No. 1550 1437 S. Boulder Ave. Tulsa, OK 74119 918.392.5620 ext. 207 bclaborn@meshekengr.com

Honorary Board Member

Ronald D. Flanagan, CFM R.D. Flanagan & Associates 3015 E. Skelly Drive No. 270 Tulsa, OK 74105 918.749.2696 rdflanagan@rdflanagan.com

Treasurer

Carolyn Schultz, CFM
Corps of Engineers—Retired
3527 S. 401 st W. Ave.
Mannford, OK 74044
918.906.3922
cschultz@cimtel.net

Region IV Representative

Johnny A. Barron, PE, CFM City of Altus 509 S. Main Altus, OK 73521 580.481.3518 jbarron@altusok.gov

PDCC Chair / Honorary Board Member

Joseph Remondini, PE, CFM Corps of Engineers—Retired 3225 S. Detroit Tulsa, OK 74105 918.361.8636 jremondini@aol.com

BFE Editor

Janet K. Meshek, PE, CFM SR/WA Meshek & Associates 1437 S. Boulder Ave. No. 1550 Tulsa, OK 74119 918.392.5620 jmeshek@meshekengr.com