OFMA will hold its 20th Annual Conference from September 20-22, 2010, at the Renaissance Hotel and Convention Center in Tulsa. This year’s theme is “Basics and Beyond: Community Outreach and Higher Standards”.

The three-day conference will bring together public and private sector floodplain management professionals for training and development activities. Presentation topics will include the benefits of membership in the Community Rating System, designing and implementing higher standards regulations, special considerations for rural floodplain management, and a showcase of education and outreach strategies.

Conference registration forms are available at OFMA’s website at http://www.okflood.org. In light of current economic times and strained travel budgets, conference rates are being kept as low as possible. New this year, a discount is being offered to any organization sending more than one representative (public or private sector). A student rate is being offered to full-time students not engaged in professional work related to floodplain management.

The Renaissance Hotel is consistently voted among the best hotels in the state. Government lodging rates will be available at GSA approved rate on a first-come, first-served basis. The negotiated conference room rate is $119 and can be obtained by calling the hotel at (800) 264-0165 and identifying as part of the Oklahoma Floodplain Managers Association group.

Certified Floodplain Managers (CFMs) will earn continuing education credit for conference attendance, and documentation will be provided for engineering and surveying professionals seeking credit.

This year’s conference will have a special focus on providing floodplain management education to professionals from related fields, including planners, real estate agents, insurance professionals and building inspectors. A special track of discussions designed for these related professionals will focus on teaching relevant floodplain management topics and practical applications. OFMA has applied to provide continuing education credit through the American Planning Association/AICP, Oklahoma Insurance Commission, Oklahoma Real Estate Commission, and Oklahoma Construction Industries Board.

Train-the-trainer workshops will be held for several of the outreach products, including OFMA’s new Traveling Trunks education program. Additionally, members of the OFMA Disaster Response Team will attend an extensive training session focused on the National Incident Management System (NIMS) and other disaster response topics.
Greetings, OFMA Members,

First, I want to thank everyone for the tremendous show of support for the ASFPM meeting in Oklahoma City this May. I will leave it to Bill Smith and Amy Brandley – who kept track of things – to thank individuals. I just know I witnessed a good number of OFMA members in attendance, plus it appeared that anytime help was needed there was always someone there ready to jump in and help out. Also, a big thanks to our sibling states (started to say sister states, but that would be sexist) in Region 6 for all their help and support. I heard compliments from many of the out of state guests about OFMA and Oklahoma City.

We rested for a month, but now we are back in full swing - working on revamping the web site, planning for the 20th Annual Conference, and various special projects, including an effort by the Mapping Committee (Bill Robison, Chair) to map and characterize the low water crossings around the state. Our Education Committee, chaired by Dee Robison, is getting a new program for students, “Design Away Floods,” ready to go this school year. Leslie Lewis is busy putting together the Turn Around Don’t Drown calendar to be ready for distribution at the Annual Meeting.

I would like to thank the PDCC, consisting of Joe Remondini - Chair, Jeff Bigby - Vice Chair, Carolyn Schultz - Secretary, and committee members Gavin Brady, Clark Williams, Tom Leatherbee, and Dale Lasley. This committee works hard all year with very little recognition maintaining our CFM program and processing CFM applications, testing, and renewals. Please make their job easier by getting your renewal materials in by the September 30 deadline. Also, renewal materials have been sent out by US Mail to all current CFMs. If you did not get yours, please check with Carolyn to make sure she has your correct address.

I look forward to seeing everyone at the 20th Annual Conference, September 20 - 22 in Tulsa.

WORDS FROM THE CHAIR—BY DR. ELLEN STEVENS, PE, CFM

The OFMA DRT was on alert again during our recent storm events in Oklahoma. The Oklahoma City/Edmond flooding was televised nationally, shown on MSN.com, and on local television. Multiple rescues were made by police and fire in the Oklahoma City and Edmond metropolitan areas, and there were structures that were inundated. The DRT Coordinator and Assistant Coordinator were in touch with both communities, as well as Oklahoma County, Blackwell, and others throughout the period. The storm event has been identified as being equivalent to or slightly greater than a 500-Year storm event. There were many structures that were outside the Special Flood Hazard Area that were significantly flooded. In Oklahoma City, the Public Works Department did request assistance from the OFMA DRT for a Post-Disaster SDE Evaluation. This was performed by the OFMA DRT Coordinator on June 29th. After review of the structures affected and identification of the Special Flood Hazard Area, there were only two (2) structures in the Oklahoma City boundary that were in the SFHA. The Oklahoma City Emergency Management Team did the preliminary assessments of water height in the numerous structures that were identified.

The DRT Coordinator has scheduled two training programs to coincide with the OFMA Annual Conference on September 20-22. On September 20 and 21 the ICS 200 Course will be taught in back-to-back afternoon sessions by Harry Trottier, CFM, also a DRT volunteer. This will be an 8-hour course to be held at the Renaissance Hotel in Tulsa. On Wednesday, September 22nd, after the Conference, W. B. Smith, P.E., CFM will hold an on-site SDE field exercise to go through the basics of a residential home evaluation after a flood event. The final location for the exercise is being determined. Transportation to and from the Renaissance Hotel will be provided.

OFMA DRT CORNER—BY W. B. “BILL” SMITH, PE, CFM, DRT COORDINATOR
This year, the Oklahoma Floodplain Managers Association (OFMA) has teamed up with the Oklahoma State Department of Education to sponsor the Turn Around Don't Drown® Poster contest. OFMA in cooperation with FEMA, NOAA, ODOT, and OWRB began the contest in 2005 in an effort to provide flood safety education to Oklahoma children. This program, designed to increase awareness of the dangers of floodwaters, was part of the nationwide Turn Around Don’t Drown® campaign.

Each year, more deaths occur due to flooding than from any other thunderstorm related hazard. Why? The main reason is people underestimate the force and power of water. Many of the deaths occur in automobiles as they are swept downstream. Of these drownings, many are preventable, but too many people continue to drive around the barriers that warn you the road is flooded.

Whether you are driving or walking, if you come to a flooded road, Turn Around Don’t Drown®. You will not know the depth of the water nor will you know the condition of the road under the water.

Governor Brad Henry declared May 2010 to be “Flood Awareness Month.” To increase Oklahoman’s Flood Awareness, Oklahoma Floodplain Managers Association held a statewide poster contest open to all fourth grade students throughout the great state of Oklahoma.

Winners from each of the five OFMA regions were voted to appear on the Turn Around Don’t Drown® calendar due out in the fall. Contest winners received $250 for first prize, $150 for second prize or $100 for third prize plus trophies and certificates. Every student who participates receives a certificate of appreciation.

Turn Around Don’t Drown calendar winners are chosen at three levels: school, regional, and state. Each student is eligible to win a place at each level. In addition to the student honors, each teacher received certificates of appreciation for their roles in this program and the school is provided a media release.

This year over 240 fourth grade students from 11 different schools throughout the state participated in the 2010 Turn Around Don’t Drown® poster contest. In all, fifteen posters were voted to appear in the 2011 calendar. The first three prize winners have been featured in this article. This fall the fifteen-month calendars will be distributed, free of charge, throughout the state and will be seen by thousands of Oklahomans.

If you wish to help promote this worthwhile endeavor, please contact the OFMA Education Committee Chair Dee Robison at (918) 396-1900 to learn more. Every year, posters are collected on or before March 1 from schools across Oklahoma. Let your school be our next year’s winner!
MORRIS AWARDED AT ASFPM CONFERENCE—BY AMY BRANDLEY, CFM, SECRETARY

Ken Morris, Past OFMA Executive Director, was lauded at the recent Association of State Floodplain Managers Conference held in Oklahoma City May 16-21.

Ellen Stevens, OFMA Chair, first presented Ken with a plaque from OFMA recognizing his service of over 25 years in developing a statewide floodplain management program in Oklahoma and participating nationally in ASFPM.

ASFPM’s Executive Director Larry Larson then presented Ken with ASFPM’s award for Meritorious Lifetime Achievement in Floodplain Management. This prestigious award recognizes individuals who, throughout their careers, have achieved success in a significant aspect of floodplain management including policy, outreach, implementation, education, government, research, litigation, or other actions which demonstrate the advancement of flood loss and risk reduction within the recipients’ professional realms.

Dan Accurti, ASFPM Award MC, listed Ken’s achievements:

- Morris began his floodplain management career as the Oklahoma State NFIP Coordinator.
- He has visited almost every community in the state and works with local floodplain administrators to help develop their local programs.
- He has attended over 200 Board meetings.
- He has served ASFPM as Board Director, Chapter Director, Treasurer, and Conference Team member.
- Morris has a deep conviction for floodplain management, making protecting life and property his life’s work. In OFMA Chair Steven’s words, “His zeal and enthusiasm are contagious and he has inspired floodplain managers throughout the state and the region to serve their communities to the best of their abilities.”

Below, Ms. Ellen Stevens, OFMA Chair, presents Mr. Morris with the OFMA Recognition.

Above: Executive Director Larry Larson, presents Mr. Morris with the ASFPM recognition. Also in the picture is Mr. Greg Main, ASFPM Chair.

Right, Mr. George Riedel, Mr. Morris and Mr. Larry Larson during award presentation.

Congratulations Ken! OFMA is very proud of you. You are an outstanding public servant and an inspiration to us all.
ASFP 2010 NATIONAL CONFERENCE “BUILDING BLOCKS OF FLOODPLAIN MANAGEMENT”
BY BILL SMITH, PE, CFM, LOCAL HOST COORDINATOR

Well, the party is over and what a party it was!! From many comments, including some from the ASFP staff, this was one, if not, THE best conference ASFP has held. Chad Ross commented to me that this was the first conference that he has been involved with that there were no major issues throughout the entire conference.

On behalf of ASFP, especially Chad Ross, ASFP Conference Planner, we would like to thank each and every one of you for participating in this year's Conference. We would like to express a sincere thank you to the many volunteers who helped plan, organize, and conduct the conference. We also want to thank the Conference Sponsors for continuing to step up to the plate to ensure the ASFP National Conference remains the world's premier flood conference. We would like to express our sincere thanks to Lt. Gov. Jari Askins for opening our Conference, for the many representatives from Washington DC that attended and made plenary presentations, and to all the individuals who acted as monitors and moderators through the breakout sessions. I would like to personally express my deep appreciation to Amy Brandley, our Volunteer Coordinator; Phillip Beauchamp, our Transportation Coordinator; and Leslie Lewis, our Local Donor Captain, for their efforts that were above and beyond all expectations. Everyone was wonderful.

As far as registration numbers are concerned, ASFP kept their heads above water. Even in these turbulent economic times and with many state travel bans, The conference still had over 1,100 participants. Here's how the numbers broke down:

- General Registrations: 995
- Exhibit Booth Registrations: 70
- Exhibit Booth Representative Registrations: 33
- One-Day Registrations: 14
- Workshop-Only Registrations: 14

When ASFP Staff and participants' guests were factored in, the total count was just about 1,150. There were representatives from all 50 states and Puerto Rico, as well as Bermuda, Canada, the Netherlands, Poland, and the United Kingdom. Oklahoma showed everyone up with an amazing 141 participants, and Virginia edged out Texas for second place 109-104.

It has been an honor and a privilege to work with each of the Captains over the past 2 years, and to see all of the many volunteers from Oklahoma, FEMA, and other states come to the Volunteer room and ask if there was anything they could do to help. It truly was a wonderful conference due to the individuals who helped. Our weather was a bit “crazy” and many from around the country asked why we live in Oklahoma, but they got to see the type of weather conditions that prevail and why the OFMA has one of the best and leading floodplain management programs in the country.

Don’t forget to mark your calendars to go to Louisville next year, May 15-20, 2011.

Pictures from the 2010 ASFP Conference, Oklahoma City
Flood insurance is available for any residential or non-residential structure in a community that participates in the NFIP. Flood insurance claims are paid even if a disaster is not declared by the President.

Federal disaster assistance for flood damage will be provided to repair insurable buildings located in identified flood hazard areas. (Individual Assistance)

GRANTS/LOANS
Communities that participate in the NFIP are eligible to apply for certain federal grants, disaster and non-disaster related. These grants include Hazard Mitigation Grant Program (HMGP), Pre-Disaster Mitigation (PDM), Flood Mitigation Assistance (FMA), Repetitive Flood Claims (RPC), and Severe Repetitive Loss (SRL).

Federal grants or loans for development will be available in identified flood hazard areas under programs administered by Federal agencies such as the Department of Housing and Urban Development, Environmental Protection Agency, and Small Business Administration.

Federal mortgage insurance or loan guarantees, such as those written by the Federal Housing Administration and the Department of Veteran Affairs, will be provided in identified flood hazard areas.

SAFETY
The NFIP has led to a large reduction in flood damages to new construction, with structures built to NFIP standards experiencing 80 percent less damage than structures not built to these standards. This includes the saving of lives and protecting of property.

The intent of the NFIP is not to prohibit development, but to guide development in floodplain areas in a manner that is consistent with both nature’s need to convey flood waters and a community’s land use needs.

A common misconception about the NFIP is that it is a taxpayer supported program. Flood insurance claims are paid from the same fund to which premiums are paid. The program has authority to borrow from the federal treasury, which it sometimes does if the program has a higher than normal year of losses. However, any money borrowed is paid back with interest.

DEFINITIONS
Special Flood Hazard Area (SFHA) is the flood zones that have the greatest risk of flooding. They are darkly shaded areas on the maps and are identified with A designation, example (Zone A, Zone AE, AH, AO). During a 30-year mortgage, there is a 26% chance of flooding in these areas and only a 4% chance of fire in the same period.

Non Special Flood Hazard Area (NSFHA) X, and Shaded X Zones are low to moderate risk flood zones. On the FIRM, they are unshaded or lightly shaded. Historically, 25-30% of all claims occur in these areas. A Preferred Risk Policy (PRP) may be available.

Zone X (Shaded) Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and, areas protected by levees from 100-year flood.

Insurance and building implications: There are no NFIP building requirements for developments in the Shaded X Zone, unless identified by local, county or state requirements.

There are no mandatory flood insurance requirements in the Shaded X Zone. Flood insurance can be purchased for minimal costs (around $300 annually for a PRP includes structure and contents).

The Digital Flood Insurance Rate Map (DFIRM) is the new form of flood

(Continued on page 7)
map produced digitally to be used in a Geographic Information System (GIS). Communities will receive one set of paper copies of the Flood Insurance Rate Maps.

**Mapping (differences from the old mapping and new mapping):**

DFIRM maps are all digital for ease of use (can add layers showing buildings and many other features as desired).

Levees showing protection on the DFIRM maps (shown as Shaded X Zone) have engineering data to support the levee design as well as operation information to support levee certification by the levee owner that the levee meets the FEMA guidelines and specifications for the 1% storm.

DFIRM maps are for the entire county and have been produced without holes for other governmental units (countywide format). Orientation and paneling of the maps are the same throughout all counties and states.

A common misconception about the NFIP is that it is a taxpayer supported Program. Flood insurance claims are paid from the same fund to which premiums are paid.

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**CONSEQUENCES OF SUSPENSION FROM THE NATIONAL FLOOD INSURANCE PROGRAM (NFIP)—BY JACK GRAHAM, CFM, SENIOR PROGRAM SPECIALIST, FEMA**

Per the 1973 Flood Disaster Protection Act, Public Law 93-234, flood insurance is required for federally backed loans for property located in the Special Flood Hazard Areas (SFHA).

The NFIP is a voluntary program but does have implications of not participating:

- Property owners will not be able to purchase flood insurance and existing policies will not be renewed.

- Lenders may require homeowners to pay off a loan if flood insurance is not available through the NFIP.

- Federally backed flood insurance will not be available. No owner of a residence, business, or public building will be able to purchase a federal flood insurance policy. Individuals may obtain private insurance (ex: Lloyd’s of London), but it will be at a considerable cost.

- If a county is declared for FEMA individual assistance, no federal disaster assistance will be provided to repair insurable buildings located in identified special flood hazard areas for damage caused by a flood.

- Federal grants, loans, or loan guarantees are prohibited for the acquisition or construction of buildings made in identified special flood hazard areas under programs administered by Federal agencies such as HUD including CDBG, EPA, SBA, HHS, DOT, DOE, etc.

- No Federal mortgage insurance may be provided in identified flood hazard areas.

- Federally insured or regulated lending institutions, such as banks and credit unions, must notify applicants seeking loans for insurable buildings in flood hazard areas that property is located in a flood hazard.

- Communities that do not participate in the NFIP are not eligible to apply for certain federal grants that include disaster and non-disaster related. These include Hazard Mitigation Grant Program (HMGP), Pre-Disaster Mitigation (PDM), Flood Mitigation Assistance (FMA), Repetitive Flood Claims (RPC), and Severe Repetitive Loss (SRL).

- Actuarial rates go into effect regardless of whether or not a community participates in the program. Unprotected construction today may be prohibitively expensive to insure should community later re-enter the program.

- The local governing body may be susceptible to some form of liability by not participating because their action denies the ability of its citizens to purchase flood insurance.
Residents and business owners in Ponca City can now enjoy a reduction in flood insurance premiums because of the city’s active participation in the National Flood Insurance Program’s (NFIP) Community Rating System (CRS). In addition to lower premiums, the CRS program helps to reduce the threat of damage due to flooding.

“The flood insurance program rewards communities for implementing programs and policies that protect their residents from flooding,” said Tony Russell, the Federal Emergency Management Agency (FEMA) regional administrator. “By joining the CRS program, Ponca City’s higher regulatory standards, public education outreach, and other initiatives, have earned the city lower premiums as a CRS Class 6 Community.”

Ponca City’s flood insurance policyholders who reside in Special Flood Hazard Areas will receive a 20 percent reduction on flood insurance premiums, and policyholders located outside Special Flood Hazard Areas will enjoy a 10 percent discount. The reduction in flood insurance premiums represents an annual savings in premium costs for Ponca City policy holders and will take effect at the time a new policy is written or an effective policy is renewed.

The city’s floodplain management staff has worked hard to insure that Ponca City’s participation in the program pays off. In addition to the reduction in insurance premiums, Ponca City officials are more knowledgeable about floodplain management, and its residents are more knowledgeable about mitigation and flood insurance.

The program has helped make Ponca City a safer place to live, reduced the economic impact of flood hazards, and saved their citizens money on their flood policy premiums.

The Community Rating System (CRS) is a voluntary program for NFIP-participating communities. The intended goals of the CRS are to reduce flood losses, facilitate accurate insurance ratings, and to promote the awareness of flood insurance. For more information on the NFIP’s CRS program, go to http://www.fema.gov/business/nfip/crs.shtm.

FEMA’s mission is to support our citizens and first responders to ensure that as a nation we work together to build, sustain, and improve our capability to prepare for, protect against, respond to, recover from, and mitigate all hazards.

Release Date: May 25, 2010
Release Number: R6-10-058
http://www.fema.gov/news/

There once was a day when determining the location of a flood event was through the local media. Whether through television or the local newspaper, many had no idea where the flooding occurred unless they were personally impacted. Those who tried hard enough could contact the Corps of Engineers or the USGS and get lake/stream elevations but it meant picking up the phone and inquiring. Even with this information, all you had was an elevation height which unless you knew the history of that lake or stream, the number probably didn’t help you make any type of flood determination.

The State of Oklahoma has experienced dozens of federally declared flood events over my 28 year career at the OWRB. Within a day of writing this article, Oklahoma has experienced flooding in Bartlesville, Oklahoma City, Del City and Hobart. I was able to track the rainfall totals on the Oklahoma Mesonet site while being updated every 5 minutes. Without picking up the phone I can track lake and river elevations at the National Weather Service offices in Norman and Tulsa. Through the NWS sites, you can see real time elevations with a history guide that describes what might be impacted at a certain elevation. As of today (July 7, 2010) the stream gauge on the Neosho River near Commerce shows the river will crest in 36 hours at 19 feet. We can scroll down to the history of this site and see that at 19 feet, the city of Miami (downstream) will begin to see moderate agricultural flooding, Riverview Park will experience moderate flooding, and State Highway 125 near the Fairgrounds will be threatened. This might not seem like much, but we continue to research and find that with just 1 more foot of flooding, State Highway 125 will be closed. This is useful information not just for local officials but anybody who plans to travel Highway 125 in Miami (passenger cars, emergency vehicles).

The OWRB and OFMA spend many hours during our training schedule focusing on the importance of substantial damage and substantial improvements after a flooding event. All of us as floodplain...
QUICK FACTS ON THE NATIONAL FLOOD INSURANCE PROGRAM (AS OF FEBRUARY 28, 2010)

- Flood policies in force: **5,627,957**

- Top 5 states:
  - Florida ............................................ 2,147,602
  - Texas ................................................ 682,055
  - Louisiana............................................ 482,954
  - California ........................................... 276,685
  - New Jersey ......................................... 229,211

- Loss and Loss Adjustment Expenses to date in FY 2010: **$443 million**
  - Loss and Loss Adjustment Expenses in FY 2009: **$3.5 billion**
  - Loss and Loss Adjustment Expenses since 1969: **$40.1 billion**

- Outstanding Treasury borrowing: **$18.75 billion** as of April 30, 2010
  - Most recent repayment: **$250 million** on December 31, 2009
  - Most recent borrowing: **$75 million** on March 31, 2009

- Flood insurance is available in **20,532** participating communities nationwide
  - Regular Program: 19,899
  - Emergency Program: 633

- There are 1,114 communities participating in the Community Rating System (CRS) accounting for 66% of policies in force.
  - The number of communities for each level of discount follows:
    - 230 ........ 5%
    - 251....... 15%
    - 51......... 25%
    - 1.......... 35%
    - 1.......... 45%
    - 468 ...... 10%
    - 108....... 20%
    - 2.......... 30%
    - 2.......... 40%

- 92 Insurance Companies writing flood insurance.
  - WYO policies: 98%  
  - Direct-side policies: 2%

- FY 2009 Severe Repetitive Loss Program: FEMA awarded $63.5 million in grants for 410 properties
- FY 2008 Severe Repetitive Loss Program: FEMA awarded $34.9 million in grants for 168 properties

- 83 Insurance Agent seminars for 2,264 agents to date in FY 2010
  - 21 Lender workshops for 881 lenders to date in FY 2010

- Authorized Staffing: **352 FTE**  
  - (Insurance: 84 FTE; Floodplain Mgt & Flood Mapping: 268 FTE)
  - (Headquarters: 168 FTE; Regions: 184 FTE)

- FY 2009 Financial Highlights (as of February 28, 2010):
  - Insurance in Force.................$1,220,199,766,100
  - Written Premium .....................$3,208,879,378
  - Average Premium ......................$570
  - Average Coverage ......................$216,810
  - Number of Losses Paid................10,553
  - Average Paid Loss ....................$23,684
As part of a unanimous consent agreement on June 6, 2010, the Senate cleared a measure (HR 5569) that would extend the authorization of the National Flood Insurance Program until September 30, 2010. The Bill was previously passed by the House, so it will become effective as soon as President Obama signs it, which is expected very soon. The effective date is retroactive to May 31, 2010, covering the period since the program lapsed. Policies may now be issued for applications and premiums received on or after June 1, and claims for covered losses can be processed. For more details on the processing of applications, premiums, and claims during and after this hiatus, go to http://bsa.nfipstat.com/wyobull/w-10063.pdf. Here is a link to HR 5569: http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_cong_bills&docid=f:h5569eh.txt.pdf

ASFPM hopes to have more information for you in the July INSIDER next week. Status updates will be posted in the Hot Topics button on the www.floods.org homepage and under the Working with Congress page as they are received.

(Continued from page 8)

managers want to stop the repetitive flood losses we see every year. With all this information at our fingertips, I'm able to contact communities, many times before the river even crests, and inform them that it is the floodplain administrator’s responsibility to make substantial damage/ improvement determinations.

Please take time to view some of the websites I use on a daily basis and on an hourly basis when flooding is in the forecast.

(Continued from page 11)

a massive flood prevention and warning system that remains among the most effective public safety programs in the nation.

1986 September 30-October 4: Remnants of Hurricane Paine produced rains of around 10 inches in western and central Oklahoma and as much as 20 inches in north central Oklahoma, producing major flooding on the Arkansas River and its tributaries. Flooding was reported in 52 counties with damages estimated at $350M, half of that to agriculture. The Caney River overflowed its banks in Bartlesville, leaving 9,000 people homeless and cutting the city in half. The Caney River crested at a record 31 feet, with the normal flood state set at 13 feet. That flooding came after the Corps of Engineers was forced to release water from the Hulah and Copan reservoir to prevent the lakes from spilling over their dams.

1993 May 8: A slow-moving storm system stalled over central Oklahoma and dumped more than seven inches of rain on Oklahoma City. Swollen creeks in Oklahoma City claimed four lives. Flash flooding occurred in almost all areas of the state, causing more than $130 million in damages to property and crops. Other hard-hit areas included Guthrie, Kingfisher, Skiatook, and Tulsa.

2007 August 19: The remnants of Tropical Storm Erin, which made landfall three days earlier on the Texas Gulf Coast, unexpectedly intensified during the overnight hours of August 19th. Tropical Storm strength winds were observed for several hours in west-central Oklahoma. In fact, the storm was stronger over Oklahoma than at any time during its entire life cycle (including its marine period). Extensive wind damage occurred west of Oklahoma City, and severe flooding ravaged much of Oklahoma. More than nine inches of rain were observed in areas near Watonga, Fort Cobb and Okmulgee. Seven flood-related deaths were reported statewide.

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MESONET TICKER...JUNE 15, 2010...MESONET TICKER...JUNE 15, 2010...MESONET TICKER...

HISTORICAL OKLAHOMA FLOODS

1900 September 9-10 - Remnants of the hurricane that devastated Galveston moved over the state, flooding a large part of eastern Indian Territory.

1906 September 16: Sudden flooding along the Cimarron River south of Dover washes out the railroad bridge, resulting in the spectacular wreck of Rock Island passenger train No. 12, from Ft. Worth to Chicago. The death toll, first thought to be over 100, was scaled down dramatically. "The engine, tender, baggage, mail cars, smoker and day coach of passenger No. 12 northbound, left the high bridge that spans the Cimarron river and plunged into the current flanked by treacherous quicksands. The locomotive disappeared from sight almost immediately. The mail and baggage clerks escaped from their coaches and swam to the shore." - excerpt from The Daily Oklahoman, September 18, 1906. The Oklahoma National Guard was called out to guard the river downstream to watch for bodies that might wash up.

1920 October 21-30: Extensive flooding along North Canadian River - levees breached in Oklahoma City, flooding low-lying industrial and residential sections. Hundreds of families were left homeless due to, at that time, the worst flood in Oklahoma City history.

1921 April 4,5: Flash flooding reportedly washed out every roadway bridge in Custer County, damaged every railroad bridge, and caused $500,000 (1921 dollars) in damage. The rain fell continuously from 8 p.m. on the 4th through 4 a.m. on the 5th, dumping eight inches of rain on the area. The deluge flooded the Washita River Valley near Clinton, killing hundreds of cattle and other livestock.

1923 October 13-16: Severe flooding along the North Canadian resulted in a breach of Lake Overholser Dam and forced the evacuation of 15,000 residents in Oklahoma City. This flood led to a radical redistribution of housing patterns in the city as higher income families moved northward, away from the river.

The flood began in Woodward where the river crested over its banks and flooded the business district there. Much of western Oklahoma reported “semi-famine” conditions after being cut off from outside contact. The surge of water rushing toward Oklahoma City rose to 25 feet tall. This flood led to a radical redistribution of housing patterns in the city as higher income families moved northward, away from the river.

1927 April 6,7: Heavy rains produce the greatest flooding along the Arkansas River (below the mouth of the Neosho River) since 1833. The flood extended through the 19th inundating 165,000 acres with losses totaling $4M (in 1927 dollars).

1932 June 3: A flood on the North Canadian inundated Oklahoma City, leaving eight dead and 3600 homeless. Property damage totaled $1.5 million (1932 dollars), including the destruction of 656 homes. The War Department was asked to furnish 650 tents to set up a tent city at the Fair Grounds to house those left homeless by the flood. Nearly seven inches of rain fell on the North Canadian watershed west of Oklahoma City between 11 p.m. and noon on June 2-3.

1934 April 3-4: Over 14 inches of rain in 6 hours near Cheyenne sent a lethal wall of water down the Washita. Just two inches fell near Hammon, but the surge from upstream swept violently through the town after midnight and took entire families - with their homes - to their deaths. Seventeen people were killed, including all six children of the A.M. Adams home. Some victims were recovered in neighboring Custer County, while others were never found.

1948 June 23-24: Eleven people died on Route 66 near Hydro after as much as 20 inches of rain led to major flash flooding along Little Deer Creek.

Kingfisher and Okmulgee also suffered major flash flooding with more than 500 and 2000 left homeless in those communities, respectively.

1957 May 16-21: A thirteen-inch downpour in Hennessey began nearly a week of devastating floods on several of the major river systems in Oklahoma; the Cimarron, Arkansas, Washita, and Canadian all overspilled their banks with $20 million in losses to agriculture alone. Lake Texoma emergency spillway opened for first time to ease the flooding dangers in that area. All 2300 residents of Bixby were ordered evacuated, by force if necessary, by the National Guard. These floods marked the end of persistent drought that began in 1952.

At least nine people died due to the week-long flooding.

1973 October 11: A state record daily and 24 hour rainfall occurred in Enid on this day, plunging much of the town under water. The bulk of the rain fell in just three hours. Turkey Creek near Dover spilled over its banks due to the rush of water downstream. Nine people died due to flash flooding in this event.

1983 October 17-23: Remnants of Hurricane Tico produce up to 10-15 inches of rain, producing extensive flooding in central Oklahoma. Damages estimated at $84M, including $77M to agriculture.

1984 May 26-27: Known simply as "The Memorial Day Flood", this disastrous flood in Tulsa was triggered by over 12 inches of rain in just six hours. Tcality died of 14 dead and over $180 million in damages, including 5,500 homes and over 7,000 vehicles. In reaction to this disaster, Tulsa launched

(Continued on page 10)
Funding Acknowledgement

Funds to produce The B.F.E. came 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.