



KANSAS



FLOODPLAIN MANAGEMENT NEWSLETTER

January 2010

NGVD or NAVD

The National Geodetic Survey (NGS) needed a consistent national datum to map the United States. During the 1920's NGS used tidal gauges in the United States and Canada to establish a mean sea level in 1929.

In this newsletter...

- NGVD or NAVD**
- Paper maps and other news**
- BFA not BFE**
- Learning Opportunities**
- Training Registration Form**
- ASFPM Annual Conference Info.**

NGVD stands for the National Geodetic Vertical Datum of 1929. This is a system that has been used by surveyors and engineers for determining elevations for decades. It has been a method used in the past to relate ground elevation to flood elevations.

NAVD is the North American Vertical Datum of 1988. In 1988 NAVD was established to correct some of the problems with NGVD. NAVD has not completely replaced NGVD. There are older maps that were made using NGVD. Some cities in Kansas still have those older flood maps as their official map. Newer digital maps that use NAVD are now being made. To find out what datum was used with your map look in the Flood Insurance Study.

The elevation certificate is a form commonly used for insurance and regulations. This form has a space on it for the base flood elevation and the lowest floor elevation. This is used to document that a structure is built in compliance. In most cases the lowest floor should be one foot higher than the base flood elevation. The form also has a place to document the vertical datum used.

One problem that has happened is that a new flood map has been made using NAVD but the elevation certificate form might be completed using NGVD. There are differences between the two datum. It is not a true comparison. Community officials involved in floodplain management should not accept an elevation certificate if it has two different datum. Ask the surveyor or engineer to convert the datum before approving a local floodplain development permit. This will ensure that a structure is not built incorrectly because of using the wrong datum. Elevation certificates are commonly reviewed during a visit from FEMA.

Paper Maps

As of October 1, 2009 the Map Service Center is no longer providing paper flood maps. Flood maps will only be available digitally from the Map Service Center. Those maps can be viewed or ordered at www.msc.fema.gov. There will be cases when a community needs a paper version of the flood map. There are options available to get a paper version of a flood map. Communities can contact the mapping staff at DWR to see if a map can be printed for them. One company sent a press release to floodplain staff at DWR. This company is offering to make paper maps for communities for a small fee. Other companies may offer this service as well. At this time the only company that has contacted us to announce this service has the website www.floodplainmaps.com.

Gilbert F. White Memorial

Gilbert F. White was one of the original supporters and mentors of the Association of State Floodplain Managers. Funds are being raised for a memorial to Gilbert F. White in Boulder, Colorado. For more information contact ClancyPh@aol.com or visit the website:

<http://www.commfund.org/giving/GilbertWhiteFund.html>



Kansas Courts

There have been some court cases related to floodplain management in Kansas in recent months. In the City of Independence five property owners filed a lawsuit. It was reported that flood damages to properties occurred in 2007. Property owners claim the damage happened because of a poorly maintained levee.

Finney County and Garden City sued FEMA over issues related to procedures followed in the creation of a new flood map. Prior to the court date FEMA withdrew a letter of final determination. That letter announced what date the map would become official. At this time only the letter has been withdrawn. It has been stated incorrectly that the map was rescinded. Only the letter itself was withdrawn.

Insurance Changes

The flood insurance manual was revised on October 1, 2009. Some of the changes are higher deductibles, higher premiums, higher basic limit, and a rating for subgrade crawl spaces. Although the insurance manual and the new elevation certificate have a place for subgrade crawlspaces communities can not automatically allow them. Communities must adopt subgrade crawl space language into ordinances and resolutions before those structures can be allowed.

BFA not BFE

BFE is the acronym that stands for base flood elevation. Base flood elevation is the predicted water surface elevation in a one percent annual chance flood event. Some flood maps have areas that only show unnumbered A zones. There are no water surface elevations provided for those maps. In many communities that are getting a new digital flood insurance rate map (DFIRM) water surface elevation data from DWR can be provided. This information is called a BFA.

The BFA layer is created from the modeling done to create an A Zone floodplain without survey. The hydrology that is used is generally from the USGS Regression equations based on a specific stream channel. Once the Hydrology flows and amounts are calculated it is applied to a program called HEC-RAS which calculates the Hydraulics to see how high the water will rise. In doing this, the best available digital elevation model is used to map the cross sections derived from the hydraulic study of the stream. The cross sections illustrate the water surface elevation or how high the water will rise. These cross sections are what is referred to as BFA's or base flood approximations. The reason for the approximation is that by not doing a survey this leaves a greater level of error based on the digital elevation model. The better the elevation data, the lower the level of error. When mapping this data, the ground surface elevation is used devoid of all structures and the water surface is mapped strictly based on the digital elevation model's bare surface elevation.

“If Flood Insurance Study data is not available, the community shall obtain, review, and reasonably utilize any base flood elevation or floodway data currently available from Federal, State, or other sources.” This language is in almost every single floodplain management regulation in Kansas. In many cases the BFA layer will be the best available information to use for determining a base flood level. A community may use a BFA when there is not a BFE.

On some of the forms from FEMA there is a place to list the BFE and the source for the BFE. Elevation certificates and letters of map amendment on the MT-EZ form specifically ask for that information. A few LOMA requests have recently been rejected. State NFIP Coordinator Tom Morey held a conference call with FEMA to solve that problem. When a surveyor or engineer uses the BFA to interpolate a BFE they should identify it on the form. State the source of the data as, “State” and add a note saying, “Data from DFIRM created under MapMod program.” The reviewers will then look at the DFIRM to evaluate the BFE that was developed. If the BFE determination is good it will be approved. If there are problems the reviewers will ask for additional information.

If your community has gotten a new DFIRM and you would like to have the BFA information contact andrew.megrail@kda.ks.gov. There are some cases where a BFA layer will not be available. It is only available when there is a DFIRM and only when that DFIRM meets certain standards. If you are using the BFA layer please make surveyors and engineers aware of the specific language that is required to be used on the forms sent to FEMA.

Training Opportunities

The Floodplain Management Program will host the following training sessions throughout Kansas. If you are interested in any of the no-cost training opportunities, please contact Tom Morey at (785) 296-5440 or Steve Samuelson at (785) 296-4622.

Basics of the National Flood Insurance Program

This free class is for officials responsible for administering their local floodplain management ordinance. The focus is on the NFIP and concepts of floodplain management, maps and studies, ordinance administration, and the relationship between floodplain management and flood insurance. Limited to 20.

Topeka-Feb. 17, 2010, 8:00am-12:00pm

Belleville-April 6, 2010, 8:30am-12:30pm

Residential Substantial Damage Estimation

FEMA Region VII has agreed to teach a free RSDE classes in Emporia and Lyons. FEMA has developed a software for use in making substantial damage estimations. This is a valuable tool for any floodplain management official to know and understand. It is a requirement that the community's Floodplain Manager make substantial damage determinations after a disaster. This class will be in two parts. In the morning there will be a classroom session to review terms and regulations related to substantial damage. In the afternoon there will be a field trip to a property to practice damage estimation. Limited to 25.

Emporia-Feb. 12, 2010, 9:00am-4:00pm

Lyons-May 6, 2010, 9:00am-4:00pm

Certified Floodplain Manager Exam

The Association of State Floodplain Managers has established a national program for professional certification of floodplain managers. A free review class will be offered in Topeka on February 18, 2010 from 9:00am until 4:00pm. The test will be given on February 19, 2010 in Topeka at 9:00a.m. There is a fee to take the exam. In order to take the exam applicants must register with ASFPM at least two weeks prior to the exam. Contact Tom Morey for details at tom.morey@kda.ks.gov or by phone at 785-296-5440.

The Division of Water Resources newsletter "Currents" can be read on line at:

http://www.ksda.gov/appropriation/mailling_list/id/68

Mark your calendar. The Kansas Association for Floodplain Management 2010 conference will be September 1 and 2 in Wichita. More information can be found at the website www.ekafm.org. Registration should be paid through Jon Bristor, Treasurer, 110 E. 10th Street, Wellington, KS 67152. Jon's phone is (620) 326-2207.

Kansas Department of Agriculture
Division of Water Resources
Floodplain Program
Training Registration Form

Name _____

Title _____

Organization _____

Address _____

City _____ State _____ Zip _____

Telephone _____ Fax _____

E-mail _____

Name, date and location of training you will attend _____

*Please share this invitation with anyone else who could benefit from the training.

**Classroom locations will be sent to registered participants one week before the training.

Please mail or fax your registration to:

KANSAS DEPARTMENT OF AGRICULTURE
FLOODPLAIN MANAGEMENT PROGRAM
109 SW 9th STREET, 2nd FLOOR
TOPEKA, KS 66612-1283
Fax to: (785) 296-4835

If you have questions about training, please contact Steve Samuelson at steve.samuelson@kda.ks.gov or (785) 296-4622, or Tom Morey at tom.morey@kda.ks.gov or (785) 296-5440.

Please help us keep our records current. If the name that appears on this newsletter is for an individual no longer with your organization, please call (785) 296-7769, or send an e-mail to Alicia.Benson@kda.ks.gov to report the change.

046-08
Kansas Department of Agriculture
Division of Water Resources
Floodplain Management
109 SW 9th Street 2nd Floor
Topeka KS 66612-1283

Funds available to attend the ASFPM National Conference in Oklahoma

The 2010 Association of State Floodplain Managers National Conference will be May 16-21, 2010 in Oklahoma City, OK. This conference is an excellent opportunity for Kansas floodplain managers to receive premier training on mapping technologies, adopting new flood hazard maps, and to discuss topics directly related to mapping and Map Modernization. The conference will be attended by over 1,300 floodplain management professionals and officials.

To help you attend this important event, Kansas is making funds available to defray your costs. Funds will be available through FEMA's Map Modernization Management Support grant and will provide up to \$1,200 each for 10 community officials.

If you are interested in attending the conference and would benefit from financial assistance, please contact Tom Morey at tmorey@kda.state.ks.us, or (785) 296-5440. Application forms will be sent out to those that are interested. Assistance awards will be granted on a first-come, first-served basis

KDA/DWR Water Structures Floodplain Program Staff

| | | |
|--|----------------|--|
| Tom Morey, CFM, RS, NFIP Coordinator | (785) 296-5440 | tom.morey@kda.ks.gov |
| Andy Megrail, CFM, Floodplain Mapping Specialist | (785) 296-2513 | andrew.megrail@kda.ks.gov |
| Steve Samuelson, CFM, NFIP Specialist | (785) 296-4622 | steve.samuelson@kda.ks.gov |
| Alicia Benson, Floodplain Coordinating Assoc. | (785) 296-7769 | alicia.benson@kda.ks.gov |

Mailing Address:
109 SW 9th Street, 2nd Floor
Topeka, KS 66612-1283
Fax: (785) 296-4835

www.ksda.gov/dwr