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# WATERLINES

News affecting the management and use of Indiana's water resources

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DIVISION OF WATER  
INDIANA DEPARTMENT OF NATURAL RESOURCES  
WINTER 2007

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## NOBLESVILLE NOW A CLASS 5 IN CRS

Congratulations to the hard-working folks who make the floodplain management decisions for the City of Noblesville. The City of Noblesville made a leap from Class 7 to Class 5 in the National Flood Insurance Program's (NFIP) Community Rating System (CRS) this past August after a verification visit by the Insurance Services Office. This is a level only achieved by three percent of the communities currently participating in the CRS program nationally.



Steven Huntley, Director of Planning & Development, and Denise Aschleman, Zoning Administrator for Noblesville, worked diligently to see that the City was credited for all the activities possible. These individuals take flooding and the detrimental impacts of flooding to their community seriously. Steve Huntley states, "The City of Noblesville works to aid citizens by implementing programs that allow our citizens to see benefits. In addition to the physical benefits associated with mitigating flood risks, the CRS allows those residents that pay flood insurance premiums to see a significant reduction in cost."

The largest credits to the City were awarded for the recent successes in acquiring and removing buildings from the special flood hazard areas within the City's jurisdiction and returning the area to green space. Some of the acquisitions were achieved through two Hazard Mitigation Grants, which resulted in the purchase of 51 residential structures and one business to date. The City's contribution was 25% of the total project cost. In addition to the grants, the City has taken the initiative to purchase several properties as they have become available, two of which were located within the floodway of the White River.

The City was credited for several other activities including outreach projects (annual mailing to residents in the special flood hazard areas of the City), conducting and adopting flood studies

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for areas not included on the Federal flood insurance rate maps, providing flood zone information and maintaining records, having documents relating to floodplain management available in the Hamilton East Public Library, elevation certificates, open space preservation, higher regulatory standards, storm water management, and flood data management. The City had a total of 2,705 points verified.

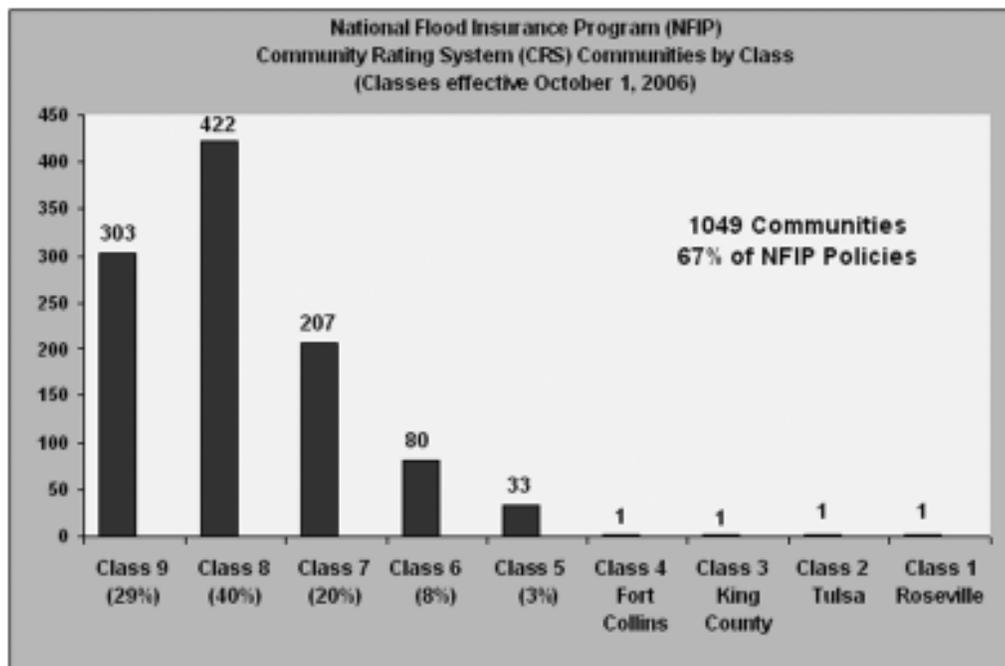
With the City's current Class 5 rating in the CRS, Noblesville residents carrying flood insurance on structures within the special flood hazard areas will receive a 25% premium discount. This is a significant savings!

### The CRS Program

The CRS is a voluntary incentive program that recognizes and encourages community floodplain management activities that exceed the minimum NFIP requirements. As a result, flood insurance premium rates are discounted to reflect the reduced flood risk resulting from the community actions meeting the three goals of the CRS: (1) reduce flood losses; (2) facilitate accurate insurance rating; and (3) promote the awareness of flood insurance.

For CRS participating communities, flood insurance premium rates are discounted in increments of 5%; i.e., a Class 1 community would receive a 45% premium discount, while a Class 9 community would receive a 5% discount (a Class 10 is not participating in the CRS and receives no discount). The CRS classes for local communities are based on 18 creditable activities, organized under four categories: (i) Public Information; (ii) Mapping and Regulations; (iii) Flood Damage Reduction; and (iv) Flood Preparedness.

In the United States, there are now 1,049



(Information obtained from the FEMA website: [www.fema.gov](http://www.fema.gov))

communities receiving flood insurance premium discounts based on their implementation of local mitigation, outreach, and educational activities that go well beyond minimum NFIP requirements. While premium discounts are one of the benefits of participation in CRS, it is more important that these communities are carrying out activities that save lives and reduce property damage. These 1,049 communities represent a significant portion of the Nation's flood risk as evidenced by the fact that over 67% of the NFIP's policy base is located in these communities. Communities receiving premium discounts through the CRS cover a full range of sizes from small to large, and a broad mixture of flood risks including coastal and riverine. The table above lists the number of CRS communities by class as of October 1, 2006.

### Indiana Stats

There are currently fifteen Indiana CRS communities as of October 1, 2006. Each community is commended for their dedication to floodplain management and their efforts to protect and improve their community. Listed below are the fifteen communities and their respective classes.

Allen County	Class 9
Bartholomew County	Class 9
City of Columbus	Class 9

City of Decatur	Class 9
City of Evansville	Class 8
City of Fort Wayne	Class 7
Hamilton County	Class 7
Hancock County	Class 8
City of Kokomo	Class 8
Kosciusko County	Class 9
City of Milford Junction	Class 9
City of Noblesville	Class 5
City of North Webster	Class 9
City of Syracuse	Class 9
Vanderburgh County	Class 8

### For More Information

If your community would like to know more about the CRS, please contact the Floodplain Management Section, Division of Water, at 317-232-4160 or toll-free at 1-877-928-3755. ☞

### CONGRATULATIONS



Congratulations to Indiana's newest Certified Floodplain Managers—Larry Aukerman of Lafayette, James Barnes and Greg Hoyes of Indianapolis, Christopher Jeter of Granger, and Erin

Wenger of Fishers. These individuals passed the Certified Floodplain Manager (CFM) Exam that was offered at the Indiana Association for Floodplain and Stormwater Management Conference in September.

The CFM Program is a national program for professional certification of floodplain managers. It recognizes continuing education and professional development that enhance the knowledge and performance of local, state, federal and private-sector floodplain managers.

For a listing of the all current CFMs and information on the Certified Floodplain Managers Certification Program, visit the Association of State Floodplain Managers (ASFPM) Web site at [www.floods.org](http://www.floods.org). ☞

# CONFERENCE CORNER

### INAFSM CONFERENCE

The 10<sup>th</sup> annual conference of the Indiana Association for Floodplain and Stormwater Management (INAFSM) was a huge success! It was held on September 13-15, 2006 in Brown County State Park at Nashville, Indiana. If you were there, you had the privilege of hearing numerous presentations packed full of interesting and useful information in a setting that was just simply relaxing *and* beautiful!

Many of the presentations from the conference are now on the INAFSM Web site, including the 2006 INAFSM Awards. If you missed the conference, or if you simply would like to view the presentations, visit [www.inafsm.net](http://www.inafsm.net).

### ASFPM CONFERENCE

The Association of State Floodplain Managers (ASFPM) annual conferences are recognized as the most important floodplain conference in the United States year after year. With more than 100 speakers and nearly 1,000 participants, they are the national conferences all community, state and federal floodplain managers plan to attend. And because of that, many of the most important consulting firms and product vendors associated with floodplain management attend.

In recent years, the attendance has had about an equal number of private, local, state and federal participants from all over the United States and several foreign countries.

Plan now to attend the ASFPM 2007 conference in Norfolk, Virginia, June 3-8, 2007.

### ASDSO NATIONAL CONFERENCE

Dam Safety '07—The Association of State Dam Safety Officials (ASDSO) National Conference will be held September 9-13, 2007 at the Hilton Austin Hotel in Austin, Texas. ☞

# FLOODPLAIN VARIANCES — THINGS TO CONSIDER FOR COMPLIANCE IN THE NFIP

*By Greg Main, CFM, State NFIP Coordinator, Division of Water and Debbie Smith, Section Manager, Division of Water*

Flooding is Indiana's number one natural disaster potential and as such many Indiana communities have been proactive in making sure that new development in their community's floodplains is done in compliance with federal and state regulations. Indiana communities that participate in the National Flood Insurance Program (NFIP) agree to adopt and enforce floodplain regulations in their community in order to reduce future flood risks to new construction in the community's special flood hazard areas. However, from time to time a developer may want to seek a variance to the requirements of the community's local floodplain regulations.

## What is a variance?

A variance is a grant of relief by a community from the terms of a land use, zoning or building code regulation. Because a variance can create an increased risk to life and property, variances from flood elevation or other requirements in the local flood ordinance should be rare. The local review board must consider the fact that every newly constructed building adds to the local government's responsibilities and remains a part of the community for the indefinite future.

## What are valid conditions for floodplain variances?

Local floodplain ordinances specify what can qualify for a variance; however, in general, variances must pertain to a piece of property and are not personal in nature. Local boards should review their local floodplain regulations prior to the issuance of a variance. The granting of a variance in an identified flood hazard area must not:

- Increase flood heights
- Create additional threats to public safety
- Cause additional expenses
- Create a nuisance

- Cause fraud or victimization of the public
- Conflict with existing law

**Note:** Any variance or exception granted by a community in the floodway will first require prior written approval by the Department of Natural Resources!

Before a community considers issuing a variance to its floodplain regulations it is recommended that they first consult with the Department of Natural Resources in order to avoid potential compliance issues. Remember the reason for floodplain regulations is for public safety and to reduce future flood losses in a community.

## What is a Community's liability for issuing improper variances?

The issuance of variances to local floodplain regulations can have a negative impact to a community's participation in the NFIP. A pattern of unjustified variances can lead to probation or even suspension from the NFIP. This can lead to the loss of flood insurance and many forms of disaster assistance for the community. The loss of availability of flood insurance can have a direct impact on future sales or re-sales of properties located in a community's floodplains.

Unjustified variances by review boards can circumvent the goals of reducing future flood loss that the community is trying to accomplish through its floodplain regulations. In addition, it can result in increased costs to the community for emergency response. Another consideration is the liability that a variance may place on the local community. Variances must not defraud or victimize the public. Any building permitted below flood protection grade is subject to increased risk of damage from floods. Local boards should ask themselves what is the potential of future litigation for the community for issuing an unjustified variance.

## Variances and Flood Insurance Rates?

While a variance may allow deviation from building standards specified in the local ordinance,

flood insurance rates and the flood insurance purchase requirements—which must be enforced by lending institutions—cannot be waived. One of the most common requests a board may get is to waive the elevation requirement for the lowest floor of a new or substantially damaged building. The following examples illustrate how elevation and insurance works on structures in floodplains.

**Example:** Flood insurance premiums shown for the next series of illustrations were computed based on \$100,000 in building coverage on a residence with no basement/enclosure. Note: insurance rates vary, based on location, date of construction and lowest floor elevation, and should be computed case-by-case when rating structures for flood insurance.

## Conclusion

Granting variances to a community’s floodplain regulations is a local decision that must be based on not only NFIP criteria, but also on state law and other provisions the community may wish to require. In general, granting variances to floodplain regulations should be discouraged. Before considering granting a variance to floodplain regulations, a community should contact the Division of Water’s Floodplain Management Section for advice and guidance. A community’s floodplain regulations are designed to reduce flood loss and make the community more disaster resistant. Few situations merit the granting of a variance to those regulations. ☞



Figure 1. Pre-FIRM building; 2006 rate - subsidized premium: \$685

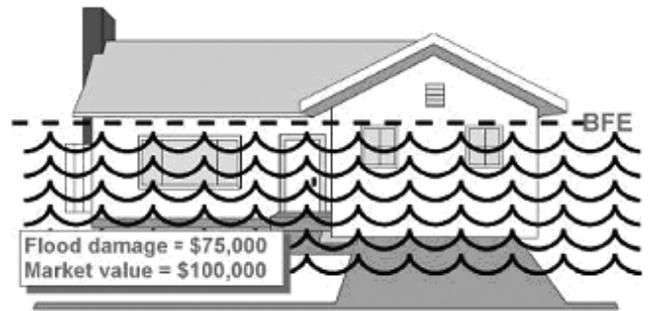


Figure 2. Pre-FIRM building; substantially damaged by flood

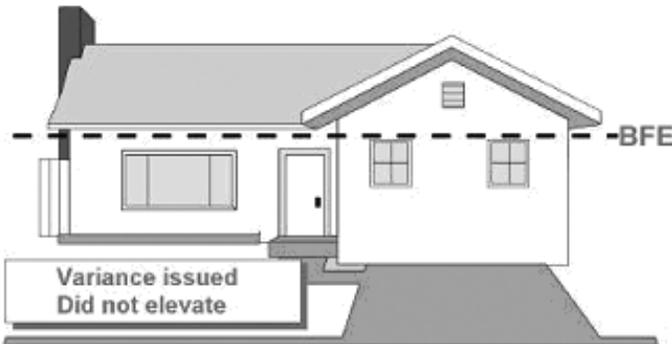


Figure 3. Repaired – variance allowed, no elevation (7 feet below BFE); 2001 rate - actuarial premium: \$7911

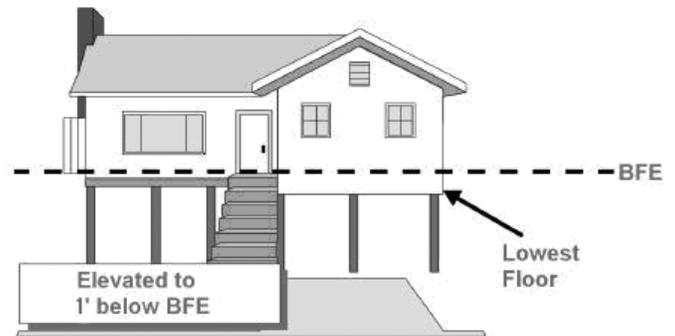


Figure 4. Repaired – variance allowed to construct 1 foot below BFE; 2006 rate - actuarial premium: \$2,086

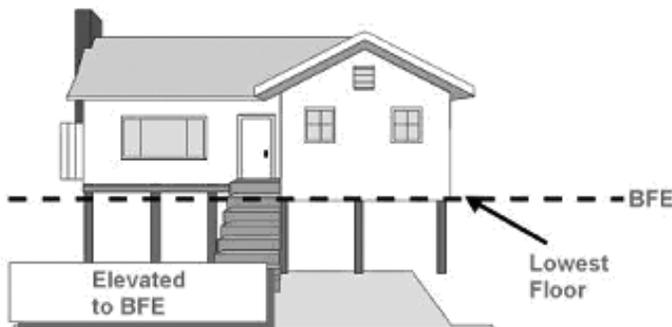


Figure 5. Repaired – variance allowed to construct at BFE; 2006 rate - actuarial premium: \$676

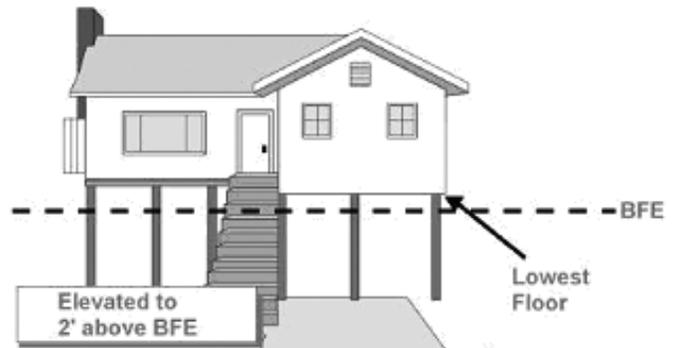


Figure 6. Repaired – Constructed in compliance with local ordinance; elevated 2 feet above BFE; 2006 rate - actuarial premium: \$236

## SEVERE STORMS AND FLOODING RESULT IN A DISASTER DECLARATION

Although located at opposite ends of the state and separated by hundreds of miles, Lake, and Vanderburgh counties were both impacted by the same weather system in mid September—severe storms and flooding that dropped huge amounts of rain in very short periods of time. This caused severe flash flooding conditions in various areas within those two counties. It certainly was not the most common flood event, as much of the damage was in locations outside of identified flood hazard areas. The Town of Griffith, Town of Highland, and City of Evansville were hit particularly hard. There were reports of numerous flooded homes, collapsed basement walls, and similar damage. It was later known that the devastation caused by the storms and flooding also spread to the east of Vanderburgh County over into a portion of Warrick County.

On October 6, 2006, President Bush signed a Disaster Declaration, authorizing federal disaster assistance for flood victims in Lake, Vanderburgh, and Warrick counties. The following is a summary of disaster recovery activities as reported by the Federal Emergency Management Agency (FEMA), as of close of business November 15:

- A total of 5,380 Indiana residents has applied for federal disaster assistance in the three disaster designated counties—4,498 in Lake, 851 in Vanderburgh, and 31 in Warrick counties.
- A total of \$9,056,440 in Housing Assistance grants has been approved—including \$7,594,039 (2,694 approved claims) in Lake, \$1,418,334 (524) in Vanderburgh, and \$44,066 (23) in Warrick counties. Disaster housing assistance comes in the

form of grants for temporary housing needs and for homeowners to make essential repairs.

- A total of \$768,387 in Other Needs Assistance (ONA) grants has been approved—including \$690,451 (850 approved claims) in Lake, \$76,234 (109) in Vanderburgh, and \$1,700 (2) in Warrick counties. ONA provides for uninsured or under-insured disaster-related necessary expenses and serious needs, which may include grants for medical, dental, personal property, transportation and other expenses that FEMA approves.
- The U.S. Small Business Administration (SBA) has approved 241 low-interest disaster loans, total \$5,747,200 (239 home and 2 businesses) — including \$4,604,500 (189 approved for home loans) and \$111,700 (2 approved for business loans) in Lake and \$1,031,000 (50 for homes) in Vanderburgh counties. No disaster loans have been approved as yet in Warrick County.
- Disaster Recovery Centers in the affected areas have served nearly 1,700 residents, providing information about disaster assistance, Internal Revenue Service (tax) issues, mental health counseling, ways to reduce damages from future storms, and assistance completing SBA disaster loan applications. ☸



*State and local crews tackle the tons of flood-damaged personal property left behind in Lake County.  
(FEMA Photo by Gene Romano)*

# PRECIPITATION REPORT FOR JULY THROUGH DECEMBER 2006

In a reversal from the trend of the previous two months, July 2006 was overall drier than normal in most areas in Indiana. However, there were some significant localized events. On the 11<sup>th</sup>, up to nine inches of rain fell in extreme northern Indiana. On the following night, two to more than five inches of rain fell in northern Clinton and southern Carroll counties causing localized flash flooding.

Most of Indiana received below normal to near normal rainfall, while some areas had significant rainfall during August. The more notable and larger rain event occurred from the 26<sup>th</sup> through the 28<sup>th</sup> when rain of one to more than six inches fell in portions of east central and southern Indiana. Significant flooding occurred in portions of Jennings and Jackson counties as a result of the excessive rain.

September ended the slightly warmer and generally drier trends of July and August. After a dry start to the month, two significant rain events occurred during the second and third weeks of September. The heaviest rainfall of the month for southern Indiana occurred from the 22<sup>nd</sup> through the 24<sup>th</sup>. Rain

of one to more than eight inches fell generally south of Interstate 70 during this period.

The cool and wet ways of September continued into October. A moist weather system dumped two to three inches of rain on much of central and southern Indiana during the 16<sup>th</sup> and 17<sup>th</sup>. Another moist weather system resulted in one and one-half to two and one-half inches of rain during the 26<sup>th</sup> and 27<sup>th</sup> on much of central and southern Indiana, where significant rain had fallen only ten days earlier. Monthly rainfall overall was above normal and ranged from four to seven inches. Rain fell on ten to eleven days during the month.

Although November began on the dry side, two small rain events kept the larger portion of Indiana on the wet side. Rainfall on the 30<sup>th</sup> allowed the above normal rainfall of the past two months to continue in most areas.

December was also a wet month with four significant rain events during the month. Because of the very wet conditions, streams and rivers rose almost immediately after each rain. Monthly rainfall was above normal, with most areas receiving between four and six inches of rain. Snowfall during December was below normal. ❄️



KEY:

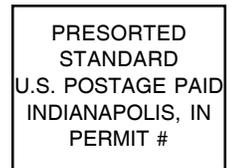
ACTUAL (INCHES)  
NORMAL (INCHES)



Locations	July 2006	August 2006	September 2006	October 2006	November 2006	December 2006	Totals 2006
CHICAGO	3.70	2.95	5.85	4.04	3.61	3.18	41.87
IL	3.51	4.52	3.27	2.71	3.01	2.43	36.17
SOUTH BEND	8.66	4.66	3.53	4.51	3.33	3.55	45.00
IN	3.73	3.98	3.79	3.27	3.39	2.53	39.14
FORT WAYNE	5.41	3.17	2.77	4.35	2.39	4.78	42.16
IN	3.58	3.60	2.81	2.63	2.98	2.06	34.75
INDIANAPOLIS	3.98	3.01	3.53	5.45	4.25	5.24	51.04
IN	4.42	3.82	2.88	2.76	3.61	3.03	40.95
EVANSVILLE	6.46	7.41	8.75	5.46	4.95	4.59	66.18
IN	3.75	3.14	2.99	2.78	4.18	3.54	44.27
LOUISVILLE	4.53	5.14	9.79	4.31	2.91	3.14	64.12
KY	4.30	3.41	3.05	2.79	3.81	3.69	44.54
CINCINNATI	4.03	1.90	6.21	4.48	2.08	3.46	46.49
OH	3.75	3.79	2.82	2.96	3.46	3.28	*41.11

Note: \*Normal values not updated for January, February, April, May, and June. Official and certified climate data can be accessed at National Climatic Data Center (<http://www.ncdc.noaa.gov/oa/ncdc.html>)

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## **THANK YOU**

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Editor – Anita Nance

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