WATERLINES

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

DIVISION OF WATER
INDIANA DEPARTMENT OF NATURAL RESOURCES
FALL-WINTER 1998

NATURAL DISASTER STRIKES INDIANA

On July 22, President Bill Clinton declared the existence of a major disaster in the State of Indiana and ordered Federal aid to supplement state and local recovery efforts in the areas struck by severe storms, tornadoes and flooding on June 11, through July 7, 1998. The President's action made Federal funding available to affected local governments in a thirteen county area. The counties included Fayette, Franklin, Gibson, Greene, Howard, Knox, Lawrence, Monroe, Montgomery, Orange, Owen, Putnam and Vigo counties.

A large-scale weather pattern produced a series of thunderstorms, straight-line winds, tornadoes and rainfall of 1 to 6 inches over a period of several weeks. Total rainfall amounts of 6 to 12 inches were common across the southern two-thirds of the state. The National Weather Service confirmed that Indianapolis experienced the second wettest June on record with over ten inches of rainfall.

Governor Frank O'Bannon directed execution of the State emergency operations plan on June 11, and declared a state of emergency on June 12. The State Emergency Operations Center was activated on June 11, and staffed around the clock through June 30. The State National Guard was activated to assist local governments in sandbag placement and delivery efforts, debris removal and road restoration grading. The Department of Natural Resources' (DNR) river rescue personnel were utilized at critical locations to provide an immediate response capability in case water rescue, evacuation or crews and equipment for debris removal assistance were needed.

The local American Red Cross (ARC) coordinated with local officials to open shelters in the affected areas. In addition, the ARC and Salvation Army assisted in the distribution of clothing and clean-

Also in this issue

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Director, Department of Natural Resources

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up kits, as well as the feeding of displaced residents and emergency personnel. Local emergency management offices were committed throughout the series of events providing services such as evacuation, sheltering, traffic control, debris clearance and damage assessment.

Two deaths and 20 injuries have been associated with this event. Eight hundred and seventy-seven homes were affected as follows: 70 destroyed; 182 with major damage; 224 with minor damage; and, 401 otherwise affected. The primary impact to the affected counties was damage to roads and bridges.

Information obtained from the Preliminary Damage Assessment teams indicated that approximately 381 of the homes categorized as destroyed or having major or minor damage, resulted from wind damage and approximately 80 percent were covered by insurance. The remainder of homes in this category were flood-damaged properties with approximately 25 percent covered by flood insurance.

The DNR Division of Water sent out a reminder to those affected NFIP participating communities regarding the need to require permits for reconstruction. Reconstruction permits for those structures within the Special Flood Hazard Areas incurring damage from flooding or by means other than floodwaters are required in accordance with the local floodplain ordinance.

ADVERSE POSSESSION – WHOSE LAND IS THIS?

One of the ancient concepts of property law is the doctrine known as "adverse possession," sometimes referred to as "prescription." Like many other points of real estate law, this rule dates back to feudal english common law. It is a means of acquiring title by someone who did not acquire the property by purchase, gift or inheritance. These are the cases where property is taken over by a "squatter;" that is, someone who does not originally own the property. These cases arise most frequently in two situations: 1) boundary line disputes, and 2) building infringements.

Say, for example, that your neighbor hires a surveyor to find the old survey markers that show the original edges of his property. When he gets the results, he gives you some startling news. One side of your garage sets two feet over on his side of the line. What are your rights? It may be that you now own the property due to the operation of this law.

The legal requirements for gaining ownership of someone else's property are rather strict.

First of all, the "squatter" must continuously exert open and notorious control. That means the adverse possession must be so visible and clear that the record owner should be fully aware of the existence of the encroachment. It must be the kind of situation where the non-owner would be exposed to a lawsuit for trespass and eviction at all times during the time of the possession.

Also, the wrongful possession must be continuous and uninterrupted for at least 10 years. Periodic or sporadic acts of ownership are not sufficient to constitute adverse possession. You cannot claim part of your neighbor's yard by mowing it occasionally. Remember, too, that this law only applies where the use of the land is adverse. That means that you cannot gain title through this approach if you are there with permission, or through a lease, rental, easement or other agreed arrangement.

Indiana statutes further require that the adverse party pay any taxes that are known to be due on the tract in question. If the area is large or includes a separate building, this would be important to prove. The cases, however, say that this requirement is satisfied in a boundary line dispute where the adjoining adverse possessor paid taxes assessed according to the tax duplicates, even if the tax statements do not expressly include the

strip in question. This would be especially true where, as in our example, you are paying taxes on the garage that was built on the contested land.

Boundary line fences often become a similar problem. The mere act of erecting a fence two feet over into your neighbor's yard will not give you a new property line. Likewise, there is no reason to fear the better practice of setting the fence two feet back on your own property so you can maintain both sides without trespassing on your neighbor. Courts have decided, however, that where all the other tests have been met, farming land seasonably to the fence line for the 10-year period is sufficient to establish adverse possession.

Generally, if adjoining owners agree upon a division line, and each occupies up to such line for the 10-year period, then the line may become the legal boundary. There is a rule that a landowner who takes possession of someone else's land under mistake as to the boundary line for the required period acquires title as against the real owner.

All this means is if you think your neighbor may be infringing on your property, you must take some legal action to get the issue resolved within 10 years or you may lose the right to recover your property. Also, successive periods of possession by different persons may be tacked together for computing the 10 years, so the sale of the neighbor's property won't help. Even so, if the facts are not clear, presumptions about ownership generally are in favor of the holder of the record title. Record title is the highest evidence of ownership and it is not easily defeated.

This article is provided for the general information of the reader in regard to the subject covered. It is not intended as a legal opinion on specific issues and should not be used to solve individual problems. Opinions expressed in this article are the opinions of the author and are not the opinions of the Department of Natural Resources. If legal advice or other expert assistance is required, the services of a competent professional should be sought. David Ford is general counsel for Indiana Farm Bureau Inc.

**reprinted from the October 1998 issue of The Hoosier Farmer ; article by David Ford* ≈

CONFERENCE CORNER

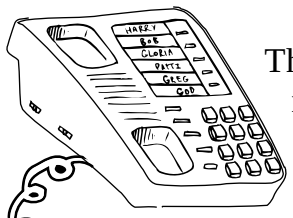
ASFPM Conference

The Association of State Floodplain Managers (ASFPM) 23rd Annual Conference will be held on May 23-28, 1999 in Portland, Oregon. The theme of the conference is "Planning Ahead: Flood Loss Reduction in the 21st Century". Contact the ASFPM Executive Office at (608) 274-0123 or through e-mail at asfpm@floods.org for more information.

Floodproofing Workshop

The Association of State Floodplain Managers, Federal Emergency Management Agency, and the U.S. Army Corps of Engineers is sponsoring a "National Floodproofing Workshop" in Baton Rouge, Louisiana in February, 1999. Contact the ASFPM Executive Office at (608) 274-0123 for more information. ≈

DID YOU KNOW?



The Division of Water has a new toll free number for use within the state of Indiana. The new number is 1-877-Water55 or 1-877-928-3755. ≈

WHAT'S GOOD ABOUT A FLOOD?

Floods cause disasters, but they can also be beneficial. Whenever a river overflows its banks, it dumps sand, silt and debris that it has carried downstream onto the surrounding land. After the flood waters move away, the soil is more fertile because of the organic matter and minerals in this material. That is, as long as there's not too much sand!

Farmers since the time of the ancient Egyptians have known about the benefits that a flood can bring. Indeed, the ancient Egyptians planned their farming, and their lives around the regular flooding of the Nile. They learned over time that, the higher the flood, the better that year's harvest would be.

**reprinted from NOVA. Online.* www.pbs.org. *1997*

2nd INAFSM CONFERENCE UPDATE

On October 28 – 30, 1998 the Indiana Association for Floodplain and Stormwater Management held its second annual meeting and conference at Turkey Run State Park. The 2 ½ Conference had over 70 participants. Presentations were made on such topics as the Floodplain Managers certification program, Mitigation success stories in floodplain and stormwater management in Indiana, community floodproofing projects, Project Impact in Indiana, and a National Flood Insurance Program Training workshop. Representatives from the Association of State Floodplain Managers, U.S. Army Corps of Engineers, Federal Emergency Management Agency, Indiana Department of Natural Resources and many of the state's River Basin Commissions were on hand for the event. Conference highlights included: the INAFSM award for excellence in stormwater management presented to Mike Spencer, Tippecanoe County Surveyor, the INAFSM award for excellence in floodplain management presented to the Maumee River Basin Commission, the INAFSM award for most improved floodplain management program presented to Utica, Indiana, and the Chairman's Award for outstanding service to INAFSM presented to Gregory Main of IDNR.

STREAMLINING THE FLOODPLAIN INFORMATION PROCESS

In an effort to better serve the public and local officials, the Hydrology and Hydraulics Section (H&H) has been reviewing how requests for floodplain information are handled. They have reviewed internal procedures and are developing ways to streamline the process and reduce response time. The recommendation letters many of you are familiar with will soon be changing. H&H will begin replying to requests for floodplain information with a summary form and general information attachments.

The summary form, shown on the next page, will include site-specific information such as location, base flood elevation, and the engineer who worked on the file. Several attachments are being developed to provide general information in an organized format. The H&H Section currently sends this information out in their letters. This includes, but is not limited to, general bridge and cross section information.

The H&H Section is also developing a Survey Information Guidelines report that will describe in detail the data expected when survey data is requested for a recommendation letter or permit. Labeled pictures of bridge cross sections will be provided for reference. The guidelines are currently in draft form and will be available in the Spring from the H&H Section or on the Division's website (www.ai.org/dnr/water).

The H&H Section welcomes your comments and questions. They can be reached at 317/232-4164 or toll-free in Indiana at 1-877-WATER55.

THIS IS NOT A PERMIT

STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES

FLOODPLAIN INFORMATION DETERMINATION

File: REC#99-981207-1 **Request Received:** December 7, 1998

Applicant/Agent: John Q. Public
123 Main Street
Hometown, IN 99999

Owner: Johnny B. Good
101 Ransom Hills
Hometown, IN 99999

Site Address: 1913 Flood Drive,
Hometown, IN 99999

Waterbody: Big River

Community: City of Hometown **County & USGS Quadrangle Map:** Columbus - Hometown

Project Site: NE ¼ of Section 34, Township 17 N, Range 5 E, Hometown, Columbus County. A site location map is enclosed.

Project Description: Proposed residential construction.

Base Flood Elevation (BFE) or 100-year Frequency Flood Elev.: 842.0 feet (NGVD) at the upstream limit of the tract ;
841.3 feet (NGVD) at the downstream limit of the tract ;
Elevations are based on a hydraulic model available in this office.

Lowest Floor Elevation: Two feet above BFE recommended.

Floodplain Limits: Parts of the project site are in the floodway of Big River. Portions of the site outside the floodway area and below the BFE are in the floodway fringe area. A floodway map is enclosed.

Permit Requirements: IC 14-28-1 prohibits the construction of residences and abodes in or on a floodway, and other types of projects proposed in the floodway require a permit from the Department. Proposed projects in the floodway fringe do not require a permit unless a dam is to be built. All buildings proposed in the floodway fringe should satisfy the lowest floor elevation requirement. A permit application and instructions are enclosed. **All projects must comply with all applicable federal, state and local permit requirements.**

Other Requirements: You may have to obtain a permit from the U.S. Army Corps of Engineers under the Clean Water Act and/or the Rivers and Harbors Act .

Special Comments: Project site covered by the Flood Insurance Rate Map for the City of Hometown. Community-Panel # 12311999-0040 D. Part in Zone A.

Staff Engineer: Ms. Jane Doe, Hydraulic Engineer, Hydrology and Hydraulics Section. **If you have any questions please contact the staff engineer at (317) 232-4164 or 1-877-928-3755 (in-state toll free). Thank you for this opportunity to be of assistance.**

Date: January 6, 1999

James J. Hebenstreit, P.E.
Assistant Director
Division of Water

Attachments: Site Location Map
Floodway Map
Permit Application and Instructions
General Information- Louisville COE

PC: City of Hometown Planning Commission
Louisville District, Corps of Engineers

A $50,000 Flood Damage Repair Cost Comparison

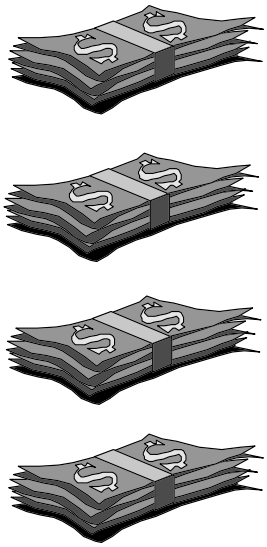
With Flood Insurance:
$100,000 Coverage
$50,000 Flood Damage
\- $1,000 Deductible

$49,000 total Claim Benefit

\- $324 Average Annual Premium

$48,676 Net Benefit

$324
Per Year



+

Without Flood Insurance:
$0 Coverage
$50,000 Flood Damage
$3,732 Annual Disaster Loan Payment

Or

$311 Per Month
($50,000 SBA Loan
@ 4% interest for 20 yrs.)

$3,732 Net Cost

$3,732
Per Year

**reprinted from The Antediluvian, Fall 1998 Issue 2*

PRECIPITATION REPORT FOR JULY THROUGH DECEMBER 1998

The second half of 1998 was an interesting mix of a very wet summer and a somewhat dry fall and winter. This fluctuation occurred simultaneously during a period of unusually warm weather. The wettest weather occurred mostly in the northern third of the state, with the Wabash continuing to flow at high levels.

The spring and summer of 1998 brought the worst agricultural flooding since the summer of 1979. Although flood crests were higher during the summer of 1998 floods, it is believed that damage during the 1979 floods was more extensive. The summer of 1998 was the sixth wettest on record. Precipitation amounts of 24 to 28 inches fell during the summer in a small portion of north central and northeastern Indiana. This rainfall represented 66% to 75% of the normal yearly amount for this region.

The months of July and August contained the highest concentration of precipitation for the latter half of the year, averaging from 5 to 10 inches in north central Indiana to 3 to 6 inches in south central Indiana. The first major flooding in July occurred on the 4th. Three to 5 inches of rain fell in north central Indiana, causing lowland flooding along the Eel River in Miami and Cass counties and along the Mississinewa River in Grant County. A rain event on July 7th brought 3 to 4 inches to the already saturated southwest Indiana, keeping the Wabash River above flood stage from Lafayette to Mount Carmel, Illinois. The rainfall event on the 7th also caused flash flooding along Kelso Creek in Knox County.

A short dry spell followed the precipitation phase until the 19th when warm, humid air returned rain to much of north central Indiana. This occurrence brought 6 to 10 inches of rain to the region. Flash flooding was common during and immediately after this event with the worst floods occurring in Wabash and Miami counties. Historically, the Wabash River was at its highest levels since April 1964 in the city of Wabash. Flooding along Deer Creek in Carroll County was the highest since June 1958. Extensive flooding also occurred along Wildcat Creek in Howard County. The White River experienced a minor rise in Hamilton and Marion

counties during a 1-½ day flood event.

During August, rain continued to pour on parts of Indiana. A rain event beginning on August 3rd and lasting through the 6th dropped another 6 to 10 inches on Grant, Blackford, southern Huntington and southwest Wells counties. This episode brought the Mississinewa and Salamonie rivers to levels not seen in 40 years. The city of Marion was strongly affected by this incident. Flooding caused the near failure of the city's levee. Fortunately, flooding from this event failed to seriously affect the city of Wabash. Most of the rain fell south of the Wabash River and was contained by flood control projects on the Mississinewa and Salamonie Rivers.

The fifth heavy rain event of the summer occurred between August 24th and 25th. A strong storm front developing over southern Michigan deluged the extreme northern part of the state with 3 to nearly 7 inches of rain. Flooding along the St. Joseph River in Dekalb County was the highest since January 1998. For the month of August, this was the highest recorded level since October 1946.

Beginning in September, the weather became drier. In fact, this September was the third driest on record and the driest since 1979. Nearly all of Indiana received below normal precipitation, but all locations obtained some rainfall. The month closed out with above average temperatures. Indiana streams and rivers were at very low levels.

October was a warm month with moderate precipitation. Monthly rainfall totals of 2 ½ to nearly 6 inches fell across the state. However, the only significant rainfall of 2 to nearly 5 inches fell on the 6th and 7th across central Indiana.

November was also a month of moderate precipitation with a few scattered storm events. The largest events occurred on the 9th and 10th. This rainfall caused small rises of 1 to 5 feet in most locations. However, by the end of the month, streams and rivers were again at low flow. As a result, the threat of drought increased over southern Indiana.

As the year closes out, there has been below normal precipitation. The winter season has yet to produce any snow events. The only significant rain event was on December 6th and 7th, when rain fell over most of the state. The highest accumulations were 1 to 1-½ inches in the northern third of the state.

KEY: ACTUAL (INCHES) / **NORMAL (INCHES)**

Airport Locations	July 1998	August 1998	September 1998	October 1998	November 1998	December 1998	Totals 1998
CHICAGO	1.38	6.88	2.34	5.22	2.00	1.12	36.99
IL	**3.66**	**4.22**	**3.82**	**2.41**	**2.92**	**2.47**	**35.82**
SOUTH BEND	2.27	5.84	1.38	1.63	1.18	1.39	33.05
IN	**3.81**	**3.67**	**3.62**	**3.08**	**3.28**	**3.31**	**39.15**
FORT WAYNE	6.00	3.85	1.31	3.90	1.47	0.33	39.25
IN	**3.44**	**3.36**	**2.66**	**2.49**	**2.79**	**2.88**	**34.71**
INDIANAPOLIS	3.97	3.66	0.43	4.93	2.51	0.31	46.27
IN	**4.47**	**3.64**	**2.87**	**2.62**	**3.23**	**3.33**	**39.92**
EVANSVILLE	3.89	3.91	0.51	2.76	2.85	0.52	42.18
IN	**4.03**	**3.10**	**2.97**	**2.87**	**3.72**	**3.67**	**43.11**
LOUISVILLE	9.56	3.16	0.51	2.77	2.16	1.09	47.10
KY	**4.51**	**3.54**	**3.16**	**2.71**	**3.70**	**3.64**	**44.39**
CINCINNATI	4.75	2.67	0.67	2.82	2.21	0.91	48.36
OH	**4.24**	**3.35**	**2.88**	**2.86**	**3.46**	**3.15**	**42.33**

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The work that provides the basis for this publication was supported by funding under a cooperative agreement with the Federal Emergency Management Agency. The author and publisher are solely responsible for the accuracy of the statements, and interpretations contained in the publication. Such interpretations do not necessarily reflect the views of the Federal Government.

THANK YOU

Thank you to those contributing to this issue of Waterlines: Dave Barnhill, Rob Beck, Suzie Delay, Indiana Farm Bureau Inc., David Knipe, Greg Main, Ed Reynolds, and Debbie Smith.

Editor - Nicole Peters

Waterlines is published biannually as a public service by the Division of Water, Indiana Department of Natural Resources. The cooperation and assistance of the National Weather Service is gratefully acknowledged.

Waterlines is available free of charge to interested parties upon request. Call or write:

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