

WATERLINES

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

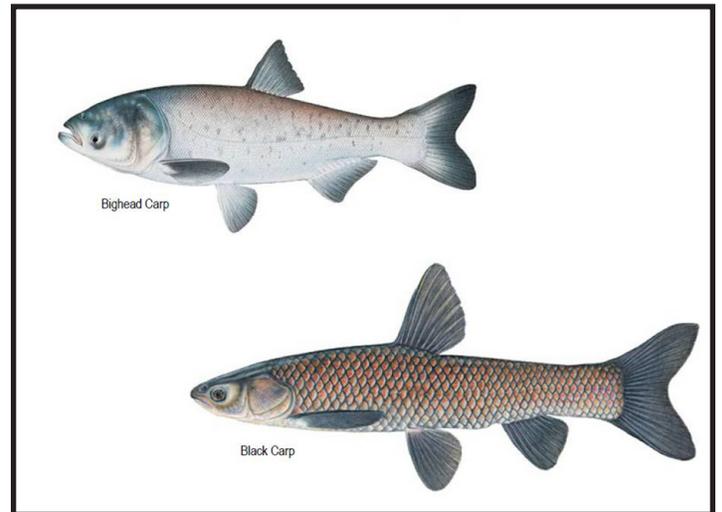
DIVISION OF WATER
INDIANA DEPARTMENT OF NATURAL RESOURCES
WINTER 2011

ONE OF DNR'S MORE UNUSUAL WATER RESOURCE PROJECTS

A chain-link fence by no means is unusual. A chain-link fence in the floodplain, while certainly not encouraged, is not unusual either. But a chain-link fence that is nearly 1,200 feet long, 8 feet high, and bolstered by almost 120 concrete barriers weighing 2 ½ tons as a temporary measure in the floodplain to keep Asian carp at bay *is* an unusual project for DNR.

The numbers document the dimensions of a temporary barrier constructed near Fort Wayne at Eagle Marsh designed to block potential advancement of Asian carp toward the Great Lakes. Construction of the 1,177-foot main fence and a supplemental 494-foot debris catch fence began in early September and was completed in October.

The DNR took a lead role in the temporary fence project after a multi-agency committee identified Eagle Marsh as a potential pathway for Asian carp to move from the Wabash River system into the Maumee River, a tributary to Lake Erie. Although the Wabash and Maumee basins drain in opposite directions and have no direct connection under normal conditions, their waters comingle under certain flood conditions in Eagle Marsh. Eagle Marsh, a 716-acre wetland preserve, is a Natural Resources Conservation Service wetland restoration site operated by the private Little River Wetlands Project and co-owned by the DNR.



Top: Bighead Carp; Bottom: Black Carp.
(Image from USGS Scientific Investigations Report 2005-5041)

Eagle Marsh is located where, under specific conditions, excess flood waters from the St. Marys River can spill into drainage leading to the

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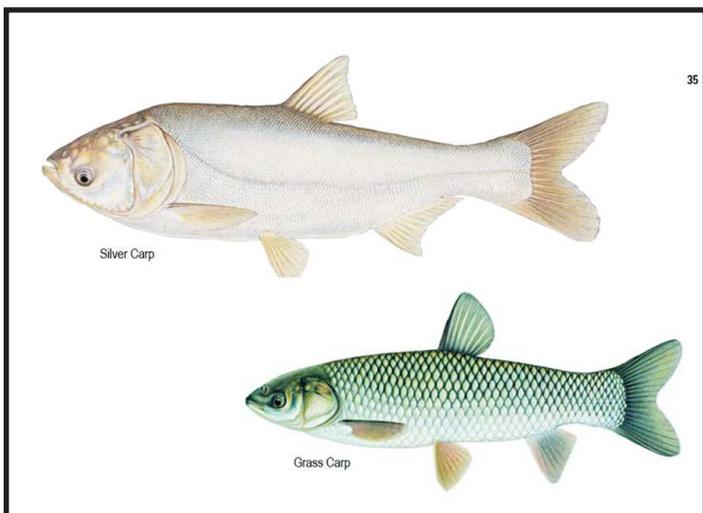
Wabash River, where Asian carp are known to exist. It is under these flow conditions that the Asian carp potentially could migrate upstream and into drainage leading to Lake Erie. The DNR pursued the mesh fence barrier as a short-term option while the U.S. Army Corps of Engineers and other federal agencies develop a permanent solution. The U.S. Environmental Protection Agency funded the temporary project.

While blocking passage of adult Asian carp is a primary goal of the temporary fence, its primary function is to avoid blocking flood flow. The fence has multiple design components to ensure unrestricted movement of water to avoid



Newly installed Asian carp barrier fence, including high-tech, real-time flood gage provided by the USGS. Eagle Marsh Wetland Preserve. (Photo provided by U.S. Army Corps of Engineers)

alteration of flood flow. As an added component of floodwater monitoring, the U.S. Geological Survey stepped up to provide for the installation of high-tech, real-time, flood stage gaging on the fence. The instrumentation will measure water levels in an effort to ensure the fence does not block water flow during significant flooding events.



Top: Silver Carp; Bottom: Grass Carp. (Image from USGS Scientific Investigations Report 2005-5041)

Asian carp refers to several species of fish originating from Asia. Three species of the non-native fish—bighead, silver and black carp—were imported to the southern United States to keep aquaculture ponds clean and to provide fresh fish for markets. Some of the fish escaped into the Mississippi River system in the 1980s and 1990s after flooding. The fish have expanded their range northward ever since. Bighead and silver carp were first detected in Indiana in the late 1990s in the Lower Wabash River. Since then, they have moved up the Wabash, East Fork and West Fork of the White River, Patoka River, and the Ohio River and some of its tributaries in southern Indiana. 🌊

CONGRATULATIONS ARE IN ORDER



Indiana now has 81 Certified Floodplain Managers (CFMs). Or is it 82? The most recent additions are Aaron Briles of Randall Miller & Associates (Muncie office); Zach

Michels, Steuben County Plan Director; and Brittney Montgomery, floodplain administrator for the Town of Clarksville. However, we must claim one more. Ashley Webb Newnam may currently reside in Cincinnati but she is a Hoosier native and zoning administrator for Dearborn County, Indiana. All four CFMs successfully completed the exam in September. Congratulations to Aaron, Zach, Brittney, and Ashley!

This national program for professional certification of floodplain managers was established by the Association of State Floodplain Managers. The program recognizes continuing education and professional development that enhance the knowledge and performance of local, state, federal and private-sector floodplain managers. ☸

WORKSHOP ON JANUARY 26

Every other year, the Division of Water offers a workshop that puts the focus on a community's responsibilities under the National Flood Insurance Program (NFIP). It is an opportunity to look at basics such as floodplain mapping, proper permitting procedures, elevation requirements, elevation certificates and examples of properly permitted structures. Community officials who are new or just want a refresher are encouraged to attend.



This workshop will be held Wednesday, Jan. 26, at the Indiana Government Center South Conference Center, 302 W. Washington St. in Indianapolis, from 9:30 a.m. until 3:30 p.m. EST in Conference Room B. There is no fee for this workshop.

For more information or to register for the workshop, contact Anita R. Nance at anance@dnr.IN.gov or (317) 234-1110 by Jan. 21. ☸

CFM EXAM OFFERING — MARCH 7

Are you ready to be Indiana's next Certified Floodplain Manager (CFM)? The DNR Division of Water will again proctor the CFM exam on March 7, at the Indiana Government Center South in Indianapolis. A short refresher session will be held before the exam. Applications for the exam must be made in advance through the Association of State Floodplain Managers (ASFPM). For specific information on the location and times, contact Anita Nance at anance@dnr.in.gov. To apply for the exam or to learn more information about the CFM program, go to floods.org. ☸

REMINDER

As the Indiana Floodplain Mapping Initiative progresses, our communities are getting new floodplain maps. If your community will be getting new floodplain maps, remember that it is critical for your community's floodplain ordinance be updated in time to adopt the new floodplain maps before these maps take effect.

A community has a six-month window prior to the effective date of their new floodplain maps to complete this requirement. Failure to update the ordinance within the time allowed will result in the community's suspension from the National Flood Insurance Program (NFIP). That means flood insurance would not be available in your community.

If your community's ordinance needs a general update, the DNR may suggest that the entire ordinance be updated. In either case, communities should submit a draft of the ordinance to the DNR for review *prior to adoption* and well in advance of the effective date of new floodplain maps. This prevents delays with the ordinance approval process.

So, if and when your community has new floodplain mapping, pay heed to those letters and other reminders from the Federal Emergency Management Agency (FEMA) and DNR. It is important to keep in good standing with the NFIP. ☸

GOLD PROSPECTING — YES, WE HAVE RULES FOR THAT

With the price of gold rising to more than \$1,300 an ounce, it's easy to understand why some people might want to pan for gold. Most of the gold found in Indiana's streams is found in tiny nuggets, perhaps better described as minute particles, grains or flakes. The particles can be sifted from the bottoms of creeks and rivers, especially south of Indianapolis in Brown, Monroe and Morgan counties, where some streams contain the correct leftover ice age glacial gravel for trace amount of gold and/or gemstones.

Be forewarned that panning requires a great deal of patience, the payoff may not be so great, and there are rules. The Indiana Department of Natural Resources adopted new rules in December 2009 aimed to protect the environment and prevent trespassing.

312 IAC 10-2-33.3 "Prospecting" refers to activities conducted in preparation for or to remove hard mineral resources.

312 IAC 10-2-24.5 "Hard mineral resources" means naturally occurring alluvial deposits of the following: Gold, Platinum, Silver, Lead, Copper, Diamonds and other gemstones and other similar materials.

According to 312 IAC 10-5-11 and 312 IAC 6-5-10, prospecting is not authorized in the following non-navigable and navigable waterways.

Non-navigable waterways:

- Cedar Creek in Allen and DeKalb counties, from river mile 13.7 to the confluence with the St. Joseph River
- Galien River in LaPorte County and its tributaries
- North Fork of Wildcat Creek in Tippecanoe and Carroll counties, from river mile 43.11 to river mile 4.82
- South Fork of Wildcat Creek in Tippecanoe County from river mile 10.21 to river mile 0.00



*Gold prospecting with motorized equipment in a central Indiana stream.
(Photo by Jon Eggen, DNR)*

- Trail Creek in LaPorte County and its tributaries
- Tributaries of the East Branch of the Little Calumet River
- Tributaries of the St. Joseph River that have their confluences downstream of the Twin Branch Dam in Mishawaka

Navigable waterways:

- Big Blue River in Harrison, Crawford, and Washington counties, from river mile 57.2 downstream to river mile 11.5
- The East Branch of the Little Calumet River in Porter County
- Lake Michigan
- The Portage Burns Waterway in Porter County
- St. Joseph River in St. Joseph County from the Twin Branch Dam in Mishawaka downstream to the Michigan state line

Prospecting in a non-navigable waterway

Except for those waterways listed in 312 IAC 10-5-11 and 312 IAC 6-5-10, a person may prospect in a non-navigable waterway if they get a written permit from Indiana DNR, Division of Water or comply with the following criteria:

- (1) obtain lawful ingress to and egress from the waterway
- (2) obtain written permission from the property owner(s)
- (3) use one or a combination of the following processes:

- (a) without the use of equipment, such as picking up nuggets
 - (b) use non-motorized equipment, such as pan, sluice box, or pick and shovel
 - (c) use suction equipment, including motorized equipment, having a hand-operative nozzle that has an opening not larger than five (5) inches in diameter
- (4) can not use mercury or other chemicals to assist with the recovery of hard mineral resources
 - (5) prospecting activities can only occur exclusively between sunrise and sunset
 - (6) no mussels are taken as prescribed by 312 IAC 9-9-3
 - (7) no endangered species are taken as prescribed by IC 14-22-34-12
 - (8) nothing in this rule modifies the rights of riparian owners

Prospecting in a navigable waterway

Except for those waterways listed in 312 IAC 10-5-11 and 312 IAC 6-5-10, a person may prospect within the ordinary high watermark of a navigable waterway if they get a written permit from Indiana DNR, Division of Water or comply with the following criteria:

- (1) obtain lawful ingress to and egress from the navigable waterway
- (2) obtain written permission from any affected riparian owner



*Prospectors checking motorized dredge for gold.
(Photo by Jon Eggen, DNR)*



*Sorting particles with a pan.
(Photo by Jon Eggen, DNR)*

- (3) use one or a combination of the following processes:
 - (a) without the use of equipment, such as picking up nuggets
 - (b) use non-motorized equipment, such as pan, sluice box, or pick and shovel
 - (c) use suction equipment, including motorized equipment, having a hand-operative nozzle that has an opening not larger than five (5) inches in diameter
- (4) can not use mercury or other chemicals to assist with the recovery of hard mineral resources
- (5) prospecting activities can only occur exclusively between sunrise and sunset
- (6) no mussels are taken as prescribed by 312 IAC 9-9-3
- (7) no endangered species are taken as prescribed by IC 14-22-34-12
- (8) nothing in this rule modifies the rights of riparian owners

If you would like more information about gold in Indiana, you may be interested in the publication “*Gold and Diamonds in Indiana — an update (2005)*,” by the Indiana Geological Survey (IGS). It can be ordered at igs.indiana.edu/survey/bookstore. For more information on Indiana’s regulations for recreational prospecting, e-mail the DNR Division of Water at water_inquiry@dnr.IN.gov or call toll free, 877-928-3755. ☞

CONFERENCE CORNER

INAFSM

The Indiana Association for Floodplain and Stormwater Management (INAFSM) Annual Conference was an enjoyable experience for those who attended, Sept. 15-17, at Brown County State Park. Participants enjoyed many interesting and educational sessions while having the benefit of the beautiful surroundings.

Congratulations to the following individuals and organizations for winning the 2010 INAFSM awards.



- Excellence in Stormwater Management — *Jason Armour, Town of Fishers*
- Outstanding Stormwater Project — *18th & Macedonia Neighborhood Stormwater Project - Owner: Muncie Sanitary District; Lead Consultant: GRW Engineers*
- Excellence in Floodplain Management — *Kenny Hale, Morgan County*
- Outstanding Floodplain Project — *Indiana Floodplain Information Portal Project - Owner: DNR Division of Water; Consultant: Stantec Consulting Services*
- Excellent Strides in Floodplain Management Program — *City of Anderson Emergency Management Agency*
- Chairman's Award for Outstanding Service in Support of the INAFSM — *Siavash Beik*

The 2011 INAFSM Conference will be held at Pokagon State Park in the luxurious Potawatomi Inn. Additional announcements and information will come in the spring 2011. For conference updates and to learn more about INAFSM, visit inafsm.net. ☞



*David Knipe of DNR Division of Water, and Paul Vidal of Stantec Consulting Service recipients of the Outstanding Floodplain Project Award for the Indiana Floodplain Information Portal Project.
(Photo by Darren Pearson, DNR)*

ASFPM

The Association of State Floodplain Managers will convene the world's largest and most comprehensive floodplain management conference—its 35th annual gathering—the week of May 15-20 in Louisville, Ky.

Throughout the week, 200 industry experts will conduct plenary and concurrent sessions and share state-of-the-art techniques, programs, and resources to accomplish flood mitigation, watershed management, and other community goals. The three-day comprehensive exposition features the materials, equipment, accessories, and services vital to get the job done. Supplementary technical field tours and training workshops provide in-depth training. Numerous networking activities offer additional opportunities to learn from each other. Visit floods.org for conference information. ☞

Frequently Asked Questions



Q: How many (and which) counties now have approximate flood elevations available through the Indiana Floodplain Information Portal (INFIP)?

A: The INFIP can be used for a quick assessment, including approximate regulatory flood elevations, on studied streams in eight Indiana counties—DeKalb, Allen, Adams, Tippecanoe, Hendricks, Hancock, Johnson, and Monroe. For an *official determination*, users can request an “e-FARA,” another feature of the INFIP.

As digital Flood Insurance Rate Maps (D-FIRMS) become available, the number of counties where information will be available through the INFIP will increase. Preliminary D-FIRMS for 24 counties are currently waiting to be finalized. The remaining 60 counties are scheduled to have new D-FIRMS by the end of 2012. Visit the Indiana Floodplain Information Portal at INFIP.IN.gov.

Q: Does elevating a structure on posts or pilings remove a building from the Special Flood Hazard Area (SFHA)?

A: Elevating a structure on posts or pilings does not remove a building from the SFHA. If the ground around the supporting posts or pilings is within the floodplain, the building is still at risk. The structure is considered to be within the floodplain, and flood insurance will be required as a condition of receipt of federal or federally regulated financing for the structure. The reason for this, even in cases where the flood velocity is minimal, is that the hydrostatic effect of flooding can lead to the failure of the structure’s posts or pilings foundation. The effects of ground saturation can lead to decreased load-bearing capacity of the soil supporting the posts or pilings, which

can lead to partial or full collapse of the structure. Even small areas of ponding will be subject to the hydrodynamic effects of flooding; no pond or lake is completely free of water movement or wave action. The movement of water can erode the ground around the posts or pilings and may eventually cause collapse of the structure.

Q: What is the requirement for purchasing flood insurance after receiving disaster assistance?

A: The National Flood Insurance Reform Act requires individuals in Special Flood Hazard Areas who receive disaster assistance after Sept. 23, 1994, for flood disaster losses to real or personal property to purchase and maintain flood insurance coverage for as long as they live in the dwelling. If flood insurance is not purchased and maintained, future disaster assistance will be denied. If the structure is sold, the current owner is required to notify the buyer of the house of the need to purchase and maintain flood insurance. If the buyer is not notified, suffers uninsured flood losses, and receives federal disaster assistance, the seller may be required to repay the federal government and any federal disaster assistance the buyer received.

Q: Will a lending institution automatically waive the flood insurance requirement if a Letter of Map Amendment (LOMA) is issued by FEMA?

A: Although FEMA may issue a LOMA, it is the lending institution’s prerogative to require flood insurance as a condition of its own, beyond the provisions of the Flood Disaster Protection Act of 1973 and the National Flood Insurance Reform Act of 1994, before granting a loan or mortgage. Those seeking a LOMA should first confer with the affected lending institution to determine whether the institution will waive the requirement for flood insurance if a LOMA is issued. If it will, the policy holder may cancel flood insurance coverage and obtain a premium refund. If not, amending the NFIP map to remove the structure from the special flood hazard area will generally lower the flood insurance premium. ☞

INDIANA DEPARTMENT OF NATURAL RESOURCES
DIVISION OF WATER
402 WEST WASHINGTON STREET, ROOM W264
INDIANAPOLIS, INDIANA 46204-2641

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Editor – Anita Nance

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

Division of Water
Indiana Department of Natural Resources
402 West Washington Street, Room W264
Indianapolis, Indiana 46204-2641
Phone: (317)232-4160
Toll free 1-877-WATER55

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