

**Celebrating 20 Years
of Flood Mitigation in
Northeast Indiana
1986—2006**



*Maumee River Basin
Commission*





**2003—2006
ACTIVITY REPORT
OF THE
BOARD OF DIRECTORS**

TO:

MRBC FULL COMMISSION
INDIANA GENERAL ASSEMBLY
CITIZENS OF NORTHEASTERN INDIANA

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MISSION STATEMENT

THE MISSION OF THE MAUMEE RIVER BASIN COMMISSION

**To provide regional leadership
and promotion of flood control
soil and water conservation
and related resource management
through a coordinated and comprehensive
planning and implementing approach.**

MAUMEE RIVER BASIN COMMISSION

ORGANIZATION AND STRUCTURE

The Maumee River Basin Commission was established by State Law (I.C. 36-7-6.1) to assist communities in the Indiana portion of the Maumee Basin to reduce flood losses by exercising sound watershed management. Critical to the success of reducing flooding is implementation of comprehensive structural and non-structural flood control measures basin wide.

To accomplish this, the Commission is composed of representatives from five (5) counties. Each County is represented by the three (3) County Commissioners (or their official designee),

County Surveyor and a member of the Soil and Water Conservation District Board (or their official designee). These members play a critical role in the formulation of policy and program recommendations. In 2001, MRBC entered the Federal Emergency Management Agency's (FEMA's) Cooperating Technical Partner (CTP) Program and coordinates all Floodplain mapping activity in the Maumee River Basin. The Commission also works closely with communities providing assistance and guidance on a multitude of flood mitigation projects.

The MRBC staff provide assistance in the areas of flood control project planning and administration, flood mitigation assistance grant writing, flood map modernization, 319 water quality improvement grant writing, erosion and sediment control, flood insurance, floodplain ordinances, inventories of flood prone properties, storm water and erosion control ordinances, soil and water conservation, and public information programs.

MRBC Sub-Committees

The Maumee River Basin Commission is served by five (5) sub-committees formed to assist the Commission in its Flood-mitigation efforts:

- * **Finance Committee**
- * **Legislative Committee**
- * **Masterplan Implementation Committee**
- * **By-Laws Committee**
- * **Technical Committee**

MRBC Sub-committees of Full Board

Finance Sub-Committee

The Finance Committee of the Maumee River Basin Commission (MRBC), formed in 1997 to comply with requirements of the State Board of Accounts, is comprised of the Full Maumee River Basin Commission Board. The Finance Committee oversees the Board's investment practices, and assists in determining the institutions the Commission conducts business with.

Legislative Sub-Committee

The MRBC Legislative Committee is comprised of Al Frisinger, Allen Co. Surveyor, Steve Baumann, Adams Co. Commissioner, Duane Kiess, Adams Co. SWCD Rep., Larry Gilbert, Steuben Co. Surveyor, and Greg Lake, Allen Co. SWCD Rep. The Legislative Committee assists with legislative matters affecting the Commission. The Committee reviews the Biennium Budget Request submitted by the Commission to the State Budget Agency, and legislation affecting the Commission.

Master plan Implementation Sub-Committee

The Master plan Implementation Committee, formed in 1996, consists of ten members including: a representative from each of the five counties, a Surveyor rep., SWCD rep., Master plan Consultant, IDNR representative and MRBC Executive Director. The Implementation Committee is responsible for reviewing, evaluating and prioritizing requests and making recommendations to the Full Board regarding the implementation of all projects associated with the Commission's Flood Control Master plan. The Master plan Implementation Committee serves as a liaison to the Full Commission. Master plan Implementation Committee Members are: Siavash Beik, Al Frisinger, Dave Nance, Larry Gilbert, Greg Lake, Paul Norr, Brad Stump, Hal Stump, and Rod Renkenberger.

Technical Sub-Committee

The MRBC Technical Committee is comprised of the (5) five County Surveyors, (Al Frisinger, Larry Gilbert, Paul Norr, Mark Strong, Scott Zeigler); (2) representatives of IDNR's Division of Water staff, (Dave Nance, Dave Knipe); Hydrologic/Hydraulic Engineering Consultants; Cole Associates and Christopher B. Burke Engineering, Ltd. and the Executive Director of MRBC. The Technical Committee is responsible for reviewing all technical work of the Commission, proposed ordinances, and forwarding recommendations to the Full Board.

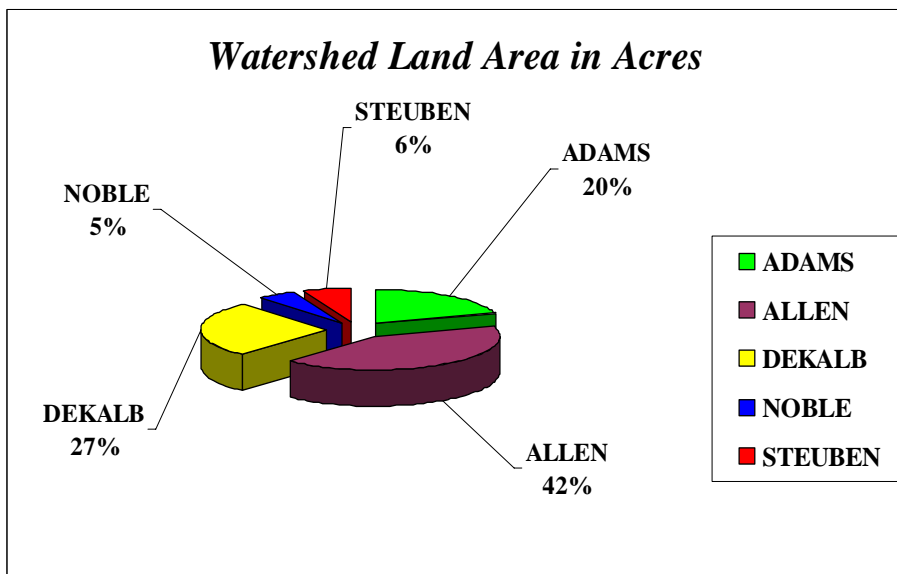
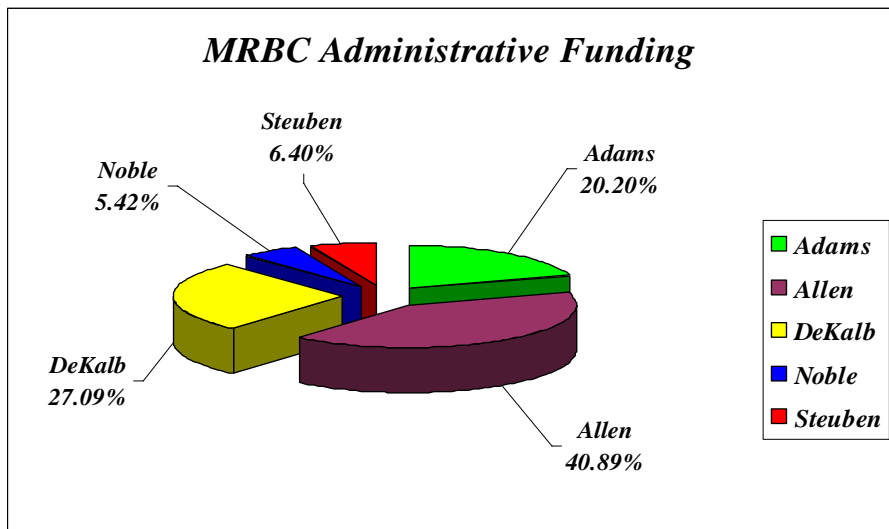
By-Laws Sub-Committee

The By-Laws Committee, formed in 2000, consists of four members including the Commission's Executive Director. Members include Mark Pankop, Mayo Sanders, Al Frisinger, and Rod Renkenberger. The By-Laws Committee is responsible for reviewing the by-laws of the commission and proposing amendments to such as they deem necessary to the Full Board.

Administrative Funding

For the past thirteen years, each of the five participating counties funded MRBC's \$101,500.00 Administrative Budget. Each County contributes according to its percentage of land in the Maumee watershed. The Administrative Budget has been supplemented with Grant Management Funds which are incorporated into Federal Grants MRBC applies for on behalf of local communities within the basin. The grant management funds help offset a portion of the costs associated with managing Federal Grants for MRBC partnering communities. Interest funds generated from the Commission's General Fund are also used to supplement the Administrative Budget.

Maumee River Basin Commission employees the services of a full-time Executive Director, part-time secretarial assistance, and Legal Counsel.



LEGISLATORS REPRESENTING MRBC

<u>LEGISLATOR</u>	<u>DISTRICT</u>	<u>COUNTY(S)</u>
<u>REPRESENTATIVES</u>		
Dennis Kruse⁺	51	DeKalb and Steuben
Richard “Dick” Dodge⁺⁺	51	DeKalb and Steuben
Marlin Stutzman	52	Noble
Mike Ripley	79	Adams and Allen
Ben GiaQuinta	80	Allen
Win Moses	81	Allen
Jeffrey K. Espich	82	Allen
Robert Alderman[*]	83	Allen and Noble
Matt Bell^{**}	83	Allen and Noble
Randy L. Borrer	84	Allen
Phyllis Pond	85	Allen and DeKalb
<u>SENATORS</u>		
Robert Meeks	13	DeKalb, Noble, and Steuben
Charles “Bud” Meeks	14	Adams, Allen, DeKalb, and Steuben
Dennis Kruse⁺	14	Adams, Allen, DeKalb, and Steuben.
Tom Wyss	15	Allen
David C. Long	16	Allen
David C. Ford	19	Adams, and Allen

⁺ Appointed to Senate upon the passing of Senator Charles “Bud” Meeks.

⁺⁺ Appointed to House of Representatives to replace Representative Dennis Kruse.

^{*} Resigned from House of Representatives.

^{**} Appointed to House of Representatives to replace Representative Alderman.

2003-2006 Membership - Maumee River Basin Commission

Member	Affiliation	County
Steve Baumann	Commissioner	Adams
Ed Coil	Commissioner	Adams
Doug Bauman	Commissioner	Adams
Duane Kiess	SWCD Supervisor	Adams
Lynn Selking *	SWCD Supervisor	Adams
Paul Norr	Surveyor	Adams
Linda Bloom	Commissioner	Allen
Marla Irving	Commissioner	Allen
Ed Rousseau	Commissioner	Allen
Nelson Peters **	Commissioner	Allen
Greg Lake	SWCD Supervisor	Allen
Al Frisinger	Surveyor	Allen
William Ort	Commissioner	DeKalb
Connie Miles	Commissioner	DeKalb
Donald Kaufman	Commissioner	DeKalb
Brad Stump ⁺	Proxy for William Ort	DeKalb
Michael Kline ⁺⁺	Proxy for William Ort	DeKalb
Jerry Smith	SWCD Supervisor	DeKalb
Mark Strong	Surveyor	DeKalb
Hal Stump	Commissioner	Noble
Mark Pankop	Commissioner	Noble
Jack Herendeen	Commissioner	Noble
Ed Harper	SWCD Supervisor	Noble
Scott Zeigler	Surveyor	Noble
Dick Dodge [^]	Commissioner	Steuben
Ronald Smith ^{^^}	Commissioner	Steuben
James Crowl ^{^^^}	Commissioner	Steuben
Rodney Wells	Commissioner	Steuben
Mayo Sanders	Commissioner	Steuben
Kevin Willibey	SWCD Supervisor	Steuben
Larry Gilbert	Surveyor	Steuben

* Appointed to replace Duane Kiess.

** Elected as Commissioner replacing Ed Rousseau.

⁺ Resigned from MRBC Board

⁺⁺ Appointed to replace Brad Stump as proxy for William Ort

[^] Appointed to Indiana House of Representatives

^{^^} Elected as Commissioner replacing Dick Dodge.

^{^^^} Elected as Commissioner replacing Rod Wells.

MRBC REGULAR MEETINGS

2003 MRBC Board Meetings

<u>Date</u>		<u>Type</u>	<u>Location</u>
February	06	Full Board	Fort Wayne, IN
March	06	Full Board	Fort Wayne, IN
April	03	Executive Board	Fort Wayne, IN
May	01	Full Board	Fort Wayne, IN
June	05	Full Board	Fort Wayne, IN
August	07	Full Board	Fort Wayne, IN
September	04	Full Board	Fort Wayne, IN
November	06	Full Board	Fort Wayne, IN
December	04	Full Board	Fort Wayne, IN

2004 MRBC Board Meetings

<u>Date</u>		<u>Type</u>	<u>Location</u>
February	05	Full Board	Fort Wayne, IN
March	04	Full Board	Fort Wayne, IN
May	06	Full Board	Fort Wayne, IN
June	03	Full Board	Fort Wayne, IN
September	02	Full Board	Fort Wayne, IN
November	04	Full Board	Fort Wayne, IN
December	02	Full Board	Fort Wayne, IN

2005 MRBC Board Meetings

<u>Date</u>		<u>Type</u>	<u>Location</u>
January	06	Full Board	Fort Wayne, IN
March	03	Full Board	Fort Wayne, IN
April	14	Full Board	Fort Wayne, IN
June	02	Full Board	Fort Wayne, IN
August	04	Full Board	Fort Wayne, IN
September	01	Full Board	Fort Wayne, IN
November	03	Full Board	Fort Wayne, IN
December	01	Full Board	Fort Wayne, IN

2006 MRBC Board Meetings

<u>Date</u>		<u>Type</u>	<u>Location</u>
February	02	Full Board	Fort Wayne, IN
May	04	Full Board	Fort Wayne, IN
June	01	Full Board	Fort Wayne, IN
August	03	Full Board	Fort Wayne, IN
October	05	Full board	Fort Wayne, IN
December	07	Full Board	Fort Wayne, IN

MRBC EXECUTIVE BOARD MEMBERS

2003 MRBC Executive Board

<u>Member</u>	<u>Position</u>	<u>County</u>
Steve Baumann	President	Adams
Mark Pankop	1st. V-President	Noble
Al Frisinger	2nd. V-President	Allen
Greg Lake	Secretary	Allen
Brad Stump	Treasurer	DeKalb
Duane Kiess	SWCD Representative	Adams
Larry Gilbert	Surveyor's Representative	Steuben
Steve Adair	Legal Counsel	Allen

2004 MRBC Executive Board

<u>Member</u>	<u>Position</u>	<u>County</u>
Al Frisinger	President	Allen
Mark Pankop	1st. V-President	Noble
Steve Baumann	2nd. V-President	Adams
Greg Lake	Secretary	Allen
Brad Stump	Treasurer	DeKalb
Duane Kiess	SWCD Representative	Adams
Larry Gilbert	Surveyor's Representative	Steuben
Steve Adair	Legal Counsel	Allen

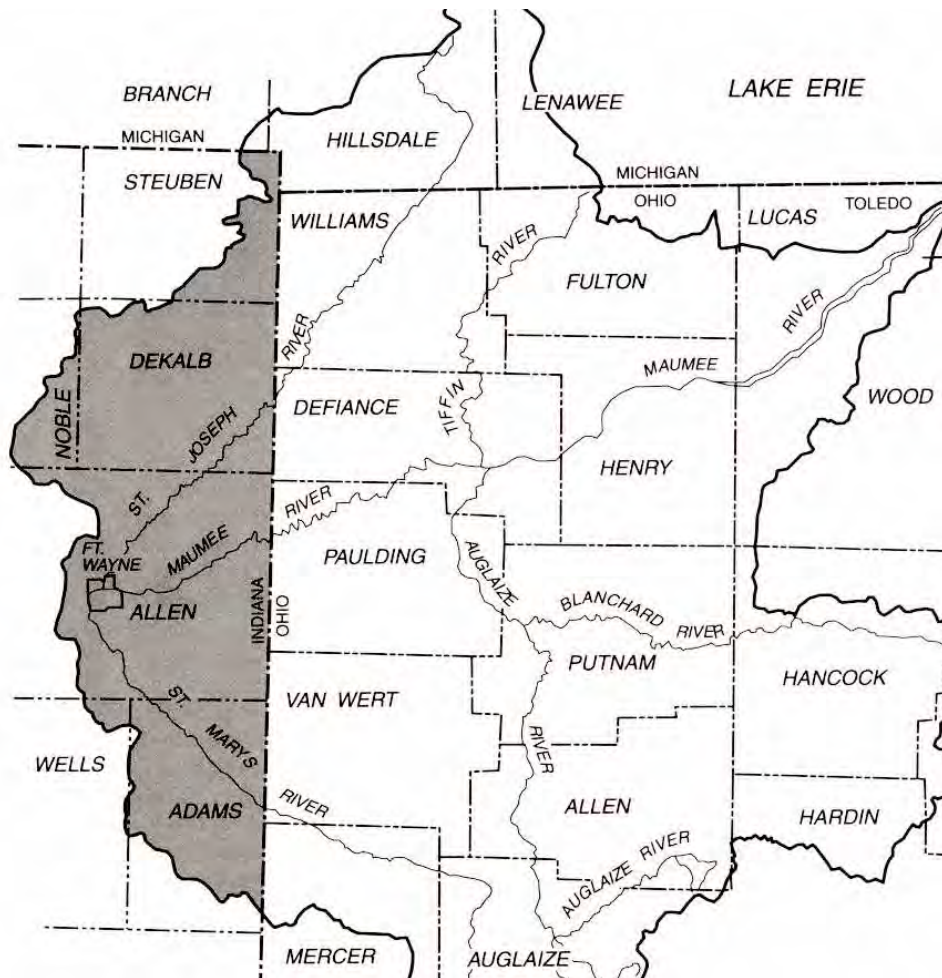
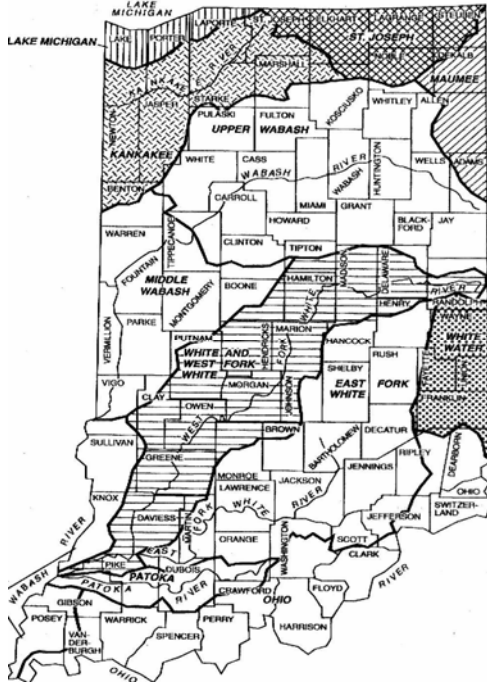
2005 MRBC Executive Board

<u>Member</u>	<u>Position</u>	<u>County</u>
Al Frisinger	President	Allen
Mark Pankop	1st. V-President	Noble
Steve Baumann	2nd. V-President	Adams
Greg Lake	Secretary	Allen
Brad Stump	Treasurer	DeKalb
Lynn Selking	SWCD Representative	Adams
Larry Gilbert	Surveyor's Representative	Steuben
Steve Adair	Legal Counsel	Allen

2006 MRBC Executive Board

<u>Member</u>	<u>Position</u>	<u>County</u>
Al Frisinger	President	Allen
Mark Pankop	1st. V-President	Noble
Steve Baumann	2nd. V-President	Adams
Greg Lake	Secretary	Allen
Mike Kline	Treasurer	DeKalb
Lynn Selking	SWCD Representative	Adams
Larry Gilbert	Surveyor's Representative	Steuben
Steve Adair	Legal Counsel	Allen

Maumee River Basin Map



MAUMEE RIVER BASIN FLOOD CONTROL MASTERPLAN

Masterplan



Accomplishments

- ◆ **Education - Public Awareness**
- ◆ **Uniform Ordinances**
- ◆ **No Adverse Impact (NAI) Initiative**
- ◆ **Retrofitting Cost-Share Assistance**
- ◆ **Voluntary Residential Buy-Out**
- ◆ **July 2003 “Firecracker Flood”**
- ◆ **Stream Obstruction Removal**
- ◆ **Voluntary Agricultural Land-Use Conversion**
- ◆ **Flood Hazard Area Identification**
- ◆ **FEMA Map Modernization Program**
- ◆ **Cooperating Technical Partners (CTP) Program**
- ◆ **Localized Flood Mitigation / Erosion Control**

**MRBC Board Members
dedicate Public Education
and Outreach Program
in honor of the late
Dale Hughes, Jr.**

* * * *

The Maumee River Basin Commission Board of Directors recognized the contributions and leadership given MRBC by Hughes, who was a founding Board Member and had served as MRBC Board President for nine years.

Hughes was known for his commitment to "Do What Is Right".

Dedicating the Public Education and Outreach Program in his honor will ensure perpetuation of Hughes commitment and leadership to sound floodplain management in northeastern Indiana.

**DO
IT
RIGHT

OR

DON'T
DO
IT!**

**Public Education
&
Outreach Program**

MAUMEE RIVER BASIN COMMISSION

Dale Hughes Jr. Public Education & Outreach Program

The Board of Directors dedicates the Commission's Public Education & Outreach Program to former Board President Dale Hughes Jr. in recognition of Mr. Hughes' commitment to sound Floodplain Management.

Dale Hughes Jr.

The late Steuben County Commissioner Dale Hughes Jr. who passed away unexpectedly on February 6, 2002 had been re-elected as President for the year 2002 by the Maumee River Basin Commission Full Board at its December 2001 meeting. Commissioner Hughes chaired the Commission's January 3rd meeting, making it his 9th year as President of the five-county board. Commissioner Hughes was one of only three (3) Charter Members still serving on the Board which was founded in 1986. Mr. Hughes served in the most faithful, unselfish manner; always there; always ready to serve; always willing to "go that extra mile"; always wanting MRBC to "do it right". Mr. Hughes was notorious for stating, "If we are going to do it, then let's do it right, or not at all".

That said, the Maumee River Basin Commission will honor Mr. Hughes words making a commitment to "do it right" while implementing its Flood Mitigation Programs.

To succeed, MRBC must continue to provide a mechanism by which the general public can be informed and educated about sound floodplain management.



Members of the late Dale Hughes Jr. Family were presented with a plaque honoring the former MRBC Board President by dedicating the Commission's Public Education and Outreach Program as the "Dale Hughes Jr. Public Education and Outreach Program".



Disaster Mitigation Act (DMA) 2000 Training Session

MRBC partnered with the Indiana Department of Homeland Security (IDHS) and Federal Department of Homeland Security / Federal Emergency Management Agency (DHS / FEMA) to provide an All Hazards Mitigation Plan Training Session for Northeast Indiana communities on February 13, 2003. The training session was held in the DeKalb County Annex Building in Auburn with Jan Crider and Mary Moran representing IDHS and Larry Sanders representing DHS / FEMA Region V. Representatives from Adams, DeKalb, LaGrange, Noble, Steuben, and Whitley Counties attended the day-long session. All counties are required to have an adopted and approved Multi-Hazard Mitigation Plan to be eligible for Federal Grant Funds following a disaster.



Decatur Board of Zoning Appeals (BZA) Training Session

MRBC coordinated a Floodplain Management Educational Training Session between the Decatur BZA Board and State National Flood Insurance Program (NFIP) Coordinator Greg Main. Mr. Main focused on requirements of the National Flood Insurance Program and instructed BZA members on how to deal with variance applications



Floodplain Management 101 Seminar

MRBC partnered with the Indiana Department of Natural Resources (IDNR) to provide a Floodplain Management 101 Seminar on September 27, 2005 for Northeast Indiana local officials. Anita Nance of the IDNR Floodplain Management Section gave a comprehensive overview of the National Flood Insurance Program and Indiana's more restrictive regulations.



National Weather Service Presentation

National Weather Service (NWS) northern Indiana gave a presentation to the MRBC Board and members of the general public on June 3, 2004. NWS Service Hydrologist Greg Lamberty and Warning Coordination Meteorologist Steve Eddy hi-lighted the agency's Advanced Hydrological Prediction Service (AHPS) Website and demonstrated how members of the general public could access the NWS website and monitor river levels to help distribute Flood Warning Information when feasible.



THE MITIGATOR



MAUMEE RIVER BASIN COMMISSION

Striving For A Disaster Resistant Community

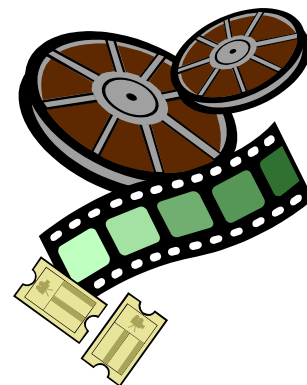
Winner of the **1999 National Local Award For Excellence** from the Association State Floodplain Managers and the **1998 Excellence in Floodplain Management Award** from the Indiana Association For Floodplain and Storm water Management.

“Fate of the River Revisited”-

Locally produced Water Quality Education Film

The Allen County Partnership for Water Quality (ACPWQ) embarked on a mission to update an earlier film dedicated to addressing water quality issues on the Maumee River. The ACPWQ is updating this film to demonstrate to the general public, the progress made to improve water quality over the past 35. The original film was produced in the late 1960's and served to enlighten the public on the misuse of our greatest natural resource-water. Pollution issues included high sediment levels produced from forest clearings, industrial wastes dumped into the river, and chemical runoff. The Clean Water Act was passed in 1972 and created programs for water quality. Today we have communities in the watershed with wastewater guidelines in place, factories are monitoring effluent discharges, and agricultural practices have included decreases in chemical use and increased conservation measures. More needs to be done; pollution still exists in non-point sources. Urban sprawl is infringing on water quality with more runoff of lawn fertilizers and chemicals and more flooding. Failing septic systems in the watershed also contribute to polluting our waterways. Our survival depends on water quality!

The ACPWQ will present this film to schools, civic groups and others. To assist with this public outreach campaign, MRBC Board of Directors approved spending \$1,200.00 from its “All Natural Hazards Awareness” campaign fund to help produce an additional 75 copies of the updated video “Fate of the River Revisited”, for distribution.



Conferences

2003—Association State Floodplain Manager’s (ASFPM) Conference

Director Renkenberger attended the 27th Annual Association of State Floodplain Managers (ASFPM) Conference held in St. Louis, MO May 11-16. National leaders of the Environmental Protection Agency (EPA) and United States Department of Agriculture (USDA) were in attendance to promote the “Watershed Management” concept and to offer their respective agencies as “partners” in flood mitigation projects. Concerns of the Mitigation Division being under the umbrella of the Department of Homeland Security were raised regarding the distribution of future funding. President Bush’s Map Modernization Initiative will focus on updating flood maps nationwide. Speakers again stressed the “No Adverse Impact” (NAI) concept. They also discussed the liability of local officials if the NAI concept is ignored.

2003—Federal Emergency Management Agency (FEMA) National Flood Conference

At FEMA’s invitation and expense, Director Renkenberger attended the National Flood Conference in San Francisco, CA on May 28-30. Director Renkenberger reported that many policy changes are on the horizon regarding floodplain management and the National Flood Insurance Program. The post-disaster Hazard Mitigation Grant Program has been cut in half from 15% to 7.5% of the total disaster amount for mitigation. Other changes will focus on eliminating Repetitive Loss properties in an effort to reduce the strain on the National Flood Insurance Program budget.

2004—Association State Floodplain Manager’s (ASFPM) Conference

President Al Frisinger and Director Renkenberger attended the 28th Annual Association of State Floodplain Managers (ASFPM) Conference held in Biloxi, MS May 16-21. The conference focused on mitigation alternatives with a special emphasis on Coastal Mitigation Projects. An update was given on the progress of President Bush’s Map Modernization Initiative. Speakers again stressed the “No Adverse Impact” (NAI) concept as a low-cost alternative to reducing damages caused by natural hazards. ASFPM will lobby Congress to rescind the legislation that authorized a 50% cut in disaster assistance to affected communities.

2005—Association State Floodplain Manager’s (ASFPM) Conference

President Frisinger and Director Renkenberger attended the 29th Annual Association of State Floodplain Managers (ASFPM) Conference held in Madison, WI May 11-16. The conference focused on the implementation of “No Adverse Impact” (NAI) initiatives as a guaranteed way of reducing damages caused by natural hazards. Damages from natural hazards have continued to rise even though many communities have implemented mitigation projects. The general consensus was that communities need to do more. Lobbying efforts to remove FEMA from the Department of Homeland Security and give it Cabinet Level status are under way. Attendees are concerned about money appropriated for mitigation projects being transferred to other programs under the Department of Homeland Security.

2006—Association State Floodplain Manager’s (ASFPM) Conference

President Frisinger and Director Renkenberger attended the 30th Annual Association of State Floodplain Managers (ASFPM) Conference held in Albuquerque, NM June 11-16. Attendance reached an all-time high of over 1,100 conference registrants in attendance. National representatives from Department of Homeland Security and U.S. Army Corps of Engineers were in attendance to review the devastation of hurricanes Katrina and Rita and to analyze FEMA’s Response and Recovery Operations. FEMA’s Map Modernization Initiative is going through a “Mid-course Adjustment”, with a major emphasis on mapping “accuracy” in lieu of producing numerous maps that have little, if any accuracy at all. Congress was measuring the success of this program based on the quantity of maps produced, which has led to inaccurate maps being produced and published.

Early Flood Warning Detection— “key” to Flood Damage Reduction.

MRBC’s Flood Control Masterplan advocates improving Early Flood Warning Systems to protect lives and property. In addition to the St. Marys River gauge, MRBC also cost-shares with Indiana USGS to maintain a gage on Cedar Creek in Auburn.

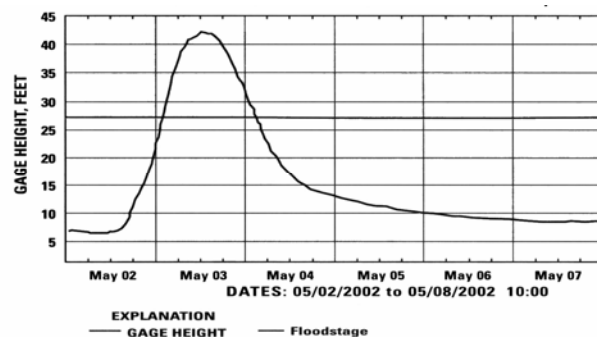
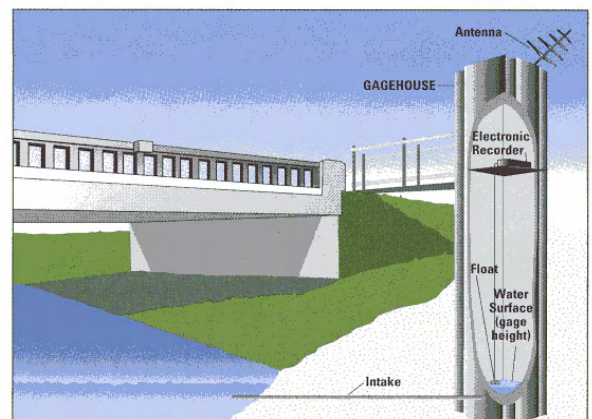
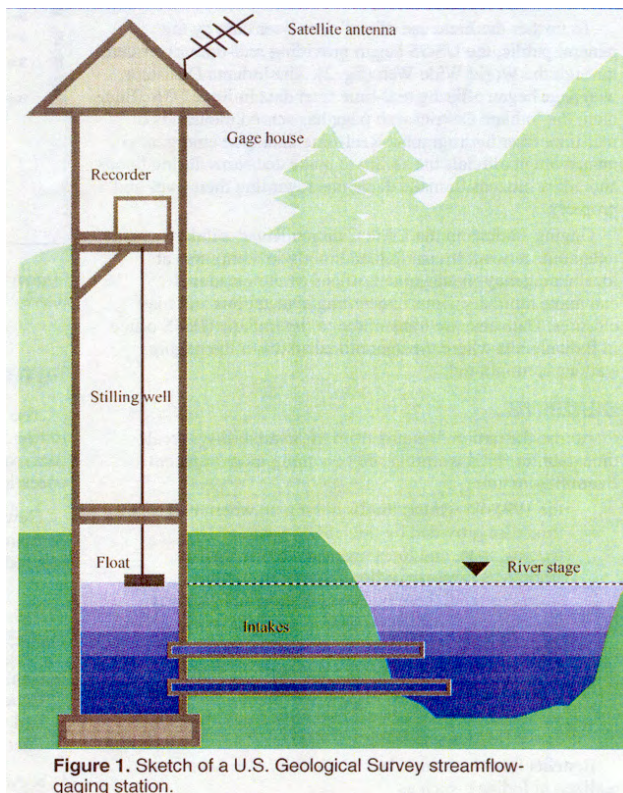
Streamgages—Information on the flow of rivers is a vital national asset that safeguards lives, protects property, and ensures adequate water supplies for the future. The U.S. Geological Survey (USGS) operates a network of about 7,000 streamgages nationwide. A Streamgage is a structure located beside a river that contains a device to measure and record the water level in the river. Generally, these measurements occur automatically every 15 minutes, and at about 5,000 of these streamgages the data are sent via satellite back to a USGS office once every 4 hours, and more frequently in times of flooding. There, USGS computers use a site-specific “rating curve” to convert the water-level (or “gage-height”) data into information about the flow of the river (measured in cubic feet per second).

Early Flood Warning Detection – Partnership with Ohio U.S.G.S.

MRBC coordinated with the Ohio USGS in an effort to re-establish a river gage on the St. Marys River near Rockford, OH. The gage will provide critical flood warning information to Pleasant Mills, City of Decatur, and City of Fort Wayne. MRBC brokered the cost-share agreement for funding the installation and maintenance of this gage. The total cost to install the gage was \$38,000.00, with an annual maintenance cost of \$12,000.00.



Agency	Gage Installation	Gage Maintenance
Ohio USGS	\$17,000.00	\$4,000.00
City of Fort Wayne	\$ 8,000.00	\$2,000.00
City of Decatur	\$ 5,000.00	\$2,000.00
MRBC	\$ 4,000.00	\$2,000.00
Adams Co. EMA	\$ 4,000.00	\$2,000.00



**National Flood Insurance Program's (NFIP)
Community Rating System (CRS)
Program**



The National Flood Insurance Program's (NFIP) **Community Rating System (CRS)** was implemented in 1990 as a program for recognizing and encouraging community floodplain management activities that exceed the minimum NFIP standards. The National Flood Insurance Reform Act of 1994 codified the Community Rating System in the NFIP. Under the CRS, flood insurance premium rates are adjusted to reflect the reduced flood risk resulting from community activities that meet the three goals of the CRS: (1) reduce flood losses; (2) facilitate accurate insurance rating; and (3) promote the awareness of flood insurance.

There are ten CRS classes: class 1 requires the most credit points and gives the largest premium reduction; class 10 receives no premium reduction. The CRS recognizes 18 creditable activities, organized under four categories numbered 300 through 600: Public Information, Mapping and Regulations, Flood Damage Reduction, and Flood Preparedness.



(L-R) Allen County Department of Planning Services staff members Maureen Voors, Catrina Covino, and Director Kim Bowman accept a plaque in recognition of Allen County joining the CRS Program as a Class 9 Community.

**CRS Class Rankings
&
Flood Insurance Premium Discounts**

Credit Points	CRS Class	Premium Discount
4,500	1	45%
4,000-4,499	2	40%
3,500-3,999	3	35%
3,000-3,499	4	30%
2,500-2,999	5	25%
2,000-2,499	6	20%
1,500-1,999	7	15%
1,000-1,499	8	10%
500-999	9	5%
0-499	10	0%



Other communities in the Maumee River Basin joining Allen County in participating in the Community Rating System (CRS) Program include:

- City of Decatur (Class 9)**
- City of Fort Wayne (Class 8).**



ORDINANCES

Fundamental Foundation to Flood Control Masterplan

MRBC continues to challenge local communities to adopt two “model ordinances” identified in the Commission’s Flood Control Masterplan as a “Key” component to successful Flood Mitigation. Model ordinances for “Flood Hazard Areas” and Storm Drainage & Erosion Control” are promoted throughout the entire River Basin as the “Foundation to the Commission’s non-structural Flood Control Masterplan.

NO ADVERSE IMPACT INITIATIVE (NAI)

Flood damages continue to rise, therefore we are forced to step back and analyze our existing policies and practices to see if they are truly working. Additionally, if we are to reduce the real dollar costs of annual flood damages, we must not be afraid of looking at and implementing new approaches to sound Floodplain Management.

The No Adverse Impact Initiative (NAI) is a proactive approach to making sure that the actions taken in the floodplain, and throughout the entire watershed, do not lead to adverse impacts on upstream, downstream or adjacent properties, including those directly across the stream. Developments (including re-development) must be held accountable and forced to mitigate the adverse impacts to prevent the transferring of problems to another property or properties within the community.

Setting the Standard.....

A Higher Standard to Reduce Flood Damages.....

Maumee River Basin Commission Position Statement

The Maumee River Basin Commission does not condone development activity in Special Flood Hazard Areas. Development should not occur in the Floodway except in those instances where it is absolutely required such as for bridges spanning the waterway or flood control projects. Development in the Floodway Fringe should occur only where no other alternative is available. MRBC expects such development activity to cause **NO ADVERSE IMPACT** to upstream, downstream or adjacent properties by providing:

- 1) Compensatory Storage in lieu of fill placed within the Special Flood Hazard Area; and
- 2) Detention for Stormwater Runoff; and
- 3) Compliance with any applicable State and Local Stormwater and Floodplain Management Ordinances.

NO ADVERSE IMPACT INITIATIVE (NAI)

Raising the Bar.....A Proactive Approach to Reducing Flood Damages.....

MRBC has previously asked its member communities to implement a variety of policies and practices that fit very well in the NAI framework. Present Floodplain regulations include: Compensatory storage requirements, two-foot free-board on new construction or substantially improved structures, and a 0.14' foot surcharge allowance in the water surface profile for defining the Regulatory Floodway. These practices are only the beginning if we are truly interested in reducing flood damages. MRBC advocates taking additional steps to meet this challenge.

FUTURE INITIATIVES.....

Flood Hazard Mapping Based on Future Conditions Hydrology—One of the most effective methods in reducing future flood damages is to map Special Flood Hazard Areas based on future conditions where the entire watershed is considered to be fully developed. This method creates wider floodplains that can be protected through strict enforcement of Floodplain Regulations.

Flood Protection Grade Requirement for Structures located in “X” Zones— Require the construction of “new” structures in “X” Zones (areas outside of the Special Flood Hazard Area) to meet Flood Protection Grade requirements. This requirement will ensure that structures lying immediately outside of the Regulatory Special Flood Hazard Area (SFHA) will also be constructed to Flood Protection Grade (FPG), thereby reducing their overall risk of flood damages. The record flood of July 2003 demonstrated that structures outside of the SFHA are vulnerable to floodwaters too!

Regional Detention Facilities—Regional Detention facilities provide greater control in regulating the release of stormwater stored in detention ponds, thus reducing the impacts to downstream receiving streams. This method is much more effective than attempting to regulate individual detention ponds from multiple developments.

Depressional Storage Provision – Depressional areas that generally store more than 0.75 acre-feet of runoff volume during a 1% chance flood should be considered as regulatory floodplain.

Two-stage Detention Facilities – Detention Pond outfalls with controlled release rates for smaller, more frequent return interval storm events. Practicing two-stage detention would help solve many flooding problems by reducing peak flows in various streams. Poorly planned development contributes to increased runoff, shorter times of concentration, and increased peak flows, all of which contribute to an increase in flood damages.

Flood Table Lands — Land located directly adjacent to the regulatory floodplain should be considered “Flood Table Lands” if the ground elevation is within two (2') feet of the Base Flood Elevation (BFE). The lowest floor elevation requirements also apply to structures constructed in the “Flood Table Lands”.

Mitigation of “Isolated” Wetlands — Impacts to “isolated” wetlands that exceed 0.50 Acres should be mitigated by a ration of 2:1 or 3:1 for high quality aquatic resources. Preservation of these areas and mitigation for impacts helps preserve storage, infiltration, evaporation, and transpiration.

RETROFITTING COST-SHARE ASSISTANCE PROGRAM

MRBC’s Retrofitting Cost-share Assistance Program (formerly known as Floodproofing Cost-share Assistance Program) provides assistance to owners of single-family residential structures, manufactured homes, multi-family apartment buildings and non-residential structures. MRBC will provide cost-share assistance on a 75% (MRBC) - 25% (owner) basis to homeowners for the purpose of retrofitting their structure to reduce the overall damage potential resulting from flooding. The cost-share assistance will be limited to the following maximums for structures located within the 1% event (100-year) Special Flood Hazard Area (SFHA):

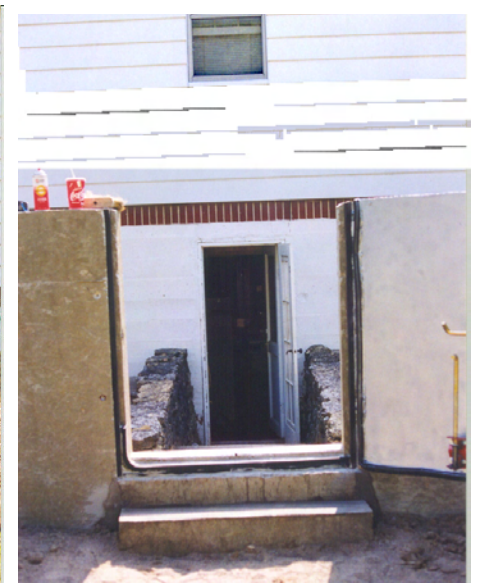
Str. Type	1% event 100-year	0.2% event 500-year
Single Family Residence—	\$ 5,000	\$2,500
Multi-Family Str.—	\$ 7,500	\$3,750
Manufactured / Mobile Home	\$ 1,500	\$ 750
Commercial Strs.—	\$10,000	\$5,000

Retrofitting Benefits Include:

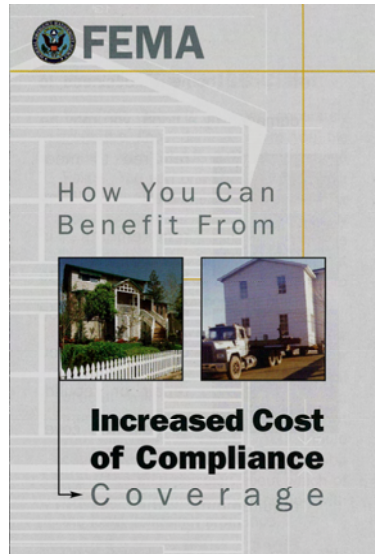
- ◆ Maintaining character of neighborhood
- ◆ 25% cash-match from homeowner
- ◆ Less costly than acquisition
- ◆ Reduces flood-damage potential
- ◆ Less intrusive
- ◆ Maintains local tax base

WHY RETROFIT A STRUCTURE?

MRBC seeks to provide financial assistance to owners of structures that have suffered multiple losses (repetitive flood losses), and are subject to less than two (2’) feet of floodwater. By elevating these structures to the Flood-protection grade, they can be protected from future flood-damages, resulting in substantial savings to the homeowner and to the Federal, State and Local Governments.



MRBC assisted City of Decatur residents and received the 1st Increased Cost of Compliance (ICC) Grant in the State of Indiana!



National Flood Insurance Program
Increased Cost of Compliance Coverage

Guidance for State and Local Officials
 FEMA 301 / September 2003



Flood victims who have an active Flood Insurance Policy have another option available to them besides waiting for a Flood Buyout.

Increased Cost of Compliance (ICC) coverage gives homeowners the option to elevate the structure in place, relocate the structure to a site outside of the Special Flood Hazard Area, or participate in a Federal Buyout Project. Participants in the Federal Buyout Project assign their ICC Grant to the local community to pay for the demolition of their flood-damaged structure.



This structure (slab-on-grade foundation) was elevated three feet (3') to meet local Flood Protection Requirements.



This structure (crawl-space foundation) was elevated 28" after the 2003 Record Flood to meet local Flood Protection Requirements.



Flood Vents must be installed as part of elevation projects to allow floodwater to flow through the crawl-space area and equalize the hydrostatic pressure to meet local Flood Protection Requirements.

July 2003 “Firecracker Flood”

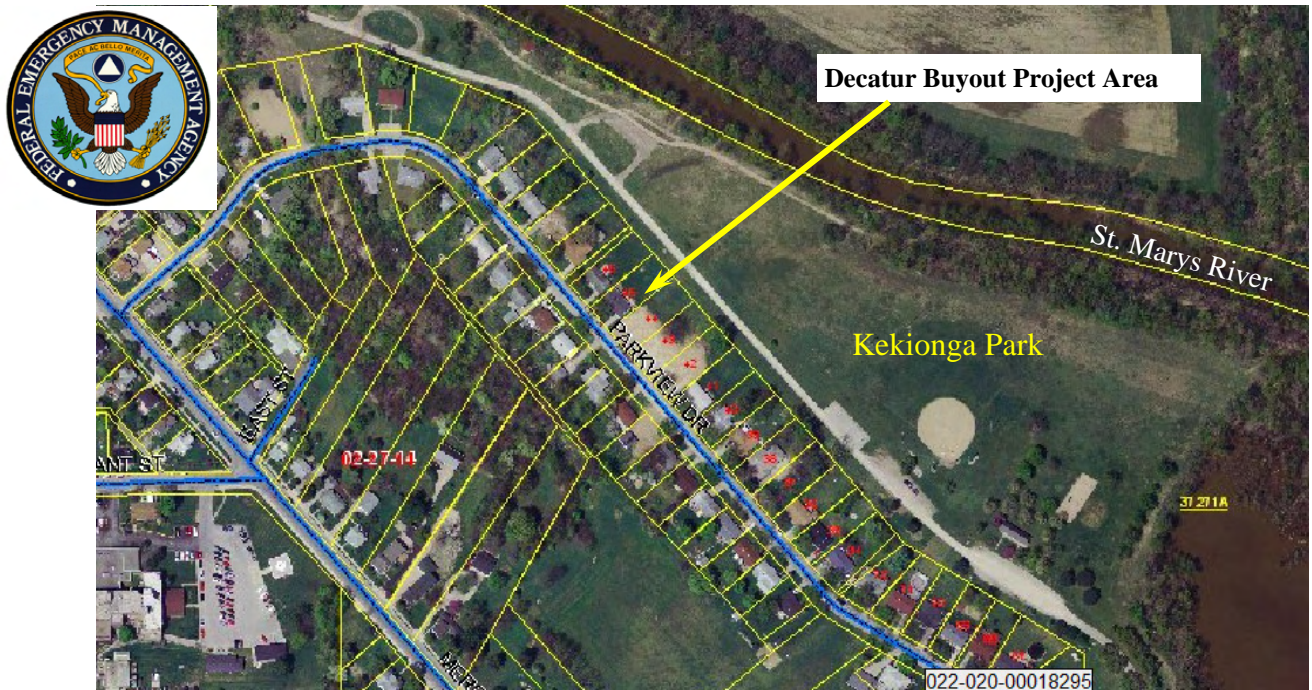
An Event to be Remembered.....



Voluntary Buyout Cost-Share Assistance Program

MRBC's **Voluntary Buyout Cost-Share Assistance Program** is designed to assist communities with the buyout and removal of properties located within special flood hazard areas and properties that have been subjected to multiple losses due to flooding. All buyouts must be from willing participants. The Voluntary Buyout Cost-Share Assistance Program offers a homeowner whose home has suffered multiple flood losses, an option to relocate to higher, safer ground.

Special Note: Properties acquired through Department of Homeland Security and MRBC's Voluntary Buyout Cost-Share Assistance Program **must remain "Open Green Space" in perpetuity**. Deed restrictions are placed on all properties at the time of closing. In most cases, MRBC seeks a local park department or school corporation to manage such properties which can be used as sports fields or open park space.



Decatur, IN—After the record “Firecracker Flood” in July 2003, the City of Decatur, with assistance from MRBC, applied for and received a Federal Hazard Mitigation Grant Program (HMGP) grant to acquire over fifty-two (52) flood-damaged homes. The homes are demolished and the vacant lots are turned into “Open Green Space”. The “Green Space” will be incorporated into the adjacent Kekionga Park to maximize the use of the acquired land. Since 1998 MRBC has cost-shared with Decatur to purchase a total of 62 homes and remove them from the St. Marys Floodplain.

Creating Open Green Space

The Hazard Mitigation Grant Program (HMGP) is a Federal Cost-Share Program administered by the Department of Homeland Security's Federal Emergency Management Agency (FEMA) and Indiana Department of Homeland Security. The Hazard Mitigation Grant Program will fund up to 75% of the cost of acquiring substantially damaged and repetitive-loss structures and structures located within the Regulatory Floodway. The local community is required to fund the remaining 25% of the project. Decatur's local share for this project was partially funded by the MRBC.

JULY 09, 2003

**ST. MARYS RIVER
REACHES RECORD
CREST OF 26.94' FEET.**

**THE PREVIOUS RECORD
CREST WAS 26.50' FEET
SET ON MARCH 26, 1913.**



Aerial view looking north shows much of the eastern side of the City of Decatur under water.

Since 1998, Decatur has partnered with MRBC and IDHS / DHS to purchase and remove 62 structures from the St. Marys River Floodplain, creating Open Green Space for future floodwaters.



Aerial view looking southeasterly at Meadow Lane and Parkview Additions.

ST. MARYS RIVER

HISTORICAL CRESTS

26.94'	July 09, 2003
26.50'	March 26, 1913
24.40'	March 14, 1982
24.31'	February 25, 1985
24.24'	January 14, 2005



Kekiong Park pavilion yields to St. Marys River Floodwater.

St. Marys River floodwater surrounds the “Riverside Center” sign in downtown Decatur, giving credence to the meaning “riverside”.



Sand bags stockpiled at the south end of Parkview Addition await being transported by raft to homes along Parkview Drive.

Over 270,000 sandbags were filled and placed around homes in the Parkview Drive and Meadow Lane Additions



Floodwater engulfs homes at the north end of Parkview Addition along Parkview Drive. **52 homes were substantially damaged forcing the families to be permanently displaced.** Approximately 70 other homes throughout the city sustained less damage.



Drywall and insulation were removed immediately after the floodwaters receded in an attempt to minimize the damage. This home, like so many along Parkview Drive, was damaged beyond 40% of its Fair Market Value and determined to be Substantially Damaged.

An Army National Guard vehicle makes its way through the floodwater on Parkview Drive. The guard unit helped to deliver thousands of sandbags to homes in the Parkview Drive and Meadow Lane Additions.

The Guard was called in to assist local Emergency Services Personnel due to the magnitude of the event.



Evergreen Court Assisted Living Apartments are shown being completely inundated by floodwater. All residents had to be evacuated.

This serves as a reminder why critical facilities should not be located in a Flood Risk Zone.

Flood Protection Grades are established to protect structures from floodwater.

Decatur Banking Center was granted a one-foot variance by the local Board of Zoning Appeals **against the recommendation of the Floodplain Administrator.**

The 2003 Flood should remind local officials that Flood Protection Grades are established for a very valid reason and to accept the recommendation of their Floodplain Administrator.





(L-R) Indiana Department of Homeland Security State Hazard Mitigation Officer Jan Crider, Decatur Mayor Fred R. Isch, and Indiana Department of Homeland Security Program Director for the Emergency Response & Recovery Division, Mary Moran hold a sign made by one of the many flood victims patiently waiting for a Federal Buy-out. The city and its flood victims waited for almost three years before finally receiving Federal Buyout Grant Funds in February 2006.

Phil Roberts, Division Director of Emergency Response & Recovery Division - Indiana Department Homeland Security presents Decatur Mayor Fred R. Isch with a \$2.046 Million check to buy the remainder of the July 2003 Flood-damaged homes.



(L-R) Maumee River Basin Commission Executive Director Rod Renkenberger, Decatur Mayor Fred R. Isch, U.S. Congressman Mike Pence, Adams County Commissioner Steve Baumann, and Adams County Surveyor Paul Norr stop for a photo opportunity while touring the Decatur Buyout Project in Park-view Addition.

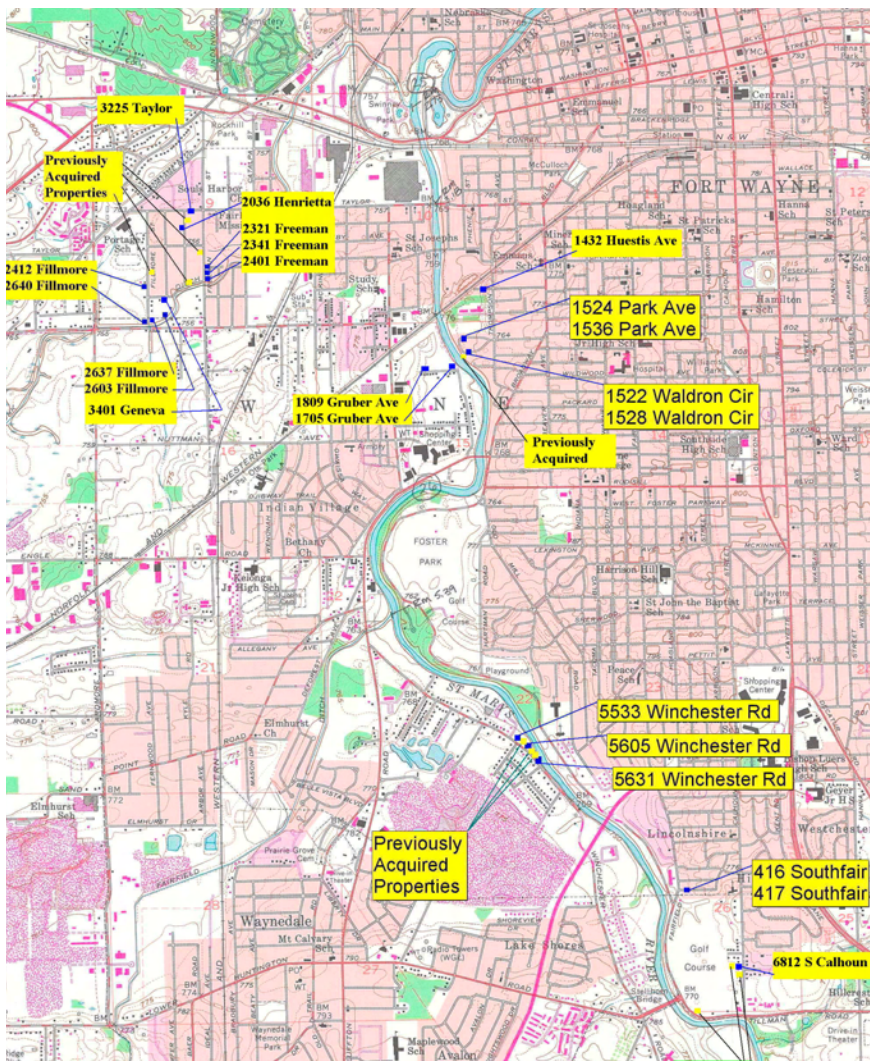
FLOOD MITIGATION PROJECT— CITY OF FORT WAYNE VOLUNTARY BUYOUT PROGRAM

Partnering The Key to Our Success!



The “record” July 2003 Firecracker Flood substantially damaged numerous homes in the St. Marys River Floodplain, prompting local officials to pursue the acquisition of those structures.

The Maumee River Basin Commission (MRBC) and Indiana Department of Homeland Security (IDHS) partnered with the City of Fort Wayne to acquire thirty-four (34) flood-damaged homes.



MRBC, IDHS, and the City of Fort Wayne have acquired homes in four (4) primary focus areas:

Upper St. Marys River reach along Tillman and Winchester Roads; and

Middle St. Marys River reach near Park Avenue and Waldron Circle; and

Lower reach of Spy Run Creek south of State Street in Eastbrook / Westbrook neighborhood; and

Junk Ditch Floodplain bounded by Taylor and Covington Streets to the north and south respectively, and by Ardmore and Freeman Streets to the west and east respectively.

All acquisitions have been funded on a 75% Federal Cost-share basis with MRBC and the City of Fort Wayne providing the 25% local match requirement.

Aerial view of Foster Park area in southwestern portion of Fort Wayne. Park land and golf courses serve as ideal natural areas to store floodwater. This area serves to protect structures by providing floodwater storage, thus keeping the floodwater crest from increasing and damaging other structures. This view shows the width of the conveyance area required for a 1% event and also shows homes encroaching the floodplain from the north, squeezing and pushing floodwaters onto other properties and into other structures.



Aerial view of southwestern Fort Wayne. Floodwaters engulfed numerous structures causing millions of dollars in flood-damages. Floodplain encroachments, both past and present, create an additional burden on local Flood Control Officials.



Floodwater from the Junk Ditch and St. Marys River floods this section of Taylor Street. During normal flow periods, Junk Ditch flows into the St. Marys River, but during significant flooding events, the St. Marys River backwater causes the Junk Ditch to reverse its flow, break watersheds, and discharge into the Wabash River Watershed via the Little River.



Homes in the West-central neighborhood are protected with sandbags lined up along the sidewalk. Flood-damages in this area are mostly limited to water in basements. The builders had the foresight to construct these homes high enough to endure a flood matching the 1913 levels.



Transportation was limited to boats, rafts, or armored vehicles. Fort Wayne officials stop for a moment to converse with these residents.



Efforts to protect this home with sandbags were thwarted by the fast-rising floodwaters of the St. Marys River.



Fort Wayne officials tour flooded areas in the Woodhurst neighborhood via the Fort Wayne Police Department's armored vehicle.



As the floodwater recedes, these homeowners prepare for the lengthy clean-up process. Bleach, gloves, and detergent were in great demand.



Huge pumps were brought into the Belle Vista neighborhood and Fernwood Drive area to pump floodwater from the streets and storm sewers back into the Fairfield Ditch.



Hundreds of feet of pipe and conduit line the street to carry floodwater backing up in storm drains away from homes and discharged it back into the Fairfield Ditch.



Thousands of sandbags block the floodwater from reaching homes in the Belle Vista neighborhood. The local residents “know the drill” as they have been through this experience many times.



Staff gauges such as the one shown are used by the City’s Flood Control Department as well as local residents who are on constant guard when the area receives significant rainfall.



An aerial view of the Tillman Road area reveals the widespread impact from the St. Marys River floodwater. **This demonstrates why floodplain development should be prohibited.**



Businesses along Tillman Road are hampered by floodwater spilling over the banks of the St. Marys River. Most of the family residences along Tillman Road have been purchased and demolished.

Stream Obstruction Removal Program

MRBC's Stream Obstruction Removal Program is designed to assist landowners and local governmental agencies with the funding and removal of various types of log-jams in rivers and natural streams. The Stream Obstruction Removal Guide includes Obstruction Removal Guidelines, which have been accepted by IDNR and U.S. Army Corps of Engineers, thus streamlining the lengthy permit process usually encountered by individuals and government agencies.

St. Marys River— In 2001 MRBC, through the Adams County Drainage Board and Surveyor's Offices, conducted the first phase of removing log jams from the St. Marys River. Phase I consisted of the section between Decatur and Adams County Road 900 North. This project was successfully completed in 2002. Phase II consists of the area between Adams County Road 900 North thence downstream to the Adams / Allen County Line. After only completing approximately 3/4 mile of log jam removal, this phase was suspended due to the contractor's inability to complete the project. The Adams County Drainage Board and Surveyor intend to complete Phase II in 2007-2008.

St. Joseph River— At the request of several landowners, MRBC committed \$20,000 for the purpose of removing log jams from the St. Joseph River. The project will be managed through the DeKalb County Surveyor's Office. The State of Ohio is performing a similar project in Williams County, immediately upstream of DeKalb County. Concerns regarding the vast amount of debris that will float downstream has caused the Indiana project to be delayed until the Ohio project is completed. The delay will prevent our efforts from being jeopardized by the formation of new log jams from the floating debris. This project is anticipated to begin in the fall of 2007.

"Improving Water Quality while Reducing Agricultural Flood Damages"

Voluntary Agricultural Land-Use Conversion Program

MRBC's Agricultural Areas Land Use Conversion Program is designed to protect the Riparian Corridor by allowing the land to revert back to its natural state. MRBC partners with other Federal Programs such as the Natural Resource Conservation Service's Conservation Reserve Program (CRP), Wetland Reserve Program (WRP), and Environmental Quality Incentive Program (EQIP) to install Best Management Practices (BMPs) along the rivers and streams in the Maumee River Basin. The State of Indiana's Lake and River Enhancement (LARE) Program is also marketed to potential program participants. In addition to partnering with the various federal programs, MRBC utilizes USEPA Section 319 Grant funds to purchase and install tree plantings on the grounds where conservations easements have been secured.

MRBC has secured two (2) Conservation Easements along the riparian corridor of the St. Joseph River for a total of 21.53 Acres. The easements are secured for thirty years. Best Management Practices (BMP's) are used to protect the riparian corridor by reducing soil erosion and filtering harmful chemicals from agricultural runoff. Practices employed on the conservation easement grounds include the installation of vegetative grass filter strips along open drains, installing French Drains in place of tile inlets, Open drain inlet buffer zones, Tree plantings, and Tiled drain inlet buffer zones. When combined, these practices form a buffer zone along the river and serve to protect the riparian corridor

IMPROVING WATER QUALITY

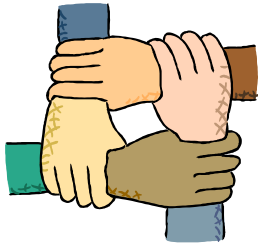
MRBC “partnered” with five (5) other entities to help secure a grant to develop a Watershed Management Plan for the St. Marys River to reduce sediment, nutrients, herbicides, pesticides, and storm water runoff in the upper watershed. The Watershed Management Plan, once completed, would position the “partners” to qualify for a USEPA Section 319 Grant to implement the BMPs. Additionally, a Great Lakes Commission (GLC) Grant would be applied for as well, to help pay for BMP installations.

The Clean Water Indiana Grant Program requires a 50% local cost-share match. The “Partners” have committed \$23,000.00 towards this effort to improve water quality in the St. Marys Watershed for a total grant project of \$46,000.00.

Local share contributions are:

Wells Co. SWCD	\$ 2,500.00	cash
Adams Co. SWCD	\$ 6,000.00	cash
Allen Co. SWCD	\$ 4,500.00	cash
Adams Co. Surveyor	\$ 0.00	(In-kind)
Allen Co. Surveyor	\$ 0.00	(In-kind)
MRBC	<u>\$10,000.00</u>	cash
Total Local Match:	\$23,000.00	

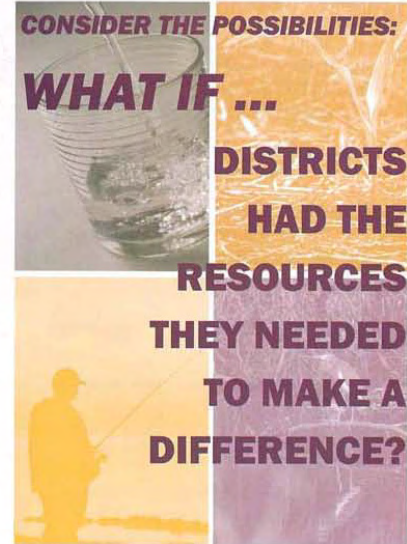
Success Through Partnerships



The State Soil Conservation Board's (SSCB) Clean Water Indiana (CWI) Grants Program provides Indiana's Soil & Water Conservation Districts (SWCDs) with a great opportunity to showcase pilot programs of what Hoosier conservationists can do when given the resources to make a difference.

Administered by the SSCB, the CWI Grants Program is funded through the CWI initiative created in 1999 and funded in 2005 by a unanimous vote of the Indiana General Assembly.

The purpose of the CWI Grants Program is to provide financial assistance to SWCDs to implement conservation practices to reduce non-point sources of water pollution through education, technical assistance, training, and cost sharing programs.



STATE SOIL CONSERVATION BOARD





Map MODERNIZATION

Federal Emergency Management Agency

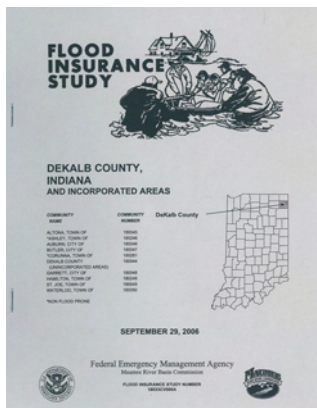
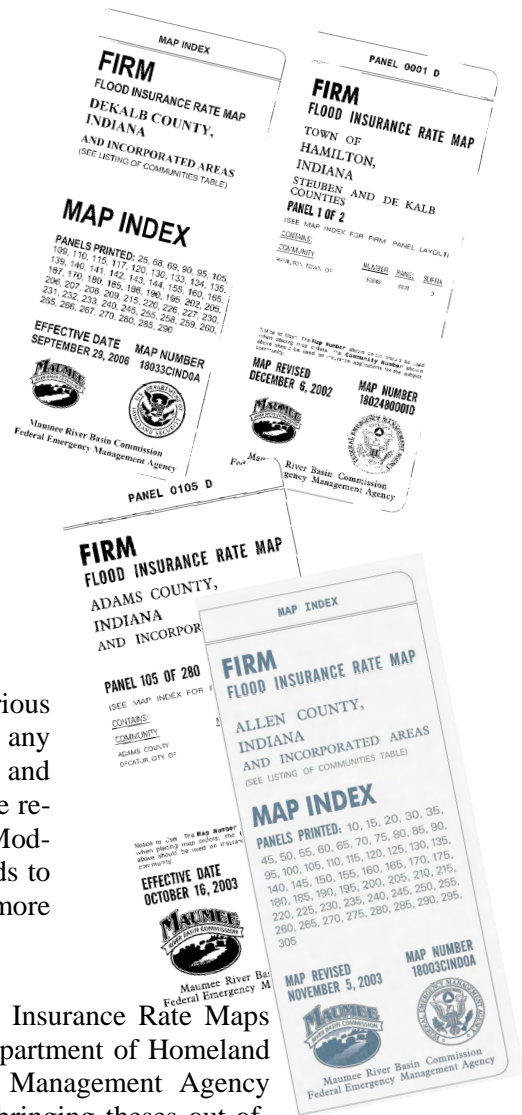
FEMA's Flood Hazard Mapping Program



FEMA's Flood Hazard Mapping Program, authorized by Congress with the National Flood Insurance Act of 1968, the Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 mandates FEMA to identify, publish, and update information with respect to all floodprone areas in the nation.

Because flood hazard conditions change over time due to both natural and manmade changes within the watershed and its respective floodplains, FEMA has an ongoing program to update flood maps for floodprone communities. In 1997 FEMA designed a plan to modernize the flood map inventory and to eventually convert them to a digital / electronic format; **Map Modernization Plan**. One of the key objectives of the FEMA Map Modernization Plan is to increase local involvement in, and ownership of, the flood mapping process. To meet this objective, FEMA developed and implemented the Cooperating Technical Partners (CTP) initiative.

2006 Mid-course Adjustment—After fielding complaints from various professional organizations that the new digital flood maps weren't any more accurate than previous maps, FEMA re-evaluated its program and concurred that more emphasis should be placed on map accuracy. The re-evaluation resulted in the 2006 Mid-course Adjustment of the Map Modernization Program. FEMA developed stricter map accuracy standards to be uniformly applied throughout the country which will result in more accurate Digital Flood Insurance Rate Maps (FIRMs) nation-wide.



With the national average age of Flood Insurance Rate Maps (FIRMs) exceeding fifteen years, the Department of Homeland Security (formerly Federal Emergency Management Agency (FEMA)) has put a major emphasis on bringing these out-of-date maps current.

Locally, MRBC member counties Adams, Allen, DeKalb and the Town of Hamilton have experienced the benefit of the Map Modernization Program. Adams and Allen County FIRMs were updated in 2003 and DeKalb County's FIRMs were updated in 2006. Adams and Allen County FIRMs are being updated again with effective dates projected for late 2007 or early 2008.

Hydrologic / Hydraulic Modeling

WHY PERFORM DETAILED FLOOD INSURANCE STUDIES?

Flood Hazard Area Identification has proven to be the most effective approach to flood damage reduction by preventing structures from being located within flood prone areas. Flood Insurance Studies are the mechanism by which these Hazard Areas are Identified.

Flood Hazard Area Identification Benefits Include:

- ▶ Accurately Mapped Flood Hazard Areas
- ▶ Greater Awareness of Flood Hazard Areas
- ▶ Floodplain Encroachment Prevention
- ▶ Floodplain Encroachment Prevention
- ▶ Tool For Floodplain Administrators
- ▶ Flood Damage Reduction

Big Run Creek—Butler, IN

To the surprise of many Butler residents, they suddenly found their properties mapped in the Special Flood Hazard Area when FEMA updated DeKalb County’s Flood Insurance Rate Maps (FIRMs). This shocking discovery led to a public outcry for a more accurate FIRM. The area had been mapped by FEMA’s mapping contractor as Zone A Flood Hazard Area through a process known as the “Approximate Method”. The approximate method is just that; “Approximate”.

Butler Mayor Floyd “Butch” Coburn approached MRBC for assistance in updating the new FIRM with a more accurate Detailed Flood Insurance Study combined with more accurate topographical survey information. MRBC agreed to cost-share with the City of Butler and hired Christopher B. Burke Engineering, Ltd. (CBBEL) to perform the detailed study. DeKalb County Board of Commissioners cost-shared with MRBC and the City to purchase more accurate topographical data for the project. CBBEL submitted a Letter of Map Revision (LOMR) request to FEMA in support of correcting the FIRM.

GOOD NEWS!

The detailed study results proved to be extremely beneficial to the residents of Butler, as the Special Flood Hazard Area was reduced significantly thereby removing most of the properties from the floodplain. This action resulted in appreciated property values and removed the mandatory purchase requirement of Flood Insurance, saving the residents over \$450 / yr. in Flood Insurance Premiums.



BEFORE:
Unnumbered Zone A area on new DFIRM in Butler, IN.



AFTER:
Revised Floodplain based on Detailed Flood Insurance Study (FIS) on Big Run Creek. Special Flood Hazard Area has been significantly reduced, benefiting numerous homeowners.

“An ounce of Prevention is worth a Pound of Cure”.

Hydrologic / Hydraulic Modeling

BENEFITS OF DETAILED FLOOD INSURANCE STUDIES

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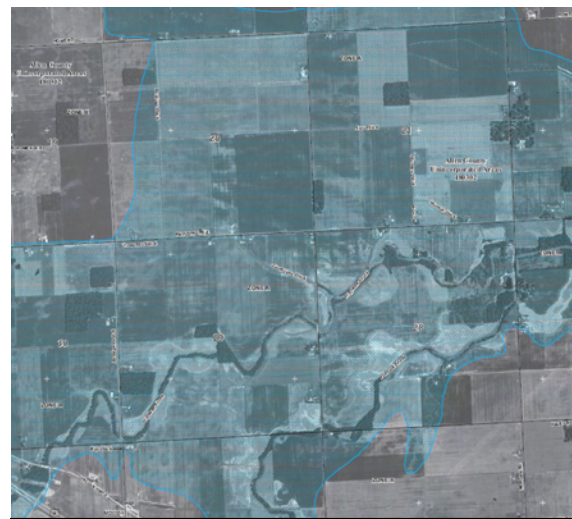
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Hoffman Ditch—Southeast Allen Co.

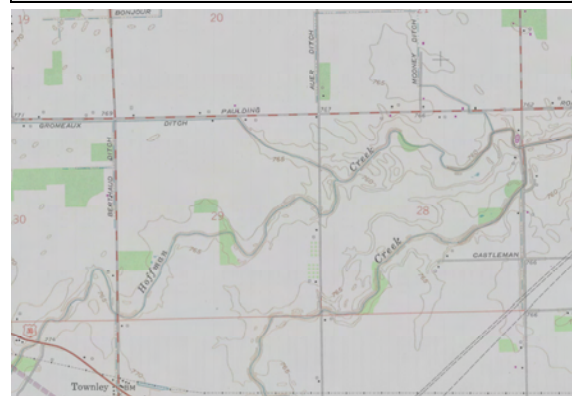
The Hoffman Ditch is one of the longest reaching unstudied tributaries in Allen County. Stretching approximately 16 miles upstream from its confluence with Flatrock Creek, the Hoffman Ditch impacts hundreds of acres of land with its unstudied Zone—A Flood Hazard Area (denoted on Flood Insurance Rate Map (FIRM) at right). Zone—A Flood Hazard Areas are based upon an “approximate” method of study not detailed enough to give Base Flood Elevations (BFEs). These Zone –A Flood Hazard Areas are referred to as “un-numbered A-Zones”. Because Zone-A Flood Hazard Areas do not have Base Flood Elevations (BFEs) established, Local Planning and Zoning Officials, Surveyors, and Property Owners are burdened with the added responsibility of obtaining this information themselves by applying to the Indiana Department of Natural Resources.

Landowners, surveyors, and zoning officials use BFE information by comparing it with actual ground elevations to determine whether a property is actually Flood Hazard Area.

To facilitate landowners, planners, surveyors, and zoning officials, MRBC, in a proactive role, has committed funding to Allen County for the purpose of performing a Detailed Flood Insurance Study (FIS) on the Hoffman Ditch. The Detailed FIS will establish Base Flood Elevations and allow the Flood Hazard Area to be very accurately delineated on Allen County’s two-foot contour mapping. The detailed FIS will benefit local planning and zoning officials in regulating activities in the Flood Hazard Area. Property owners will benefit from an accurately delineated Flood Hazard Area as the width of the existing delineation is expected to narrow considerably. The reduction in Flood Hazard Area will result in increased property values and an increased in assessed land value for Allen County. Affected homeowners may very likely be relieved of the requirement to carry Flood Insurance based on the new delineations.



The current effective Flood Insurance Rate Map (FIRM) shows a Flood Hazard Area reaching widths exceeding 1 1/2 miles. Inaccurate Floodplain delineations affect property values, cause an undue burden on local zoning officials who regulate these areas, and homeowners who are required to carry Flood Insurance.



Hoffman Ditch, as shown on this United States Geological Survey (USGS) Quadrangle Map, is one of the longest reaching streams in Allen Co.

Spy Run Creek—City of Fort Wayne Flood Insurance Study



Considering all watersheds in the Maumee River Basin, Spy Run Creek Watershed has been most impacted by development over the past thirty plus years. With the percentage of impervious area increasing, stormwater runoff reaches the Spy Run Creek at an accelerated rate; a rate that the creek does not have the capacity to handle, thus flooding numerous downstream properties. The significant increase in impervious areas and resulting stormwater runoff has contributed to the chronic flooding problems in the Eastbrook—Westbrook neighborhood.

MRBC Partners with City of Fort Wayne to restudy Spy Run Creek

Christopher B. Burke Engineering, Ltd (CBBEL) was retained to review and correct the Flood Insurance Study for Spy Run Creek. CBBEL found an error in the previous study in addition to identifying three (3) “primary” problem areas in the Spy Run Creek Watershed:

- ◆ Eastbrook-Westbrook neighborhood;
- ◆ Malfunctioning retention pond at Cross Creek Shopping Center;
- ◆ Interstate Industrial Park area.

CBBEL developed a list of potential solutions that could be implemented to solve most of the chronic flooding problems that have plagued the Spy Run Creek Watershed.



A Multi-Objective / Comprehensive Approach:

- * Repair retention pond in Cross Creek Shopping Center;
- * Construct additional detention / retention ponds;
- * Buyout homes in Eastbrook-Westbrook neighborhoods;
- * Channel Improvements / modifications;
- * Construct a floodwall or small levee at fringe line.

To successfully mitigate the flooding problems associated with Spy Run Creek, CBBEL noted that it would require multiple projects that when combined, would serve to accomplish the noted task. Implementing only a couple of the recommended actions would not serve to reducing flood damages in the Eastbrook—Westbrook neighborhood.

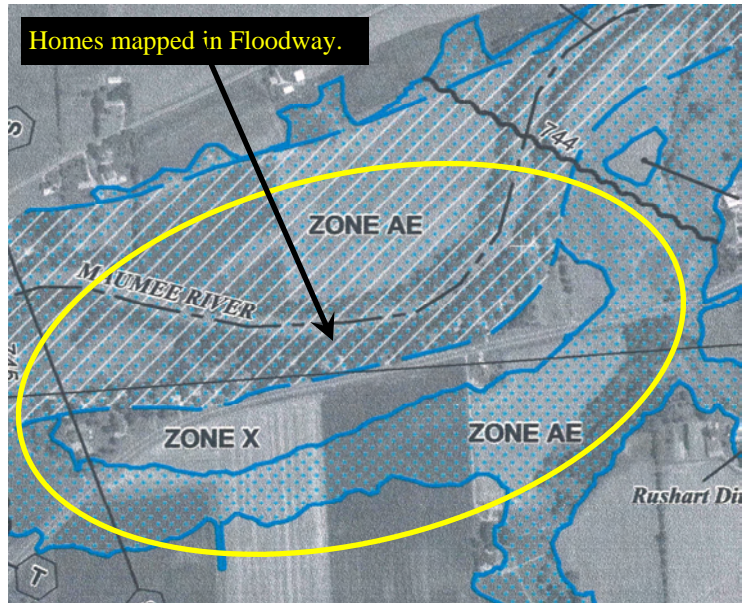
The multi-objective approach to resolving the Spy Run Creek flooding problems combines structural and non-structural projects that when implemented together, should mitigate the vast majority of the chronic recurring flood damage losses.

Flood Map Accuracy Improving with “Better Available Data”

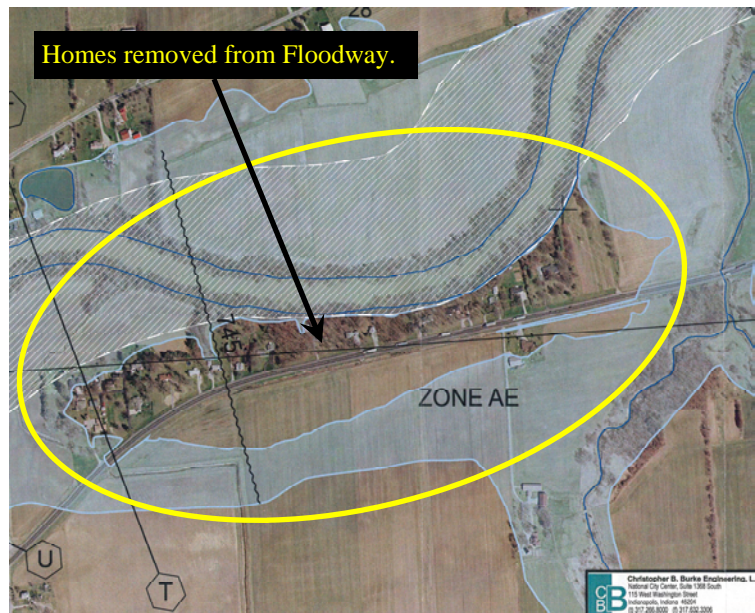
Approximately 20 residents whose properties abut the Maumee River approached MRBC in March 2005 for assistance in correcting the Flood Insurance Rate Map (FIRM) for their area. After several land-owners secured the professional services of a licensed Surveyor to apply for a Letter of Map Amendment (LOMA), it was determined that all of their properties were well above the Regulatory Base Flood Elevation, even though their properties were mapped as being in the Regulatory Floodway. The residents were directed to MRBC for assistance in correcting the Hydraulic Model and removing their properties from the Regulatory Floodway.

.....restrictions that had challenged these owners for many years will no longer apply, therefore allowing them to maximize the use of their properties.

MRBC agreed to cost-share with the residents to pursue a Letter of Map Revision (LOMR) using better available data. MRBC contracted Christopher B. Burke Engineering, Ltd. to perform the Hydraulic Modeling corrections using Allen County’s two-foot contour mapping (better available data). Upon completion of correcting the Hydraulic Model, the properties were removed from the floodplain completely. This mapping change resulted in an increase of property values, in addition to relieving the homeowners of the requirement to comply with the County’s Flood Hazard Ordinance. The Floodplain Ordinance building restrictions that had challenged these owners for many years no longer will apply, therefore allowing them to maximize the use of their properties.



Approximately 20 residential structures situated between the south bank of the Maumee River and U.S. #24 were mapped as being in the Regulatory Floodway. The Floodway designation prohibited these property owners from making any major repairs or additions to their homes.



“Better Available Data” in the form of two-foot contour mapping provided by Allen County has made it possible to correct mapping errors such as this where the Floodway and Floodway Fringe were incorrectly mapped due to limited ten-foot contour data.



MRBC is First “Regional” CTP in the Nation

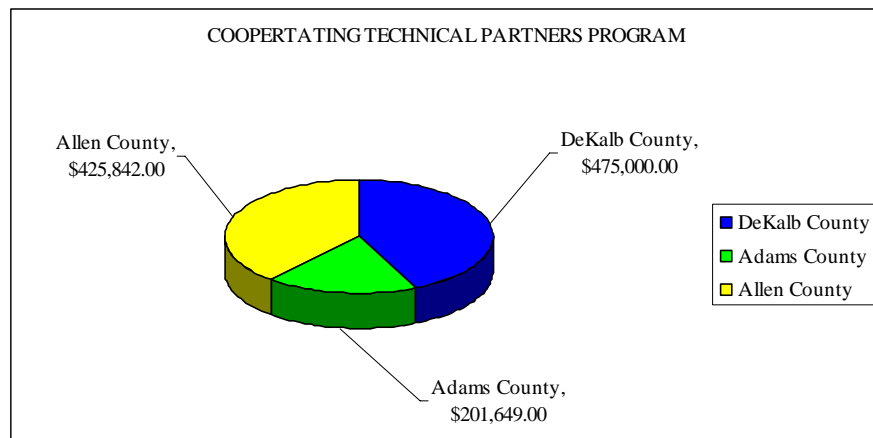
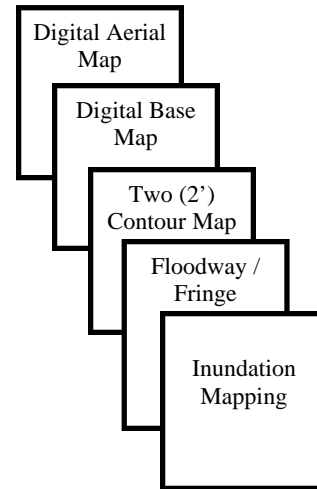
FEMA's Cooperating Technical Partners (CTP) Program

With over 20,000 communities in the National Flood Insurance Program (NFIP), there is a significant challenge keeping flood hazard maps current. The Cooperating Technical Partners (CTP) Program is an innovative approach to creating partnerships between FEMA and participating NFIP communities, regional agencies, and State agencies that have the interest and capability to become more active participants in the FEMA flood hazard mapping program.

One of the key objectives of the FEMA Map Modernization Plan is to increase local involvement in, and ownership of, the flood mapping process. To meet this objective, FEMA developed and implemented the **Cooperating Technical Partners (CTP) Program**.

As technologies have improved, many State agencies, regional agencies, and local communities have become increasingly sophisticated and can provide FEMA better information such as Digital Base Maps, Digital two (2') foot contour mapping, and Ortho-Photography through the CTP Program. The CTP Program mutually benefits the local community and FEMA.

MRBC took advantage of this opportunity to gain more local control over the mapping process. MRBC signed a Cooperating Technical Partner (CTP) agreement with FEMA in June 2001. As a CTP, **MRBC has been able to secure over \$1,102,491.00 in Federal Cost-share Funds** for North-east Indiana. The Commission has been given top priority for map funding. This prioritization elevated the Adams, Allen, and DeKalb County Digital Flood Insurance Rate Mapping Projects to the top 10 percentile, allowing the remapping efforts of Adams, Allen, and DeKalb Counties to move forward.



Cooperating Technical Partners Program



CTP Benefit:

MRBC, as a “Cooperating Technical Partner”, has been given a high priority for map funding. This prioritization elevated the DeKalb County Digital Flood Insurance Rate Mapping Project from the 50th percentile to the top 10 percentile, assuring that the DeKalb County Flood Map Modernization Project would be completed. Flood Map Modernization Projects in Adams and Allen Counties followed.

Year	Project	Cost-share Community	CTP Funds
2001	John Diehl & William Peckhart Drains Detailed Flood Insurance Study	DeKalb County	\$55,000.00
2003	DeKalb County - County-wide Map Modernization Project	DeKalb County	\$420,000.00
2004	Adams County - County-wide Map Modernization Project	Adams County	\$201,649.00
2005	Allen County - County-wide Map Modernization Project	Allen County	\$425,842.00
Total CTP Funds Received to Date:			\$1,102,491.00



DeKalb County GIS Coordinator and former MRBC Board Member Brad Stump shows a staff member the benefits of the new DeKalb County Digital Flood Insurance Rate Maps (on computer screen) while holding the previous Flood Insurance Rate Map (paper) dated April 3, 1987. MRBC’s CTP Agreement with FEMA elevated the DeKalb County Map Modernization Project to the top 10 percentile.

The Disaster Mitigation Act of 2000

The Disaster Mitigation Act of 2000 (DMA 2000) (P.L. 106-390) provides an opportunity for states, Tribes and local governments to take a new and revitalized approach to mitigation planning.



The requirement for a State mitigation plan is continued as a condition of disaster assistance, adding incentives for increased coordination and integration of mitigation activities at the State level through the establishment of requirements for two different levels of state plans: “Standard” and “Enhanced”. States that demonstrate an increased commitment to comprehensive mitigation planning and implementation through the development of an approved Enhanced State Plan can increased the amount of funding available through the Hazard Mitigation grant Program (HMGP). **DMA 2000 also established a new requirement for local mitigation plans.** Local Governments, including Cities, Counties, and Towns are required to develop and adopt a Multi-Hazard Mitigation Plan, which must be approved by both the Indiana Department of Homeland Security (IDHS) and Federal Department of Homeland Security (DHS) before the respective entity is eligible for future Disaster Relief Funds.

Risk Assessment..... A proactive approach

MRBC continues to provide the best service to the residents it serves by planning, preparing and protecting.

What are the Risks?

- ◆ Adams County— The Adams County MHMP was the first in the State of Indiana to be approved! The Adams County MHMP was approved in May 2005 and has been used as a model for other counties in Indiana including MRBC member counties Allen, DeKalb, Noble, and Steuben.
- ◆ Allen County—Allen County’s MHMP was the second plan in the state to be approved. The Allen County MHMP was approved in August 2005.
- ◆ DeKalb County—MRBC secured a Pre-disaster Mitigation (PDM) Grant to fund 75% of the costs to develop a MHMP for DeKalb County. The county began developing their MHMP in 2006 and expects approval in early 2008.
- ◆ Noble County—MRBC secured a Pre-disaster Mitigation (PDM) Grant to fund 75% of the costs to develop a MHMP for Noble County. The county began developing their MHMP in 2006 and expects approval in early 2008.
- ◆ Steuben County—MRBC secured a Pre-disaster Mitigation (PDM) Grant to fund 75% of the costs to develop a MHMP for Steuben County. The county began developing their MHMP in 2006 and expects approval in early 2008.

MAUMEE RIVER BASIN COMMISSION

FLOOD VICTIM RELIEF FUND

Flood Victim Relief Fund Established:

After witnessing the pain and suffering of flood victims for the second, and in some cases, the third time in the last eighteen (18) months and listening to flood victim after flood victim asking for additional assistance, MRBC has stepped up to the plate in partnership with First Source Bank to establish a “local” Flood Victim Relief Fund to provide emergency relief to flood victims. The MRBC Flood Victim Relief Fund will be managed by a sub-committee of the MRBC Full Board. Proceeds will be disbursed after approval is received from the sub-committee. This fund is not intended to replace FEMA and/or other governmental assistance that flood victims are eligible for. Flood victims will be required to exhaust all potential resources for funding assistance before being eligible for relief funds.



Flood Victim Relief Fund

Send contributions (check or money order) to:

1st Source Bank
c/o Maumee River Basin Commission
Flood Victim Relief Fund
200 East Main Street
Fort Wayne, IN 46802

MEMBERSHIPS AND COMMUNITY INVOLVEMENT

The Maumee River Basin Commission realizes that a coordinated flood control program is necessary to solve the continuing problem of flooding and poor water quality. Therefore information is continually exchanged through various professional organizations. These include:

INDIANA ASSOC. FOR FLOODPLAIN & STORMWATER MANAGEMENT

- ◆ Founding Board Member
- ◆ Past Chairman of the Board

ASSOCIATION OF STATE FLOODPLAIN MANAGERS

- ◆ Co-Chair of Flood Insurance Committee
- ◆ ASFPM Representative of Flood Insurance Producers National Council (FIPNC)

FEMA ELEVATION CERTIFICATE REVISION TASK FORCE

INDIANA SOCIETY OF PROFESSIONAL LAND SURVEYORS

NORTHEAST CHAPTER OF PROFESSIONAL LAND SURVEYORS

INTERNATIONAL EROSION CONTROL ASSOCIATION

RIVER GREENWAY CONSORTIUM

ST. JOSEPH RIVER WATERSHED INITIATIVE

- ◆ Board of Directors

MAUMEE RIVER BASIN PARTNERSHIP OF LOCAL GOVERNMENTS (IN & OH)

MOVING FORWARD

Goals of the Maumee River Basin Commission for 2007:

- > **Promote No Adverse Impact Initiative (NAI)**
- > **Assist communities with:**
 - * **Flood Hazard Ordinances**
 - * **Compensatory Storage Requirements**
 - * **Storm Drainage & Erosion Control Ordinances**
- > **Assist FEMA with Public “Open House Meetings” to unveil new Digital Flood Insurance Rate Maps (DFIRMs) for:**
 - Adams County**
 - Allen County**
- > **Assist IDNR / FEMA in coordinating Map Modernization Projects in:**
 - Noble County**
 - Steuben County**
- > **Continue Updating MRBC Web Site**
- > **Coordinate Multi-Hazard Mitigation Plan Planning Committee Meetings for:**
 - DeKalb County**
 - Noble County**
 - Steuben County**
- > **Serve as FEMA’s Public Awareness Liaison: Develop Educational Program / Brochure targeted at High School Students**
- > **Start Publishing MRBC newsletter “The Mitigator” on a quarterly basis.**
- > **Secure additional grant funds through FEMA’s Cooperating Technical Partner Program to perform Additional Flood Hazard Area Identification Studies**
- > **Continue implementation of MRBC’s Flood Control Master plan**
- > **Host Flood Forum in cooperation with National Flood Insurance Program and Indiana Association for Floodplain and Stormwater Management, Inc.**
- > **Host FEMA’s Training Sessions on: “Substantial Damage Estimating” for Northeast Indiana communities.**
- > **Secure funding through the State General Fund Budget for the 2008-2009 Biennium Budget.**