



**Hunter's Creek Flood**  
**Mitigation/Information Meeting**

January 7, 2016

Lydia Mihalik, Mayor

Paul Schmelzer, P.E., P.S., Safety-Service Director

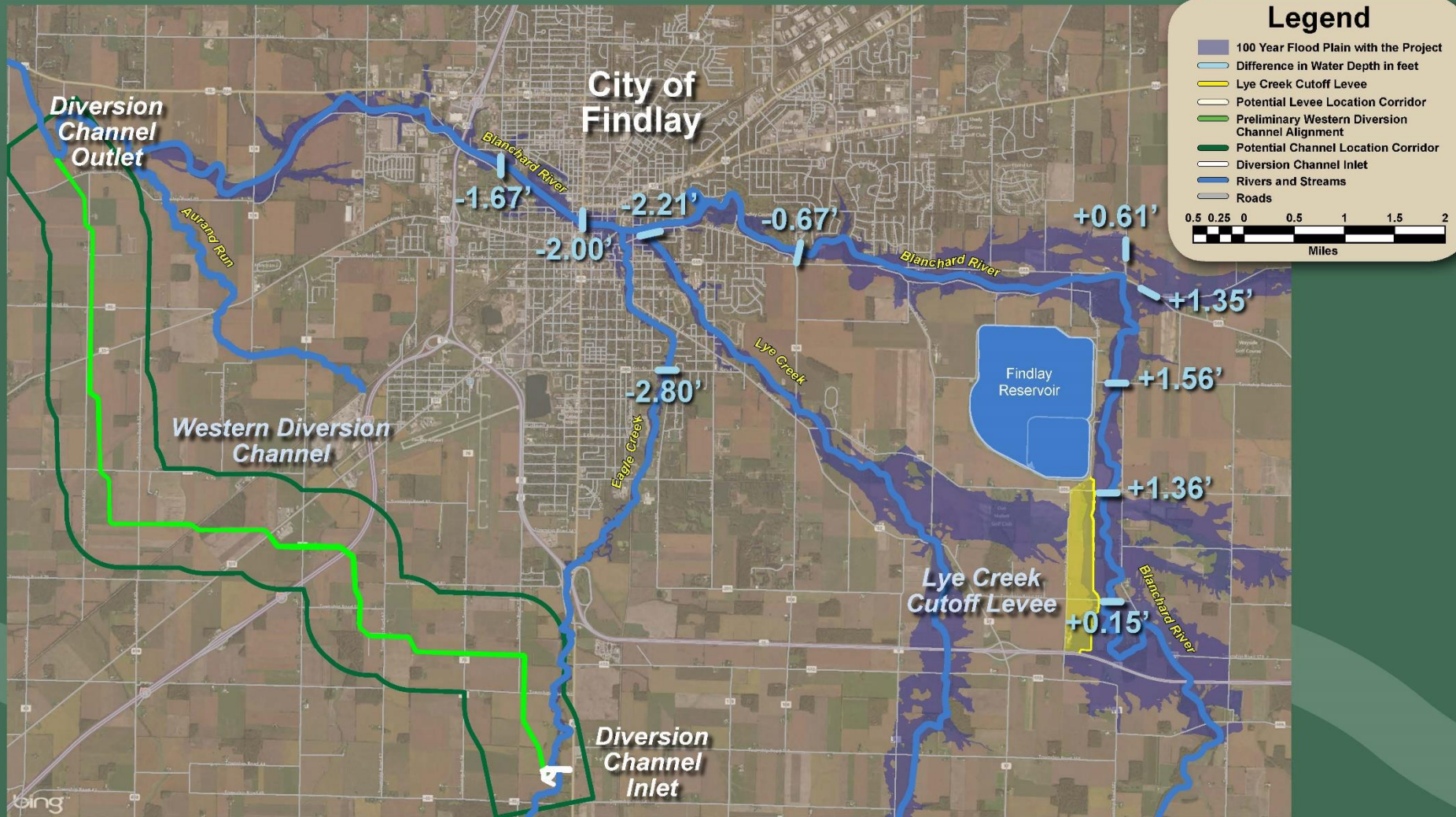
Todd Richard, CFM, Floodplain Manager/Zoning Inspector

Steve Wilson P.E., P.S., Project Coordinator

Mike Pniewski, P.E., USACE Project Manager



# 100 Year Storm Event with Proposed Project



**US Army Corps of Engineers®**  
Buffalo District  
**BUILDING STRONG®**

*The 100 year flood plain is based on the results of the U.S. Army Corps of Engineers (USACE) hydrology and hydraulics model. USACE will coordinate with the Federal Emergency Management Agency (FEMA) and submit the necessary documentation for map revisions for modifications to existing flood insurance maps.*

**April 2015**

## MEASURES CONSIDERED:

- Diversion and Channel Relocations • Non-Structural • Bridge Removal/Replacement Modification
- Detention Basins • Channel Improvements • High Velocity Channels • Levees and Floodwalls
- Evacuation of Floodplain • Flood Warning • Clearing and Snagging • Dredging

## ALTERNATIVES:

- **F0: No-Action** • **F1: Western Diversion of Eagle Creek** • **F1a: Blanchard to Lye Cutoff Levee**
- **F2: Western Diversion of Eagle Creek and Cutoff Levee (100 year event)**
- **F3: Plan F2 + Non-Structural** • **F4: Western Diversion of Eagle Creek, Cutoff levee and Non-Structural (50 year event)**
- **F5: Western Diversion of Eagle Creek, Cutoff levee and Non-Structural (250 year event)**

## FINAL ARRAY:

- No-Action
- Western Diversion of Eagle Creek and Cutoff Levee

### LEGEND

-  Carried Forward
-  Screened Out
-  Implemented by Others

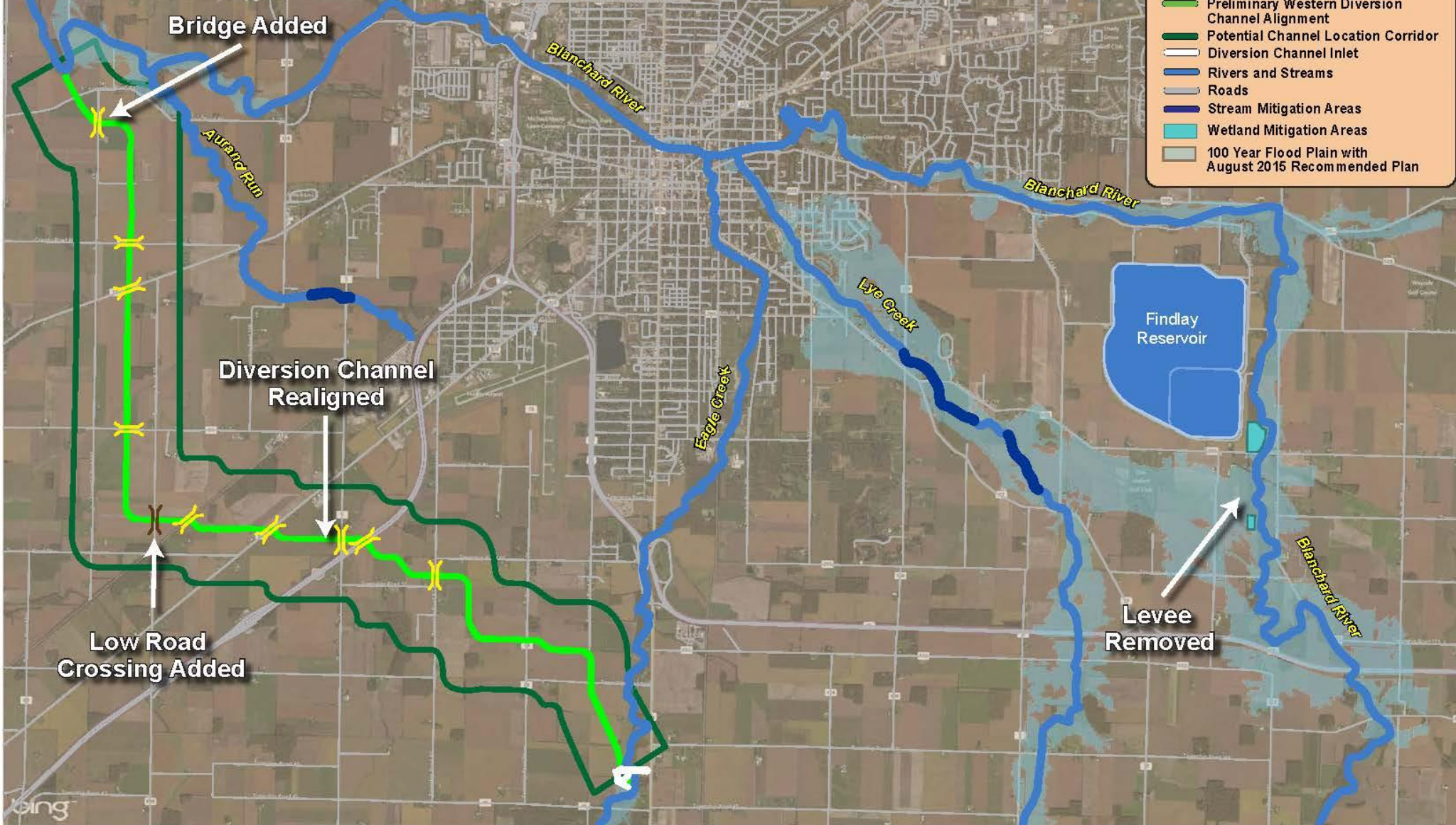
Western Diversion of Eagle Creek and Cutoff Levee



# August 2015 Recommended Plan

### Legend

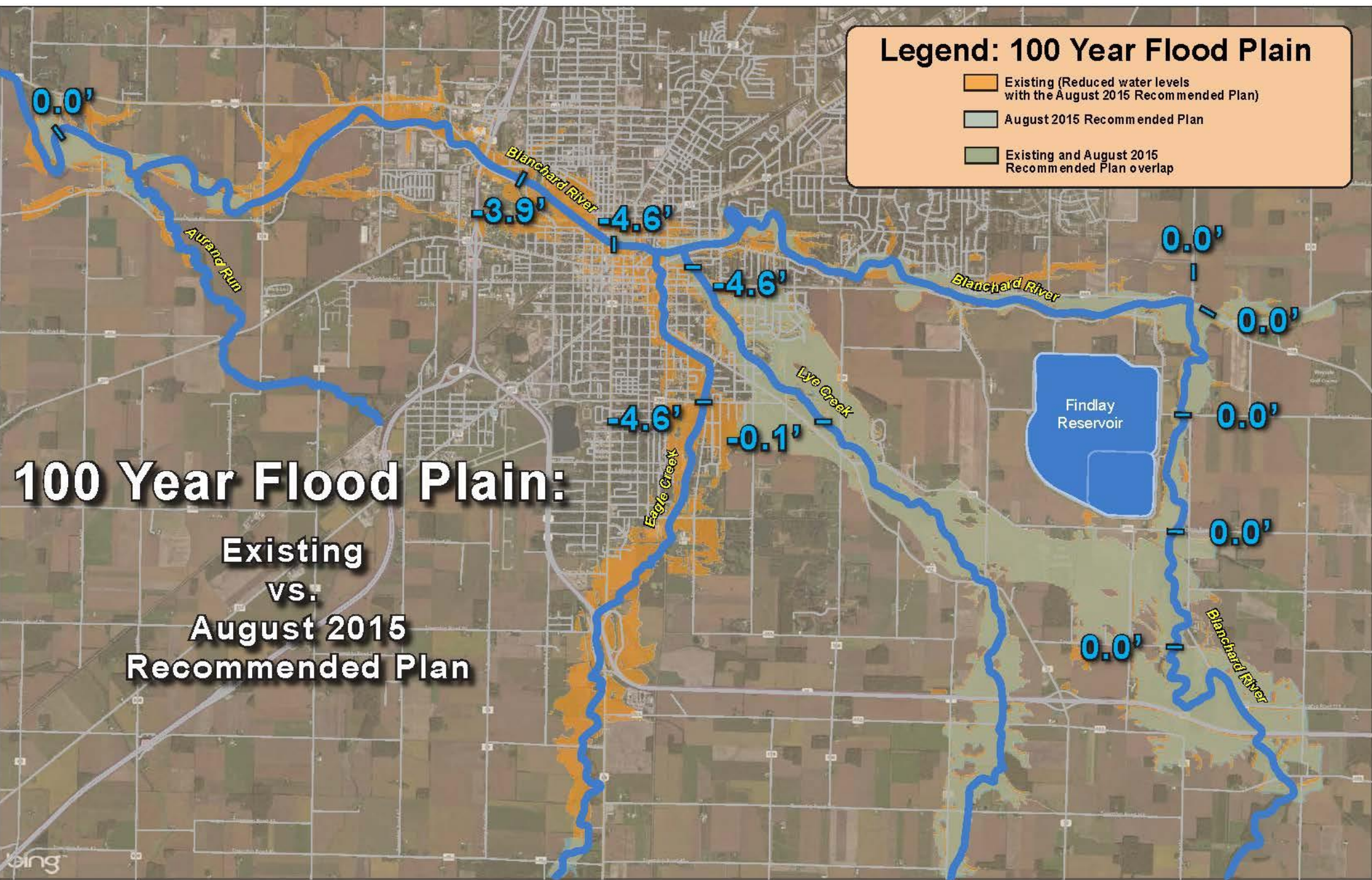
- Bridge Crossing
- Low Road Crossing
- Preliminary Western Diversion Channel Alignment
- Potential Channel Location Corridor
- Diversion Channel Inlet
- Rivers and Streams
- Roads
- Stream Mitigation Areas
- Wetland Mitigation Areas
- 100 Year Flood Plain with August 2015 Recommended Plan





# Legend: 100 Year Flood Plain

- Existing (Reduced water levels with the August 2015 Recommended Plan)
- August 2015 Recommended Plan
- Existing and August 2015 Recommended Plan overlap



**100 Year Flood Plain:**  
**Existing**  
**vs.**  
**August 2015**  
**Recommended Plan**





REPLY TO  
ATTENTION OF:

DEPARTMENT OF THE ARMY  
BUFFALO DISTRICT, CORPS OF ENGINEERS  
1776 NIAGARA STREET  
BUFFALO NY 14207-3199

October 16, 2015

RECEIVED

OCT 23 2015

MAYOR'S OFFICE

The Honorable Lydia Mihalik  
Mayor of the City of Findlay  
300 Dorney Plaza  
Findlay, OH 45840

Dear Mayor Mihalik:

Thank you for the inquiries provided by you, members of your staff, and residents concerning the Hunter's Creek neighborhood. We embrace the opportunity to engage the community on any possible impacts as a result of the proposed flood risk management project for the Blanchard River watershed.

The Blanchard to Lye Creek cutoff levee cannot be justified according to Federal policy and we will no longer consider including it in the flood risk mitigation plan. During our August 2015 visit, we outlined changes to the Recommended Plan for flood risk reduction for the Blanchard River Watershed Study as a result of our optimization and scaling of the Recommended Plan (Enclosure 1). The changes also took into consideration agency and public comments. During the course of optimizing and scaling of the Recommended Plan, changes were made to the method of operation of the diversion channel structure on Eagle Creek, including slightly increasing the size of the diversion channel. As a result, the Blanchard River to Lye Creek cutoff levee was removed from the Recommended Plan. The proposed levee carried with it the potential for inducing flooding to approximately 1,500 acres of agricultural lands during a 1% annual chance exceedance event (100-year flood). After our study team optimized the performance of the proposed Eagle Creek diversion channel, the levee was screened from the overall plan since it was not economically justified. The costs of constructing and maintaining the levee exceeded the flood reduction benefits it would provide and was screened from further consideration according to Federal policy.

Based on our engineering analysis, the residents in Hunter's Creek Neighborhood will experience the same level of flood risk with construction of the Recommended Plan as without; they would neither be at less or greater risk compared to today's current risk. At the event announcing the revisions to the Recommended Plan, inundation maps depicting the changes were presented and are enclosed. We understand you have received multiple inquiries from residents who reside in the Hunter's Creek neighborhood, which is located adjacent to, and drains into, Lye Creek. The Recommended Plan presented in April 2015 indicated a reduction in water surface elevation in Lye Creek in this area which correlated to a reduction in flood risk for this neighborhood. As a result of the changes in the Recommended Plan presented in August 2015, the flood risk in this area will not change from the existing without-project

“Based on our engineering analysis, the residents in Hunter’s Creek Neighborhood will experience the same level of flood risk with construction of the Recommended Plan as without; they would neither be at less or greater risk compared to today’s current risk.”

“While our results show that a significant portion of the Hunter’s Creek neighborhood would be impacted by the 1% chance of annual exceedance, the current FEMA Flood Insurance Rate Map documents indicate most of this neighborhood is outside of the Special Flood Hazard Area.”

condition. Specifically, results of our analysis indicate that implementation of our Recommended Plan would result in no change in flood risk from existing conditions. For this area, we simulated the 1% annual chance exceedance event (100-year flood) for both the without-project (existing conditions) and with-project conditions (August 2015 plan), compared the two and found no difference in the Hunter’s Creek neighborhood (Enclosure 2).

Our map includes the Hunter’s Creek Neighborhood in the floodplain for the 1% annual chance exceedance event (100-year flood plain), while the current Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map does not. While our results show that a significant portion of the Hunter’s Creek neighborhood would be impacted by the 1% chance of annual exceedance, the current FEMA Flood Insurance Rate Map documents indicate most of this neighborhood is outside of the Special Flood Hazard Area. Structures which are located outside the Special Flood Hazard Area are not mandated to have flood insurance unless a lending institution requires flood insurance as a condition of financing. The Buffalo District is coordinating with FEMA to document and resolve any mapping discrepancies.

“Relying on observations from the 2007 flood can be misleading; because the event was more intense than the 1% (100-year storm), it resulted in flooding beyond the floodplain for 1% (100-year) event.”

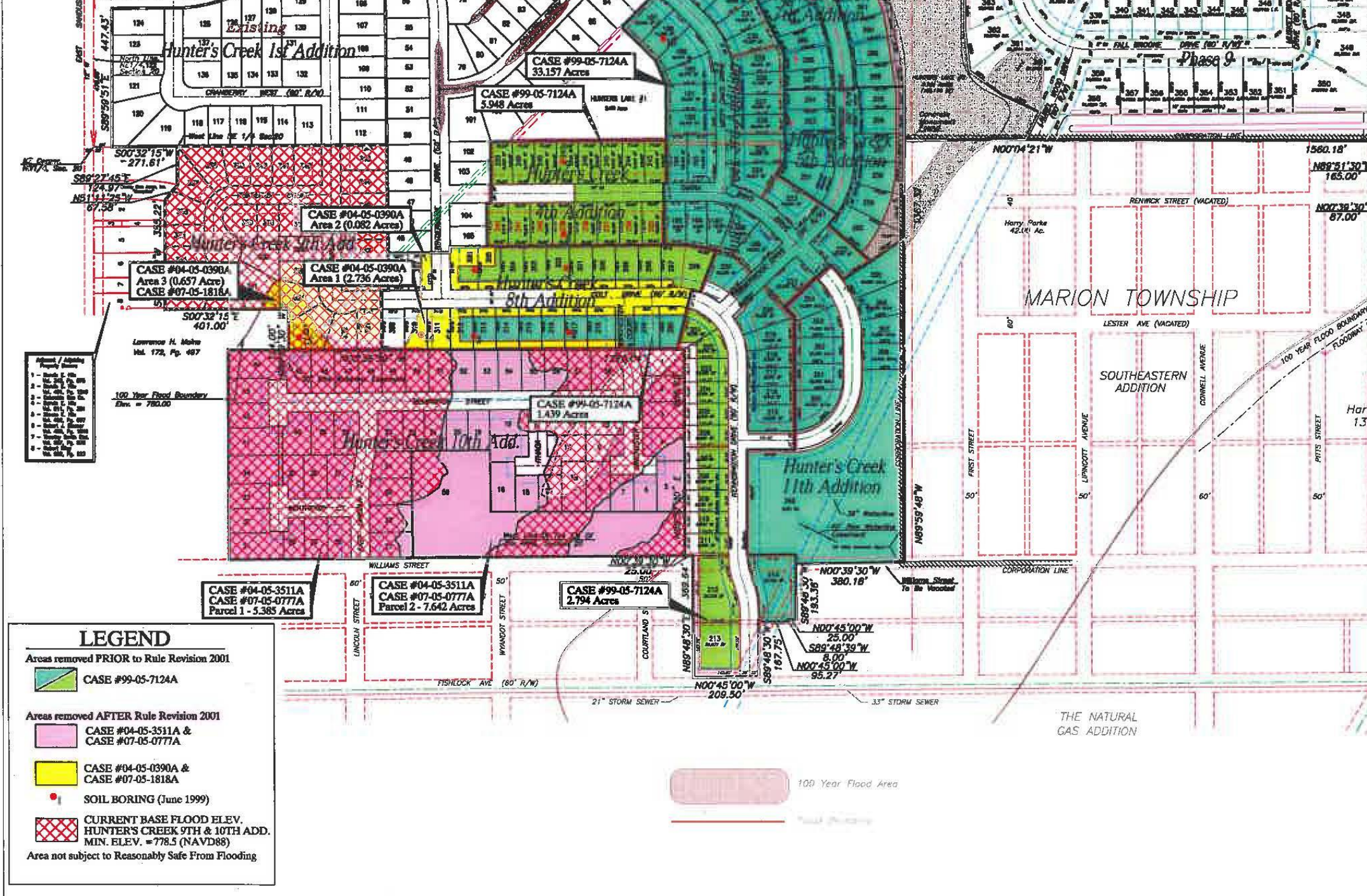
Relying on observations from the 2007 flood can be misleading; because the event was more intense than the 1% chance annual exceedance event (100-year storm), it resulted in flooding beyond the floodplain for 1% (100-year) event. It is important to note the 2007 flood was greater than the 1% annual chance exceedance event. During the development of the hydrologic and hydraulic modeling studies, we used the most up-to-date topographic data (LIDAR) and flow frequency statistics that accounted for the numerous recent flood events. As a result, we are confident our models accurately represent flood risk in the watershed.

“The Buffalo District will engage FEMA during the design phase to determine if the difference in mapping between the existing Special Flood Hazard Area and the proposed without-project floodplain mapping for 1% chance of annual exceedance may require a separate LOMR to document difference between the mapping prior to review and approval of a CLOMR for the Recommended Plan.”






There is a process available to rectify the difference between the USACE and FEMA flood plain mapping. During the design phase and prior to construction, an application to FEMA requesting a Conditional Letter of Map Revision (CLOMR) for the Recommended Plan would need to be prepared and submitted prior to construction. Typically, the CLOMR application to FEMA is made by local communities, but in this case, USACE can also submit the application for a Federal flood risk management project. A CLOMR enables FEMA to comment on a proposed project which results in a change to the hydrologic or hydraulic characterization of a flooding source. A CLOMR does not revise an effective FEMA National Flood Insurance Program (NFIP) map; however it indicates whether the project, if built as proposed, would be recognized by FEMA. After the project is constructed, a Letter of Map Revision (LOMR) would need to be submitted which documents the as-built project and would revise the NFIP map.

The FEMA map change process outlined above may result in the need for changing the existing without-project floodplain mapping prior to implementation of the project. The Buffalo District will engage FEMA during the design phase to determine if the differences in mapping between the existing Special Flood Hazard Area and the proposed without-project floodplain mapping for 1% chance of annual exceedance may require a separate LOMR to document differences between the mapping prior to review





**LEGEND**

- Areas removed PRIOR to Rule Revision 2001
  -  CASE #99-05-7124A
- Areas removed AFTER Rule Revision 2001
  -  CASE #04-05-3511A & CASE #07-05-0777A
  -  CASE #04-05-0390A & CASE #07-05-1818A
  -  SOIL BORING (June 1999)
  -  CURRENT BASE FLOOD ELEV. HUNTER'S CREEK 9TH & 10TH ADD. MIN. ELEV. = 778.5 (NAVD88)
- Area not subject to Reasonably Safe From Flooding

Existing  
Hunter's Creek 1st Addition

CASE #99-05-7124A  
33.157 Acres

CASE #99-05-7124A  
5.948 Acres

CASE #04-05-0390A  
Area 2 (0.082 Acres)

CASE #04-05-0390A  
Area 3 (0.657 Acres)  
CASE #07-05-1818A

CASE #04-05-0390A  
Area 1 (2.736 Acres)

CASE #99-05-7124A  
1.439 Acres

CASE #04-05-3511A  
CASE #07-05-0777A  
Parcel 1 - 5.385 Acres

CASE #04-05-3511A  
CASE #07-05-0777A  
Parcel 2 - 7.642 Acres

CASE #99-05-7124A  
2.794 Acres

N00°39'30"W  
380.18'

S89°46'30"W  
193.36'

N00°45'00"W  
25.00'

S89°48'39"W  
8.00'

N00°45'00"W  
95.27'

N00°45'00"W  
209.50'

100 Year Flood Area

MARION TOWNSHIP

SOUTHEASTERN ADDITION

THE NATURAL GAS ADDITION

Lawrence H. Mohr  
Vol. 172, Pg. 487

100 Year Flood Boundary  
Elev. = 780.00

- 1. Street
- 2. Alley
- 3. Easement
- 4. Flood Hazard
- 5. Flood Boundary
- 6. Flood Hazard
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- 9. Flood Hazard
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Questions...