Black Fork River – Ditch Petition

First Hearing

August 5, 2021

Richland & Crawford County Joint Board of County Commissioners

Why are we here?

- Petition filed by the City of Shelby and 60+ property owners in Richland and Crawford Counties
- Petition filed under Ohio Revised Code Section 6133 (Joint County Ditch Petition) on February 24, 2021
- Update to ORC Sections 6131, 6133, 6137 on March 24, 2021
- ORC states that old section of code must be used because petition filed before the new law enacted

What is the Purpose of this Ditch Petition?

- Remove brush, log jams, tree piles, leaning trees, felled trees, and dead trees from within and along the banks of the river
- Necessary bank armoring or stabilization
- Any additional duties deemed necessary, including but not limited to the removal of silt bars and brush piles, and the removal of trees, debris, and brush 20 feet back from the top of bank
- Maintain the waterway from said obstructions

Definition

- (6131.01.C) "Improvement" includes:
  - (1) The location, construction, reconstruction, reconditioning, widening, deepening, straightening, altering, boxing, tiling, filling, walling, arching, or any change in the course, location, or terminus of any ditch, drain, watercourse, or floodway;
  - (2) The deepening, widening, or straightening or any other change in the course, location, or terminus of a river, creek, or run;
  - (3) A levee or any wall, embankment, jetty, dike, dam, sluice, revetment, reservoir, holding basin, control gate, breakwater, or other structure for the protection of lands from the overflow from any stream, lake, or pond, or for the protection of any outlet, or for the storage or control of water;
  - (4) The removal of obstructions such as silt bars, log jams, debris, and drift from any ditch, drain, watercourse, floodway, river, creek, or run;
  - (5) The vacating of a ditch or drain.

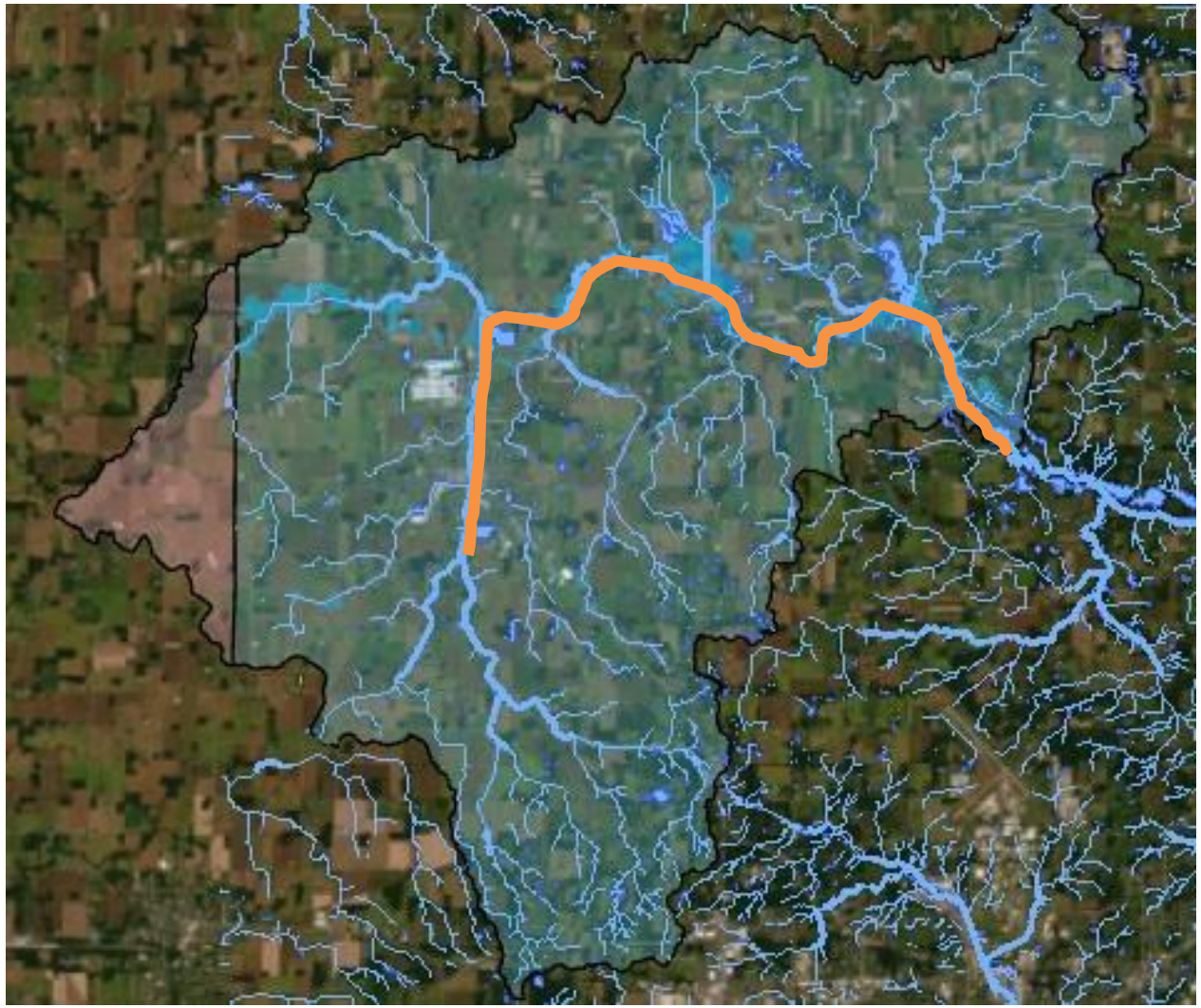
Where is the project?

- Black Fork River (main channel) and 20 feet from either bank
- Starting 50 feet south of the Mickey Road Bridge (Shelby)
- Ending at the eastern edge of the St. Rt. 13 bridge over the Black Fork River (Franklin Township)
- Approximately 18 miles of river to clean and maintain
- Watershed includes 10 Townships (Richland – Plymouth, Cass, Bloominggrove, Butler, Sharon, Jackson, Franklin, Springfield; Crawford – Auburn, Vernon) and 3 Municipalities (Shelby, Ontario, Shiloh)

Black Fork Watershed

Section of river channel to be cleaned & maintained

Approximately 18 miles



Source: WBDHU12 – Watershed Boundary Dataset – USGS/NRCS USDA

What's happened so far?

- Joint Board formed between Richland and Crawford Counties on March 9th, 2021
- Mailed notices to all property owners and placed legal notices in the paper concerning the viewing and first hearing
- Viewings held on May 20th, 2021 (on-site on Ganges East Road) and May 21st, 2021 (viewed drone footage of entire project length)
- Engineer to file preliminary report at first hearing

What did we find?

- In-Person Viewing – visited 2 log jam locations
- Drone footage (1st flight – leaves off) (2nd flight – leaves on)
  - Findings:
    - Dead Standing Trees – 500
    - Leaning Trees (next to stream channel) – 65
    - Dead Laying Trees (next to stream channel) – 340
    - Single Trees in Water – 130
    - Small Logjams – 45
    - Medium Logjams – 15
    - Large Logjams - 10

Examples of Black Fork issues


Approximate top bank of stream

Why am I included?

- Ditch Petitions are based on watershed area
- If water from your property flows into or through the project location, you are in the project watershed
- This project watershed contains approximately 10,567 parcels
  (Richland County = 10,374; Crawford County = 193)

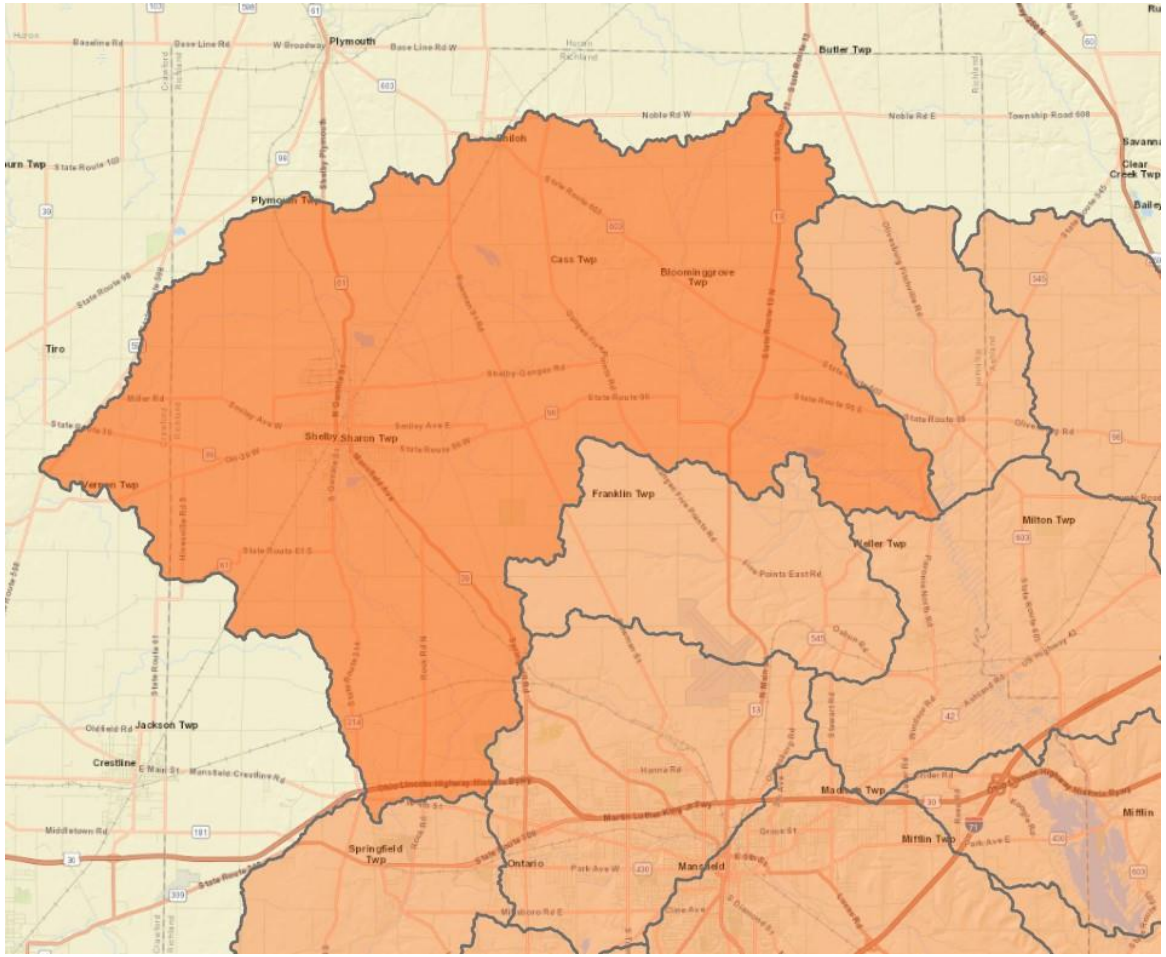
- This project watershed contains approximately 70,024 acres
  (Richland County = 66,232; Crawford County = 3,792)

Definition

- (6131.01.F) "Benefit" or "benefits," except as ordered in section 6131.31 of the Revised Code, means advantages to land and owners, to public corporations as entities, and to the state resulting from drainage, conservation, control and management of water, and environmental, wildlife, and recreational improvements. Factors relevant to whether such advantages result include:
  - The watershed or entire land area drained or affected by the improvement;
  - The total volume of water draining into or through the improvement and the amount of water contributed by each land owner;
  - The use to be made of the improvement by any owner, public corporation, or the state.
- "Benefit" or "benefits" includes, but is not limited to, any or all of the following factors:
  - Elimination or reduction of damage from flooding;
  - Removal of water conditions that jeopardize public health, safety, or welfare;
  - Increased value of land resulting from an improvement;
  - The use of water for irrigation, storage, regulation of stream flow, soil conservation, water supply, or any other incidental purpose;
  - Providing an outlet for the accelerated runoff from artificial drainage if a stream, watercourse, channel, or ditch that is under improvement is called upon to discharge functions for which it was not designed. Uplands that have been removed from their natural state by deforestation, cultivation, artificial drainage, urban development, or other human methods shall be considered to be benefited by an improvement that is required to dispose of the accelerated flow of water from the uplands.

Black Fork Watershed

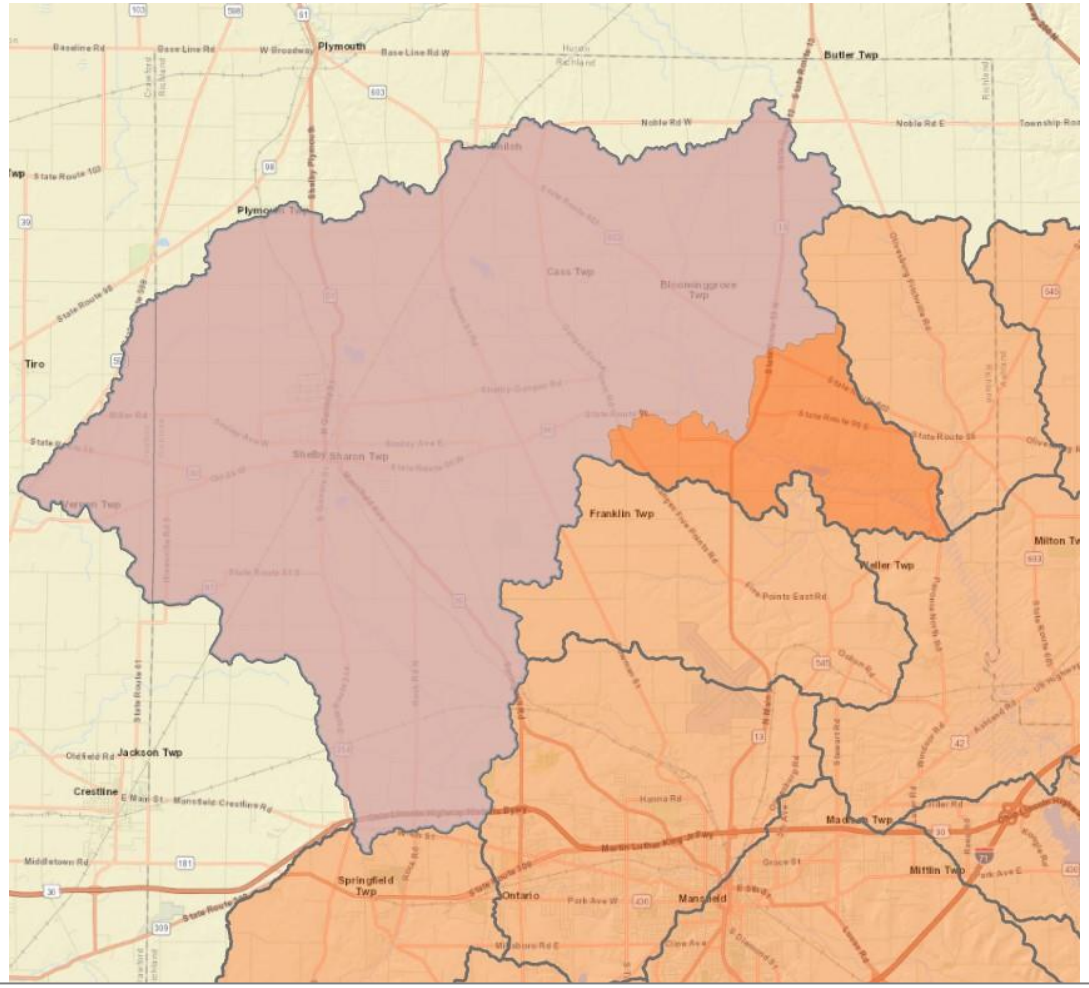
Sub-watershed (Includes portion within Crawford County)



Source: WBDHU12 – Watershed Boundary Dataset – USGS/NRCS USDA

Black Fork Watershed

Sub-watershed-Assessed Area (Trimmed from St. Rt. 13 - upstream)



Source: WBDHU12 – Watershed Boundary Dataset – USGS/NRCS USDA

What is the Preliminary Estimate of Costs?

• Construction	$516,000
• Engineering	$55,000
• Administration	$15,000
• Mailings, Advertising, Legal Notices	$13,000
• Construction Inspection	$50,000
• Costs to date (through 7/20/21)	$15,300
• **Total**	**$664,300**

What are the benefits?

- Those within the 100-year floodplain will see the most benefit
- Possible increased land value
- Possible increased crop production
- Possible reduced localized flooding occurrence

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How do we put a number on the Benefits?

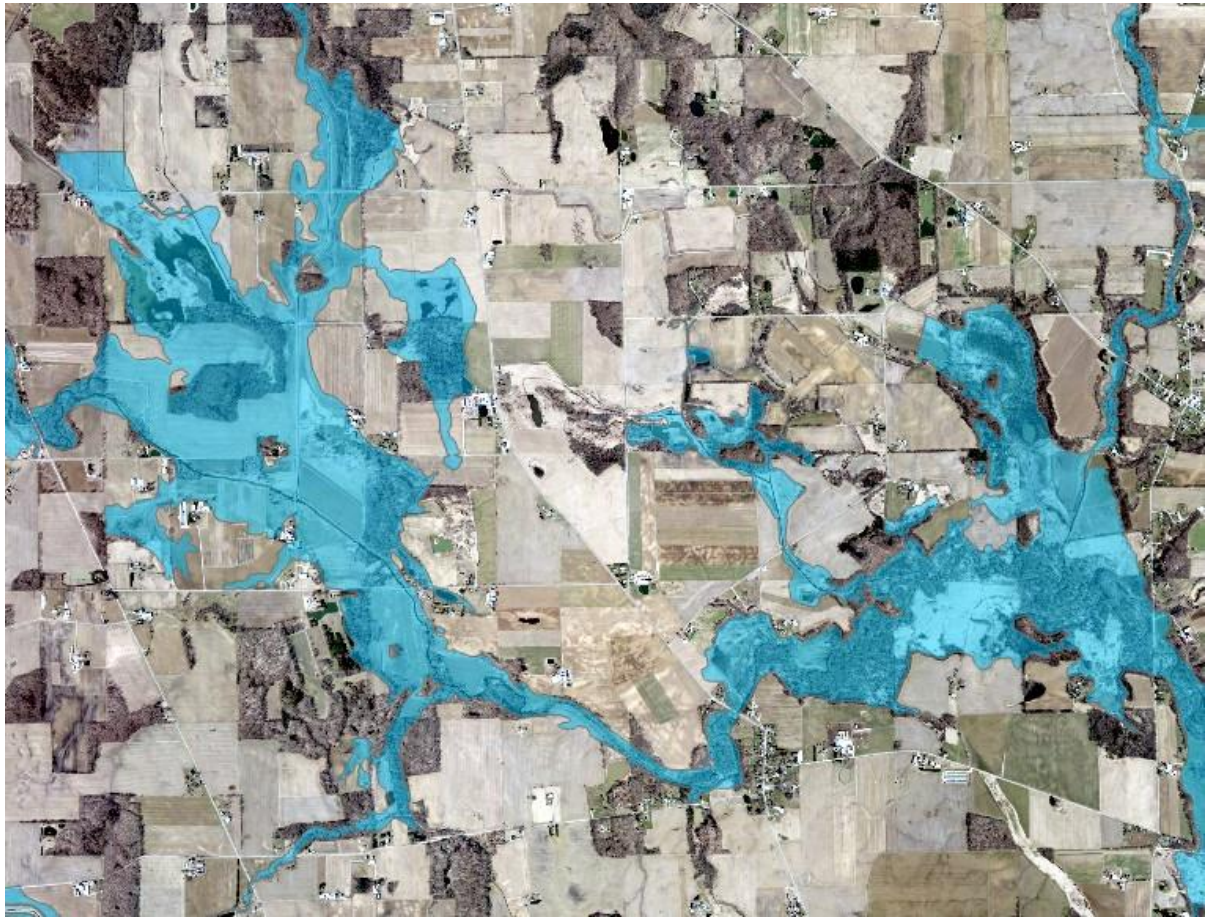
- Increased crop production
- Based on study found in the National Corn Handbook (NCH-23)
- Long-term study conducted in north central Ohio
- Increased yields based on improved surface drainage

100-year Flood Hazard Area

Sample area Within Watershed

Areas highlighted in blue show the 100-year FEMA Flood Hazard Boundary (100-year floodplain).

Flood Hazard Zones represented in this map would be Zone A, AE & AE Floodway.



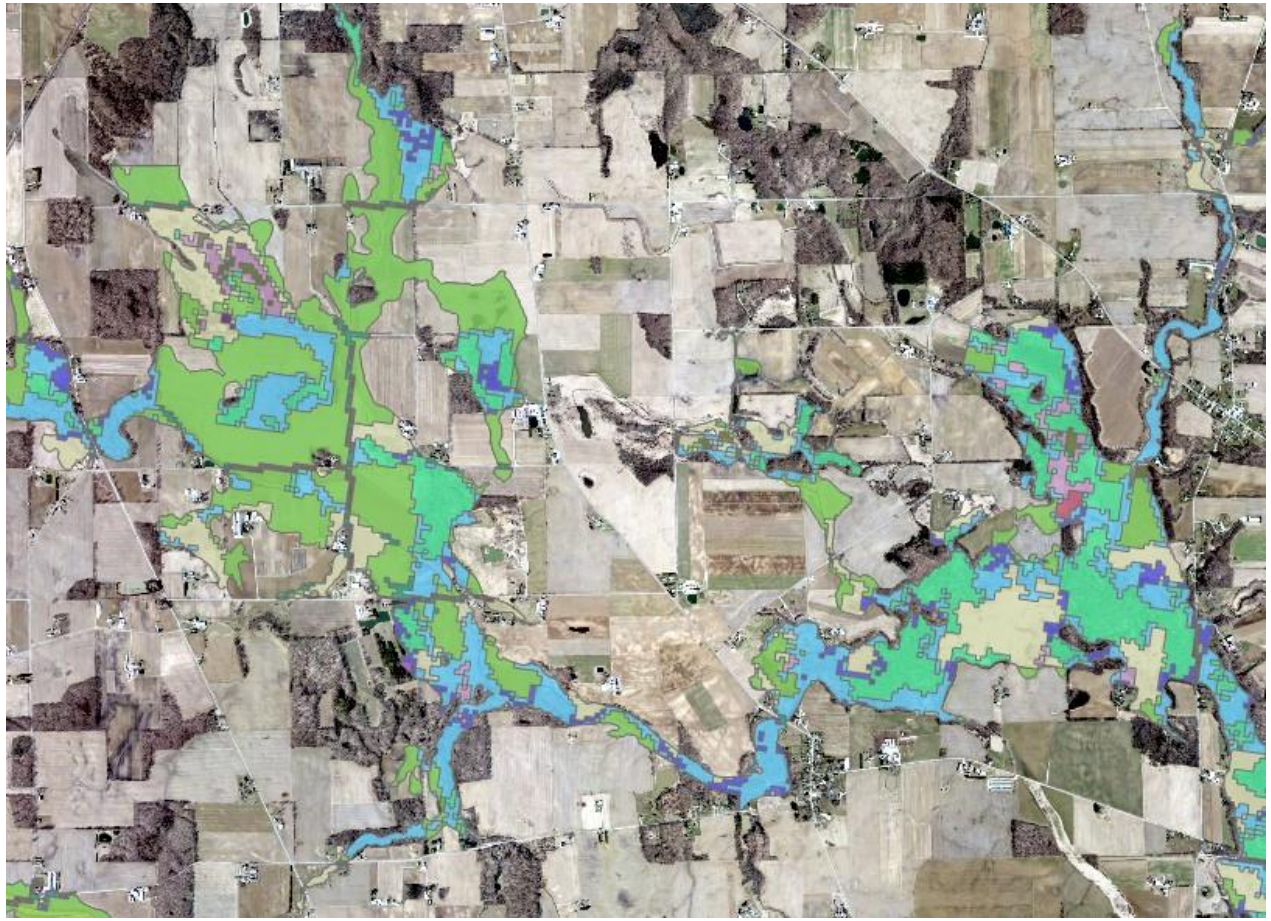
Source: NLCD – National Land Cover Database – USGS (2016)

100-year Flood Hazard Area

Sample area Within Watershed

Land uses shown over aerial map.

- Cropland
- Forested Area
- Developed Land



Source: NLCD – National Land Cover Database – USGS (2016)

What's the Number?

- Area within 100-year floodplain = 5,573 acres
- Cultivated land within 100-year floodplain = 2,472 acres
- Increased crop production (based on National Corn Handbook)
- Increased land value
- Total probable annual benefit = **$423,700**

  (based on increased crop production on 2,472 acres)

Favorable Factors for Ditch Petition

- Possible reduction in flooding occurrences from frequent storms (2, 5, 10-year storms)
- Improved drainage along project location
- Possible improved crop yields within 100-year floodplain
- Possible increased property values within 100-year floodplain
- Provides for perpetual maintenance
- Possible reduction in bank erosion (water flow will not have to go around log jams)

Unfavorable Factors for Ditch Petition

- The 100-year floodplain area will not be reduced
- Flooding will continue, especially from the less frequent storms (25, 50, 100-year storms)
- Minimal physical benefit for landowners outside the 100-year floodplain area
- Continual annual administrative costs associated with inspections, maintenance, and record keeping at property owner expense

Do Benefits outweigh Costs?

- Benefits = $423,700 (annual benefit)
- Costs = $664,300 (one-time cost)
- Annual Maintenance = $65,000 (estimate – as needed)

- After a period of two years, it is reasonably certain the benefits will exceed the costs of the project

How much will it cost me?

- Assessment examples are preliminary estimates
- Final assessments will be based on actual cost of construction
- Property owners in the 100-year floodplain will be assessed a factor for receiving the most benefit
- Property owners out of the 100-year floodplain could pay about $7.50 per acre (minimum is $10)
- Property owners in the 100-year floodplain could pay about $11.25 per acre (minimum is $15)
- Property owner only pays for area inside the watershed

Assessment Examples
(Outside of 100-year Flood Hazard Boundary)

- A property owner with 1.0 acre owns property within the watershed, but outside of the 100-year floodplain.

  1.0 acres X $7.50 base rate/parcel = $7.50 assessment = **$10.00 minimum**

- A property owner with 6 acres owns property within the watershed, but outside of the 100-year floodplain
  - 6 acres X $7.50 base rate/acre = $45.00 assessment
- A property owner with 80 acres owns property within the watershed, but outside of the 100-year floodplain.
  - 80 acres X $7.50 base rate/acre = $600 assessment

Assessment Examples
(Within the 100-year Flood Hazard Boundary)

- A property owner with 1.0 acre owns property within the watershed, inside of the 100-year floodplain
  - 1.0 acres X $10 minimum X 1.5 factored rate/parcel = $15.00 assessment
- A property owner with 6 acres owns property within the watershed, inside of the 100-year floodplain
  - 6 acres X $7.50 base rate X 1.5 factored rate/acre = $67.50 assessment
- A property owner with 80 acres owns property within the watershed, inside of the 100-year floodplain
  - 80 acres X $7.50 base rate X 1.5 factored rate/acre = $900 assessment

What happens next?

- Joint Board decides to dismiss or move forward with the petition
- If moving forward, Engineer proceeds with developing plans, specifications, survey, estimates, and assessment schedules
- Final hearing is scheduled after the plans, specifications, estimates, and assessments are filed with the Joint Board
- Property owners will be notified of final hearing along with their estimated assessment
- Joint Board again decides to dismiss or approve the petition at the final hearing