



**BOARD OF COUNTY COMMISSIONERS**  
**WARREN COUNTY, OHIO**  
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**TOM ARISS**  
**PAT ARNOLD SOUTH**  
**DAVID G. YOUNG**

BOARD OF COUNTY COMMISSIONERS  
WARREN COUNTY, OHIO

MINUTES: Regular Session – August 16, 2012

The Board met in regular session pursuant to adjournment of the August 14, 2012, meeting.

David G. Young - present

Pat Arnold South - present

Tom Ariss - present

Tina Davis, Clerk - present

Minutes of the August 14, 2012 meeting were read and approved.

- 12-1110 A resolution was adopted to designate Tina Davis, Clerk of Commissioners, as Representative to receive training on behalf of David G. Young, Pat Arnold South and Tom Ariss, Warren County Commissioners, pursuant to House Bill 9. Vote: Unanimous
- 12-1111 A resolution was adopted to Waive Permit Fee associated with St. Francis De Sales Catholic Church Festival. Vote: Unanimous
- 12-1112 A resolution was adopted to authorize Amendment No. 1 to the Engineering Agreement with Burgess & Niple Inc. increasing purchase order No. 88482 for the North Water System – Water Booster Pump Station Improvements Project, Fund No. 3225. Vote: Unanimous
- 12-1113 A resolution was adopted to approve Second Amendment to Frequency Reconfiguration Agreement with Nextel on behalf of Warren County Telecommunications. Vote: Unanimous
- 12-1114 A resolution was adopted to approve various Refunds. Vote: Unanimous

- 12-1115 A resolution was adopted to approve a Change Order No. 3 to the Contract with Lake Erie Electric Inc. increasing Purchase Order No. 78896 for the Lower Little Miami Wastewater Treatment Plant Expansion Project, Fund No. 574.  
Vote: Unanimous
- 12-1116 A resolution was adopted to declare various items within Engineer's Office, Sheriff's Office, Health Department, Telecommunications, and Facilities Management as surplus and authorize the disposal of said items.  
Vote: Unanimous
- 12-1117 A resolution was adopted to enter into Street and Appurtenances (including sidewalks) Security Agreement with M/I Homes of Cincinnati, LLC, for installation of certain improvements in Estates at Hawthorne Manor, Section 4 situated in Hamilton Township. Vote: Unanimous
- 12-1118 A resolution was adopted to enter into a Subdivision Public Improvement Performance and Maintenance Security Agreement with M/I Homes of Cincinnati, LLC for installation of certain improvements in Estates at Hawthorne Manor, Section 4 situated in Hamilton Township. Vote: Unanimous
- 12-1119 A resolution was adopted to enter into Erosion Control Bond Agreement with M/I Homes of Cincinnati, LLC for improvements in Estates at Hawthorne Manor Section 4, situated in Hamilton Township. Vote: Unanimous
- 12-1120 A resolution was adopted to enter into a Subdivision Public Improvement Performance and Maintenance Security Agreement with the Drees Company for installation of certain improvements in Heritage at Miami Bluffs, Phase 3, Block "C", Part 2 situated in Hamilton Township. Vote: Unanimous
- 12-1121 A resolution was adopted to approve following Record Plats. Vote: Unanimous
- 12-1122 A resolution was adopted to accept Amended Certificate into Grants Pass Thru Fund #261 and Approve Supplemental Appropriation Adjustment into Fund #261. Vote: Unanimous
- 12-1123 A resolution was adopted to approve Supplemental Appropriation within Water Revenue Fund #510. Vote: Unanimous
- 12-1124 A resolution was adopted to approve a Supplemental Appropriation in Community Development Fund #265. Vote: Unanimous
- 12-1125 A resolution was adopted to approve Appropriation Adjustment from Commissioners Fund #101-1112 into Coroner's Office Fund #101-2100.  
Vote: Unanimous

- 12-1126 A resolution was adopted to approve Appropriation Adjustments within Juvenile Probation Fund #101-2500. Vote: Unanimous
- 12-1127 A resolution was adopted to approve Appropriation Adjustment within Building and Zoning Inspection Fund #101-2300. Vote: Unanimous
- 12-1128 A resolution was adopted to waive Permit Fees associated with the Ohio Sauerkraut Festival. Vote: Unanimous
- 12-1129 A resolution was adopted to authorize payment of Bills. Vote: Unanimous

### DISCUSSIONS

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Ron Kronenberger, Waynesville Chamber of Commerce and Ohio Sauerkraut Festival Representative, was present to thank the employees within the Building Department for the hard work and guidance to the Sauerkraut Committee in the Committee's improvements to the safety of the festival goers.

Mr. Kronenberger then updated the Board on the dates of the festival and requested their consideration of a fee waiver for the inspection of the various items required prior to the festival opening.

Upon discussion, the Board resolved (Resolution #12-1128) to waive the permit fees associated with the Ohio Sauerkraut Festival.

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The Board met this 16<sup>th</sup> day of August, 2012, in the Commissioners' Meeting Room, for a work session with representatives from the Regional Planning Commission, Building and Zoning Department, Soil and Water Conservation and various townships and municipalities within Warren County to discuss if there is a need for Streamside Setbacks to be required within the Warren County Zoning Code.

Commissioner South welcomed those present and gave background information on the streamside setback discussion that has lead to this work session being scheduled today.

Jeff Thomas, Soil and Water Conservation, introduces John Mathews, ODNR, who presented the attached PowerPoint presentation relative to background information and the importance of streamside setbacks/storm water controls.

Greg Vreeland, Dayton Homebuilders Association, discussed the definition of stream as determined by the State of Ohio and stated his opinion that Warren County's current regulations accommodate as written. He then discussed the need for Warren County to take into consideration elevations adjacent to a stream if they are going to consider a mandatory streamside setback in the Zoning Code.

There was discussion relative to a committee being formed of a few key players within the interested parties to draft regulations for presentation and consideration at a later date.

Upon discussion, Commissioner Young requested that Mr. Vreeland, along with Jerry Spurling, Chief Building Official, Pam Jones and Fred Grimm, Zoning Board of Appeals, along with staff, form the discussed committee and upon and make a presentation to the entire group upon completion of their findings.

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Upon motion the meeting was adjourned.

  
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David G. Young, President

  
\_\_\_\_\_  
Tom Ariss

  
\_\_\_\_\_  
Pat Arnold South

I hereby certify that the foregoing is a true and correct copy of the minutes of the meeting of the Board of County Commissioners held on August 16, 2012, in compliance with Section 121.22 O.R.C.

  
\_\_\_\_\_  
Tina Davis, Clerk  
Board of County Commissioners  
Warren County, Ohio

# Information Re: Stream Setbacks

- Are Headwater Streams & Small Tribs Important?
- Effects of sub/urbanization on natural drainage systems.
- Does loss of stream buffers or stream degradation have a cost?
- Comparison of FEMA regulated floodplains to meander belt width (streamway) based areas.

**John Mathews, Stormwater and Streams**

**Ohio Dept. of Natural Resources**

**Division of Soil and Water Resources**

# How Important are Headwater & Small Tributaries?

- Natural processes occurring in headwater streams and wetlands affect the quantity and quality of water and the timing of water availability in rivers, lakes, estuaries, and groundwater.

# How Important are Headwater & Small Tributaries?

- Natural processes occurring in headwater streams and wetlands affect the quantity and quality of water and the timing of water availability in rivers, lakes, estuaries, and groundwater.
- These areas
  - store water,
  - recharge groundwater,
  - reducing the intensity and frequency of floods.
  - Process and buffer natural and human sources of nutrients (leaves, fertilizer etc.)
  - Capture sediments from uplands and streams

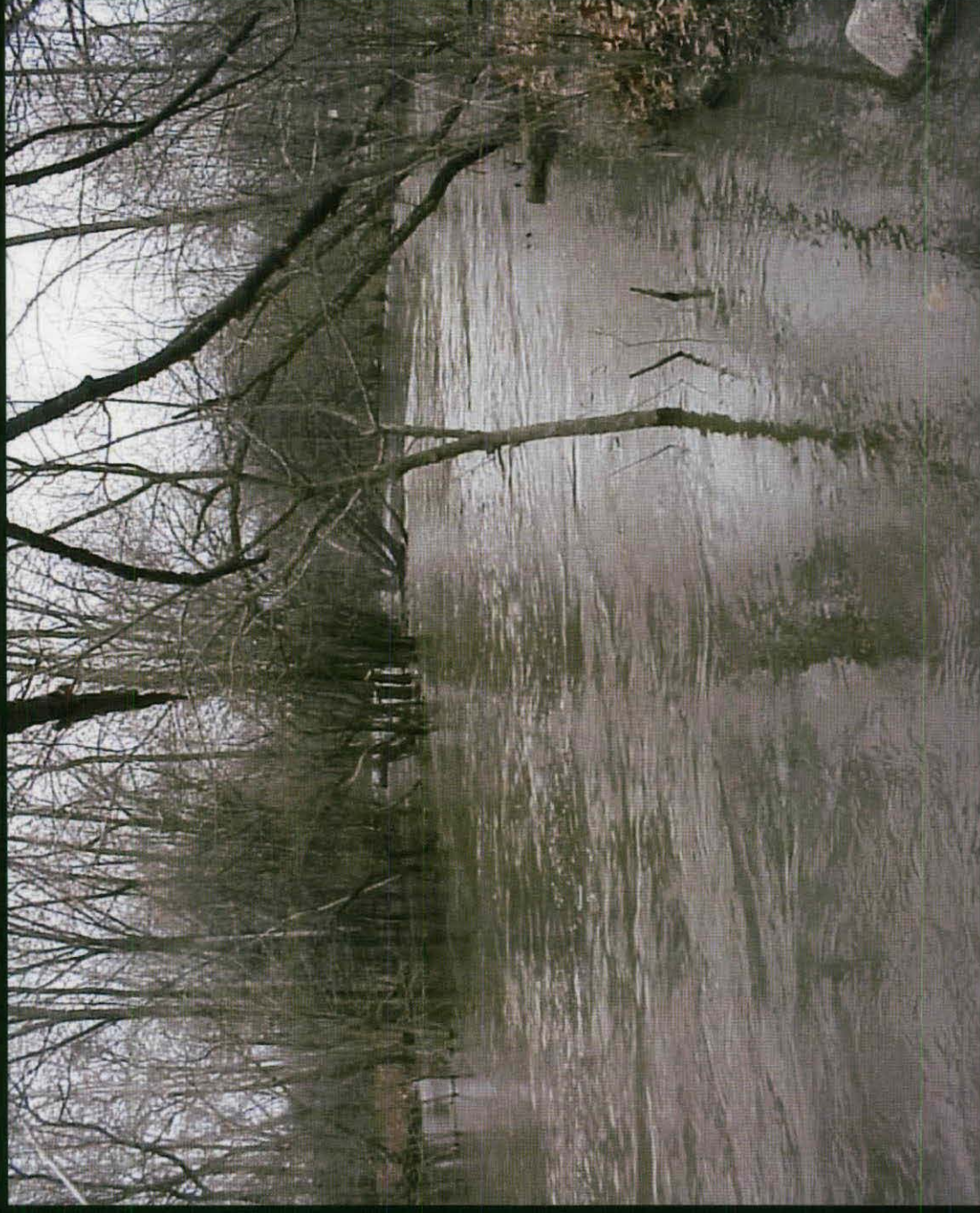
# Stormwater Services – Detention, sediment and nutrient treatment.





# Storage in headwaters and small tributaries reduces flooding

- public health & safety
- damage to infrastructure and property



# Hydrologic & Hydraulic Function (even w/Development)



Flood Conveyance, Flood Storage, Recharge...

# Pollution Treatment:

Sediment, Nitrogen, and Phosphorous

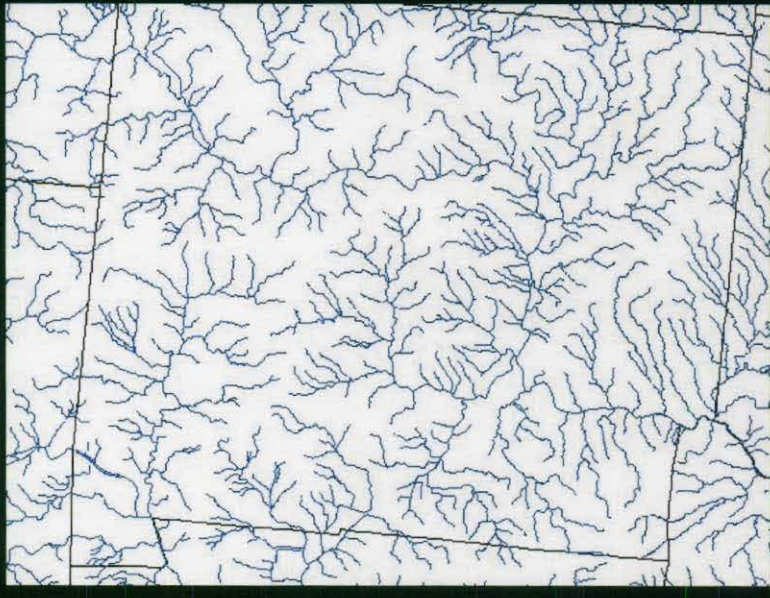


# Plus Stream and Riparian Habitat, Stream Stability and Thermal Buffering



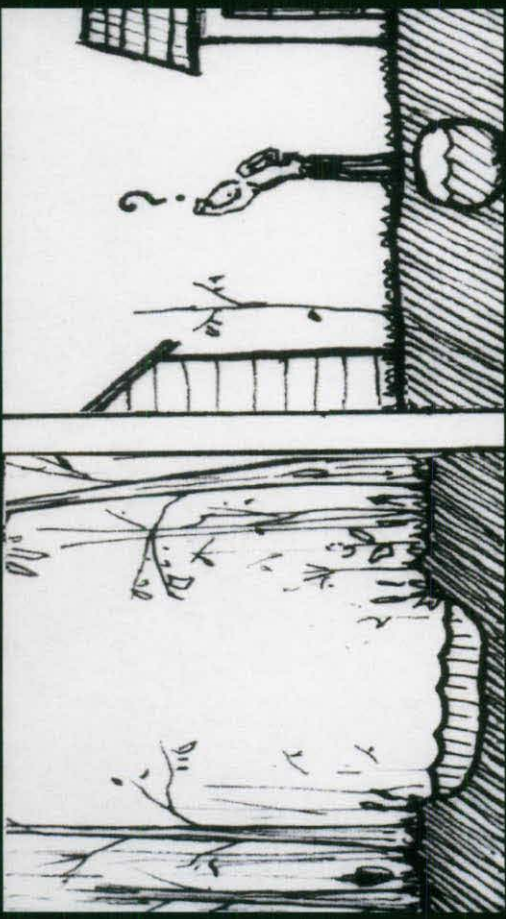
# Stream System

- Dendritic Pattern is revealing
- Stream system is analogous to other branching systems: Trees; digits-arm-body; circulatory system.

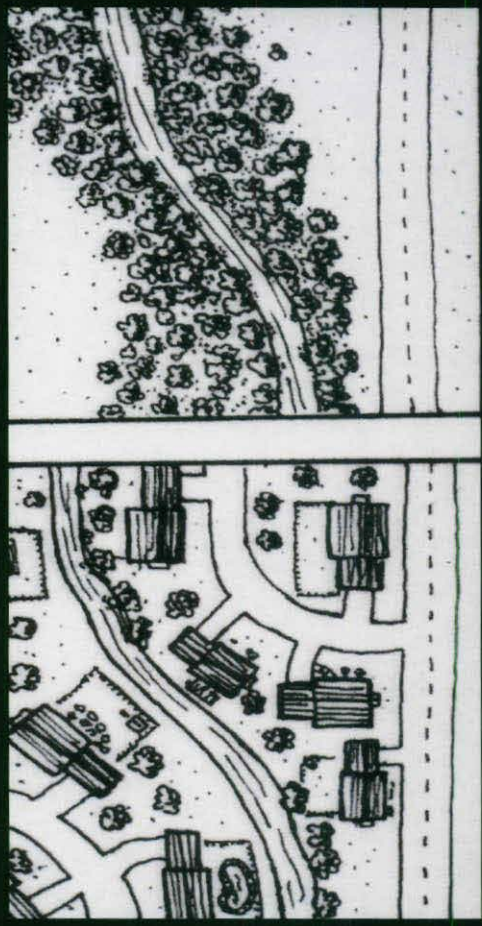


# Effects of Development on Streams

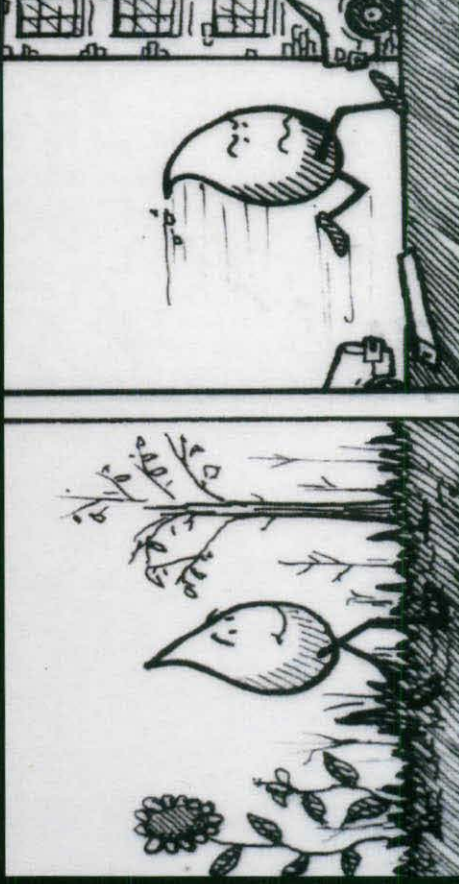
Loss of Small Channels



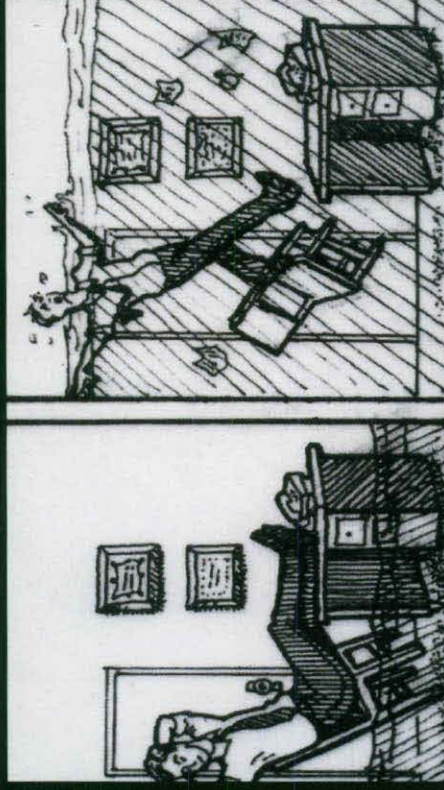
Loss of Stream  
Corridors/Floodplains



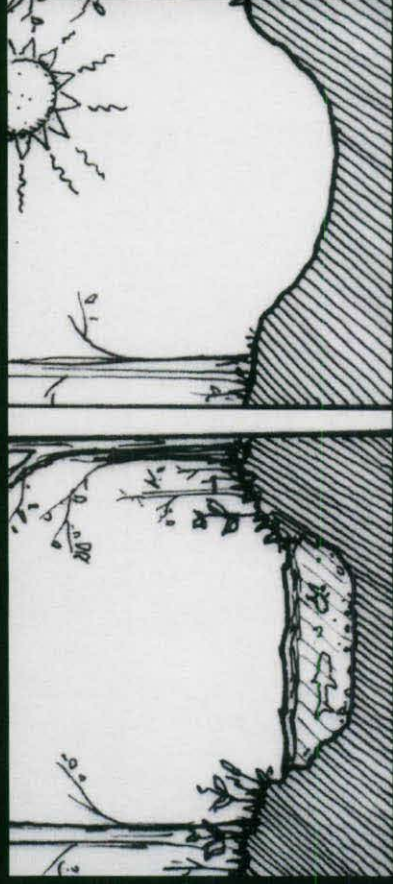
Faster Runoff - Time Runoff  
Reaches Stream” as much as  
50% faster



More Runoff – Moderate  
Development produces as  
much as 50% more runoff



Low Flows  
Reduced infiltration often  
affects base flows



# Increased Flood Frequency Higher Peaks



- 2-5 times Predevelopment / Increased Bankfull Events



# Creek Result-Degradation or Incision



# Creek Result-Degradation or Incision

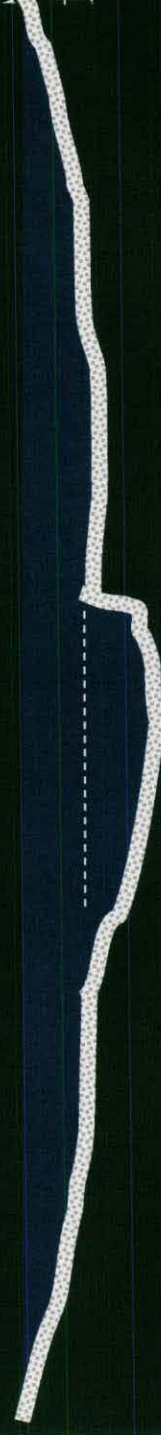


The big problem in developing areas

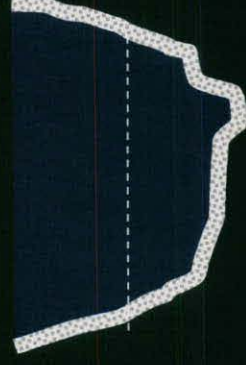
# Cost of Stream Degradation

- Property loss (often structures in unmapped but active floodplain or former floodplain)
- Infrastructure

Stable channel w/  
floodplain access



less able to erode the bed and banks



Entrenched Channel  
Fill FP, Dike, ...

more able to work, eroding the bed and banks.



# Purposes of Stream Setbacks?

- Stream Stability



# Problem of Trading Natural Services for Projected Services



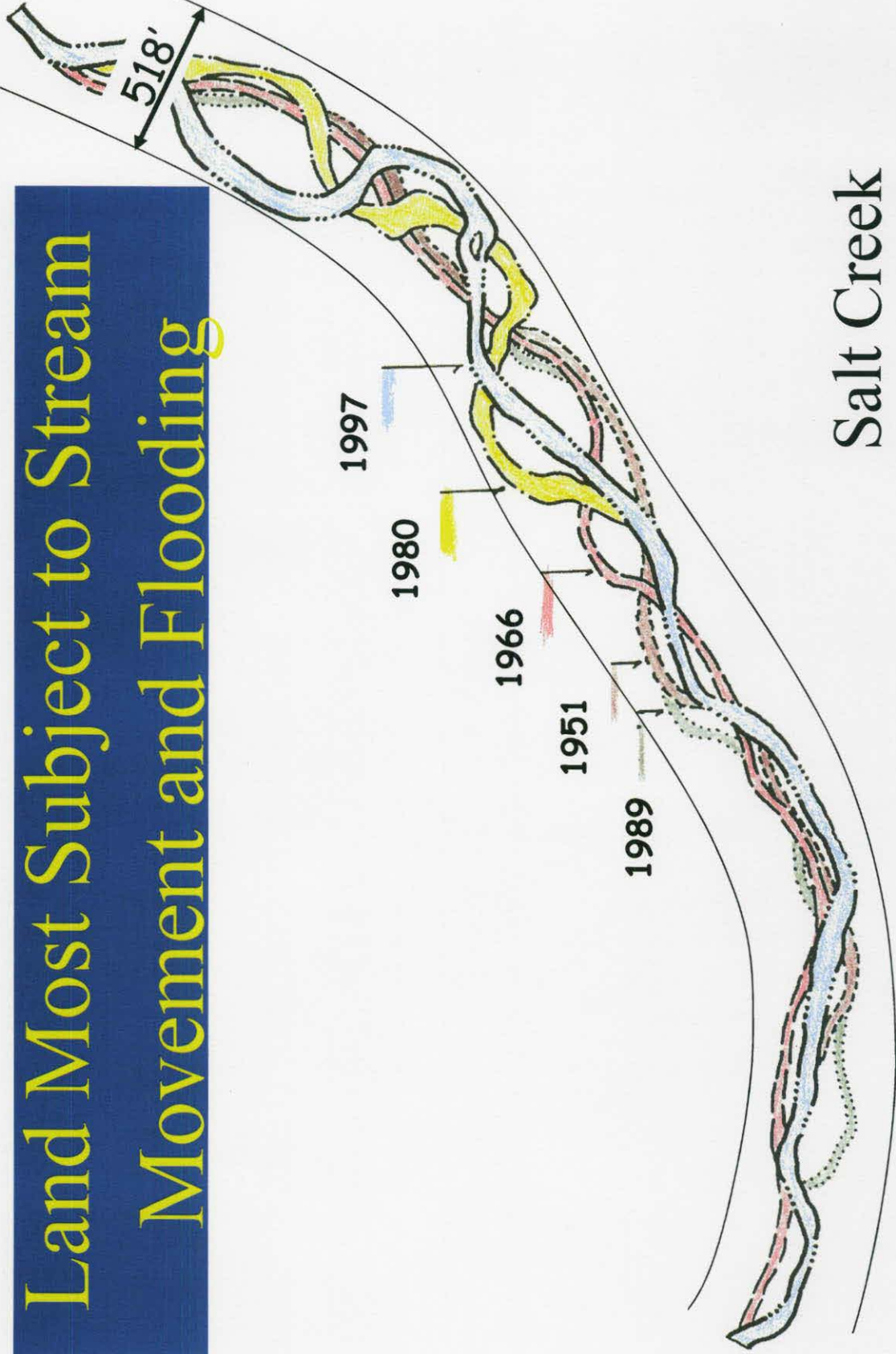
# Purposes of Stream Setbacks?

## Channel Stability

Setbacks allow room for natural stream adjustments



# Land Most Subject to Stream Movement and Flooding



Salt Creek  
Vinton County, Ohio

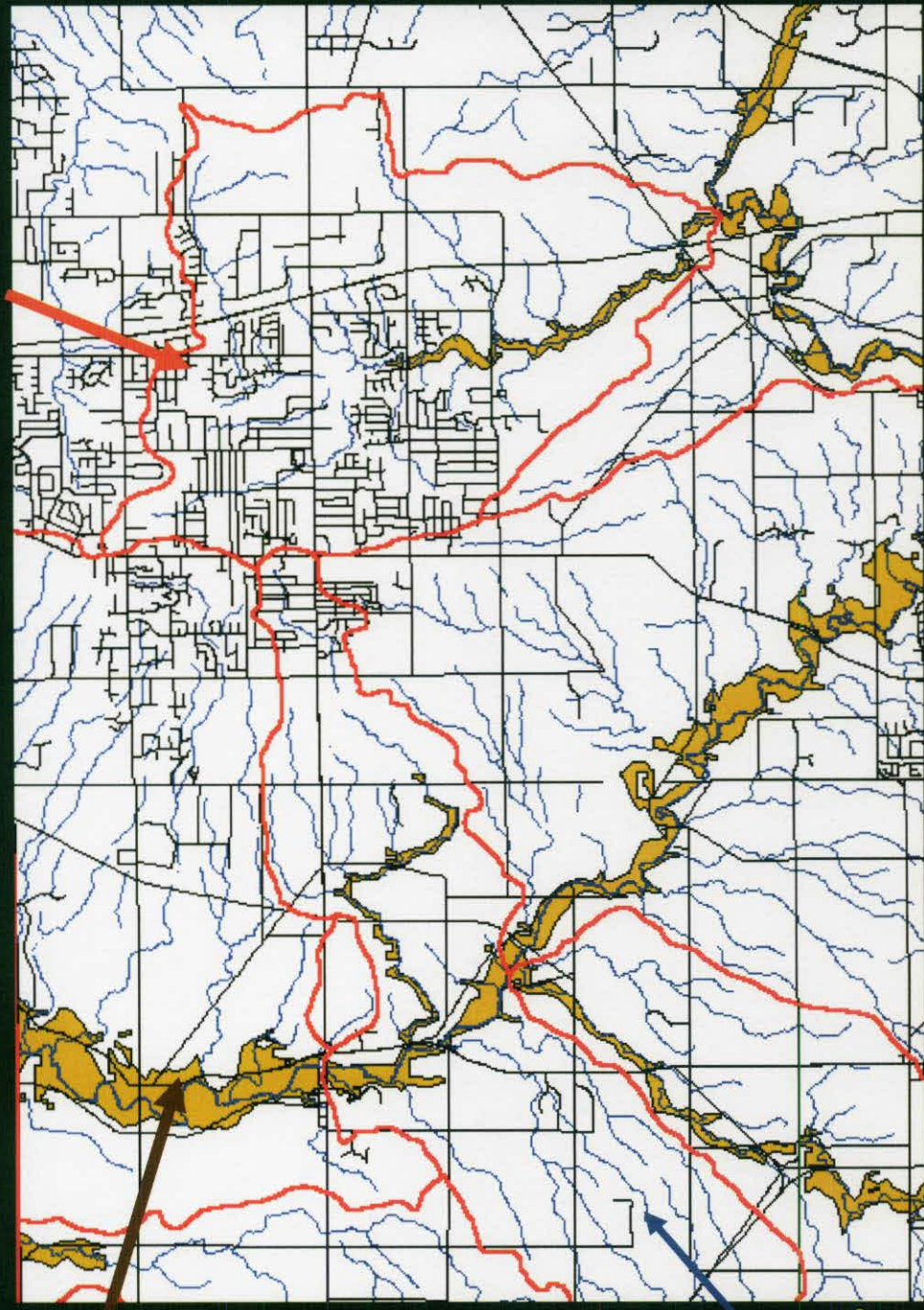


# How Do Stream Setback Widths Differ from 100 year Floodplain Area?

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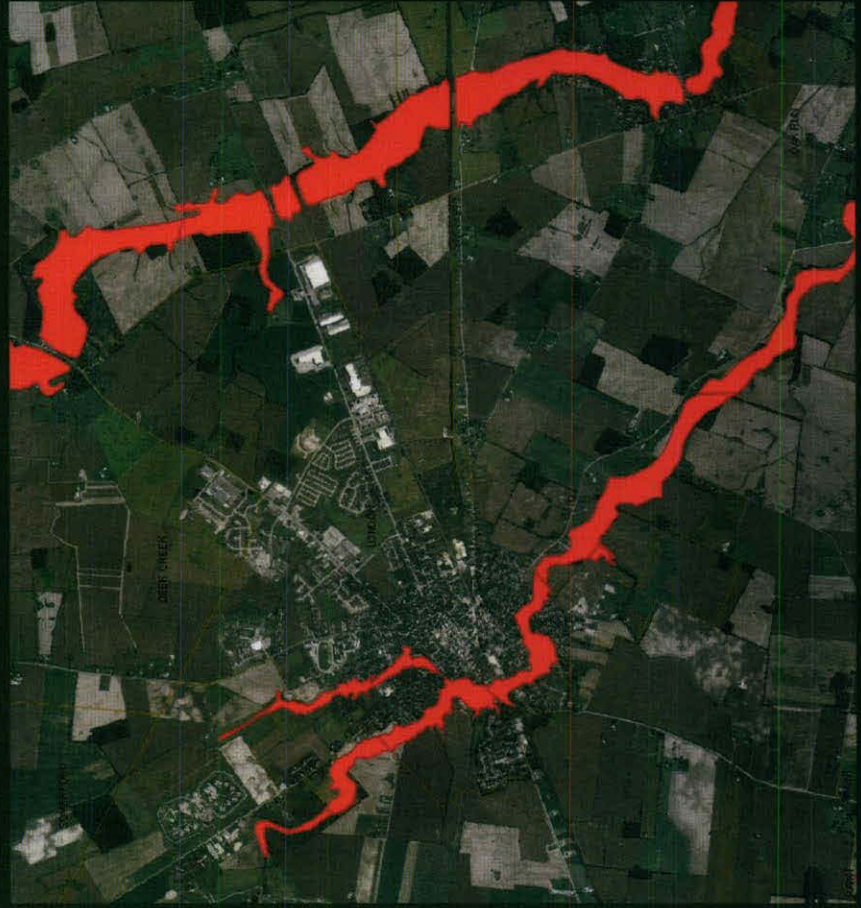
FEMA  
Floodplain &  
Floodway

Watershed  
Boundaries



Unmapped Streams

# London, Ohio Floodplains and Streams



# Recognize the Limitations of the Current Floodplain Program (FEMA)

- Based on older development
- Leaves out small channels
- Focus: life and property damages  
not watershed services such as stormwater management, pollution control etc.

# General Setback Width Guidelines

(Source: US Army Engineer Research and Development Center)

Function	Description	Recommended Setback, Each Side
Water Quality Protection	Dense grass or herbaceous vegetation	15 to 100 ft
Riparian Habitat	Diverse stands of shrubs and trees	100 to 1600 ft
Stream Stabilization	Riparian vegetation roots anchor soil along stream	30 to 65 ft
Flood Attenuation	Store and attenuate flood flows	65 to 500 ft
Detritus Input	Leaves, twigs, and branches fall into streams	10 to 30 ft

# What We've Learned in Ohio About How Wide?

High quality stream systems have  
extensive floodplains often beyond

10 x Channel Width

A diagram illustrating channel width measurement. A solid blue horizontal line represents the channel width. Above it, a yellow double-headed arrow spans a wider distance, representing the extent of floodplains. Dotted lines connect the ends of the arrow to the ends of the channel width line, forming a rectangular shape that shows the floodplains extending beyond the channel's boundaries.

# What We've Learned About How Wide?

Good qualities in stream  
systems begin showing



# What We've Learned About How Wide?

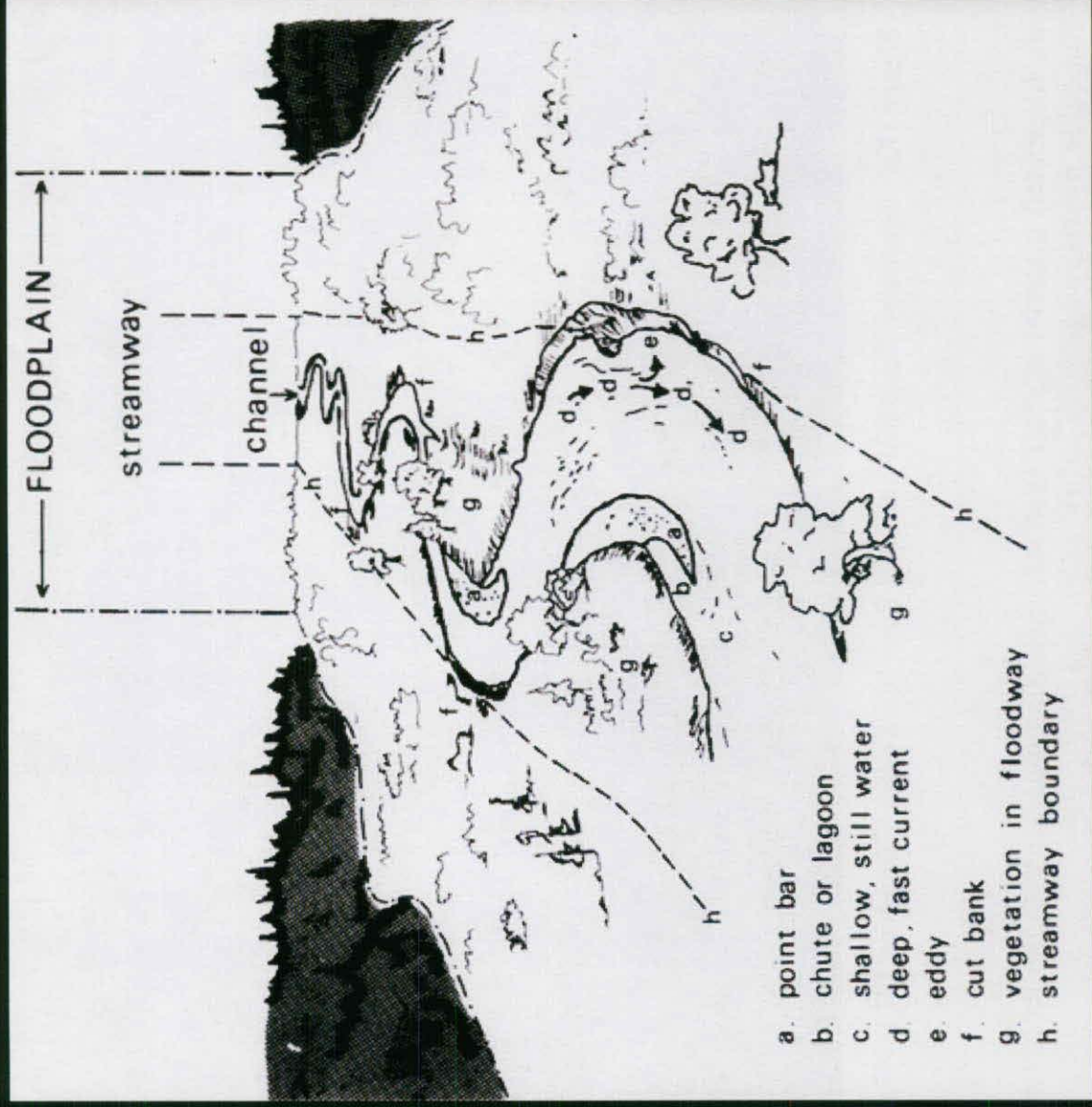
Minimum Width  
for Stability



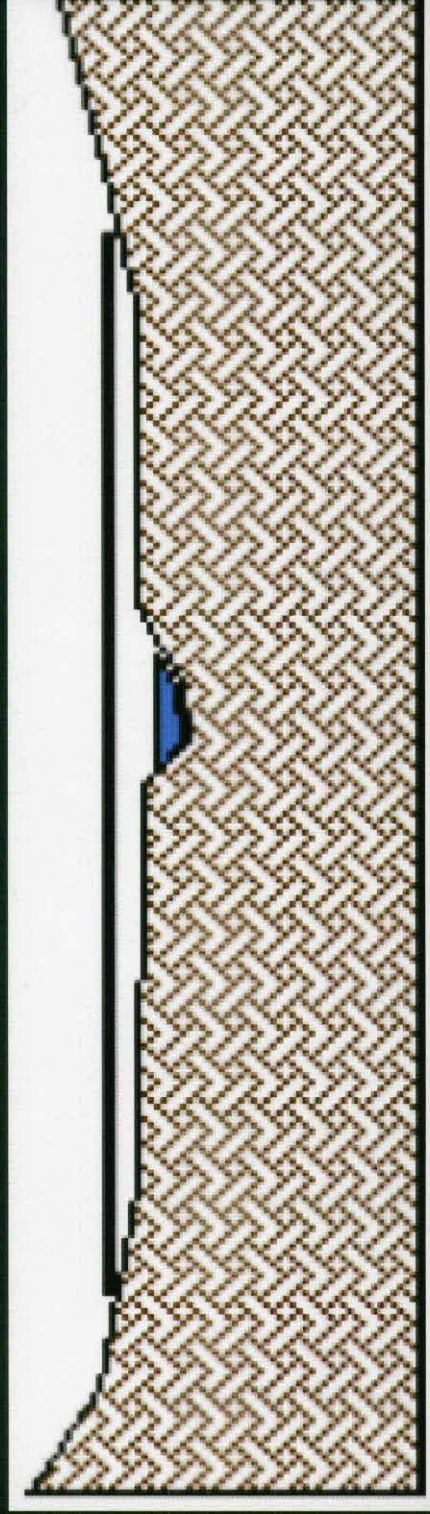
3 x Channel  
Width



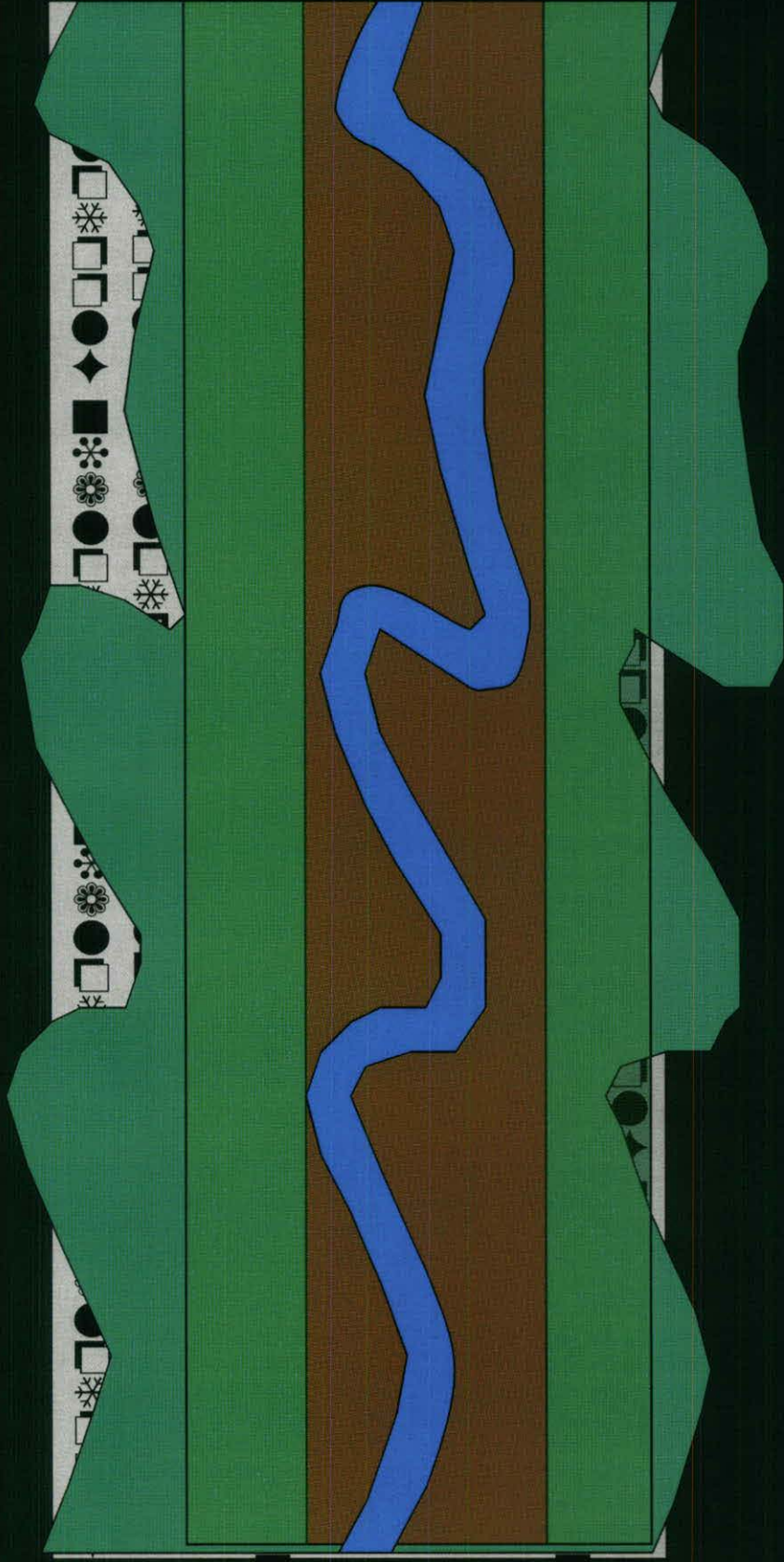
# ODNR's Approach: Streamway Treating SW and Flood flows



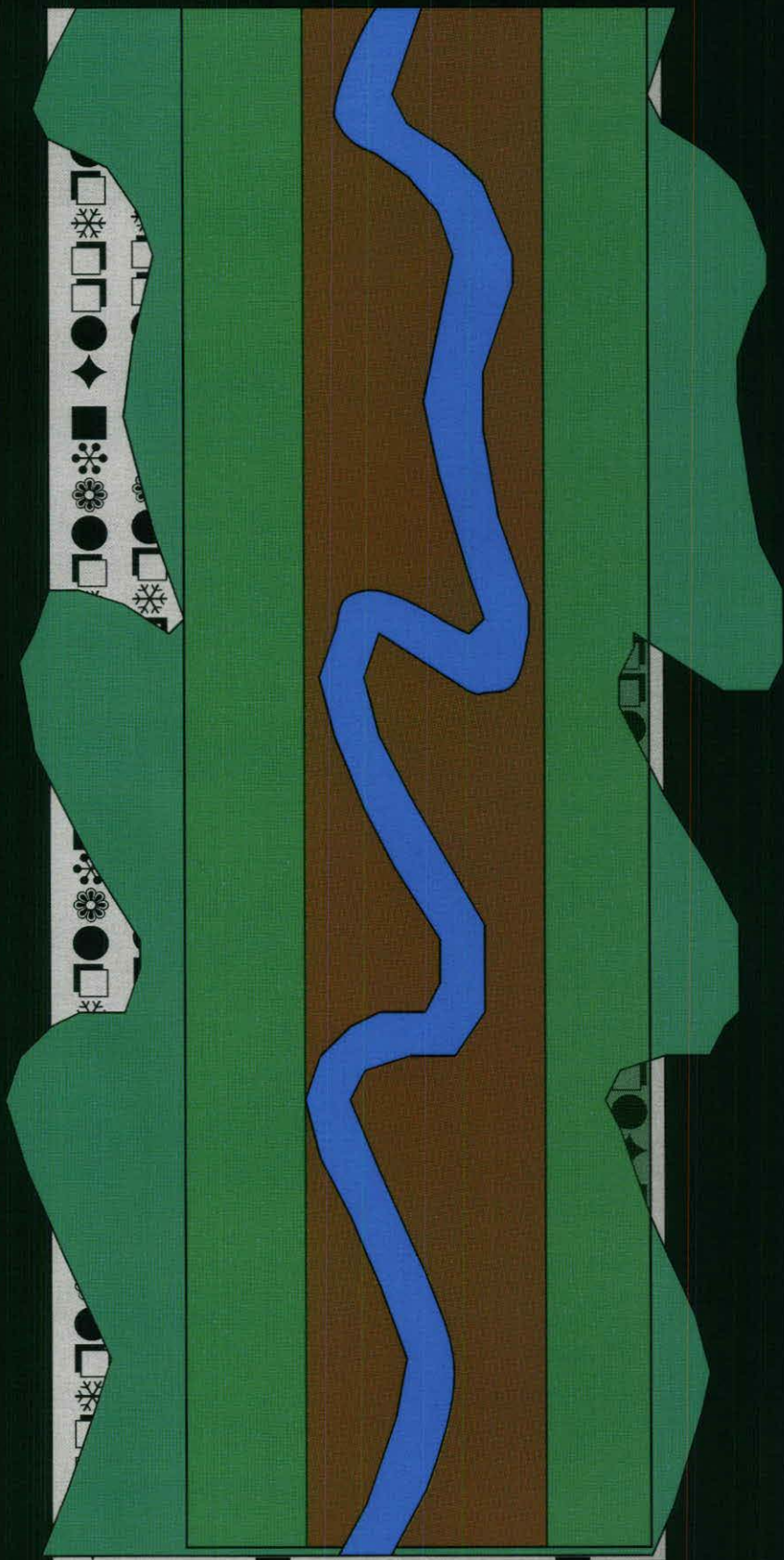
Most Valuable Area = Lowest elevation



# Many Approaches to Stream Setbacks



# Many Approaches to Stream Setbacks

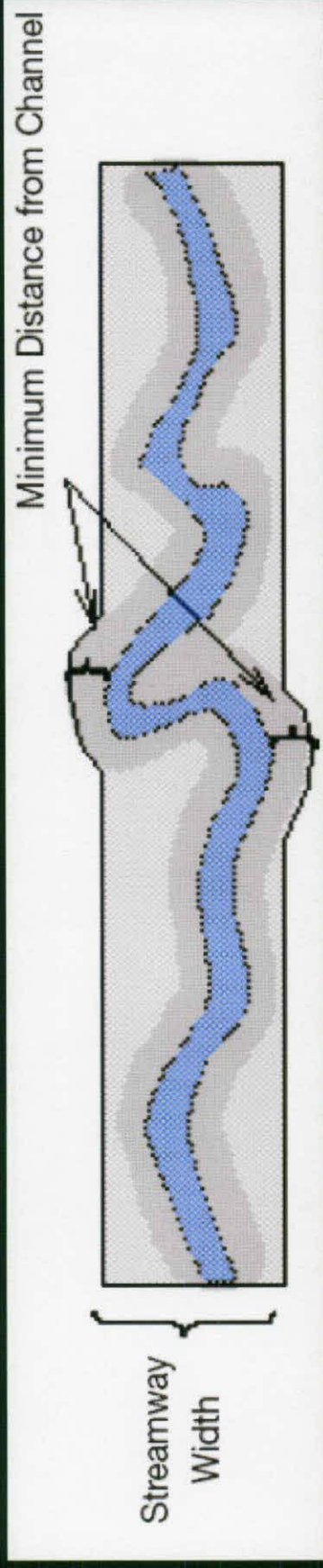


# Comparing Widths

Dr. Area	Dr. Area	25'/side	10 x W	5 x W	Darby	W
Acres	Sq. Miles		$147DA^{0.38}$	$74DA^{0.38}$	$133DA^{0.43}$	$14.7DA^{0.38}$
32	0.1	50	47	24	37	5
64	0.1	50	61	31	49	6
128	0.2	50	80	40	67	8
256	0.4	50	104	52	90	10
320	0.5	50	113	57	99	11
480	0.8	50	132	66	118	13
640	1.0	50	147	74	133	15
1280	2.0	50	191	96	179	19
3200	5.0	50	271	136	266	27
12800	20.0	50	459	231	482	46

# Approaches: Overlaying Zones

- Streamway



- Minimum Offset for Stability, Slope, Infrastructure Issues

# Protect Current Condition, Allow Alterations or Encourage Changes?



# Final Recommendations

- Apply a setback that allows a full set of services to be gained in the area (5-10 times channel width)
  - Stormwater detention, water quality and habitat
- Allow option of channel improvements to maximize channel quality and services.