

ROCK COUNTY LAND CONSERVATION DEPARTMENT **TOTAL**  
**MAXIMUM DAILY LOAD**  
**IMPLEMENTATION PROGRAM**

CHRIS MURPHY

CONSERVATION SPECIALIST

# WHAT IS THE BEST OPTION?

## WATER QUALITY TRADING

- PAY LANDOWNERS TO REDUCE PHOSPHORUS RUNOFF
- COMPLIANCE IS DETERMINED BY COMPARING CREDITS GENERATED TO PERMIT DISCHARGE LIMIT
- DETAILS OF BEST MGMT PRACTICES MUST BE SPECIFIED PRIOR TO EFFECTIVE DATE OF PERMIT
- MUST USE TRADE RATIOS
- BEST FOR PERMITS WITH SMALLER REQUIRED PHOSPHORUS REDUCTIONS

## ADAPTIVE MANAGEMENT

- PAY LANDOWNERS TO REDUCE PHOSPHORUS RUNOFF
- COMPLIANCE IS DETERMINED BY REDUCTION OF IN-STREAM PHOSPHORUS CONCENTRATIONS
- DETAILS OF BEST MGMT PRACTICES ARE NOT REQUIRED PRIOR TO EFFECTIVE DATE OF PERMIT
- NO TRADE RATIOS
- BEST FOR PERMITS WITH LARGE REQUIRED PHOSPHORUS REDUCTIONS

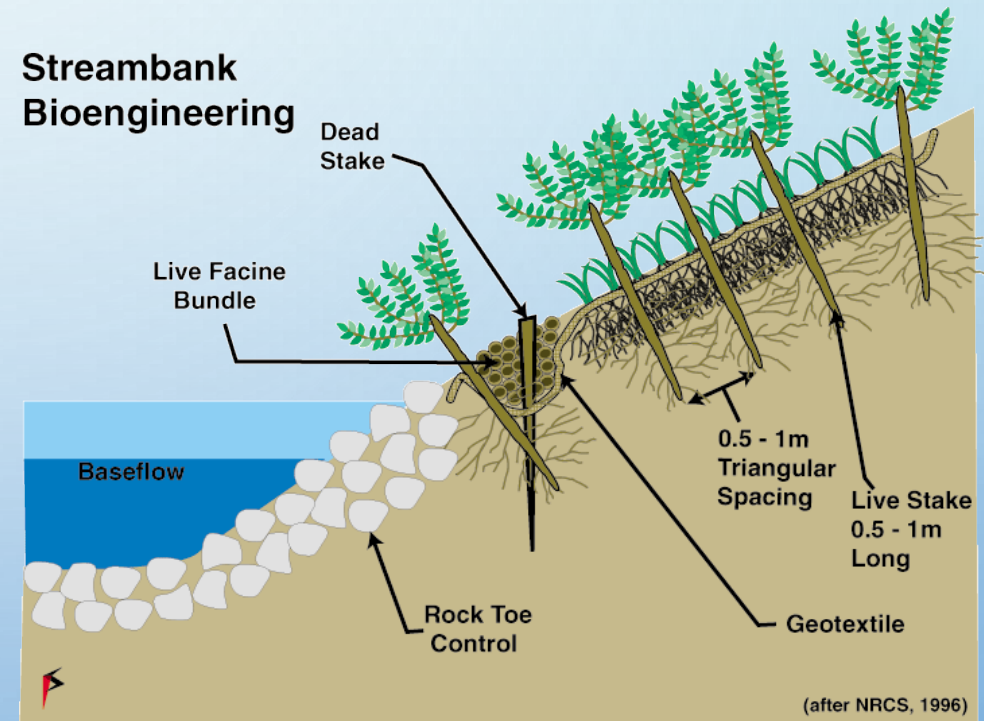
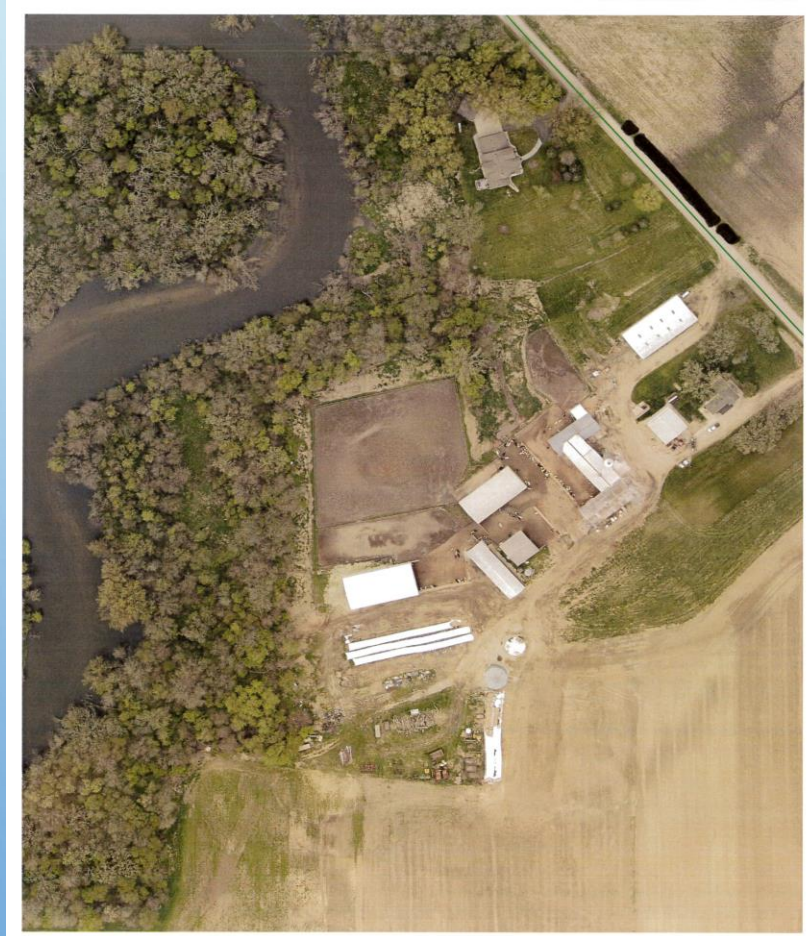
# BEST MANAGEMENT PRACTICES



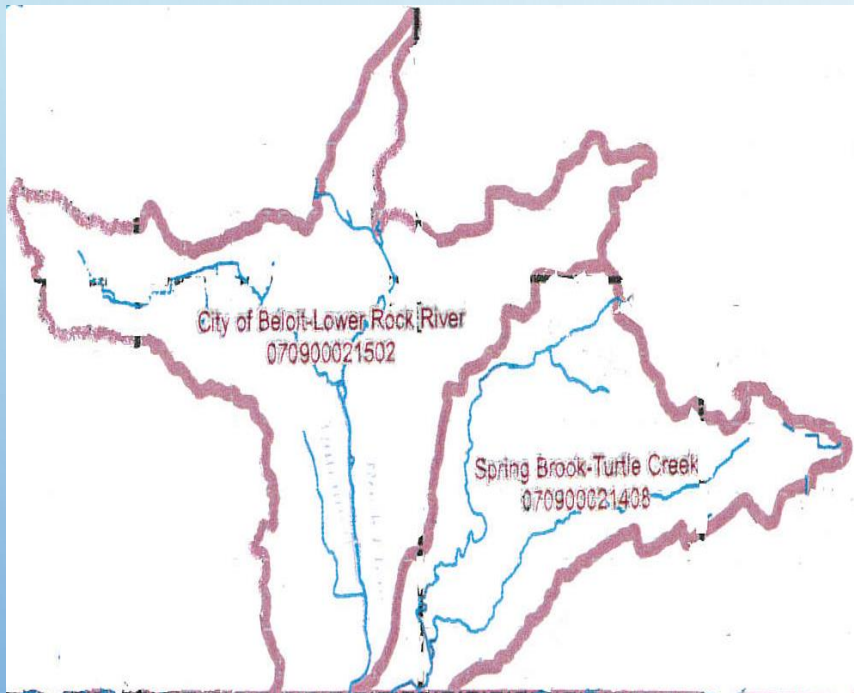
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# ROCK COUNTY WATER QUALITY TRADING

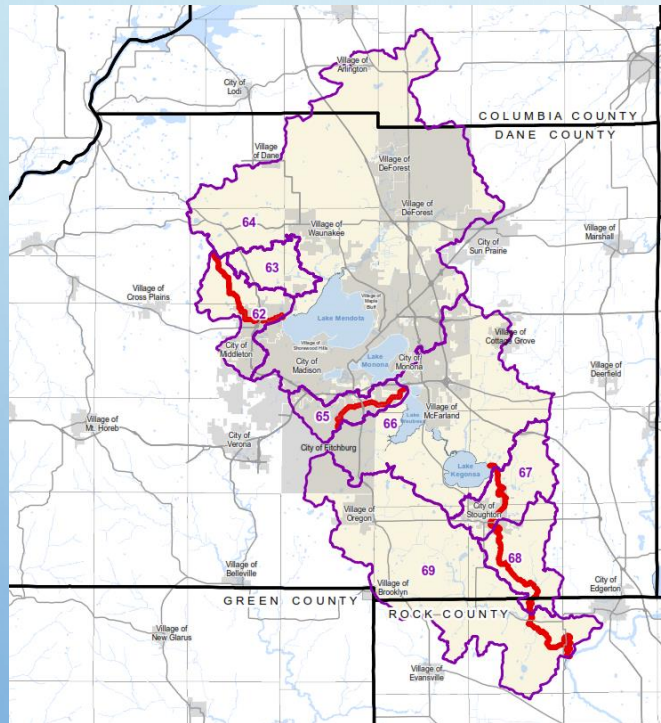


- MET WITH CITY OF БЕЛОIT WATER RESOURCE DIVISION TO EXPLAIN OPTIONS FOR P REDUCTION.
- FORMED PARTNERSHIP WITH THE CITY IN SUMMER OF 2019 FOR THE PURPOSE OF REDUCING THE AMOUNT OF PHOSPHORUS (1800 LBS/YEAR) DISCHARGED INTO THE WATERS OF THE LOWER ROCK RIVER WATERSHED AND SPRING BROOK – TURTLE CREEK WATERSHED.
- MET WITH WDNR TO DISCUSS PROPOSED PLAN IN FALL OF 2019 AND WINTER OF 2020.
- PLAN TO PRESENT FINAL PLAN TO WDNR SPRING OF 2020.

# ROCK COUNTY WATER QUALITY TRADING

- INTERGOVERNMENTAL AGREEMENT BETWEEN CITY OF БЕЛОIT AND ROCK COUNTY LAND CONSERVATION DEPARTMENT (LCD) FOR PURPOSE OF **PROVIDING FUNDING FOR STAFF COSTS; BMPS INSTALLATION AND MAINTENANCE; P REDUCTION MODELING.**
- **PRIVATE CONSULTANT** UTILIZED FOR MODELING CURRENT DISCHARGE FROM SITE, DEVELOPING APPLICATION AND PLAN.
- CITY OF БЕЛОIT **PAYS FOR INSTALLATION OF BEST MANAGEMENT PRACTICES (BMPS) TO REDUCE AGRICULTURAL STORM WATER RUNOFF IN EXCHANGE GETS CREDIT FOR PHOSPHORUS REDUCTION. GOAL > \$50/LB OF P**
- **CITY OF БЕЛОIT ENTERS INTO AGREEMENTS WITH LANDOWNERS** TO PROVIDE PAYMENT FOR INSTALLATION AND MAINTENANCE OF BMPS. LANDOWNER RECEIVES TOTAL PAYMENT FIRST YEAR OR PAYMENT MAY BE DIVIDED INTO 3 PAYMENTS STARTING FIRST YEAR. **AGREEMENTS ARE RECORDED ON LAND DEED AT COUNTY REGISTER OF DEEDS**
- **FILTER STRIPS, GRASSED WATERWAYS, CONTOUR STRIPS = \$450 / ACRE; CONSERVATION EASEMENT = \$300 / ACRE STREAMBANK AND BARNYARD ITEMS PAY 100% OF COSTS SO LONG AS UNDER \$50/LB OF P.**
- **LANDOWNER MAINTAINS LAND USE CONTROL – (I.E. ABLE TO HARVEST PERENNIAL VEGETATION FOR FORAGE)**

# ROCK COUNTY YAHARA RIVER ADAPTIVE MANAGEMENT



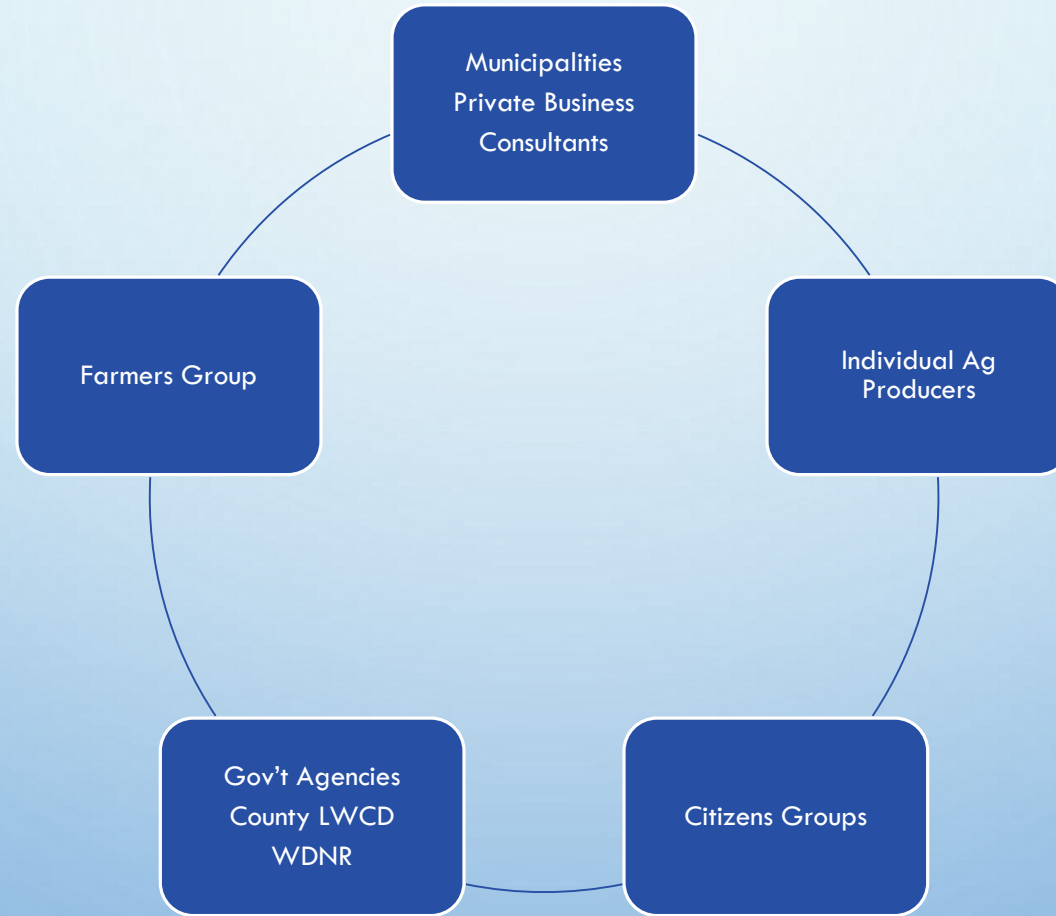
- THE YAHARA WATERSHED IMPROVEMENT NETWORK (YAHARA WINS), WAS **FORMED IN 2012**.
- **PARTNERS IN YAHARA WINS** INCLUDE CITIES, VILLAGES, TOWNS, WASTEWATER TREATMENT PLANTS, ENVIRONMENTAL GROUPS AND OTHERS.
- FORMED FOR THE **PURPOSE OF REDUCING THE AMOUNT OF PHOSPHORUS DISCHARGED (22,879 LBS PER YR)** INTO THE WATERS OF THE YAHARA RIVER WATERSHED



# ROCK COUNTY YAHARA RIVER ADAPTIVE MANAGEMENT

- YAHARA WINS **PAYS FOR INSTALLATION OF BEST MANAGEMENT PRACTICES (BMPS) TO REDUCE AGRICULTURAL STORM WATER RUNOFF IN EXCHANGE GETS CREDIT FOR PHOSPHORUS REDUCTION. GOAL > \$50/LB OF P**
- **PRIVATE CONSULTANT** UTILIZED FOR MODELING CURRENT DISCHARGE FROM SITE, DEVELOPING APPLICATION AND PLAN.
- YAHARA WINS ENTERED INTO AN INTERGOVERNMENTAL AGREEMENT WITH ROCK COUNTY LAND CONSERVATION DEPARTMENT (LCD) FOR PURPOSE OF **PROVIDING FUNDING FOR STAFF COSTS; BMPS INSTALLATION AND MAINTENANCE; P REDUCTION MODELING.**
- **ROCK COUNTY LCD ENTERS INTO AGREEMENTS WITH LANDOWNERS** TO PROVIDE PAYMENT FOR INSTALLATION AND MAINTENANCE OF BMPS. LANDOWNER RECEIVES TOTAL PAYMENT FIRST YEAR OR PAYMENT MAY BE DIVIDED INTO 3 PAYMENTS STARTING FIRST YEAR. **AGREEMENTS ARE RECORDED ON LAND DEED AT COUNTY REGISTER OF DEEDS**
- **FILTER STRIPS, GRASSED WATERWAYS, CONTOUR STRIPS = \$450 / ACRE; CONSERVATION EASEMENT = \$300 / ACRE STREAMBANK AND BARNYARD ITEMS PAY 100% OF COSTS SO LONG AS UNDER \$50/LB OF P.**
- **LANDOWNER MAINTAINS LAND USE CONTROL – (I.E. ABLE TO HARVEST PERENNIAL VEGETATION FOR FORAGE)**

# PARTNERS



# FARMER/LANDOWNER GROUP - YAHARA RIVER ADAPTIVE MANAGEMENT



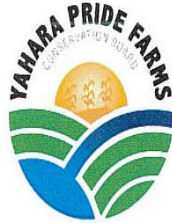
- YAHARA PRIDE FARMS IS A **FARMER-LED, NOT-FOR-PROFIT ORGANIZATION** WORKING TO IMPROVE SOIL AND WATER QUALITY. WE STRIVE TO HELP ADVANCE NEW IDEAS AND TECHNOLOGY THAT BALANCE WATER QUALITY IMPROVEMENT WITH FARM SUSTAINABILITY AND PROFITABILITY.
- CREATE A MECHANISM TO RECOGNIZE FARMER-LED ENVIRONMENTAL SUSTAINABILITY, **REWARD FARMERS FOR GOOD STEWARDSHIP, TRACK COLLECTIVE PROGRESS IN CONSERVATION AND DEMONSTRATE WATERSHED ADVANCEMENT.**
- THROUGH OUR FARMER NETWORK OF INFORMATION SHARING, **HELP INFORM THE AGRICULTURAL INDUSTRY** OF NEW WATER QUALITY RULES, LAWS AND ISSUES.
- EARN THE TRUST AND RESPECT OF FARMERS, PRIVATE CITIZENS AND GOVERNMENT THROUGH **ENGAGING THEM IN OUR PROJECTS AND EDUCATIONAL PROGRAMS** THAT DEMONSTRATE HOW THE AGRICULTURAL INDUSTRY IS COMMITTED TO DOING ITS FAIR SHARE IN MAKING IMPROVEMENTS IN THE WATERSHED.
- CREATE THE YAHARA PRIDE BRAND AND GROW ITS RECOGNITION AMONG BOTH URBAN AND RURAL COMMUNITIES.

# ROLE OF FARMER GROUP

## 2018 Cost-Share Programs – Due Nov. 15

The following incentives are being considered for 2018:

1. *Strip Tillage* - \$15 per acre up to 100 acres (max. payment of \$1500/farm)
2. *Low Disturbance Manure Injection* - \$20 per acre up to 100 acres (max. payment \$2,000/farm)
3. *Cover Crops* - \$40 per acre up to 50-acres
4. *Low Disturbance Deep Tillage and Cover Crop Planting* - \$55 per acre up to 50 acres
5. *Headland Stacking* – for winter application only - \$3.50/yd
6. *Composting Manure* – enroll in pilot program, payment TBD
7. *Stacking of multiple cost-shared practices* - payment TBD



Yahara Pride Farms provides on-farm assessment and verification of conservation practices leading to Yahara Pride Farms Certification. **Final cost-share payments are dependent on available funds and participation.**

To enroll in the 2018 Cost-Share program, complete the form below, detach and return **by Nov. 15.**

Retain the top half of this form for your records. **You may also enroll at the YPF conference.**

Thank you to our 2018 Partners in Pride!



# WHY I THINK THIS IS A BLUEPRINT FOR SUCCESS

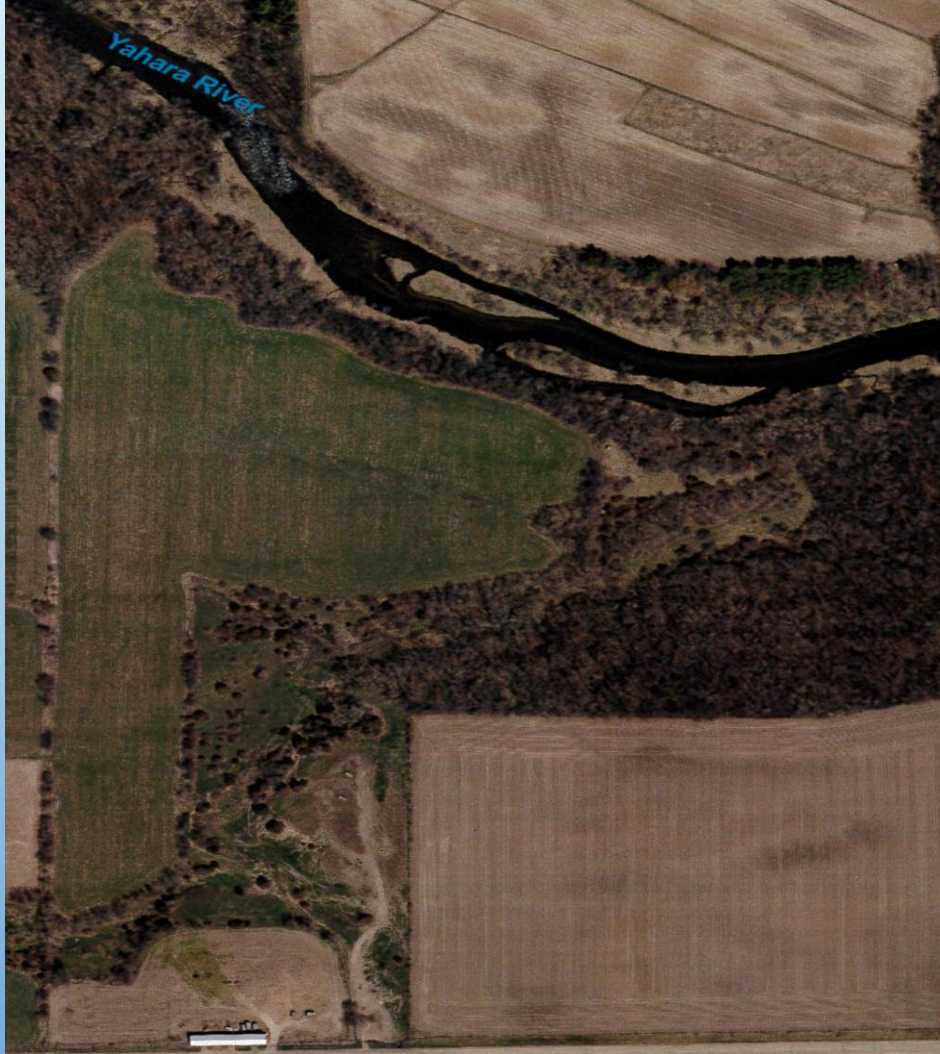
- A PROCESS THAT **DEVELOPS PARTNERSHIPS** AND MAXIMIZES RESOURCES
- SIMPLE AND EASY TO UNDERSTAND FOR ALL INVOLVED – **USER FRIENDLY**
- **WIN – WIN.** GUARANTEED ECONOMIC RETURN WITH CONTROL OF LAND USE IN EXCHANGE FOR LONG-TERM, COST EFFECTIVE PHOSPHORUS REDUCTION.
- **LOCALLY LED EFFORT** WITH LITTLE GOVERNMENT DICTATION.
- **WERE ABLE TO WORK WITH PRIORITY FARMS. EFFICIENTLY REDUCE LARGE P RUNOFF.**

# WHAT IS A PRIORITY FARM?

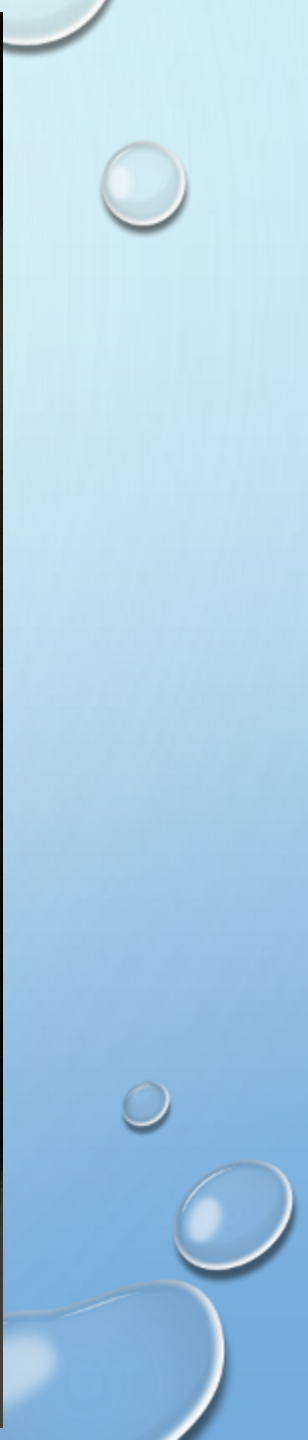
- ATCP 50.12(F)
  - **SUBJECT TO DNR NOTICE OF DISCHARGE**
  - **FARMS IN WATERSHED OF 303(D) IMPAIRED WATERS**
  - **SIGNIFICANT PROBLEMS WITH MANURE MGMT.**
  - **FARMS MAKING CLEARLY EXCESSIVE NUTRIENT APPLICATIONS**
  - **FARMS WITH CLEARLY EXCESSIVE RATES OF CROPLAND EROSION**



# EXAMPLE OF PRIORITY FARM

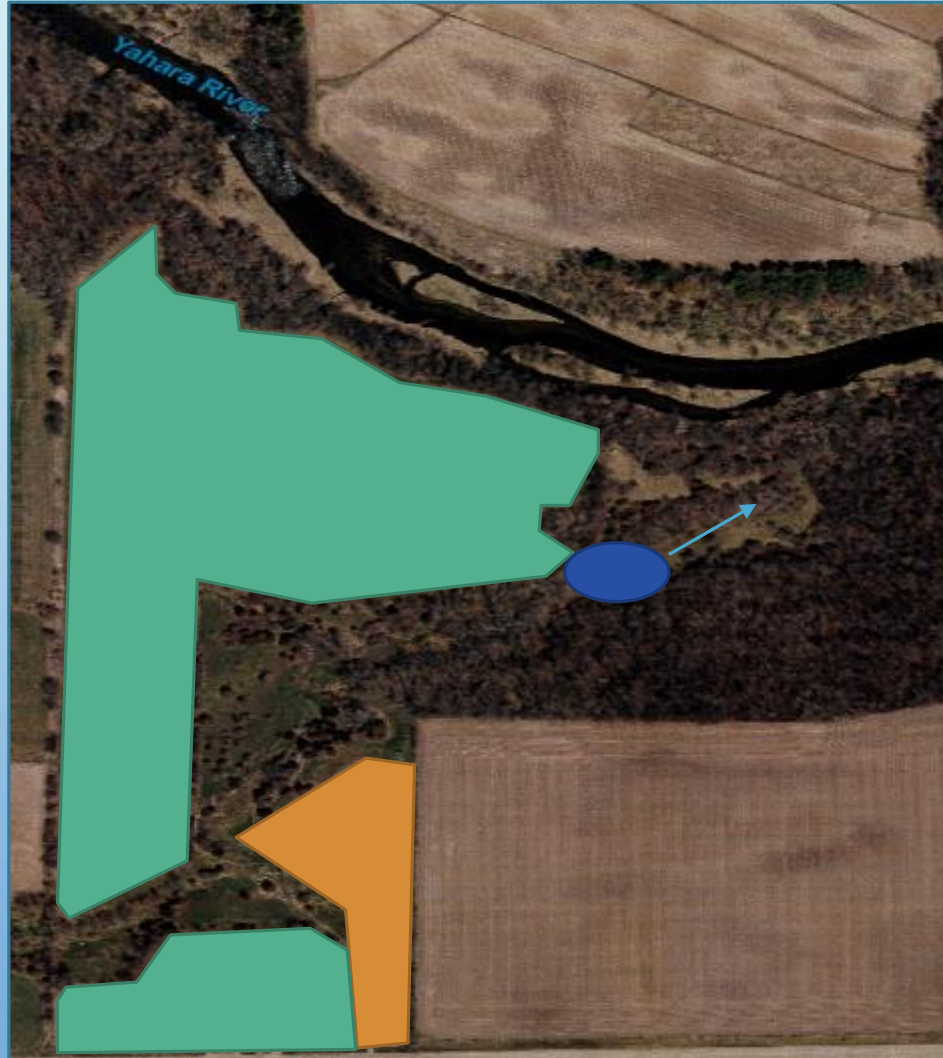


- ENTIRE CROP FIELD SLOPES TO DRAINAGE
- PASTURE AREA OVERGRAZED AND USED AS SEASONABLE FEEDING AREA
- HAS A HISTORY OF NOT WANTING TO WORK WITH GOV'T AGENCIES





# EXAMPLE OF SUCCESS



- CROP FIELDS SLOPE TO DRAINAGE – SEED TO GRASS FOR 15 YRS
- PASTURE AREA OVERGRAZED SEASONABLE FEEDING AREA – SEED TO GRASS WITH NO GRAZING FOR 15 YEARS.
- HAS A HISTORY OF NOT WANTING TO WORK WITH GOV'T AGENCIES – WORKING WITH LCD TO CAPTURE RUNOFF IN POND WITH SLOW RELEASE TO INFILTRATE WATER

# SOLUTION TO AN IMPOSSIBLE SITUATION



# WHERE DO WE START?

- CONTACT LAND CONSERVATION DEPARTMENT, UW EXTENSION AND/OR PRIVATE CONSULTANTS
- CONTACT THOSE ALREADY IN ADAPTIVE MGMT. OR WATER QUALITY TRADING
- ASK FOR GUIDANCE AND ASSISTANCE TO FACILITATE MEETINGS
- **GET ALL THE PARTNERS IN ONE ROOM**

ROCK COUNTY LAND CONSERVATION DEPARTMENT

# TOTAL MAXIMUM DAILY LOAD IMPLEMENTATION PROGRAM



CHRIS MURPHY

CONSERVATION SPECIALIST

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