

# UPPER GREEN MEADOW PROJECT TEAM

1<sup>st</sup> Meeting

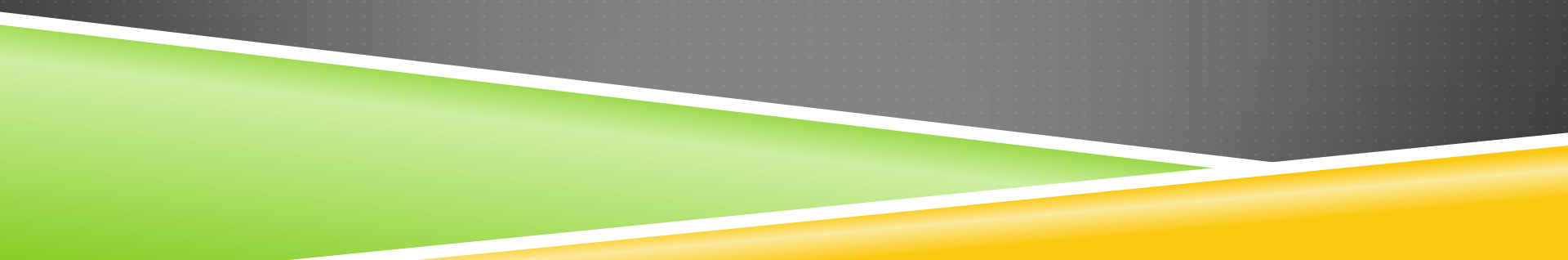
December 11<sup>th</sup>, 2013

Wild Rice Watershed District Offices

# AGENDA

- ▶ Introductions
- ▶ Goal
  - ▶ Timeline/# of Anticipated Meetings
- ▶ 1<sup>st</sup> Meeting Objective
- ▶ MN Mediation Agreement
- ▶ Process
  - ▶ Ground Rules
  - ▶ Expectations
- ▶ Watershed Description
- ▶ Problems
- ▶ Public/Audience Comments
- ▶ Project Team Discussion

# GOAL

- ▶ Develop viable strategy option(s) to solve known problem(s) within Upper Green Meadow Subwatershed for Wild Rice River Watershed District Board of Managers consideration
  - ▶ Completion: Spring 2014
  - ▶ Anticipate 1- 6 Meetings
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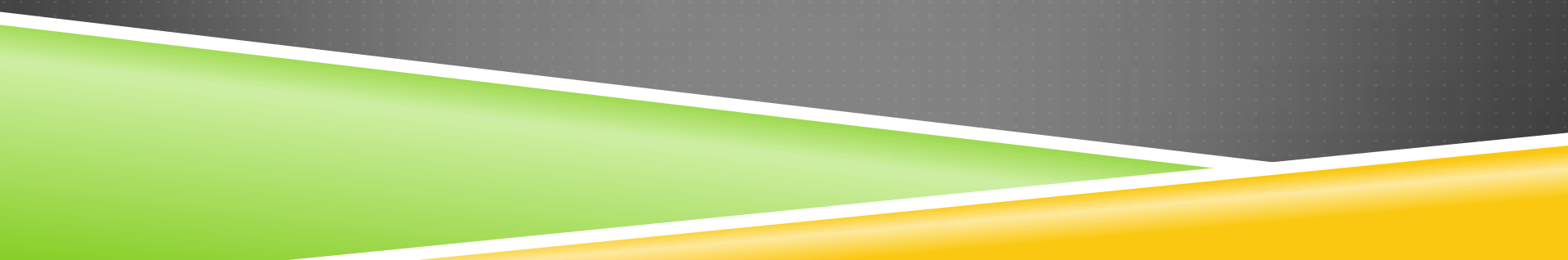
# 1<sup>ST</sup> MEETING OBJECTIVES

1. Provide Background Information
  - ▶ MN Mediation Agreement and Process
2. Establish Project Team Process/Ground Rules
3. Identify and Prioritize Water Resource Problems in the Upper Green Meadow Watershed
4. Determine if there is Agreement Among Project Team Representatives that the Problem(s) is/are Severe Enough to Warrant Action by the Wild Rice Watershed District
5. Develop Green Meadow Watershed Problem Statement

# RED RIVER BASIN MEDIATION PROCESS OVERVIEW

A decorative graphic at the bottom of the slide consists of a solid green trapezoidal shape pointing downwards, which is overlaid on a larger yellow trapezoidal shape also pointing downwards. The shapes are separated by a thin white border.

# CHALLENGES / OPPORTUNITIES

- ▶ Historic battles over water management and environmental permitting resulted in a joint Federal-State Environmental Impact Statement (EIS) on flood control projects.
  - ▶ Disagreement over the EIS resulted in a legislative directive and funding to mediate the conflict.
  - ▶ 12 months of meetings resulted in the Red River Mediation Agreement
  - ▶ Consensus-based process; no votes!
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# MEDIATION AGREEMENT MEMBERS

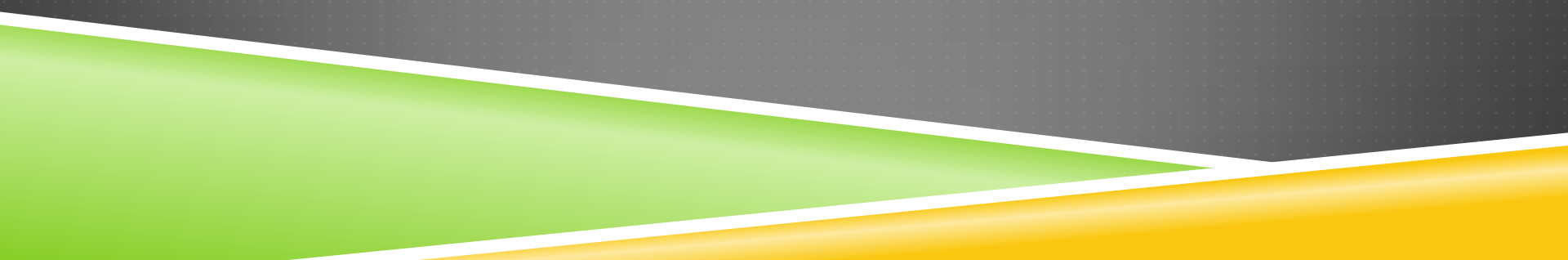
- ▶ MN Dept. of Natural Resources
- ▶ MN Board of Water and Soil Resources
- ▶ MN Pollution Control Agency
- ▶ Red River Watershed Management Board
- ▶ MN Center for Environmental Advocacy
- ▶ National Audubon Society
- ▶ U.S. Fish and Wildlife Service
- ▶ Local residents
- ▶ Red Lake Band of Chippewa
- ▶ U.S. Army Corps of Engineers\*

# RED RIVER MEDIATION AGREEMENT

- ▶ Signed by 20+ parties in December, 1998.
- ▶ Outlined a watershed based approach to flood damage reduction (FDR) and natural resource enhancement (NRE).
- ▶ Recommended a “problem solving” approach to develop comprehensive solutions.
- ▶ Directed work to watershed based multidisciplinary “project teams”.



# FLOOD DAMAGE REDUCTION GOALS

- ▶ **Prevent** loss of human life
  - ▶ **Prevent** damage to structures, homes, communities (100 yr.)
  - ▶ **Reduce** damage to farm land (10 yr summer storm event, more if at minimal cost)
  - ▶ **Reduce** damage to transportation, water quality, social and economic factors
- 

# FDR STRATEGIES

- ▶ Full range of methods for reducing flood damages and control flood volumes
- ▶ All strategies have their proper and improper uses and locations
- ▶ Included controversial methods such as wetland restoration, channelization, drainage ditches, overtopping levees

# TP II STRATEGIES

## ▶ **Reduce Flood Volume**

- ▶ Construction or Restoration of Depressional Wetlands, Cropland BMPs, Conversion of Cropland to Perennial Grassland, Conversion of Land Use to Forest, Other Beneficial Uses of Stored Water

## ▶ **Increase Conveyance Capacity**

- ▶ Channelization, Agricultural Drainage, Diversions, Setting Back Existing Levees, Increasing Road Crossing Capacity

## ▶ **Increase Temporary Flood Storage**

- ▶ On Channel Impoundments, Off Channel Impoundments, Restored or Created Wetlands, Drainage, Culvert Sizing, Setting Back Existing Levees, Overtopping Levees

## ▶ **Protection / Avoidance**

- ▶ Urban Levees, Farmstead Levees, Agricultural Levees, Evacuation of the Floodplain, Floodproofing, Flood Warning and Emergency Response Planning

# NATURAL RESOURCE GOALS

- ▶ Manage streams for natural characteristics
- ▶ Enhance flow regimes in streams for water supply, water quality, recreation.
- ▶ Provide recreational opportunities
- ▶ Improve water quality
- ▶ Protect groundwater
- ▶ Manage lakes for natural characteristics

# COMPREHENSIVE WATERSHED DISTRICT MANAGEMENT PLANS

- ▶ WD plans pre-mediation had lists of projects built and proposed
- ▶ 2<sup>nd</sup> Generation plans are more comprehensive
- ▶ Incorporate both FDR and NRE goals from Agreement

# All Projects

## Impoundments

## Stream Rehabilitation



# PROCESS

- ▶ Project Development Planning Steps
- ▶ Roles and Responsibilities
  - ▶ Watershed Board
  - ▶ Project Team
  - ▶ Additional Resources
- ▶ Ground Rules
  - ▶ Meeting Discussion
  - ▶ Communication
  - ▶ Participation
  - ▶ Minority Report

# PROCESS

...SOME RELEVANT QUOTES

“Never mistake activity for accomplishment”

(John Wooden, 1910-2001)

“The key to failure is trying to please everybody”

(Bill Cosby, 1937 -)

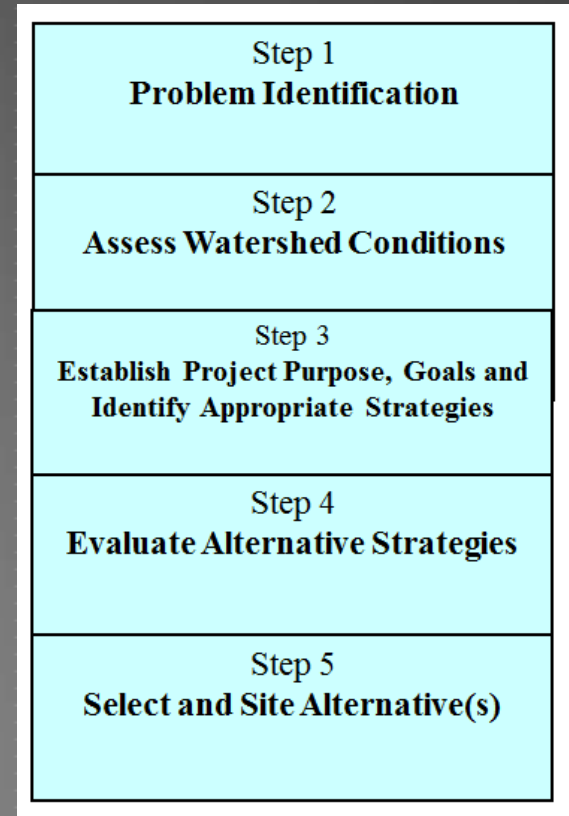




# PROCESS

## ...PROJECT DEVELOPMENT STEPS

1. Problem Identification
2. Existing Watershed Condition
3. Goal(s), Purpose, and Need
4. Range of Alternatives/Alternatives Evaluation
5. Selection of Preferred Alternative(s)



# PROCESS

## ....ROLES AND RESPONSIBILITIES

### ▶ **WATERSHED DISTRICT (Statutory Authority)**

- ▶ Identify Areas of Concern
- ▶ Invite Stakeholders to Serve on PT
- ▶ Coordinate Meetings
- ▶ Arrange for Facilitator
- ▶ Record Keeping
- ▶ Communication with PT Members

### ▶ **BOARD MEMBERS**

- ▶ PT Direction, Focus, Support
- ▶ Considering Alternatives
- ▶ Taking Action (DECISION-MAKING BODY)

# PROCESS

## ...ROLES AND RESPONSIBILITIES

### ▶ UPPER GREEN MEADOW PROJECT TEAM

- ▶ Represent Stakeholder Constituency
- ▶ Identify Problems and Opportunities for FDR/NRE
- ▶ Formulate and Evaluate Alternative to Address Problems and Opportunities
- ▶ Recommend Preferred Alternative to Wild Rice Watershed District Board
- ▶ Identify and Clarify Regulatory Requirements and Permitting
- ▶ Review/Comment on Key Project Documents
- ▶ Assist in the Formulation of Operating/Monitoring Plans
  
- ▶ DECISION-MAKING...

# PROCESS

## ...PROJECT TEAM DECISION-MAKING

- ▶ Consensus – Individuals collectively make a choice



# PROCESS

...PROJECT TEAM DECISION-MAKING

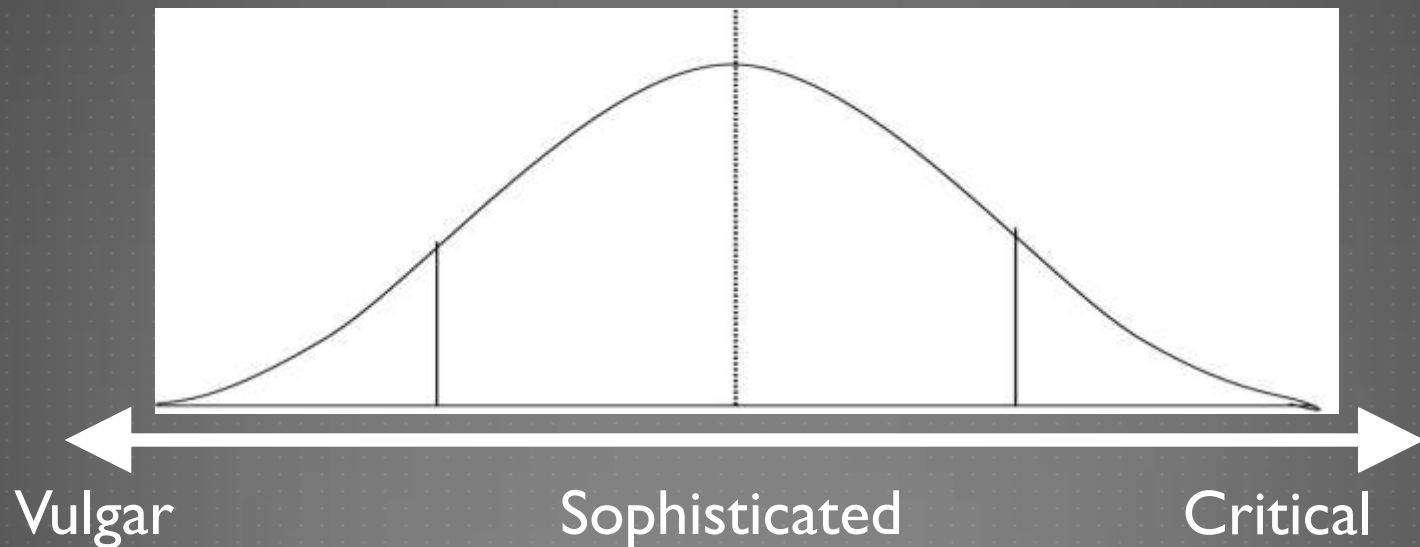
- ▶ “I CAN LIVE WITH IT”



# PROCESS – FINAL WORD

## ...PROJECT TEAM DECISION-MAKING

- ▶ Consensus – Individuals collectively make a choice
  - ▶ “I can live with it”
- ▶ Three Kinds of Believers (C.Wright Mills)



# PROCESS

## ...ROLES AND RESPONSIBILITIES

- ▶ Facilitator/Watershed Administrator/Consulting Engineer/FDRWG Coordinator
  - ▶ NOT PT Member – no participation in developing alternatives
  - ▶ Guide PT – FDRWG Mediation Agreement
  - ▶ Monitor - Ground Rules, PT Dynamics
  - ▶ Ask Questions
  - ▶ Clarify Issues
  - ▶ Worker Bee
    - ▶ Provide Information
    - ▶ Manage Process
    - ▶ Create Products (notes, reports, etc.)

# GROUND RULES

## ...PROJECT TEAM MEETING/DISCUSSION

- ▶ Everyone Participates
- ▶ No Single “Right” Answer
- ▶ Keep an Open Mind (Sophisticated Thinker)
- ▶ Listen to Others
- ▶ Keep Discussion on Track
- ▶ Try to Understand the Views with Whom you Disagree
- ▶ Ask Questions
- ▶ Disagreements OK
- ▶ Strive for “I can Live with it”



# GROUND RULES

## ...PROJECT TEAM COMMUNICATION

- ▶ Constituency – Communication Lead
  - ▶ Watershed District Board - WD Administrator
  - ▶ Press Media – WD Administrator
  - ▶ Stakeholders – Project Team Members
- ▶ If consensus cannot be reached, the Project Team member(s) with a minority opposing opinion, shall work with the “Additional Resources” to prepare a minority report for the Wild Rice Watershed District Board

# GROUND RULES

...PROJECT TEAM PARTICIPATION

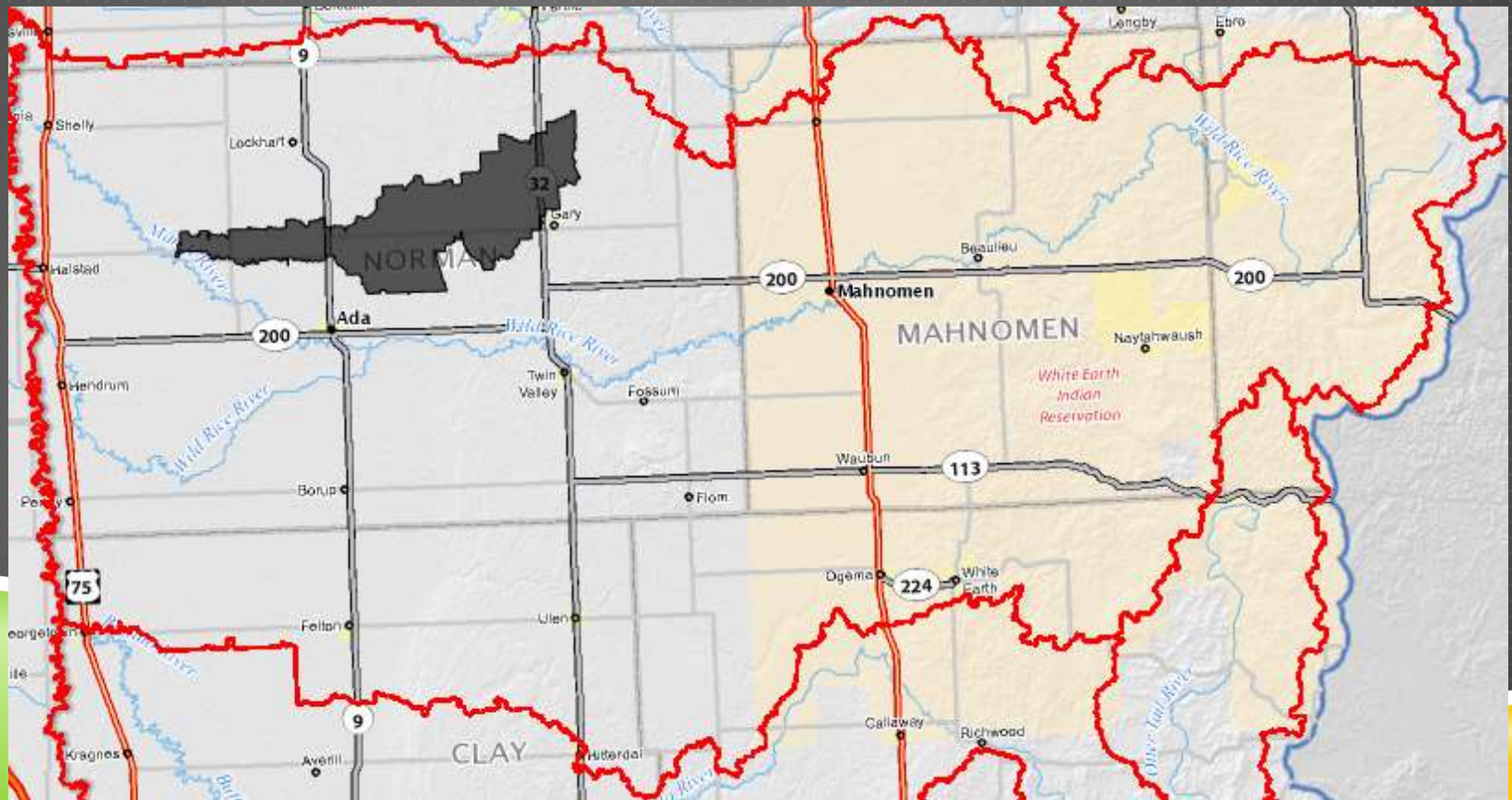
▶ “Snooze you Loose” Rule

# AGENDA

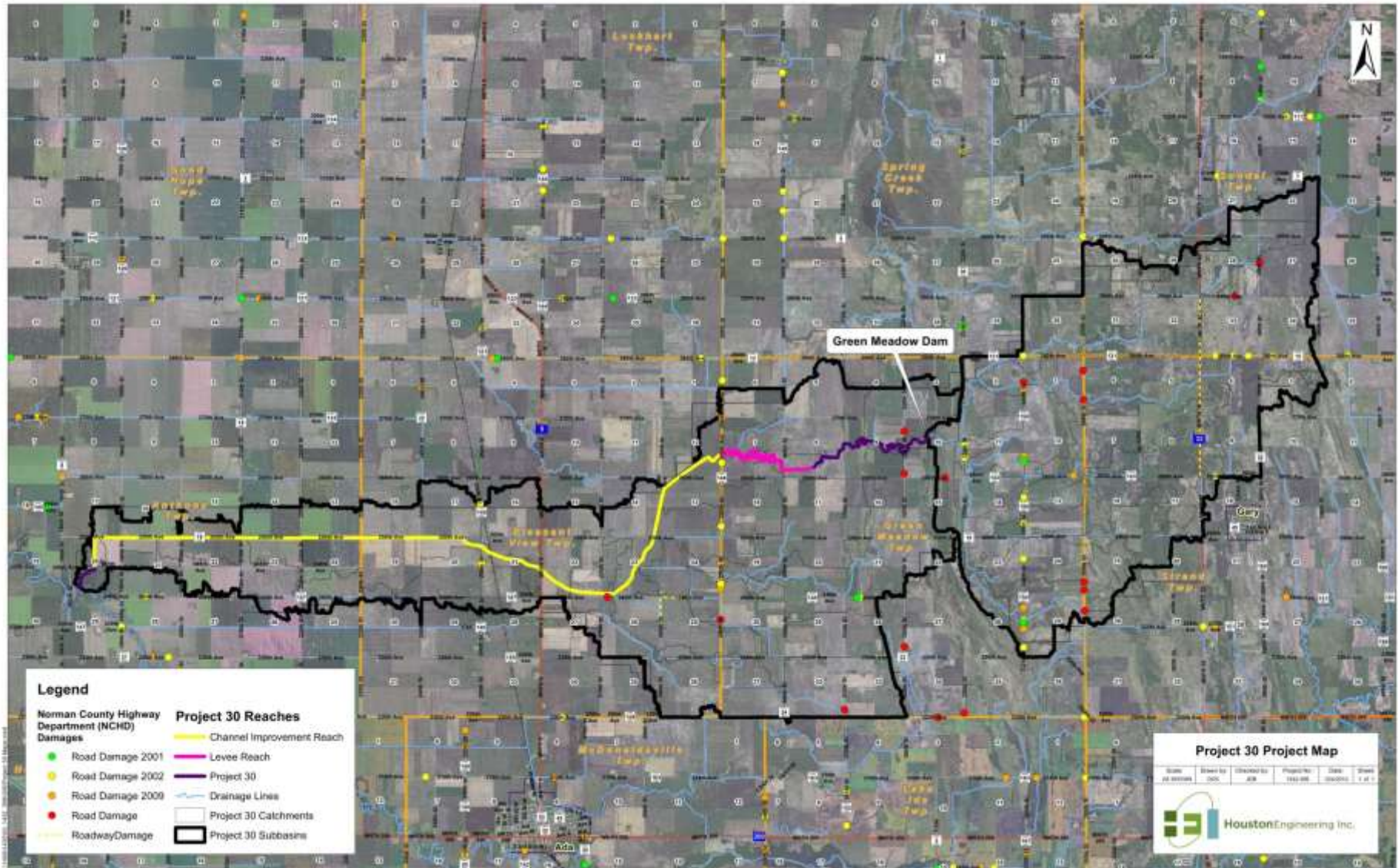
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# UGM EXISTING CONDITIONS

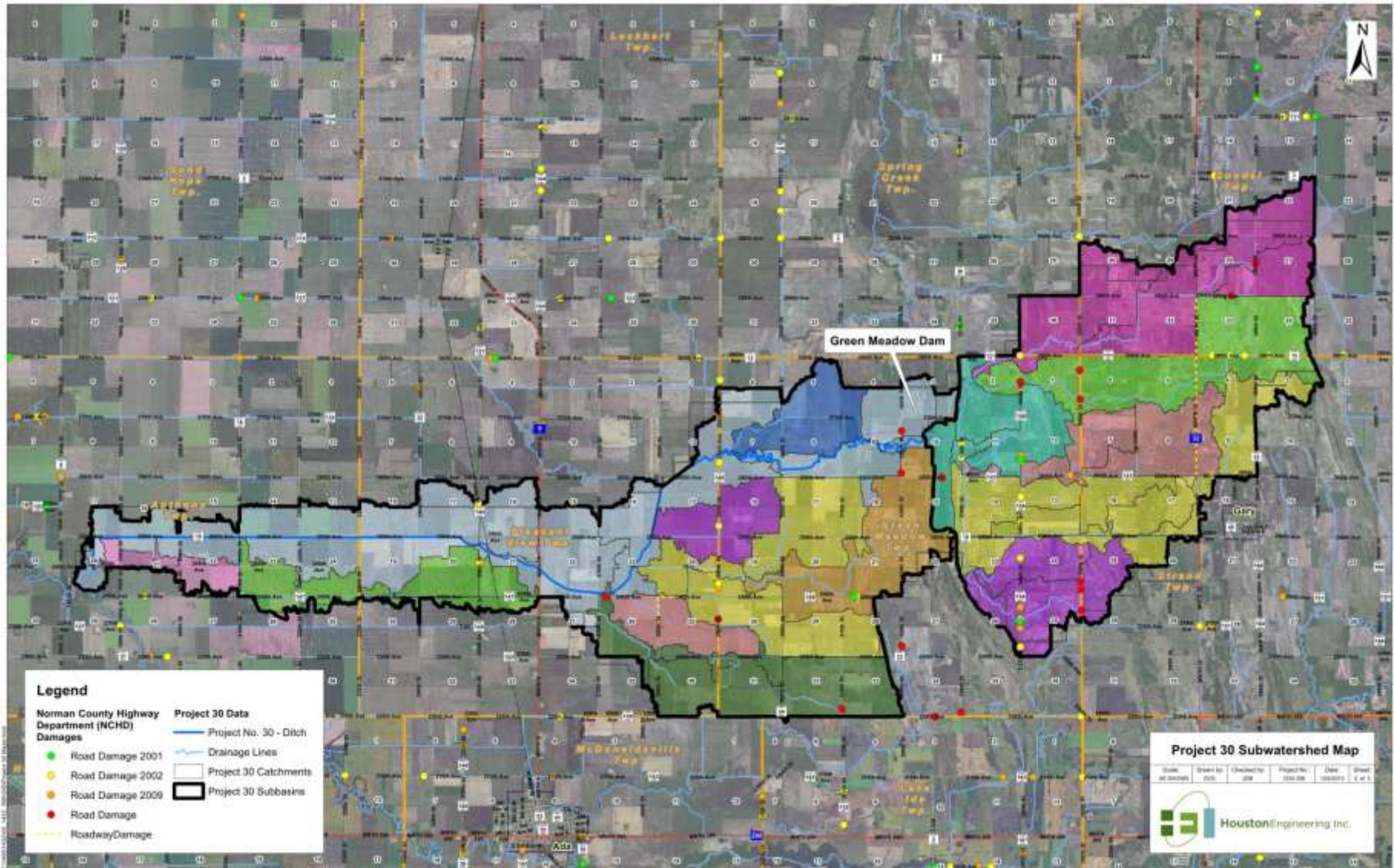
- ▶ Marsh River Subwatershed
- ▶ Approximately 69 Square Miles
- ▶ Contains Upper Green Meadow Dam
- ▶ Project 30 – WRWD Project



# UGM EXISTING CONDITIONS

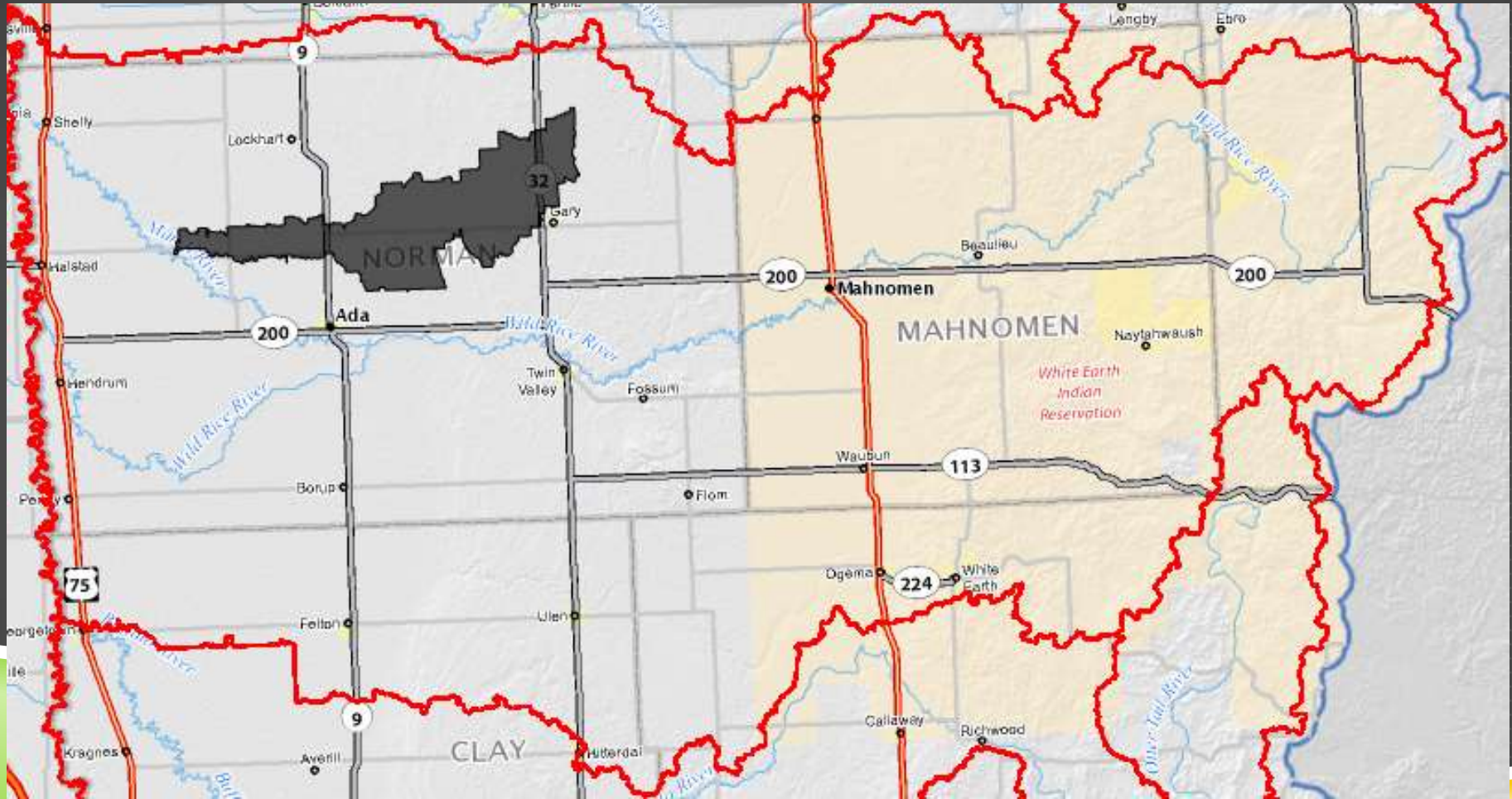


# UGM EXISTING CONDITIONS



# UGM EXISTING CONDITIONS

- ▶ Google Earth Fly Though



# UGM EXISTING CONDITIONS

- ▶ Green Meadow Dam

- ▶ Location

- ▶ Sections 10 and 15 of Green Meadow Township (Norman County). West of Gary, MN

- ▶ History

- ▶ The dam was constructed in approximately 1973 by the Soil Conservation Service.
    - ▶ It was later added to become part of the downstream ditch system as part of WRWD Project No. 30.



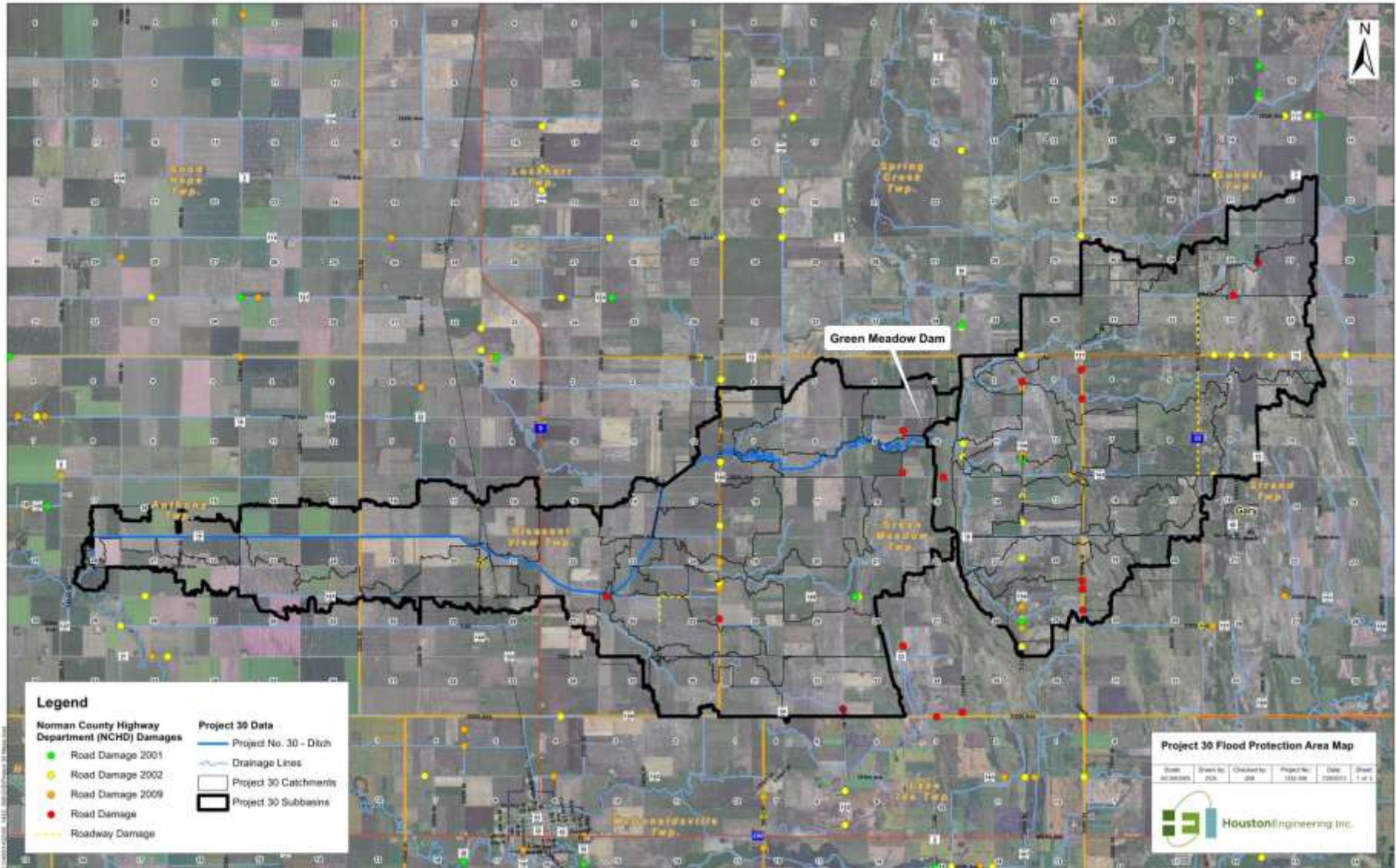


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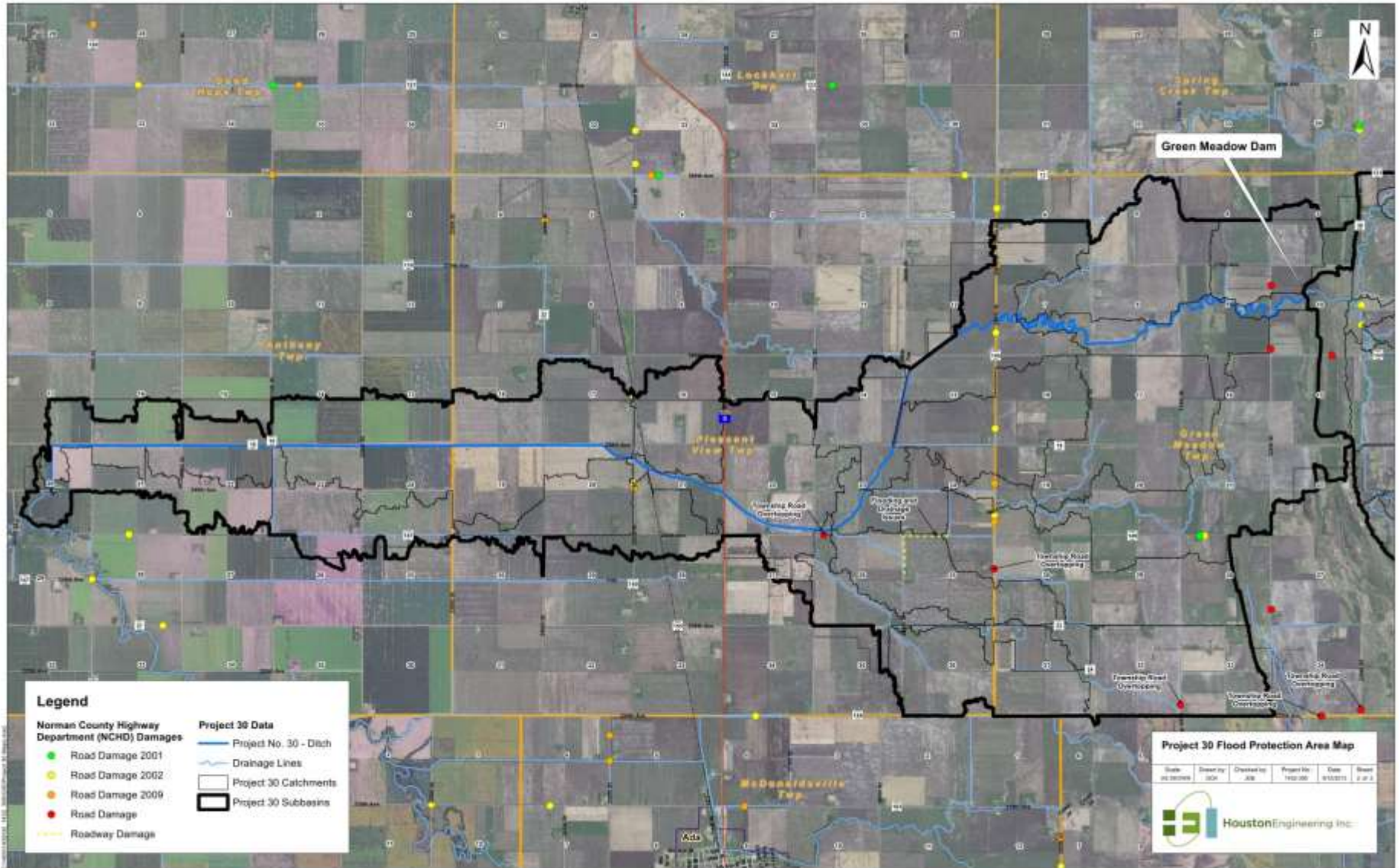
- ▶ Green Meadow Dam
  - ▶ Drainage Area
    - ▶ 29.6 SM±
  - ▶ Storage
    - ▶ 2,200 AC-FT (1.4")
  - ▶ Soils
    - ▶ Poor / Granular



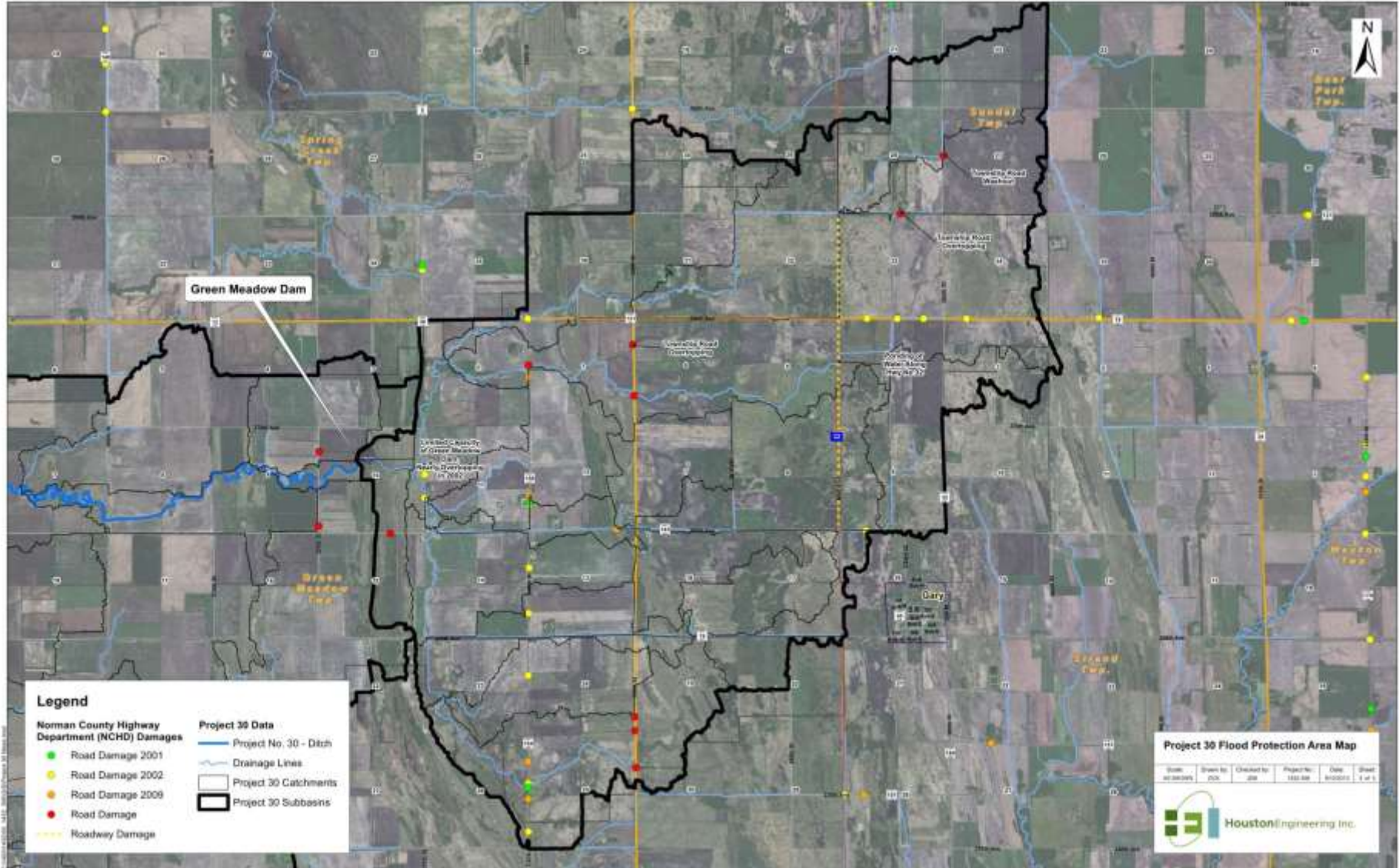
# UGM PROBLEMS - INFRASTRUCTURE DAMAGES



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# UGM PROBLEMS

- ▶ Green Meadow Dam
  - ▶ Limited Capacity
  - ▶ Sandbagging Overflows in 2002



# UGM PROBLEMS

- ▶ Green Meadow Dam
  - ▶ Substantial Repair (2006)
    - ▶ Erosion Repairs
    - ▶ Clay Liner - Partial



# UGM PROBLEMS

- ▶ Channel Erosion
  - ▶ Middle Reach – Erosion on Setback Levees
    - ▶ Riprap and Levee Setbacks



# UGM PROBLEMS

- ▶ Lower Reach Channel – 2011 Repair
  - ▶ Substantial Repair (2011)
    - ▶ Section 20-24 (Anthony Township) and Section 19 (Pleasant View Township)
    - ▶ FEMA Funding Assistance





# UGM PROBLEMS

- ▶ Lower Reach Channel – 2011 Repair
  - ▶ FEMA Approved Repair Method
    - ▶ Backslope at 5:1
    - ▶ Restore Gradeline and Grade Control
    - ▶ Re-Establish Grass Buffers

