# Welcome to the Swift Coulee Project Work-team Meeting

# Note ….

Don’t forget the **Sign in Sheet &**

**Silent your phone**

# Agenda

- 5:00 Project update and Next Steps (Mori Maher)
- 5:15 Update from SWCD on RIM applications (Darren Carlson / John Voz)
- 5:45 Engineering developments since last year
- 6:00 Run through Water Management District (Matt Fischer, BWSR)
- 6:20 One on One Easement QA with Landowners (Darren, John, Mori)
- 6:40 Respond to general questions
- 6:50 Fill out applications for whom ever will be ready to sign
- 7:00 Adjourn

# MSTRWD Update

## Project Establishment

- June 20th,2023 the MSTRWD Board formally established the project under Minn Stat. 103D.605 and called it

**"The Swift Coulee Channel Restoration"**

# MSTRWD Update
# ★Meetings

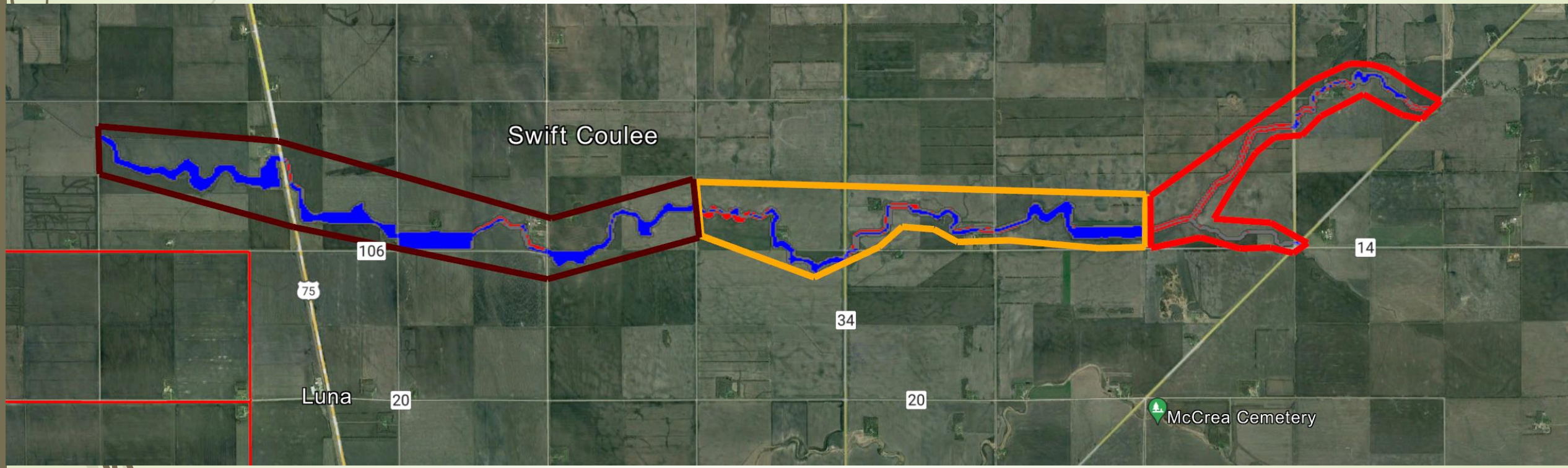
- **Mori Alone had more than 22 meetings in 2023** on or about the Swift Coulee. On top of that all the landowners meetings with Darren, internal meetings in BWSR or BWSR and SWCD … this number can be
- The project was established in Sep. 17th, 2007 (**about 16 years past now!**)
- **Let's do something before its more too late**

# MSTRWD Update
# Financial

- **Secured from State: *$650k* from last year**
- **expected additional *$2.3 million* from State for construction in *2024***
- **State funds require *10% cost share* and have *deadline to use***
- **Most of that State fund is for *Engineering, Permitting, Construction***
- **Easement Fund is separate and will be mostly from State too**
- ***Let's do something quick***

# MSTRWD Update

- Phasing (update for who was not in the meeting last year)



# Easement Acquisition Overview

BOARD OF WATER AND SOIL RESOURCES

# Easement Acquisition Overview

John Voz – Easement Program Coordinator

# RIM Easement Acquisition Framework

## Process Milestones:

Application

12- 18+ Months

Payment

SWCD Submits App Package / BWSR Reviews for Eligibility & Completeness

3-5 months

BWSR Prepares Agreement & Sends for Landowner Signature

3-5 months

SWCD Submits Title Commitment & Conservation Plan

3-6 months

BWSR Reviews & Prepares Easement for Landowner Signature

3-6 months

Easement Paid & SWCD Reimbursed

# Wolverton Creek Restoration

# Wolverton Creek Restoration

BWSR 8/16/2023

# CONSERVATION EASEMENT APPLICATION

EASEMENT #
(BWSR Use Only)

COUNTY (easement location) | SWCD (administering easement) | LANDOWNER TELEPHONE NO.

LANDOWNER OR ENTITY'S FULL NAME | SPOUSE

ADDRESS (No., Street, RFD, Box No.) | IN CARE OF

CITY | TOWNSHIP NAME | ACRES | TWP | RANGE | SECTION

STATE ZIP | TOWNSHIP NAME | ACRES | TWP | RANGE | SECTION

## EASEMENT TYPE:

*Use CEFW with tax assessed calculation for easement types with an asterisk
See Easement Type reference list at end of form

## EASEMENT PAYMENT INFORMATION (from the Conservation Easement Financial Worksheet):

Total Easement Acres: Total Easement Payment:

## TERMS AND CONDITIONS

The purpose of this application is to authorize the collection of the information necessary to make a preliminary determination for the land you are asking to enroll in a conservation easement program. This application is not a binding contract on either party.

By signing this application, the landowner(s) agree to grant local soil and water conservation districts (SWCD) representative(s) permission to visit the parcel and to provide other ownership and title documents requested by the SWCD during this determination.

TENNESSEN WARNING NOTICE – Social Security Numbers
As a condition of receiving monetary compensation from the State of Minnesota, you will need to provide your tax identification numbers or social security number. Your social security number is private data under the Minnesota Government Data Practices Act. Private data on individuals is not available to the public, but it is available to other persons or entities authorized by law to receive the data. Your social security number may be given to the commissioner of revenue for purposes of tax administration. The social security number is also provided to the commissioner of finance for the issuance of 1099 tax forms. If the social security number is not provided, the easement application cannot be completed.

I, the landowner, certify that the answers to the questions on pages 2 and 3 of this form are true and correct to the best of my knowledge. I understand that the state cannot enter into a conservation easement on any land containing contaminants, pollutants, or hazardous substances. Further I understand that state law requires that all environmental problems located on the parcel to be enrolled must be properly cleaned up and any abandoned wells must be sealed at my expense before any conservation easements can be secured. Further I have read and understand the Tennessen warning notice.

Landowner Signature

SWCD Signature

Date

Date

BWSR

# Conservation Easement Financial Worksheet (CEFW)

10/1/2023

County (easement location)  Landowner or Entity's Full Name

Easement Type (payment calculations may change based on selection)

Township Name1

| | Acres | x | Rate | = | Payment |
|---|---|---|---|---|---|
| Land with Crop History | | | | | |
| Land without Crop History | | | | | |
| Donated Land | | | | | |

Township Name2 (if applicable)

| | Acres | x | Rate | = | Payment |
|---|---|---|---|---|---|
| Land with Crop History | | | | | |
| Land without Crop History | | | | | |
| Donated Land | | | | | |

| Total Easement Acres | Total Donated Acres | Total Easement Payment | Percent Non-Crop Acres |
|---|---|---|---|

* These are preliminary figures and are subject to change as easement boundaries are finalized.

I attest that to the best of my knowledge, the information on this form is accurate, that it has been reviewed and discussed with the landowner, and that the landowner understands and acknowledges the financial obligations herein represented.

SWCD Signature  Date

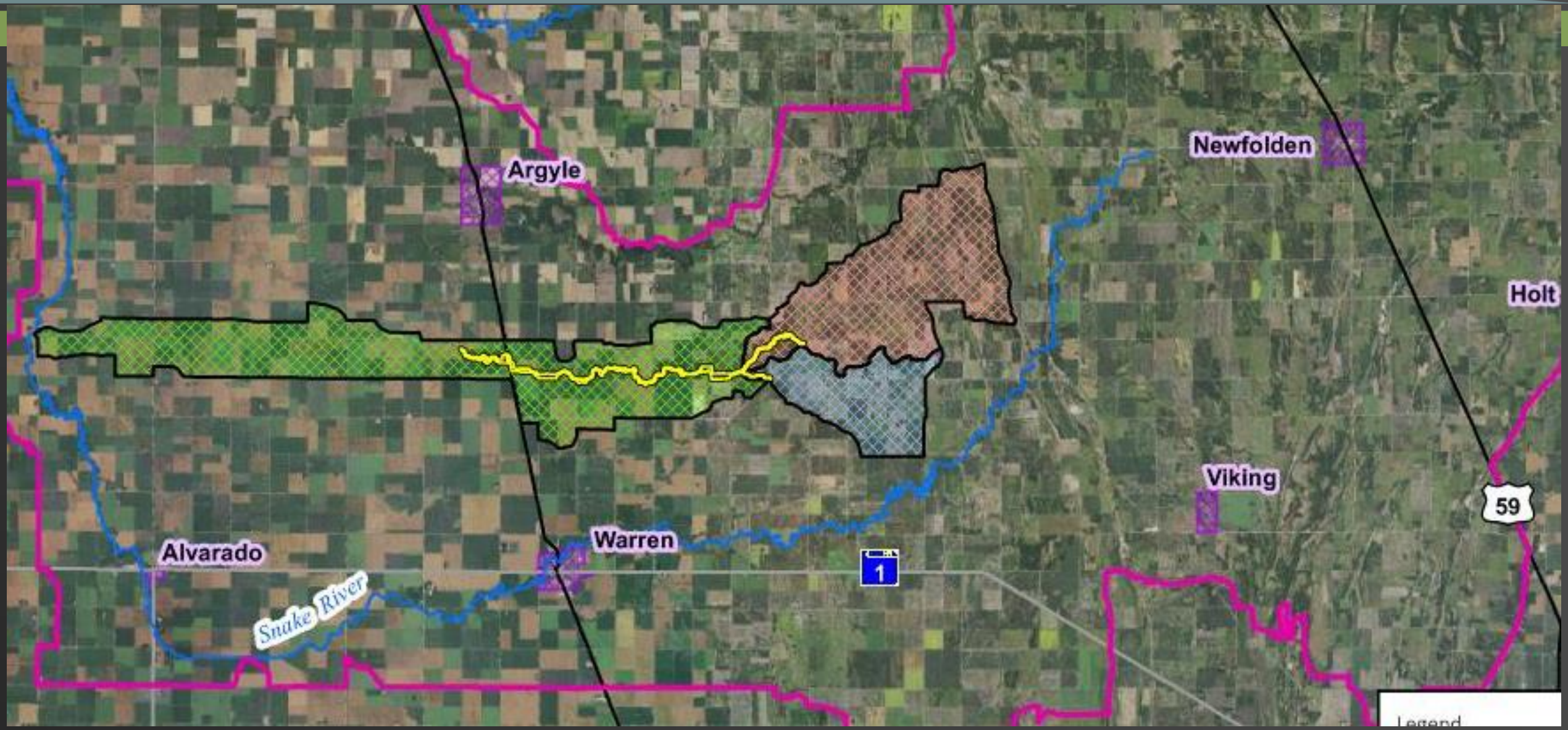
# Houston Engineering
# Design and Permitting update

# SWIFT COULEE CHANNEL RESTORATION PROJECT

## PROJECT TEAM & LANDOWNER MEETING

## DECEMBER 7, 2023

# CHANNEL RESTORATION/SETBACK LEVEE EXTENT

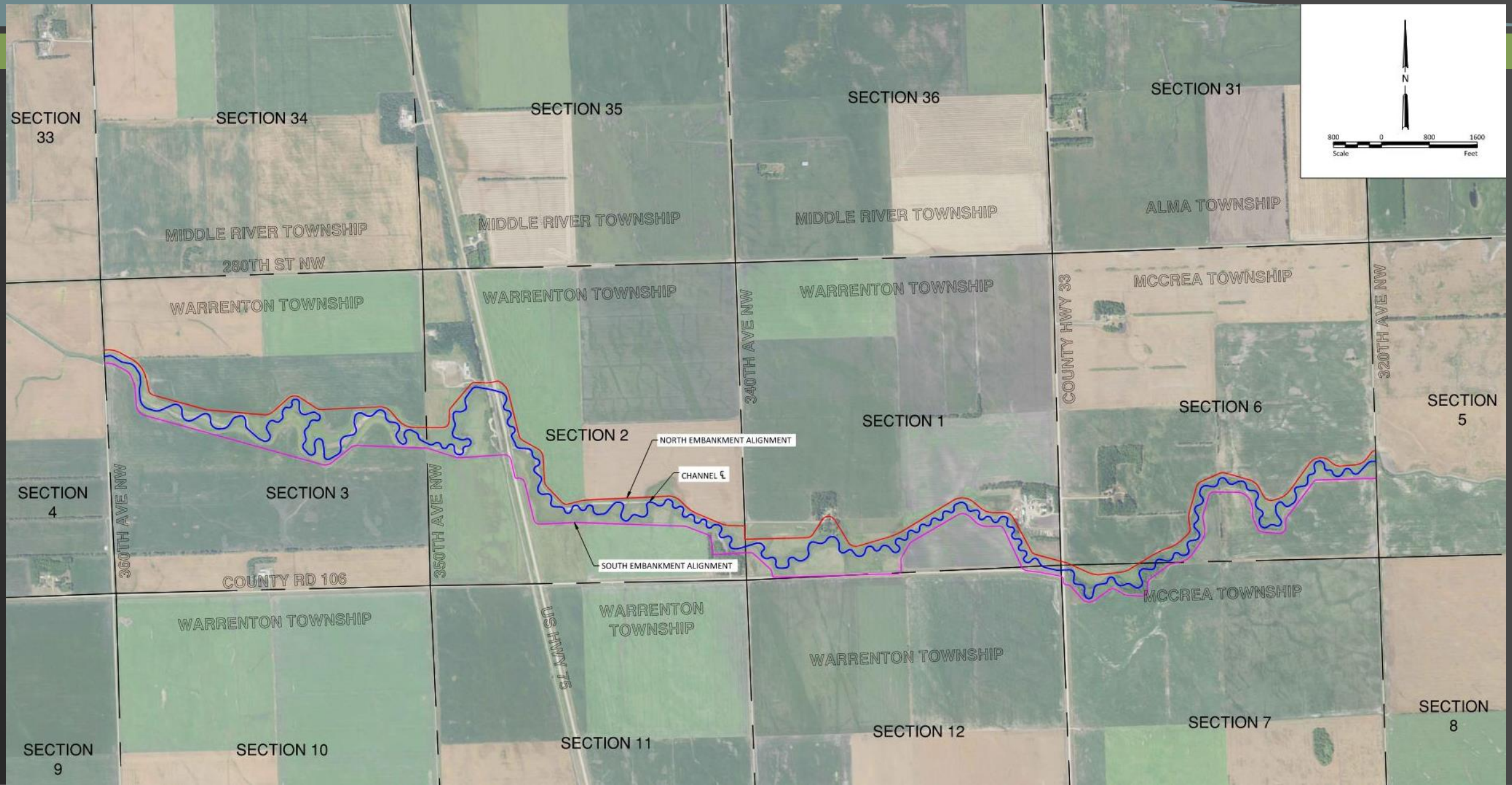


# PROJECT TEAM PROCESS UPDATE

- Tasks completed
  - Purpose and Need of Project – Concurrence Point #1 – Dec. 2018
  - Potential Alternatives and Alternatives to Carry Forward – Concurrence Point #2 – June 2019
  - Individual Meetings with Majority Landowners where Alternatives were Identified
  - Identification of the Selected Alternative – Concurrence Point #3 – April 2021
    - 13 Alternatives screened through the Concurrence Point process
    - Alt.11 – Restoration with Impoundment showed the most benefit meeting the purpose and need
    - Landowner Unwillingness – Alt. 11 – August 19, 2020 Project Team Meeting – Landowners Suggest Share Flooding Burden
    - Alt. 13 – Channel Restoration w/Setback Levees – Share Flooding Burden
  - Alt. 13 – Selected as Preferred Alternative on February 11, 2021 Project Team Meeting

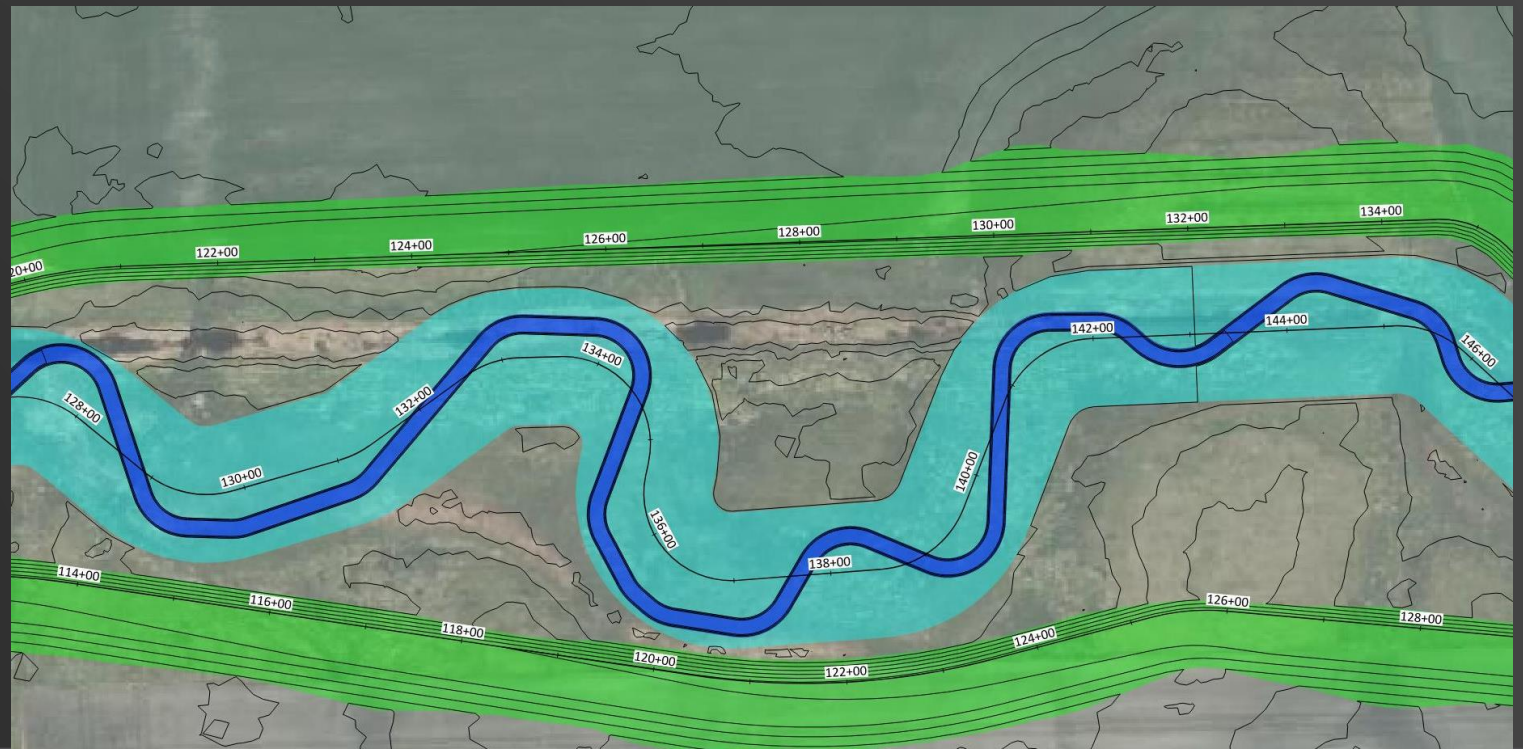
# PROJECT PHASING

# PHASE 1 EXTENT



# PHASE 1 DESIGN

- Review Hydraulic & Hydrologic Modeling Results
  - E- Channel Restoration
    - Culvert to Culvert Profile
    - Historic Aerial Photography/DNR Input – Add Meander Back into Channel Alignment with Set Back Levees
    - Approx. 1-yr Meandering Channel with 10-yr Floodplain/Valley and Set Back Levees



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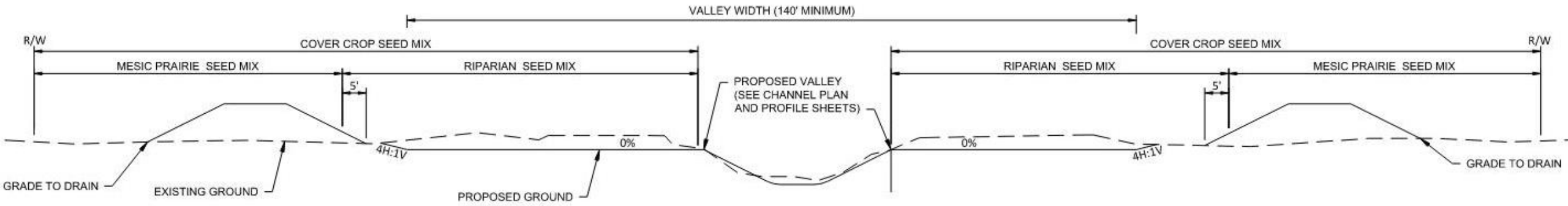
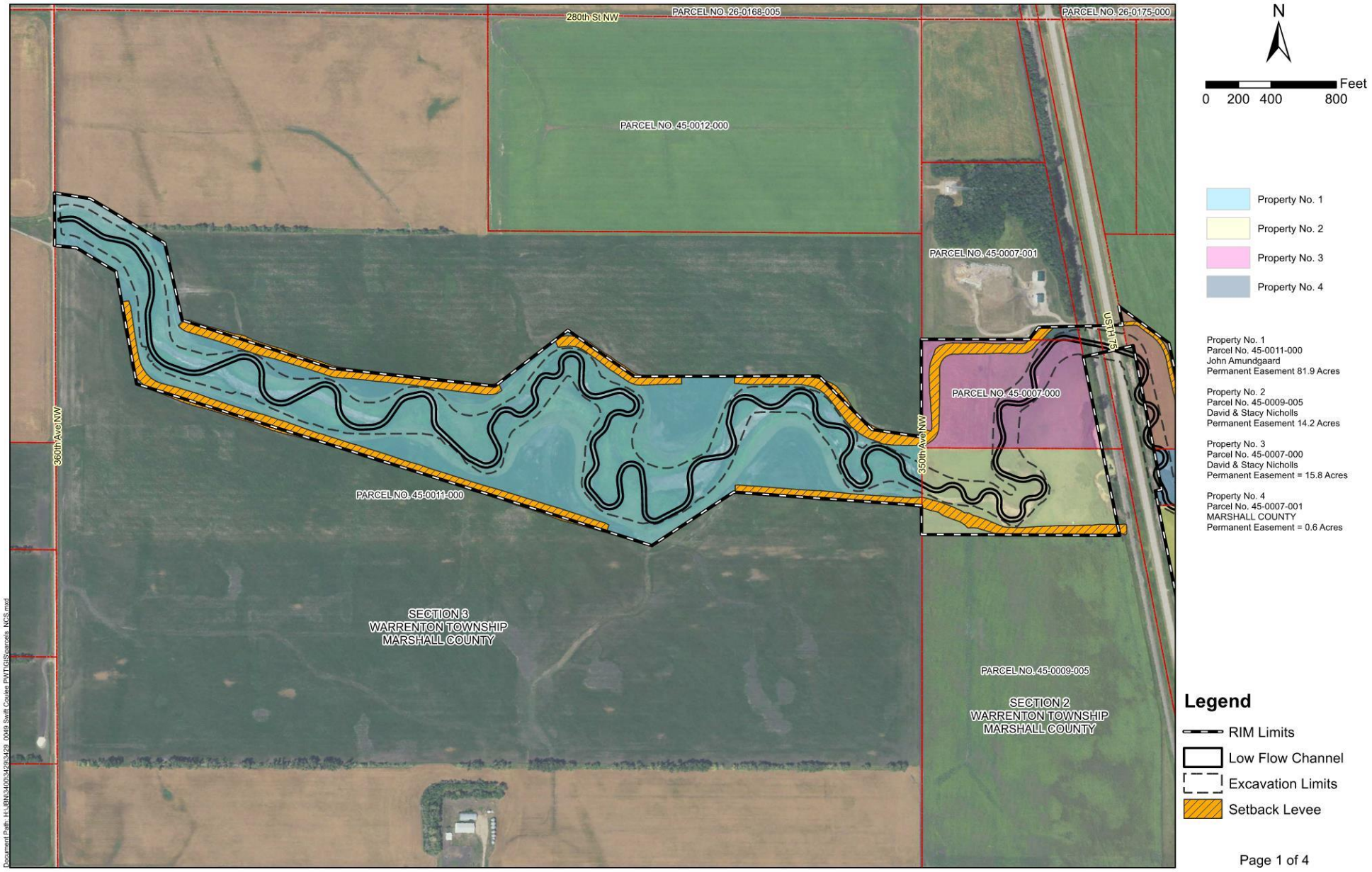



**STA. 1000+83 TO 1287+00**
**TYPICAL CHANNEL SECTION**
NOT TO SCALE

# PHASE 1 DESIGN

- Design
  - Centerline culverts
    - Additional 48” added and altered roadway profile in current design at low water crossing west of Hwy 75 Sect 2/3 Warrenton for public waters requirements
    - All other centerline openings left as existing conditions – change from preliminary concept design
  - Side water inlet pipes with traps through setback levees for adjacent agricultural drainage
  - Rock riffles at downstream end of project – minimize channel grade & reduce excavation
  - Utilities – private & public

# PRELIMINARY PROJECT PLAN



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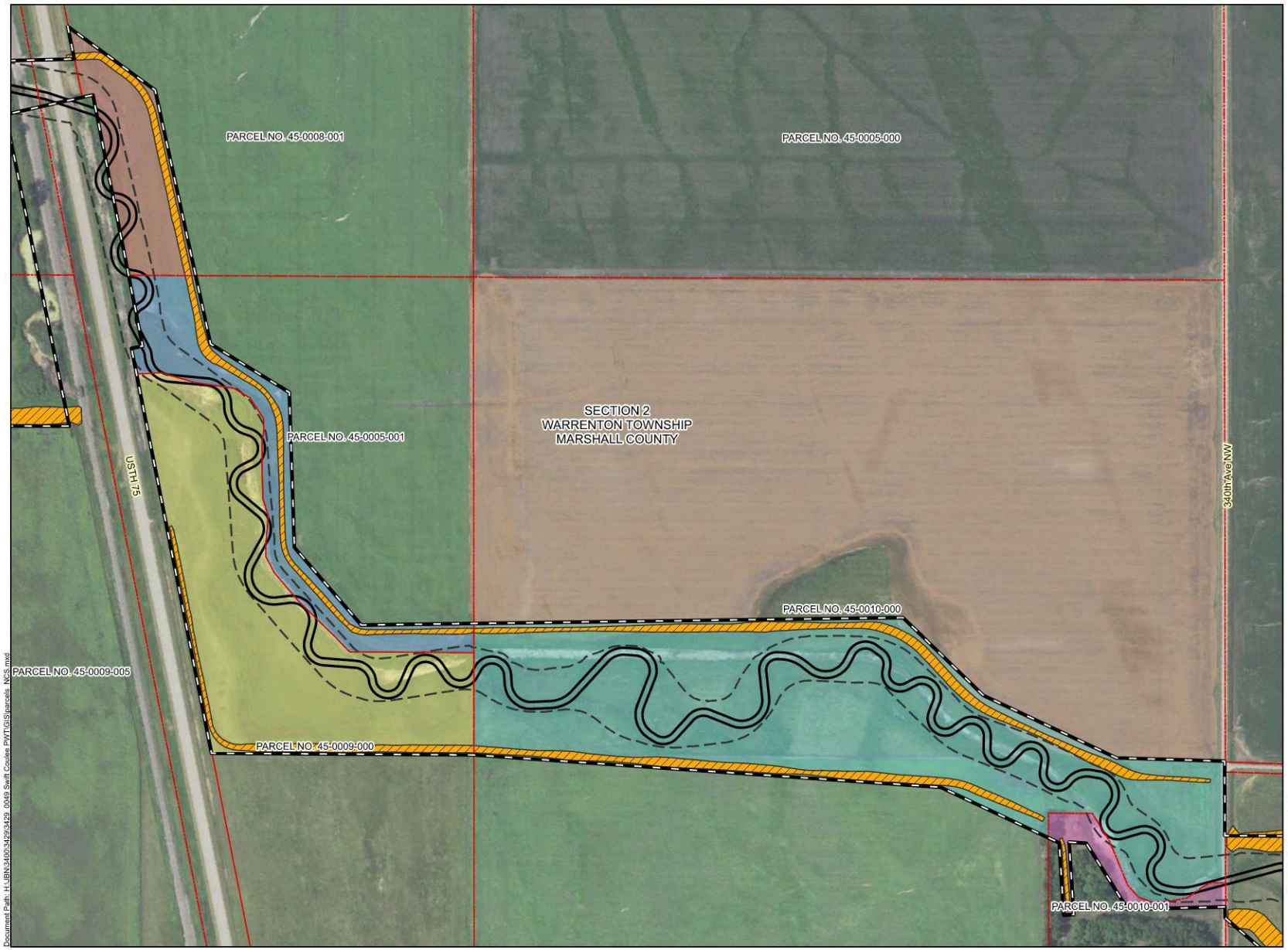



N

0 120 240 480 Feet

Property No. 5
Property No. 6
Property No. 7
Property No. 8
Property No. 9

Property No. 5
Parcel No. 45-0008-001
Donald & Mark Yutrezenka
Permanent Easement = 4.1 Acres

Property No. 6
Parcel No. 45-0005-001
Donald & Mark Yutrezenka
Permanent Easement = 5.7 Acres

Property No. 7
Parcel No. 45-0009-000
Ruth Ann Shlief ETAL
Permanent Easement = 16.4 Acres

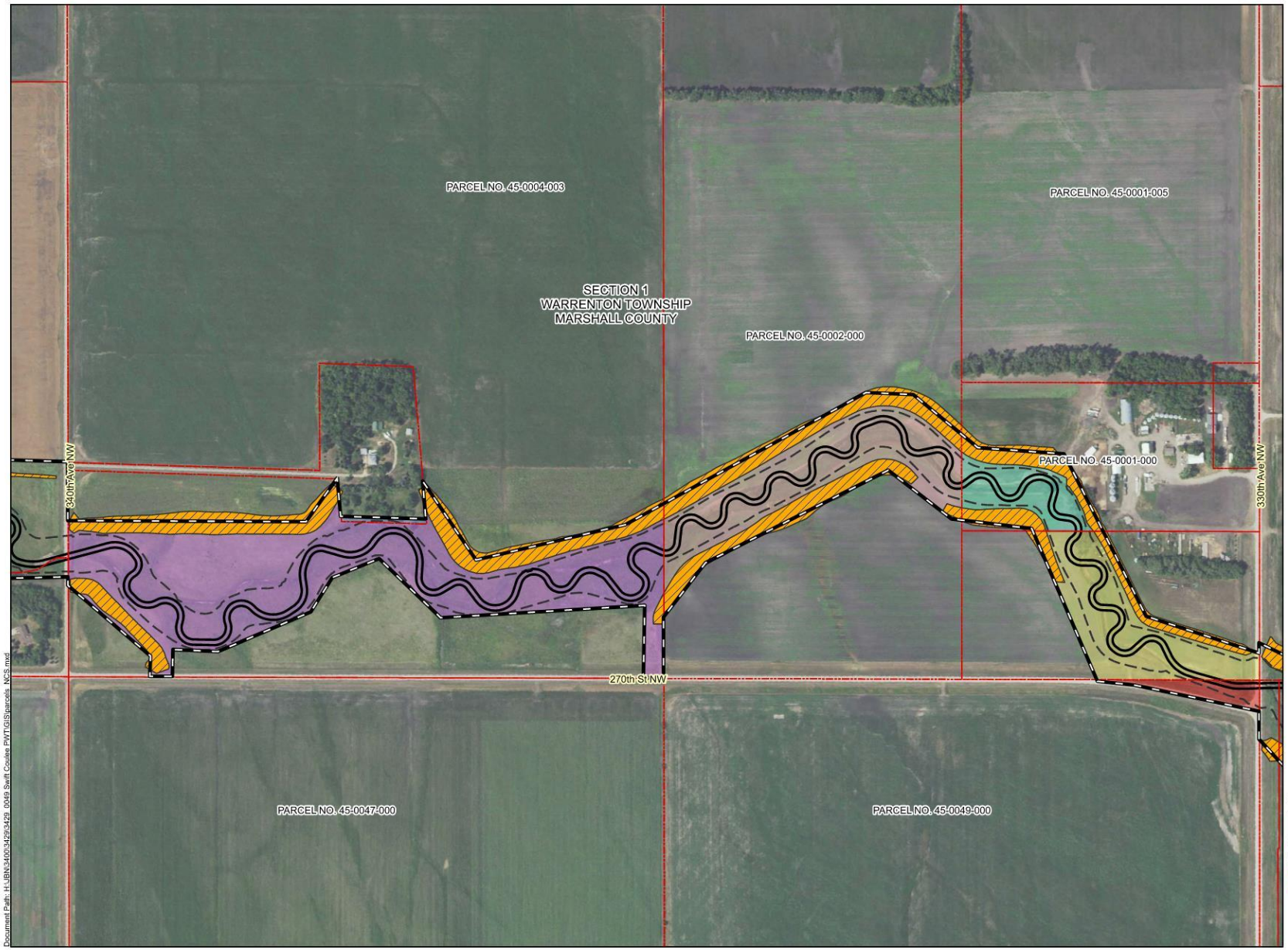
Property No. 8
Parcel No. 45-0010-000
Kenneth Johnson
Permanent Easement = 28.9 Acres

Property No. 9
Parcel No. 45-0010-001
Eric Larson
Permanent Easement = 1.3 Acres

**Legend**

RIM Limits
Low Flow Channel
Excavation Limits
Setback Levee

# PRELIMINARY PROJECT PLAN




N

0 155 310 620 Feet

- Property No. 10
- Property No. 11
- Property No. 12
- Property No. 13
- Property No. 14
- Property No. 15

Property No. 10
Parcel No. 45-0004-003
Marshall & Beverly Fulks Trust
Permanent Easement = 24.9 Acres

Property No. 11
Parcel No. 45-0004-000
Nathaniel & Hannah Gornowicz
Permanent Easement = 0.2 Acres

Property No. 12
Parcel No. 45-0002-000
James & Lisa Vansickle Trust
Permanent Acres = 11.9 Acres

Property No. 13
Parcel No. 45-0001-000
James & Lisa Vansickle Trust
Permanent Acres = 4.3 Acres

Property No. 14
Parcel No. 45-0001-005
James & Lisa Vansickle Trust
Permanent Easement = 7 Acres

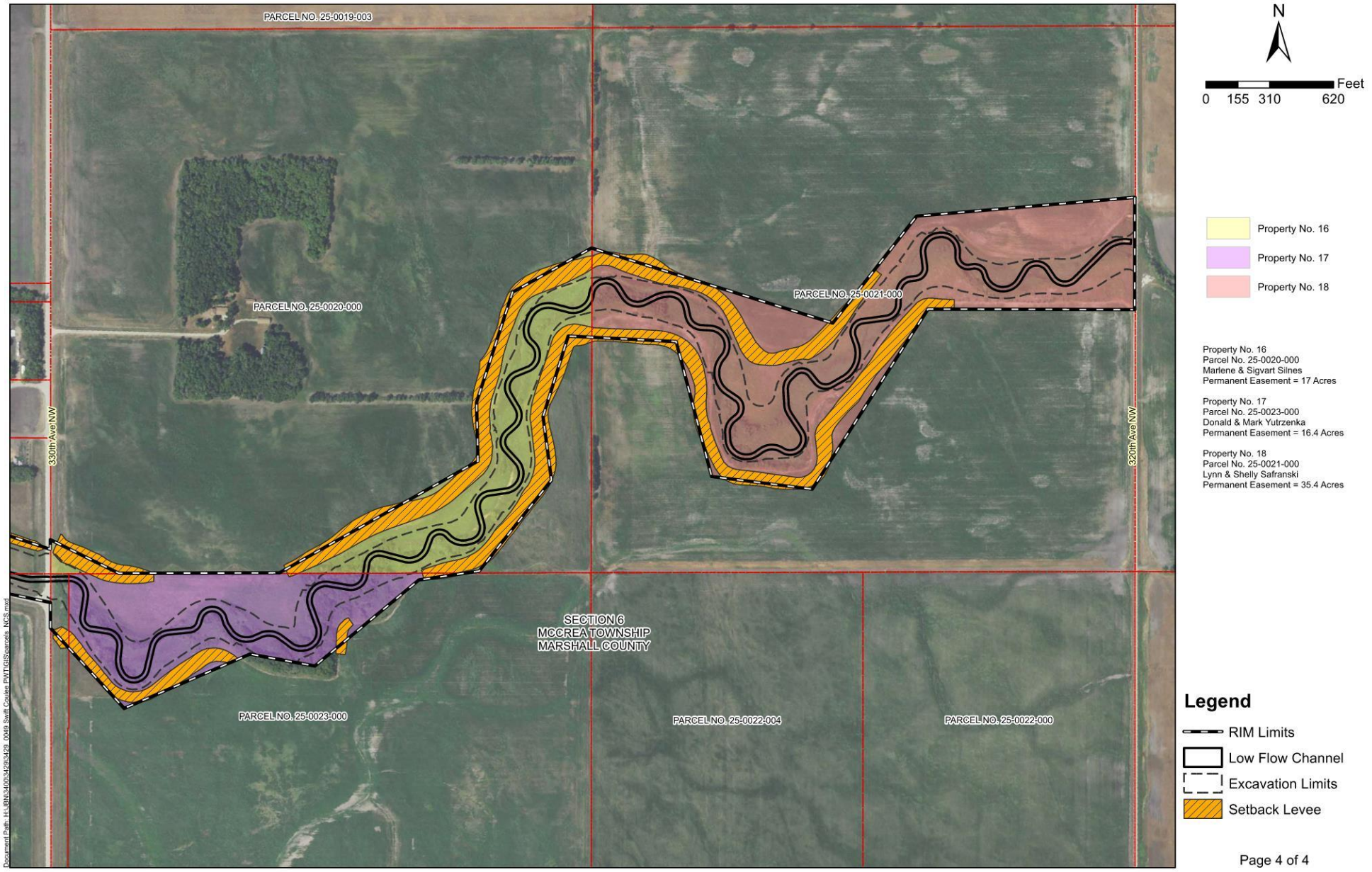
Property No. 15
Parcel No. 45-0049-000
Donald & Mark Yutrzenka
Permanent Easement = 1.1 Acres

**Legend**

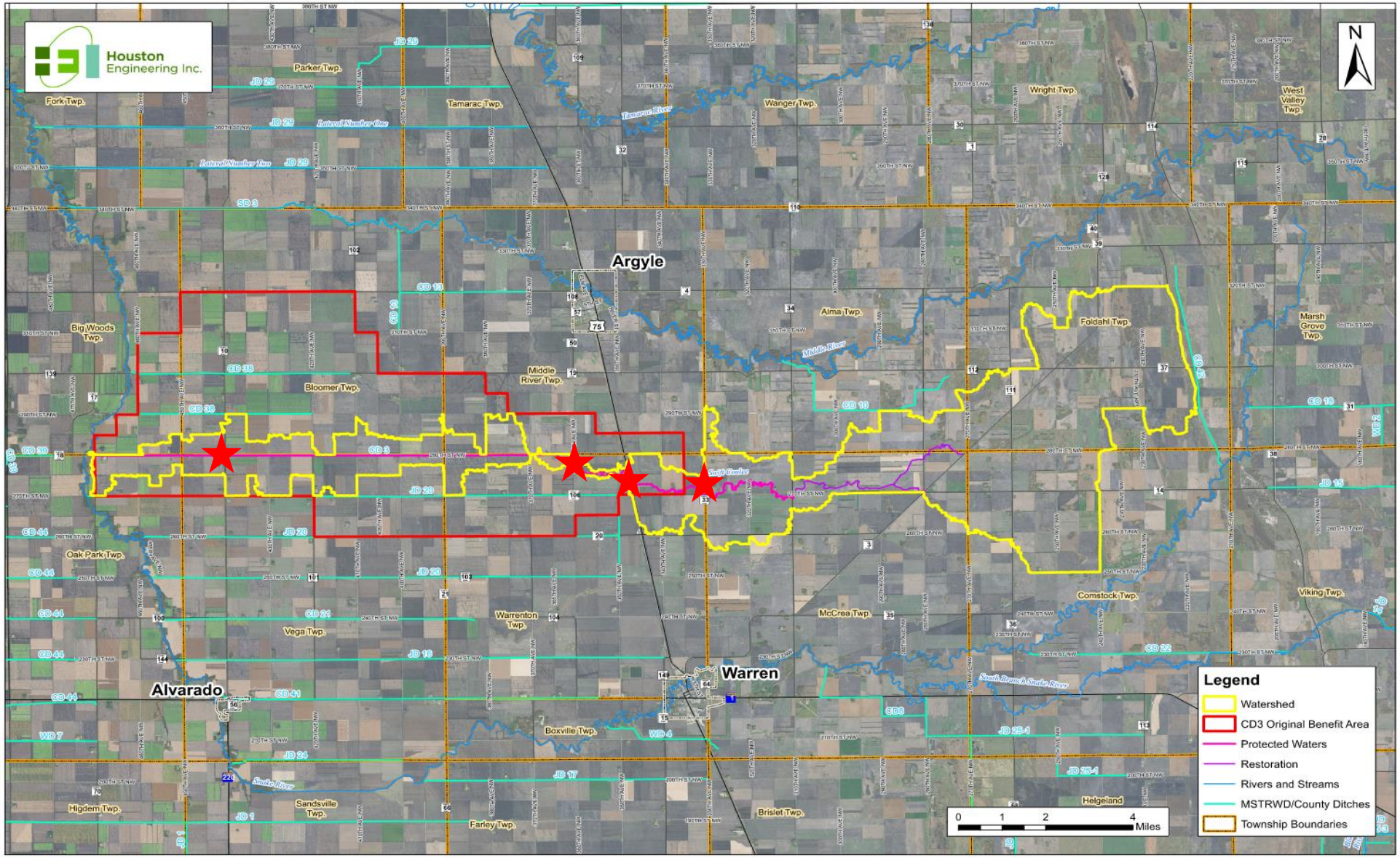
- RIM Limits
- Low Flow Channel
- Excavation Limits
- Setback Levee

Document Path: H:\JBN\3400\3429\3429_0049 Swift Coulee PWT\GIS\parcels_NCS.mxd

# PRELIMINARY PROJECT PLAN

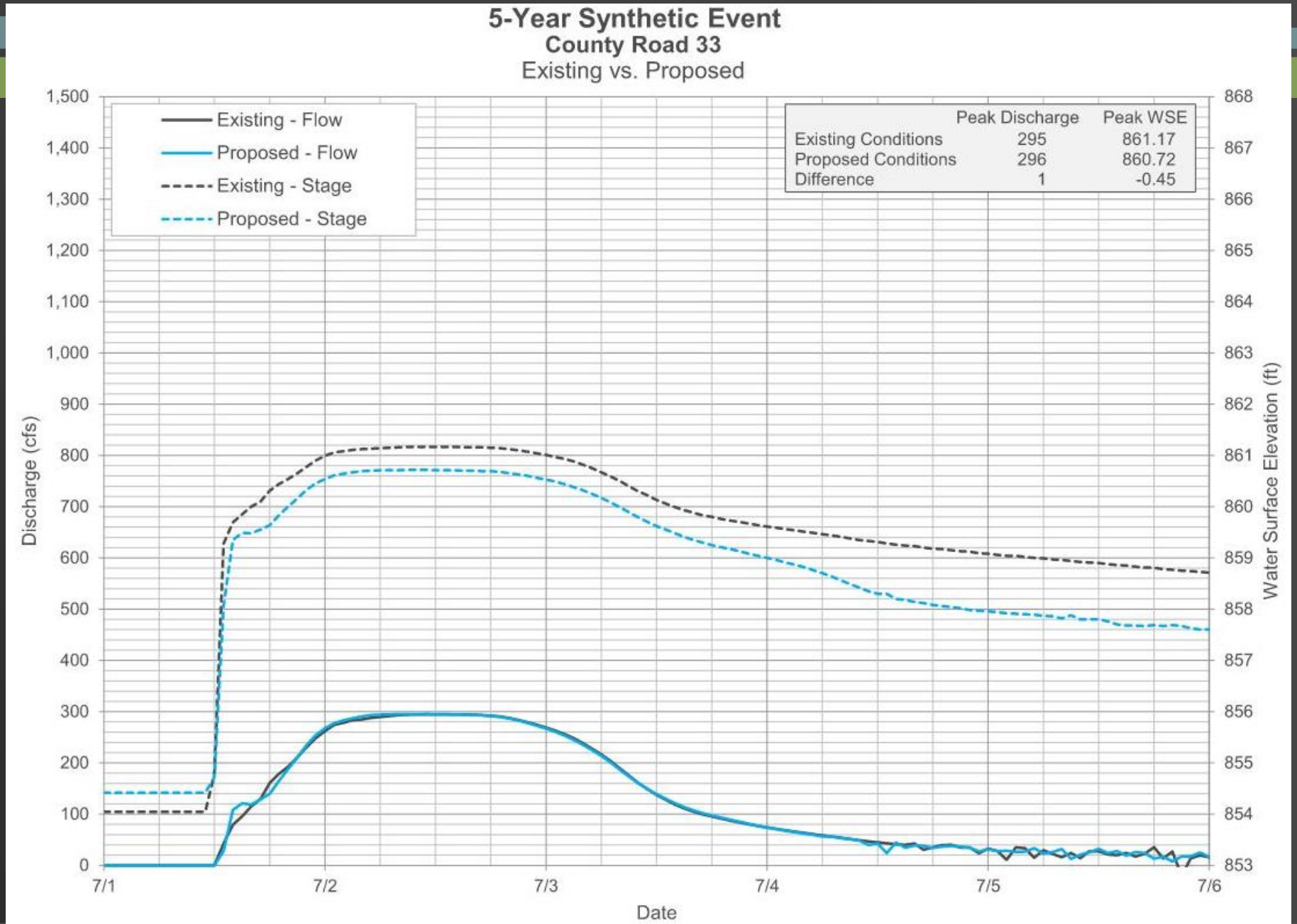


# REPORTING LOCATIONS – H&H MODELING

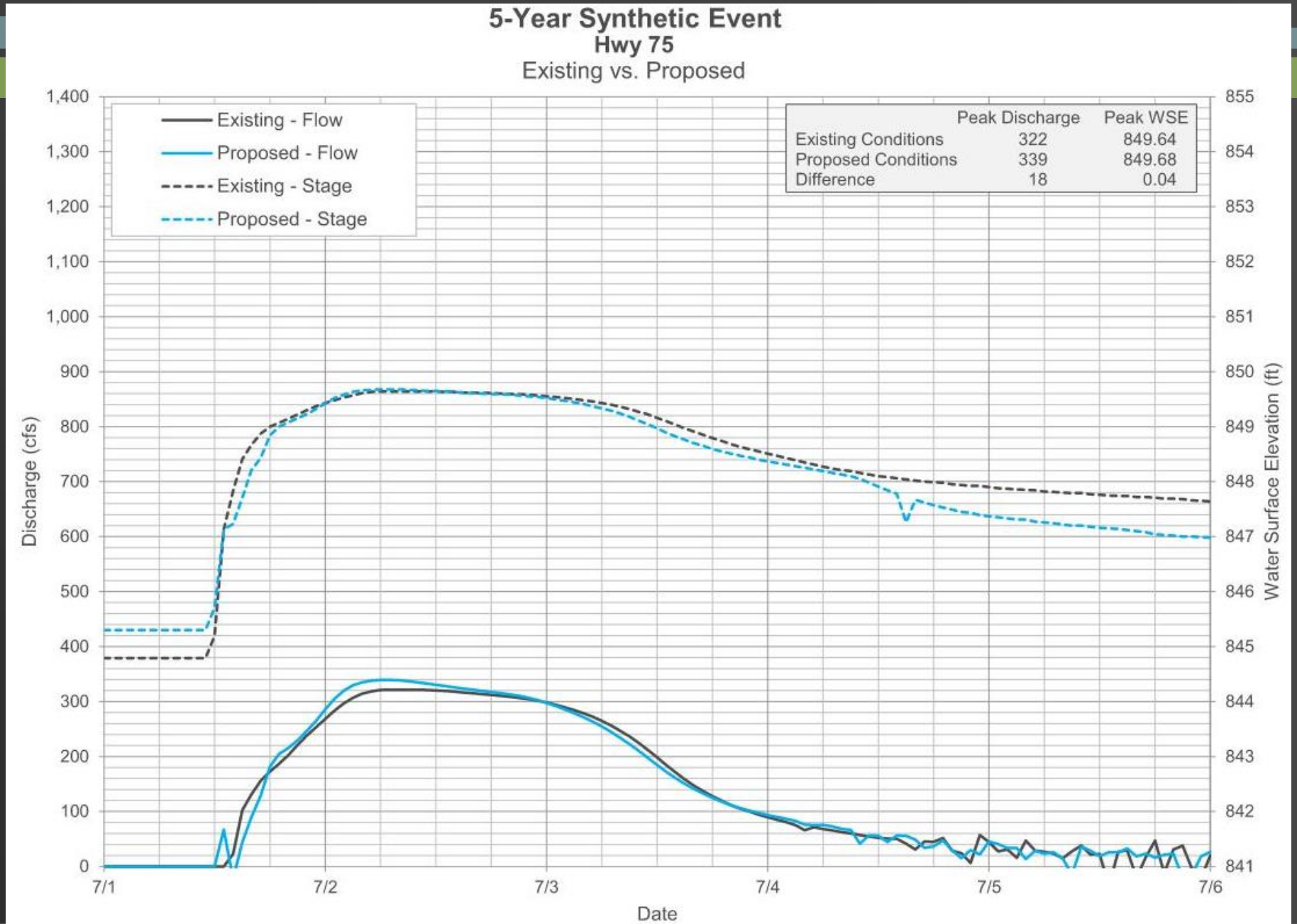


# 5-YEAR 24-HOUR HYDROGRAPHS

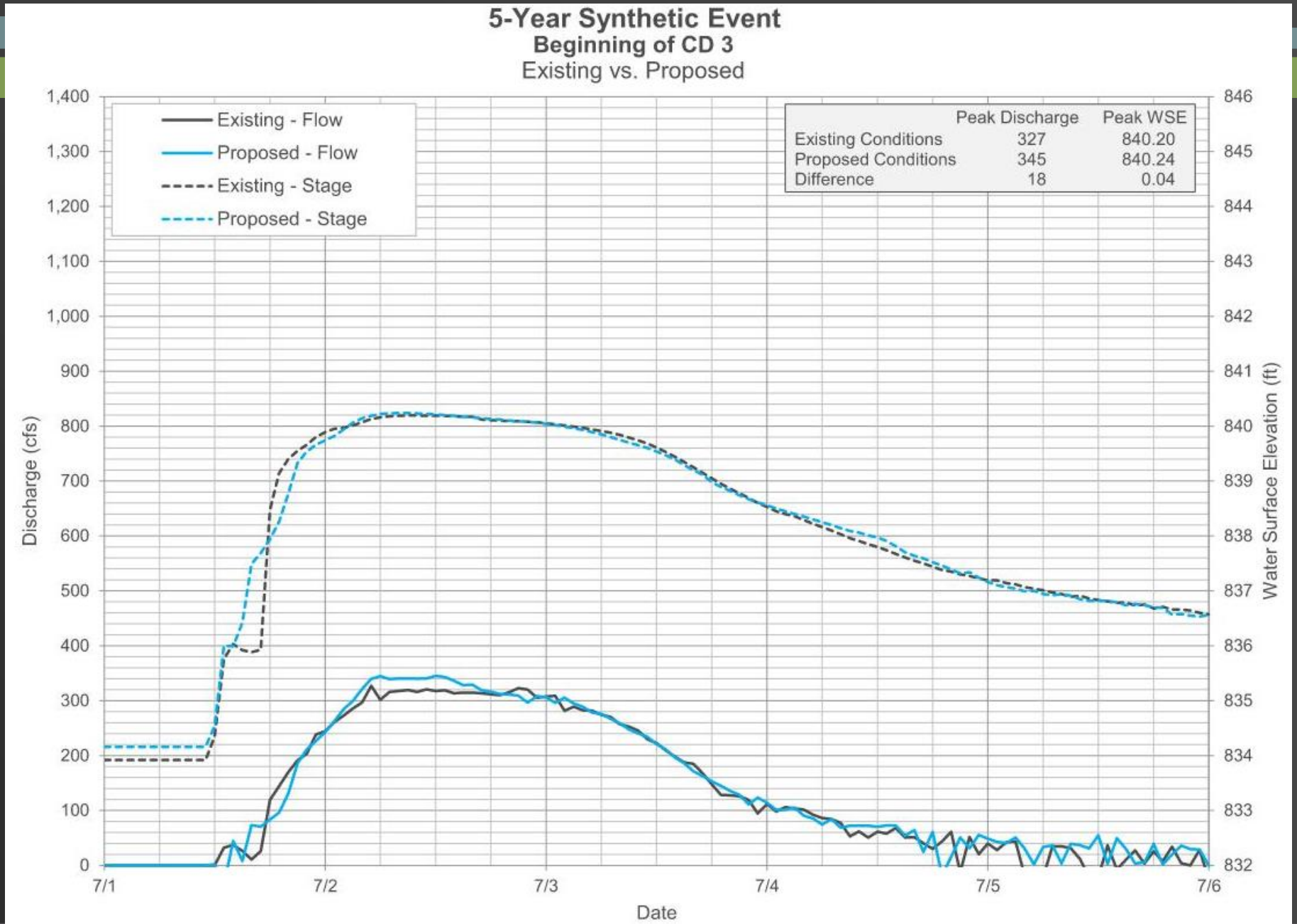
# CHANNEL RESTORATION RESULTS –CR 33



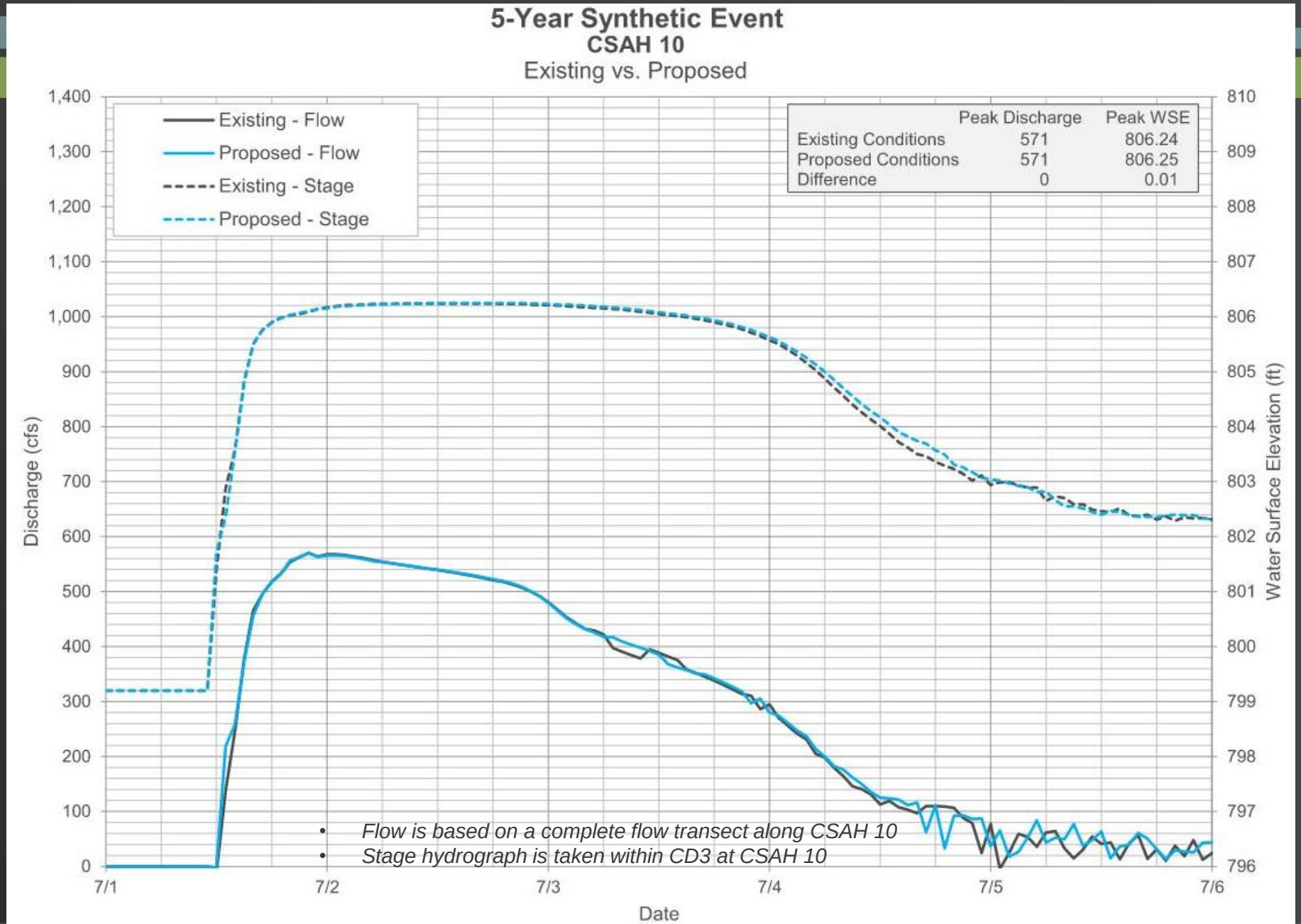
# CHANNEL RESTORATION RESULTS –HWY 75



# CHANNEL RESTORATION RESULTS –BEGINNING OF CD 3

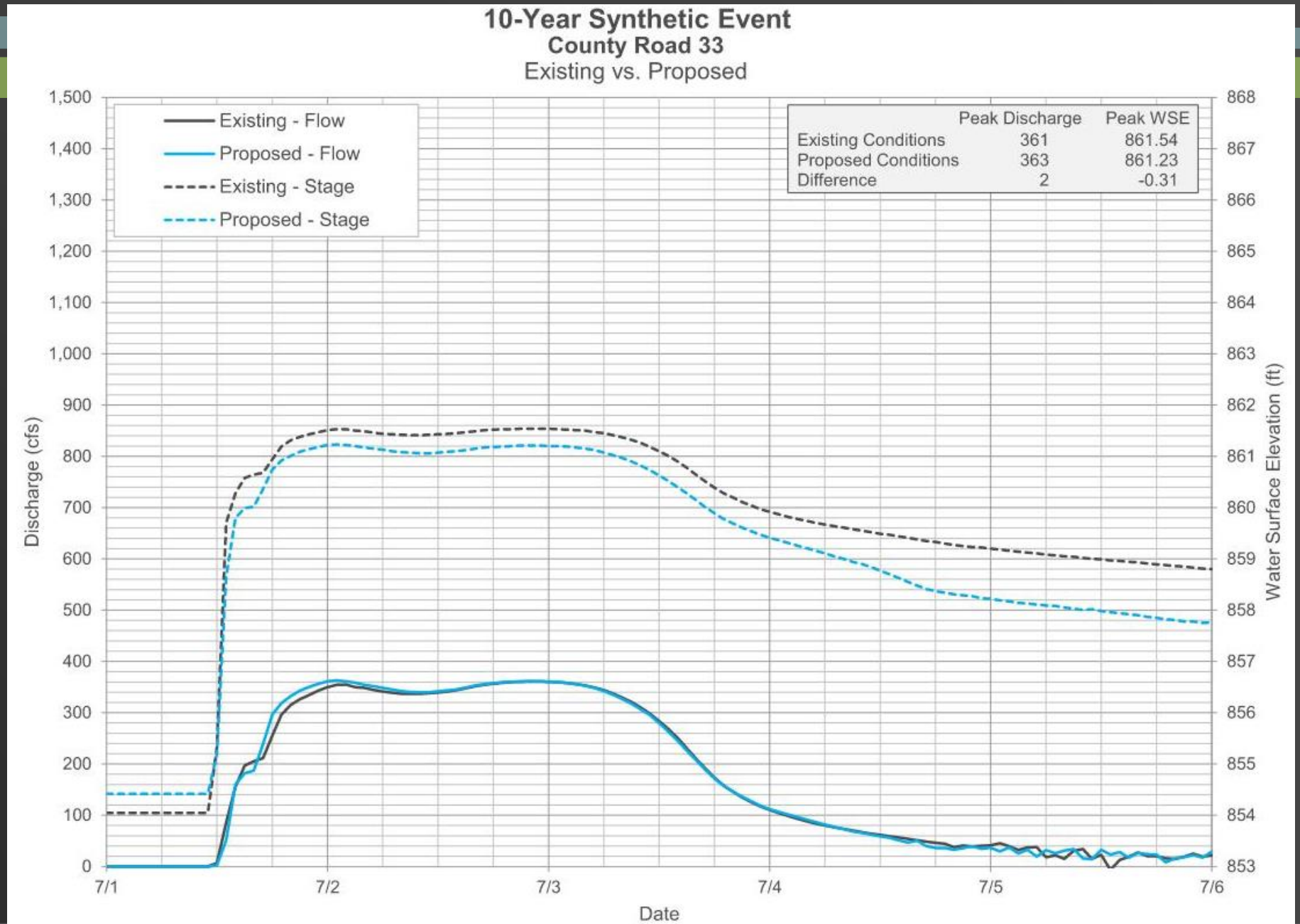


# CHANNEL RESTORATION RESULTS –CSAH 10



# 10-YEAR 24-HOUR HYDROGRAPHS

# CHANNEL RESTORATION RESULTS –CR 33



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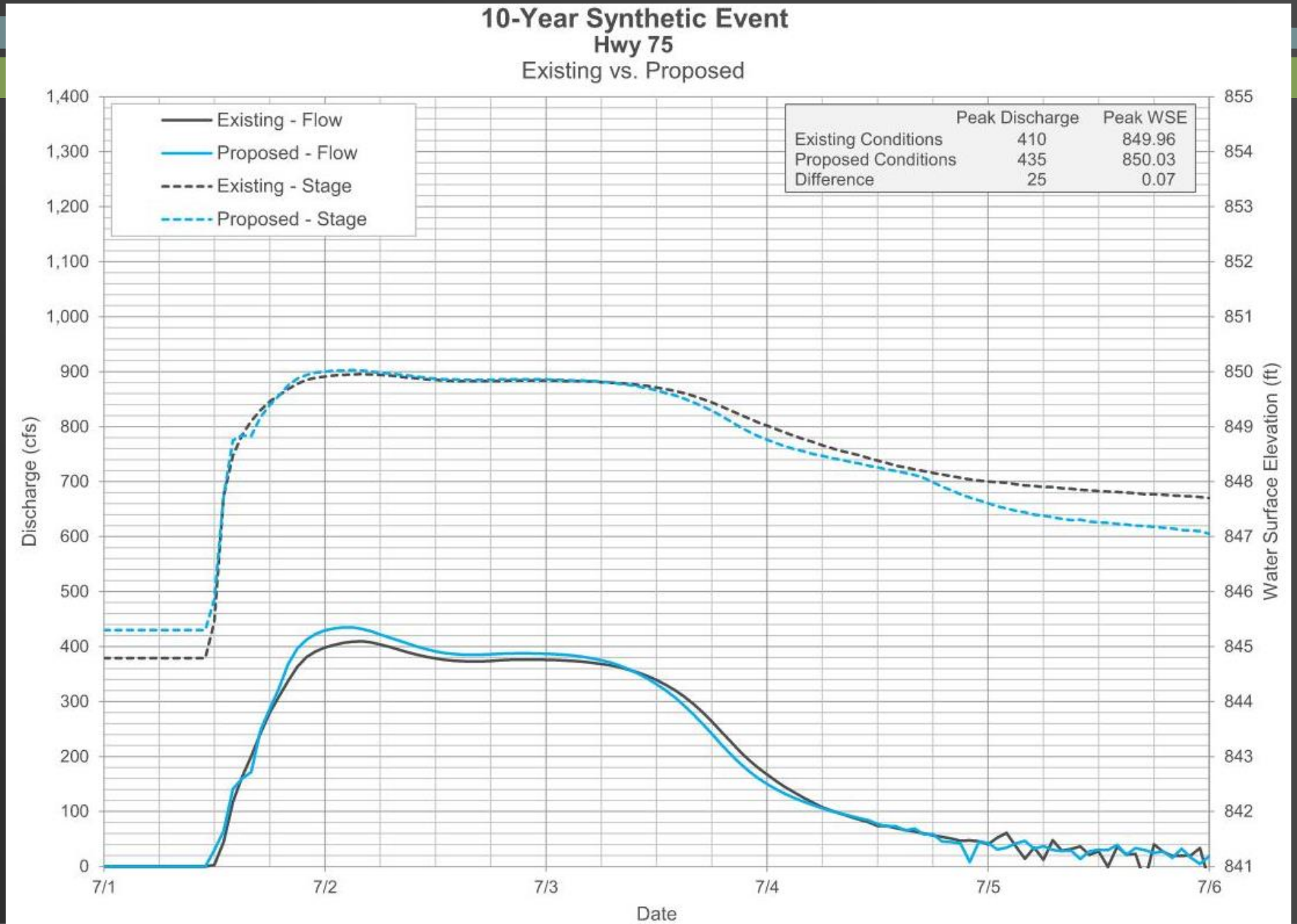
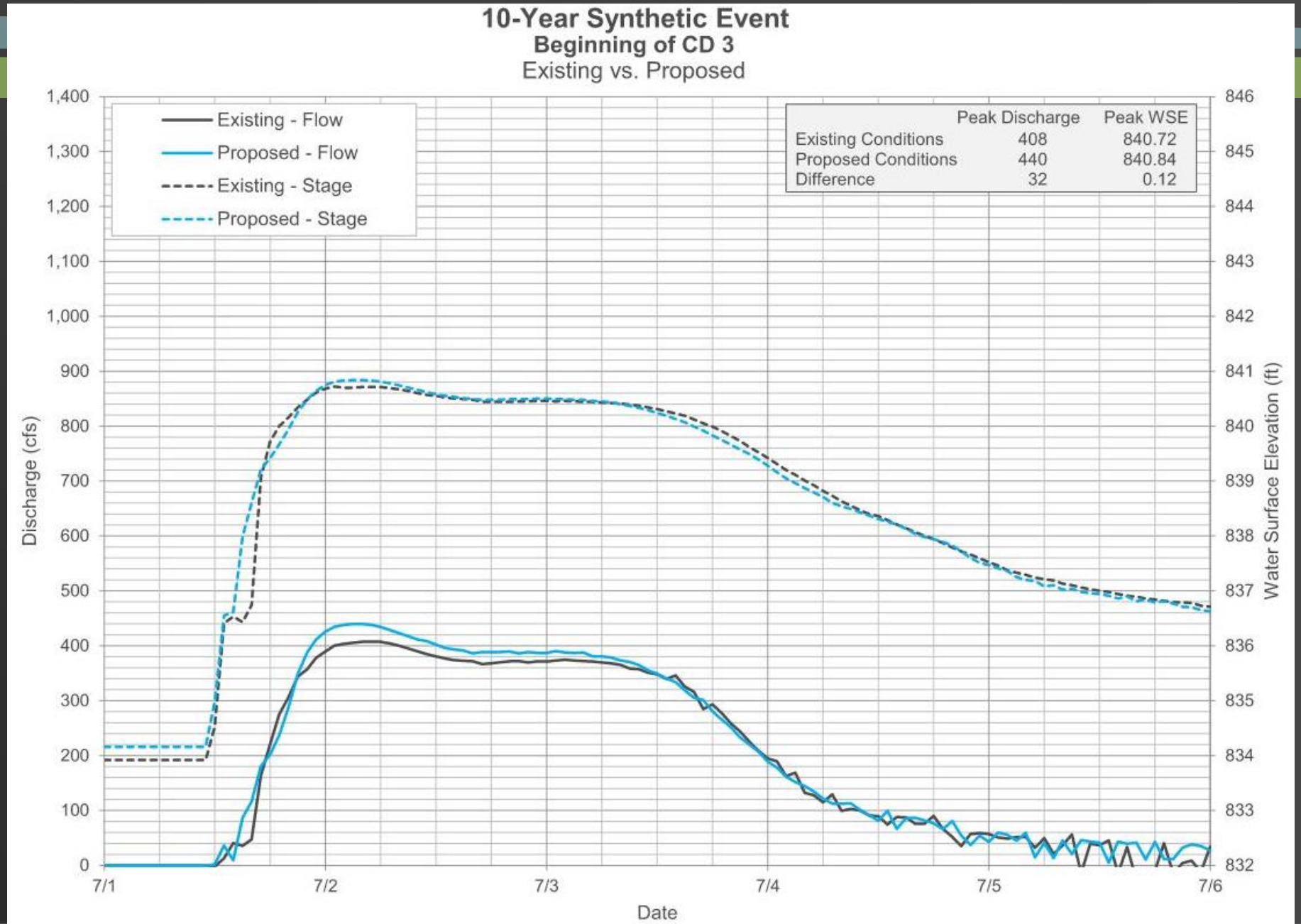
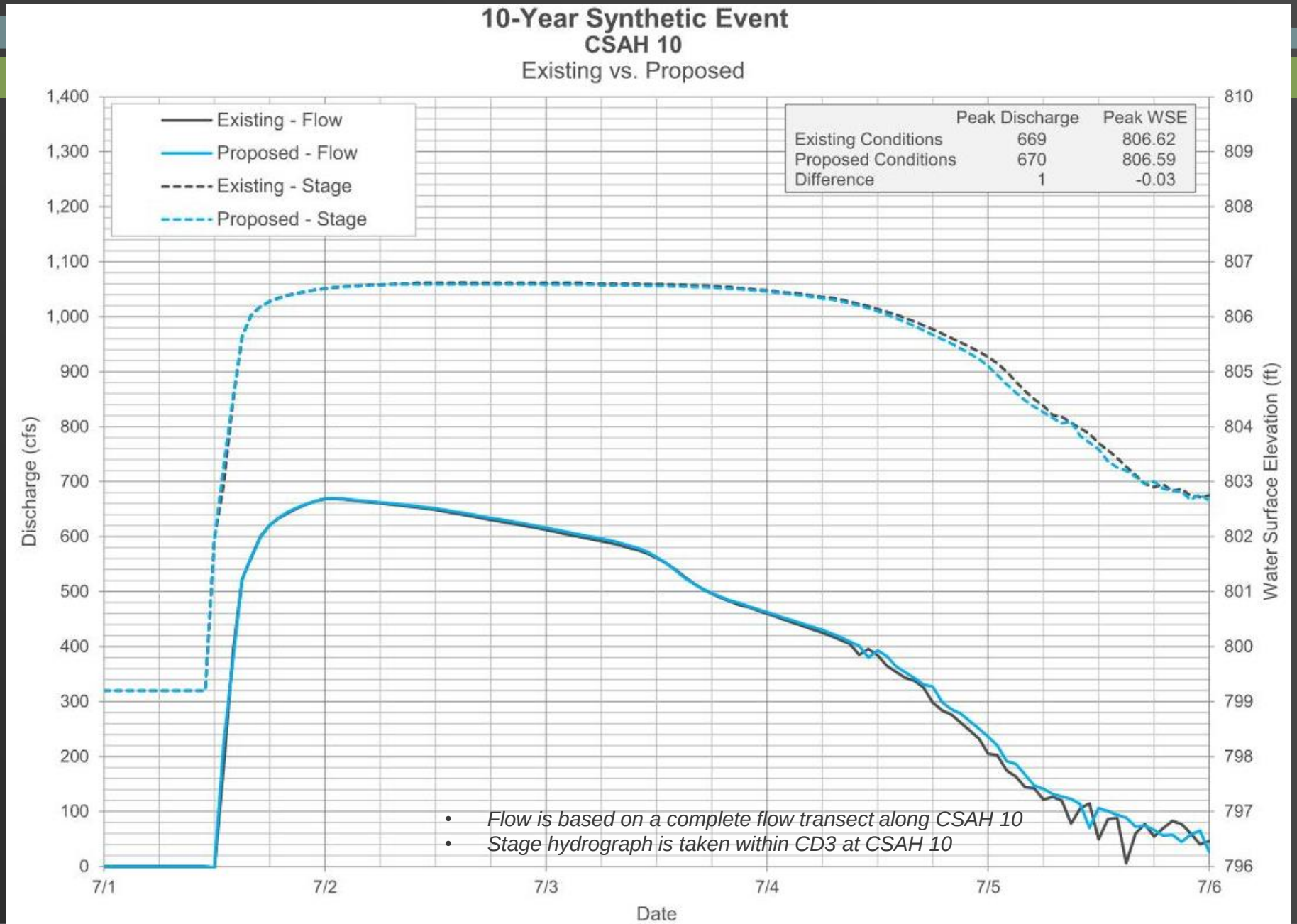


# CHANNEL RESTORATION RESULTS –BEGINNING OF CD 3

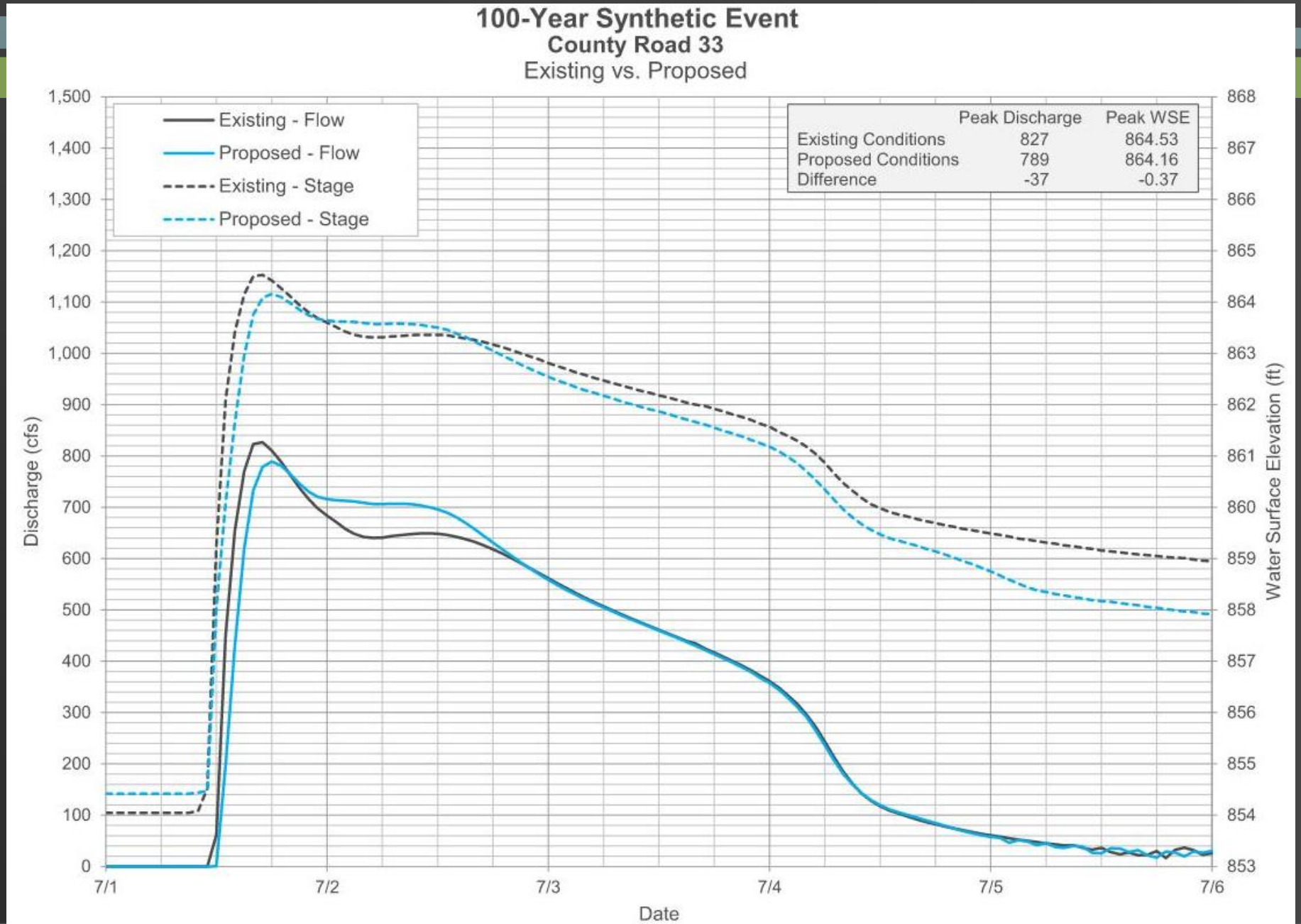


# CHANNEL RESTORATION RESULTS –CSAH 10



# 100-YEAR 24-HOUR HYDROGRAPHS

# CHANNEL RESTORATION RESULTS –CR 33



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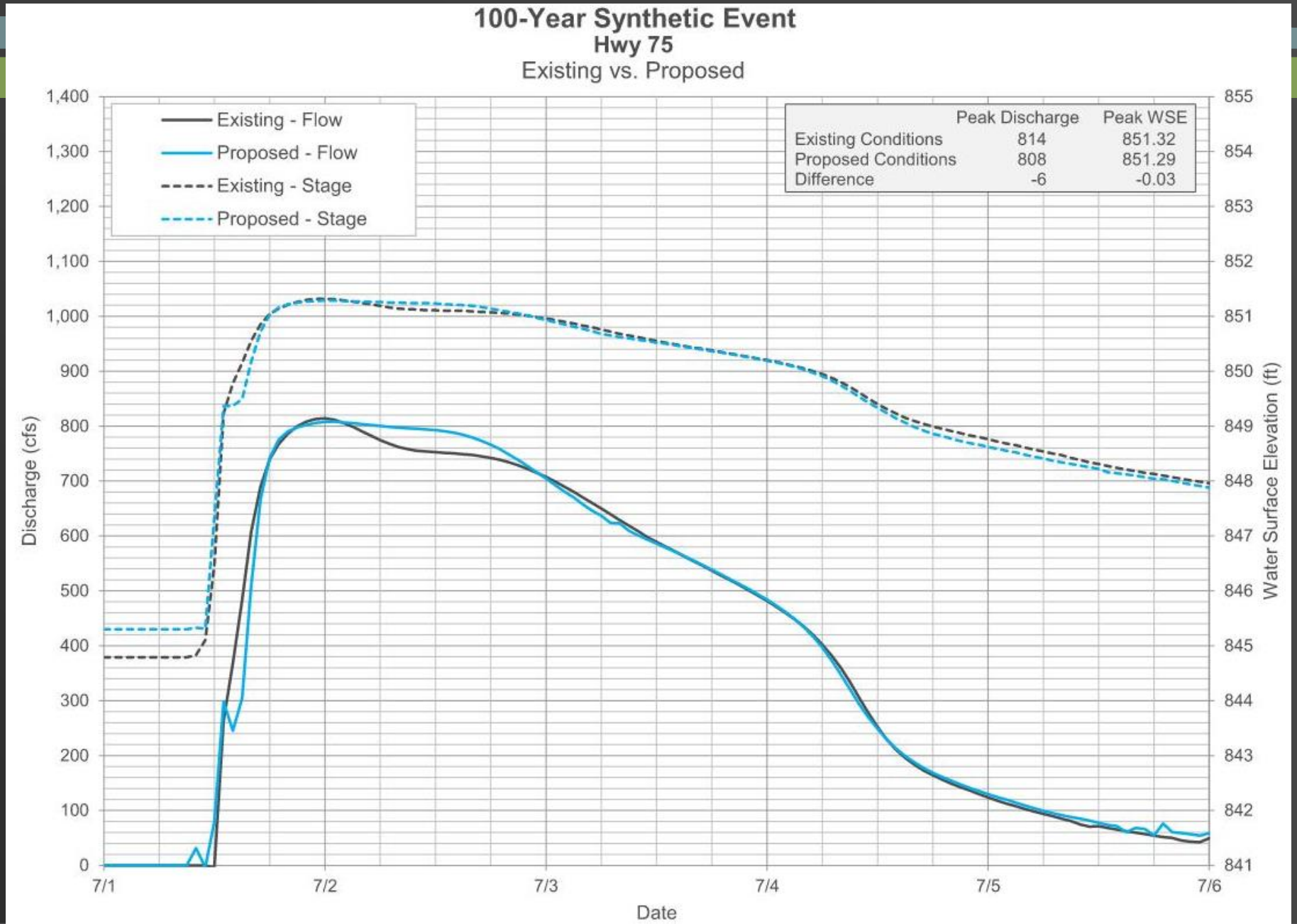
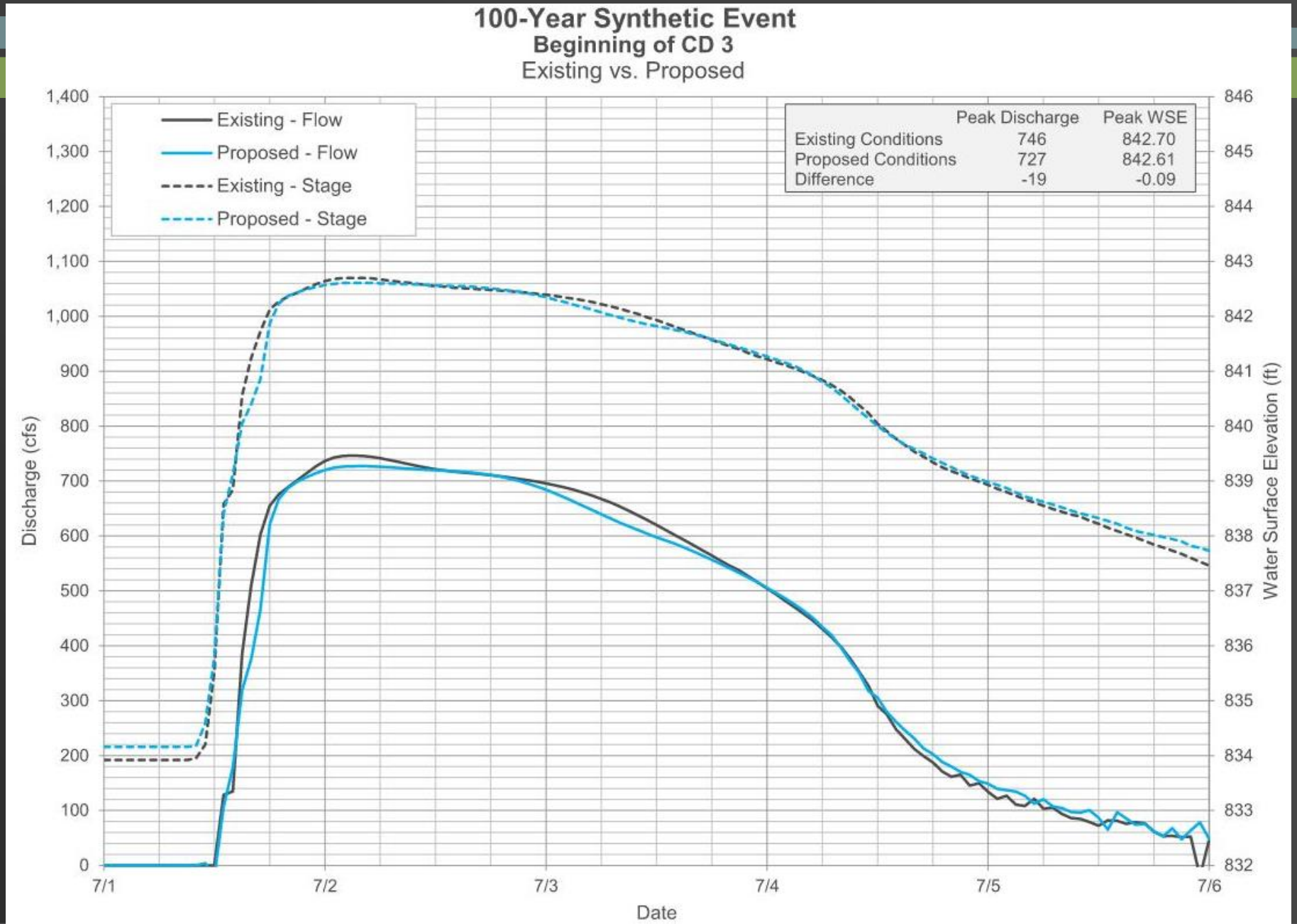


# CHANNEL RESTORATION RESULTS –BEGINNING OF CD 3



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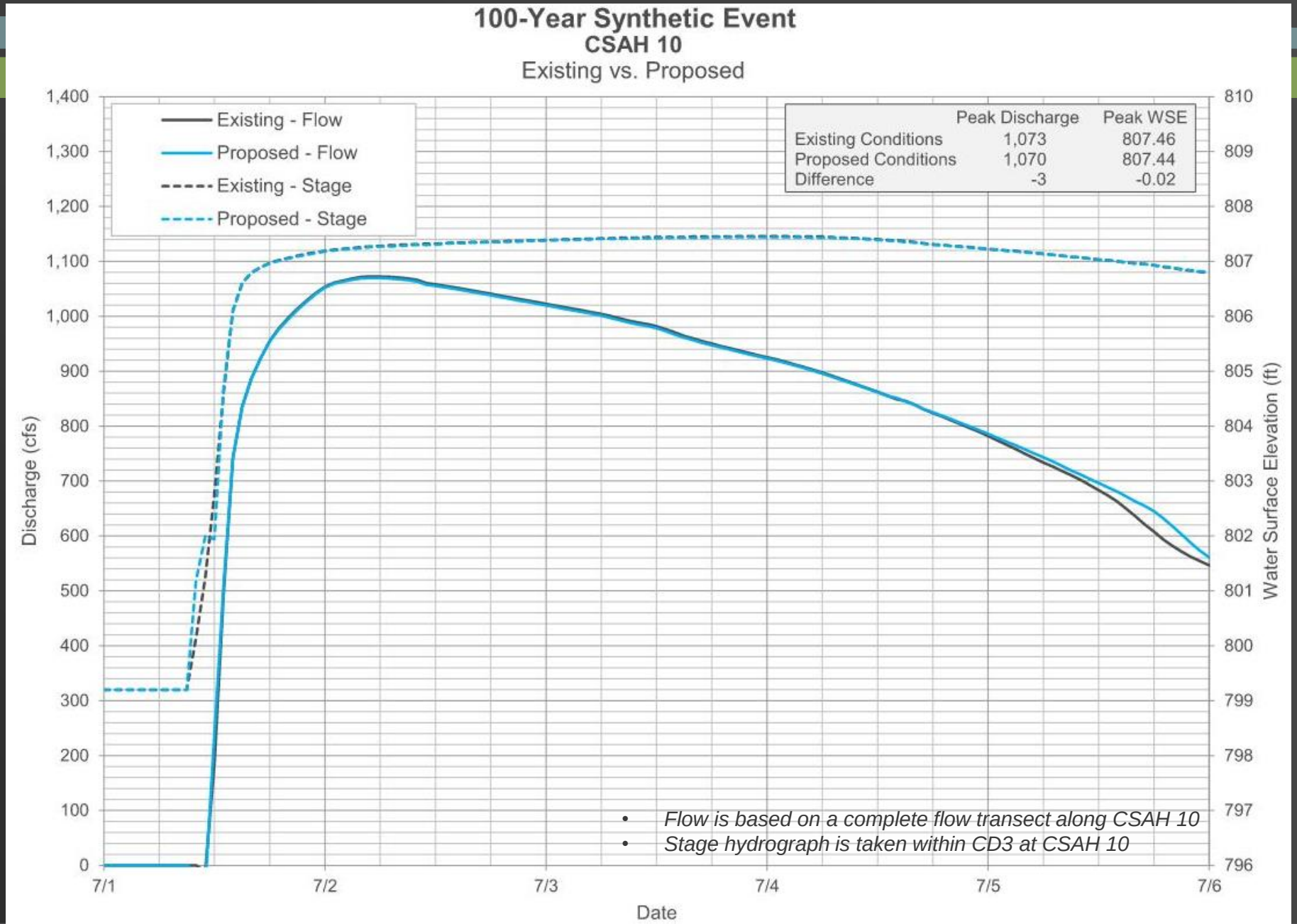
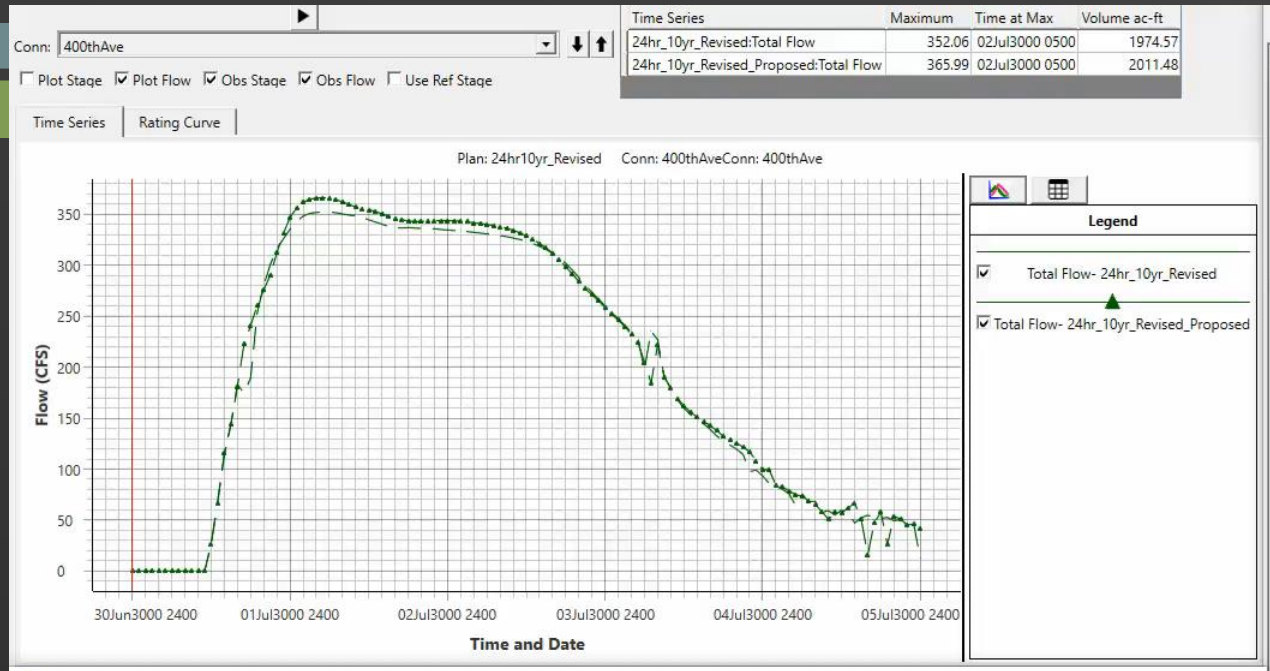


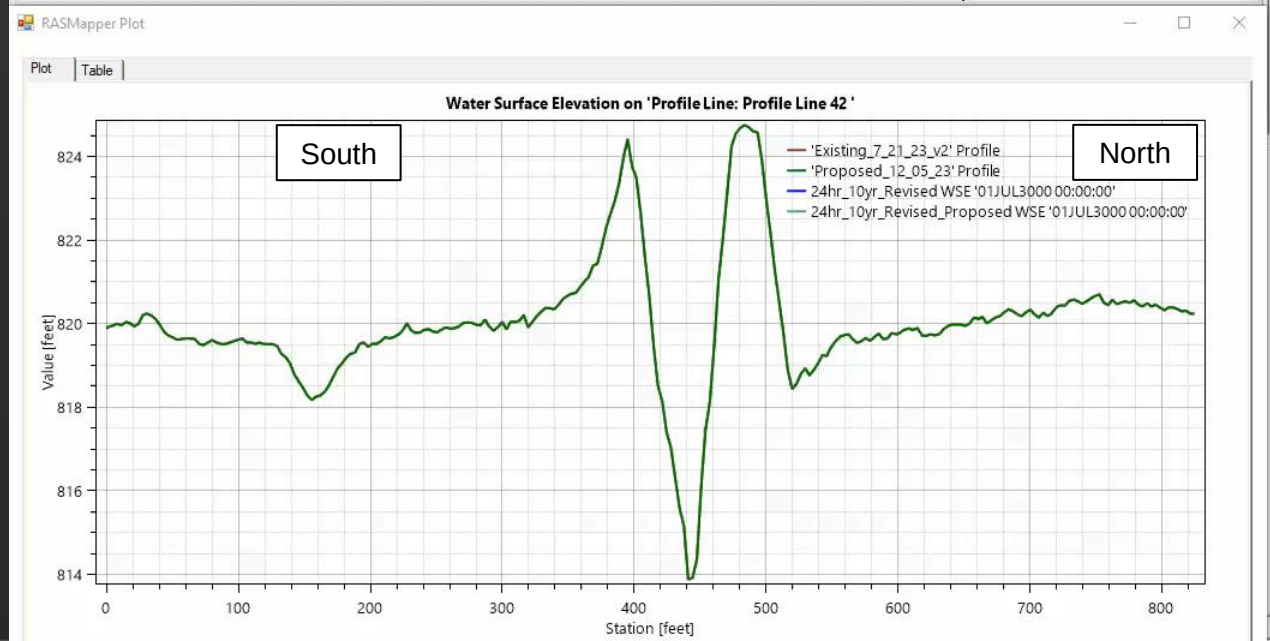
# CHANNEL RESTORATION RESULTS - SUMMARY

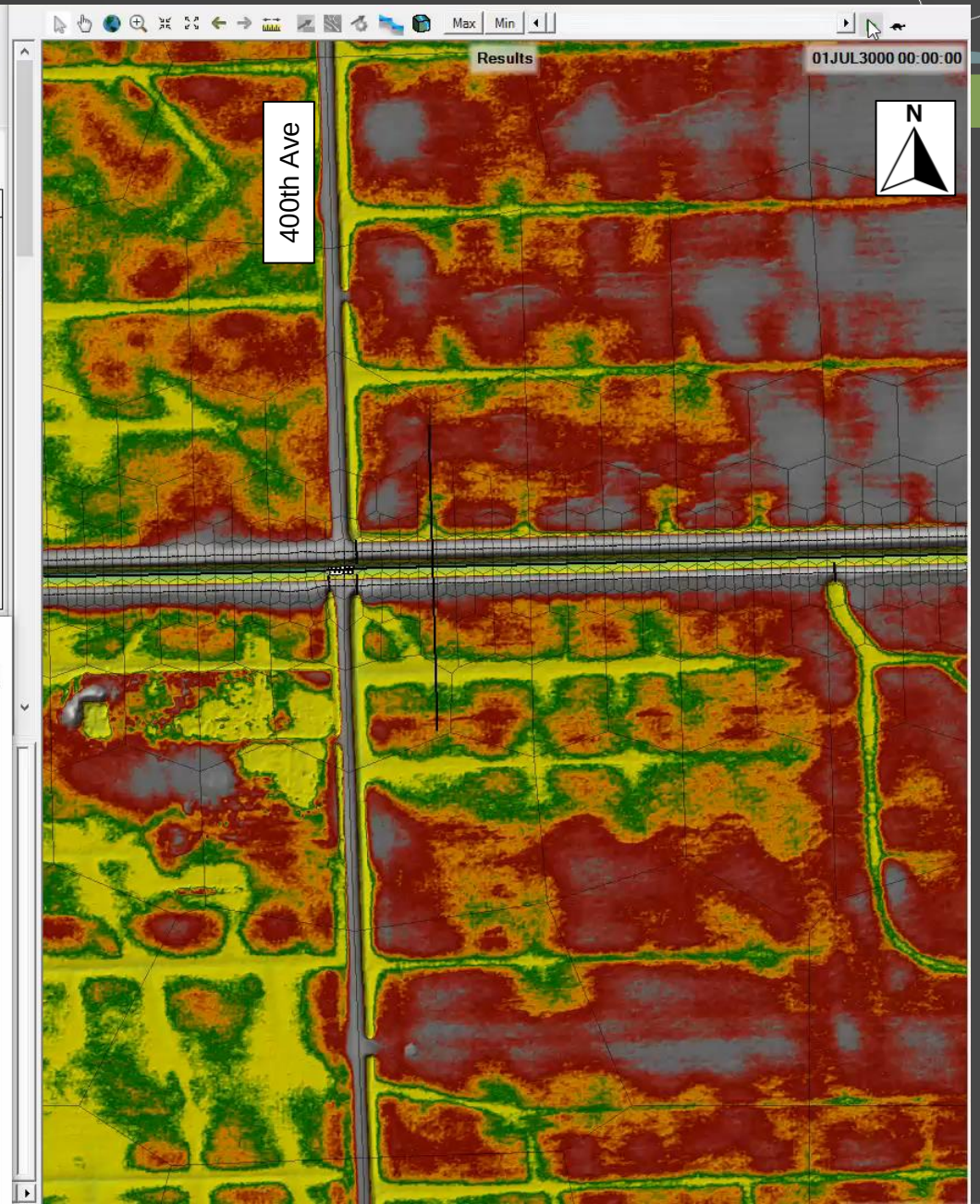
- Hydrograph Summary/Takeaway
  - Approx. 20 cfs peak flow increase to CD3 on 5-year & 30 cfs increase on 10-year
    - Negligible effects downstream (as seen on next slide)
    - Impacts result from a more efficient channel & low flow hydraulics
  - Flow reduction at all reporting locations on 100-year
    - Dependent on allowing water to breakout where it does today
    - These locations are still being reviewed & subject to change
  - No impacts/benefits past CSAH 10 on any simulated events (2-yr through 100-yr)

# 10-YEAR WATER SURFACE/DURATION COMPARISON CD #3

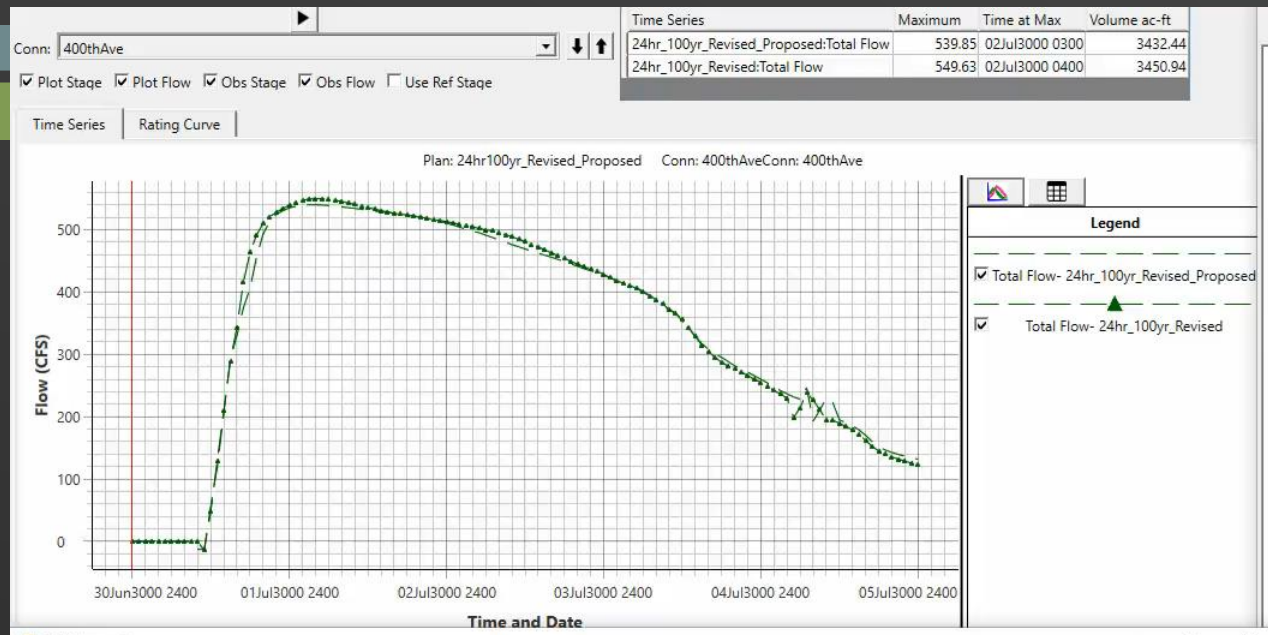



| Time Series | Maximum | Time at Max | Volume ac-ft |
|---|---|---|---|
| 24hr_10yr_Revised:Total Flow | 352.06 | 02Jul3000 0500 | 1974.57 |
| 24hr_10yr_Revised_Proposed:Total Flow | 365.99 | 02Jul3000 0500 | 2011.48 |

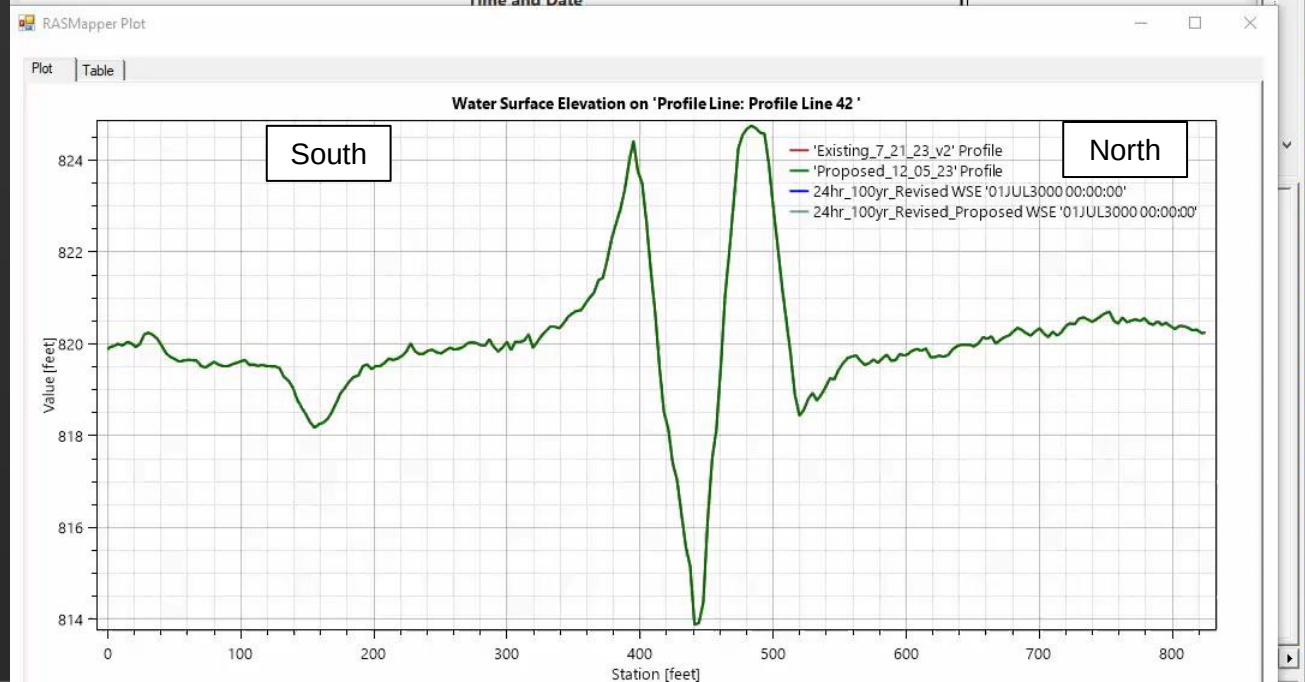


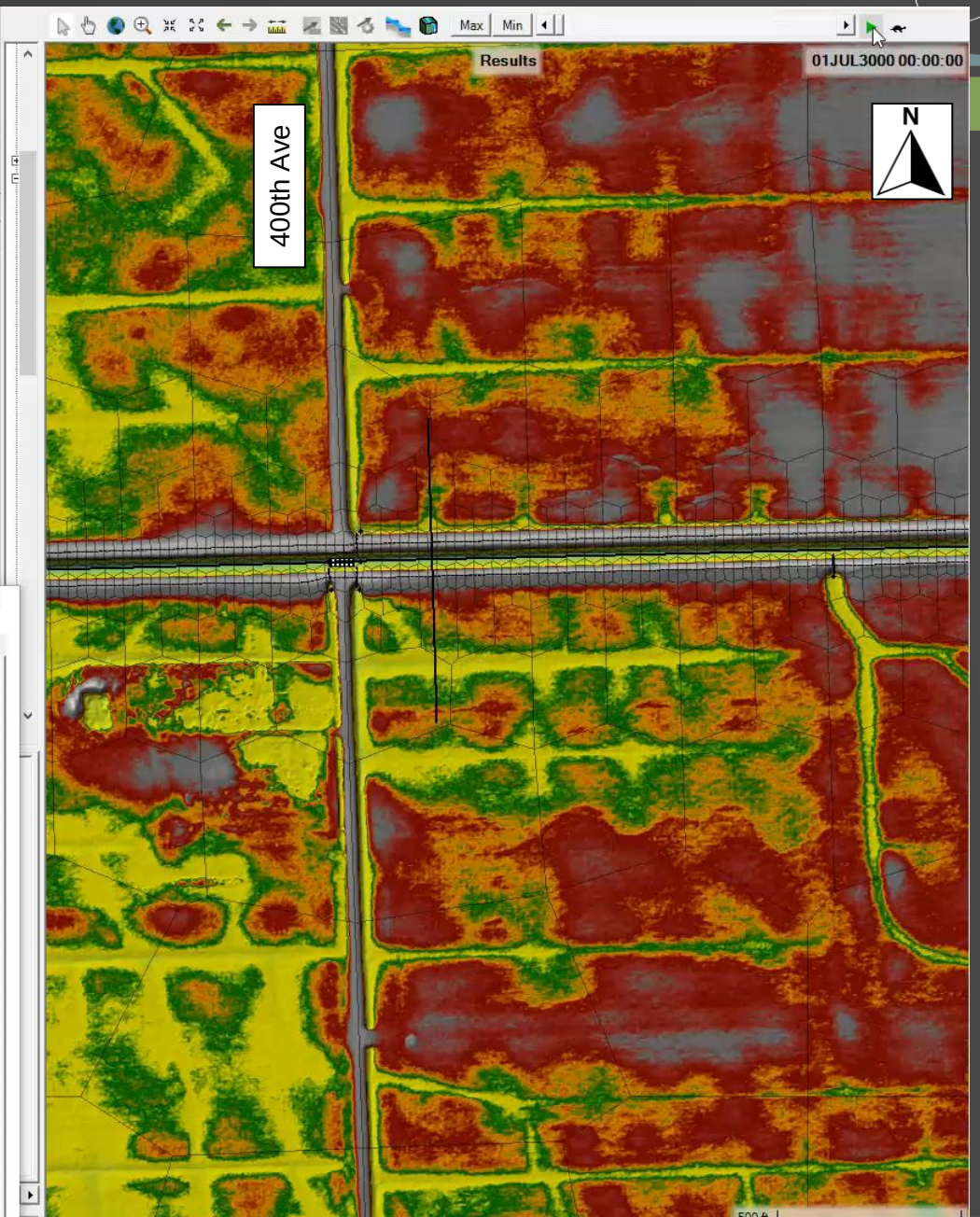



# 100-YEAR WATER SURFACE/DURATION COMPARISON CD #3

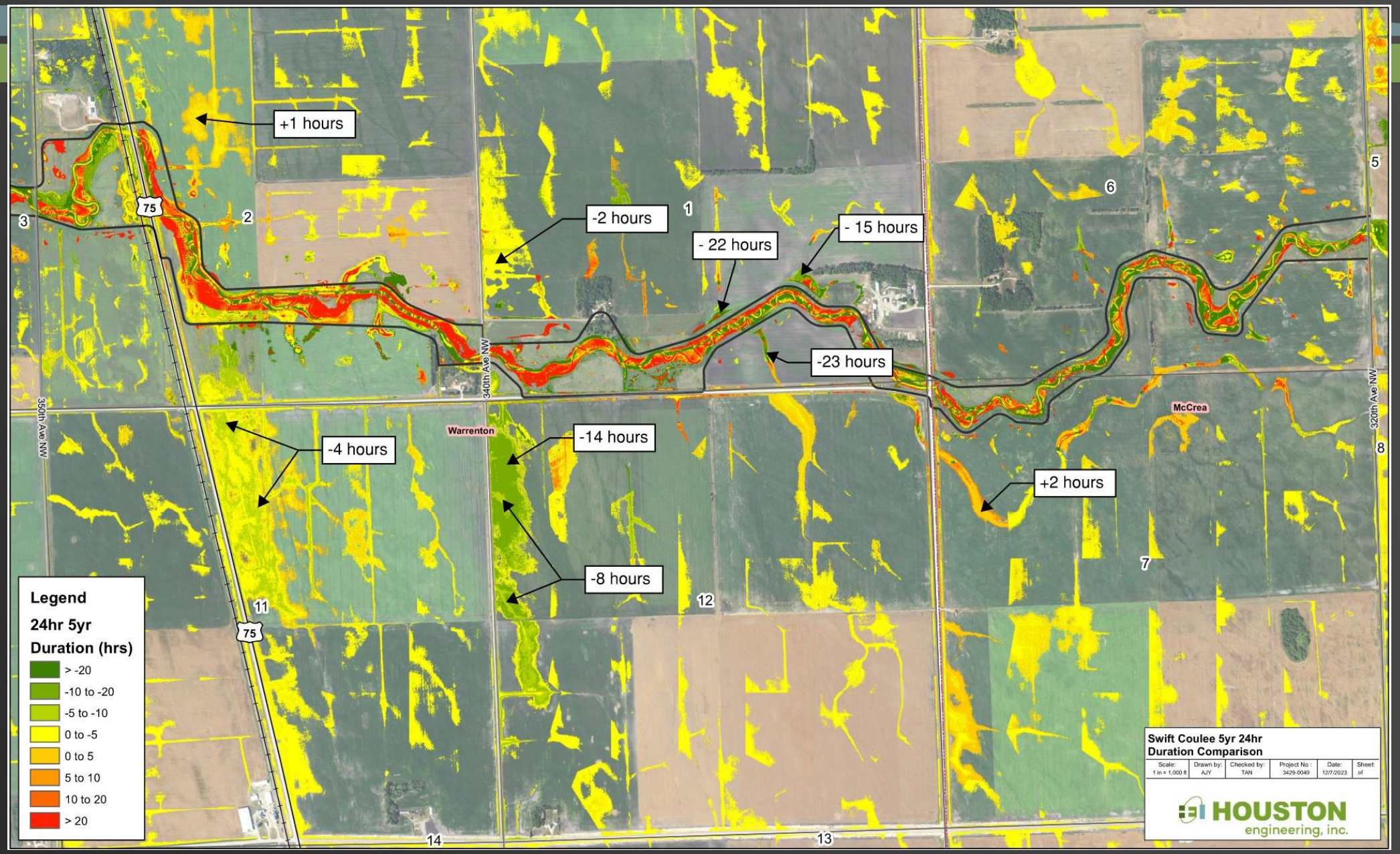



| Time Series | Maximum | Time at Max | Volume ac-ft |
|---|---|---|---|
| 24hr_100yr_Revised_Proposed:Total Flow | 539.85 | 02Jul3000 0300 | 3432.44 |
| 24hr_100yr_Revised:Total Flow | 549.63 | 02Jul3000 0400 | 3450.94 |

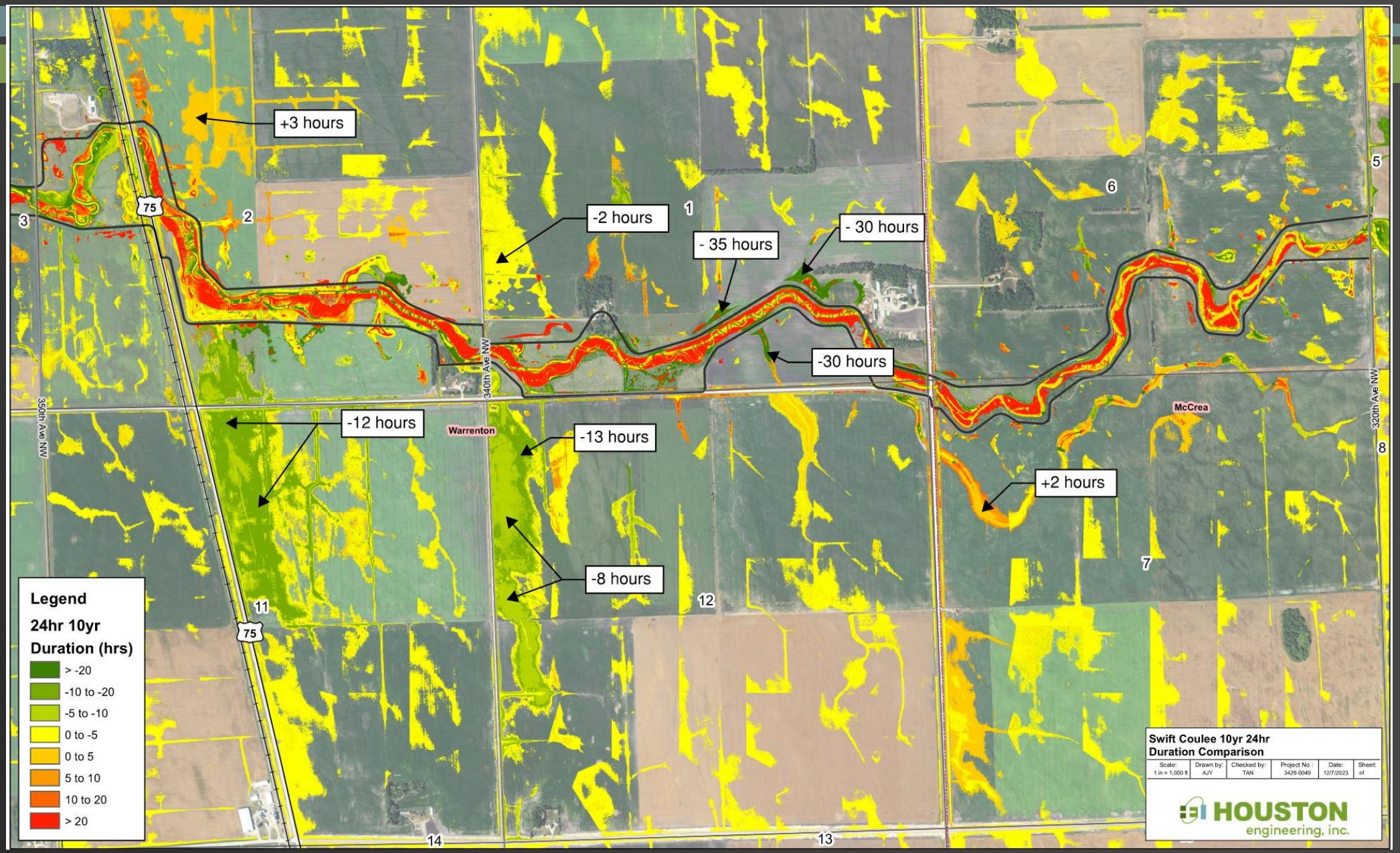


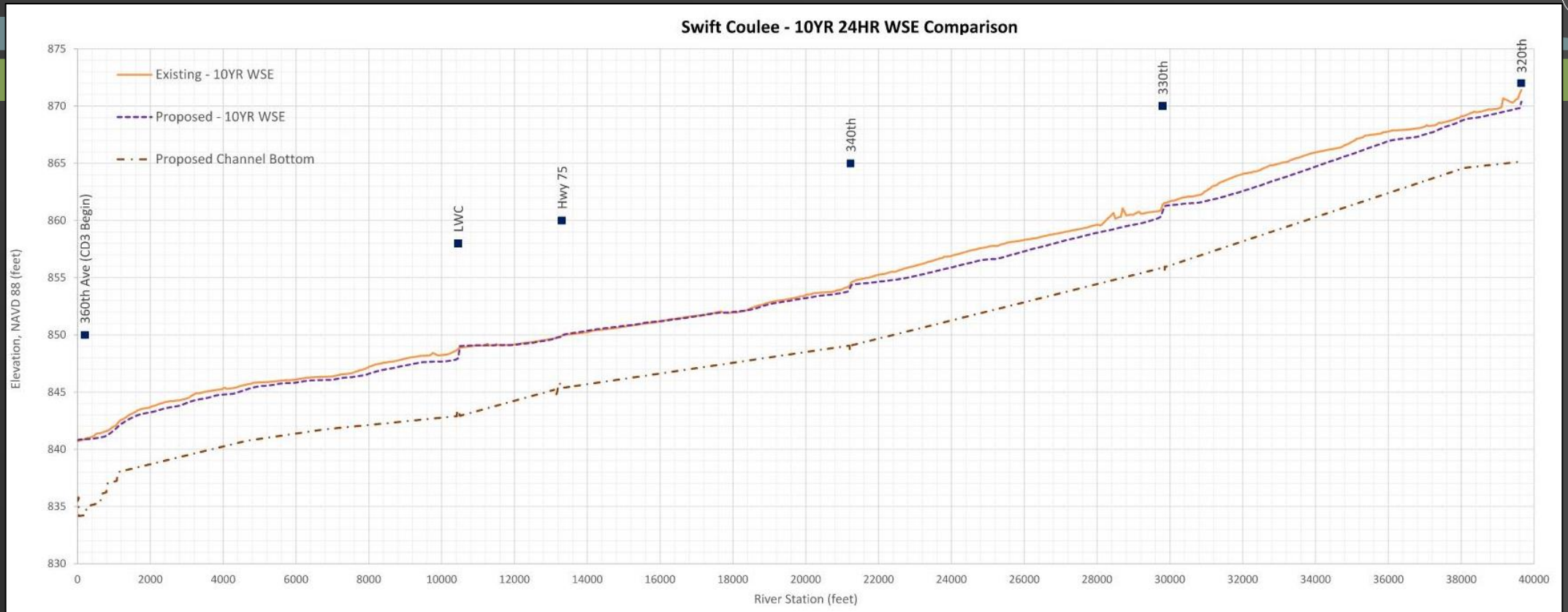
# CHANNEL RESTORATION 5-YEAR DURATION RESULTS

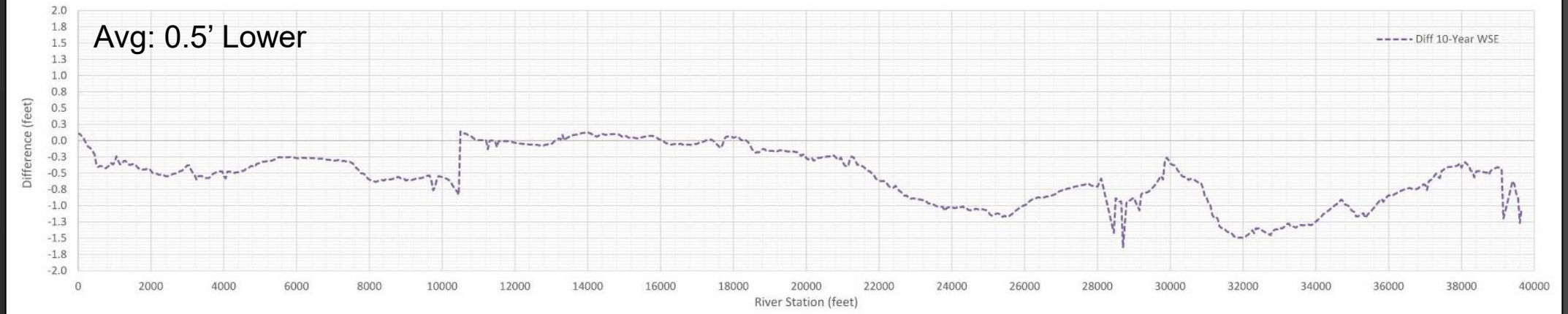


# CHANNEL RESTORATION 10-YEAR DURATION RESULTS

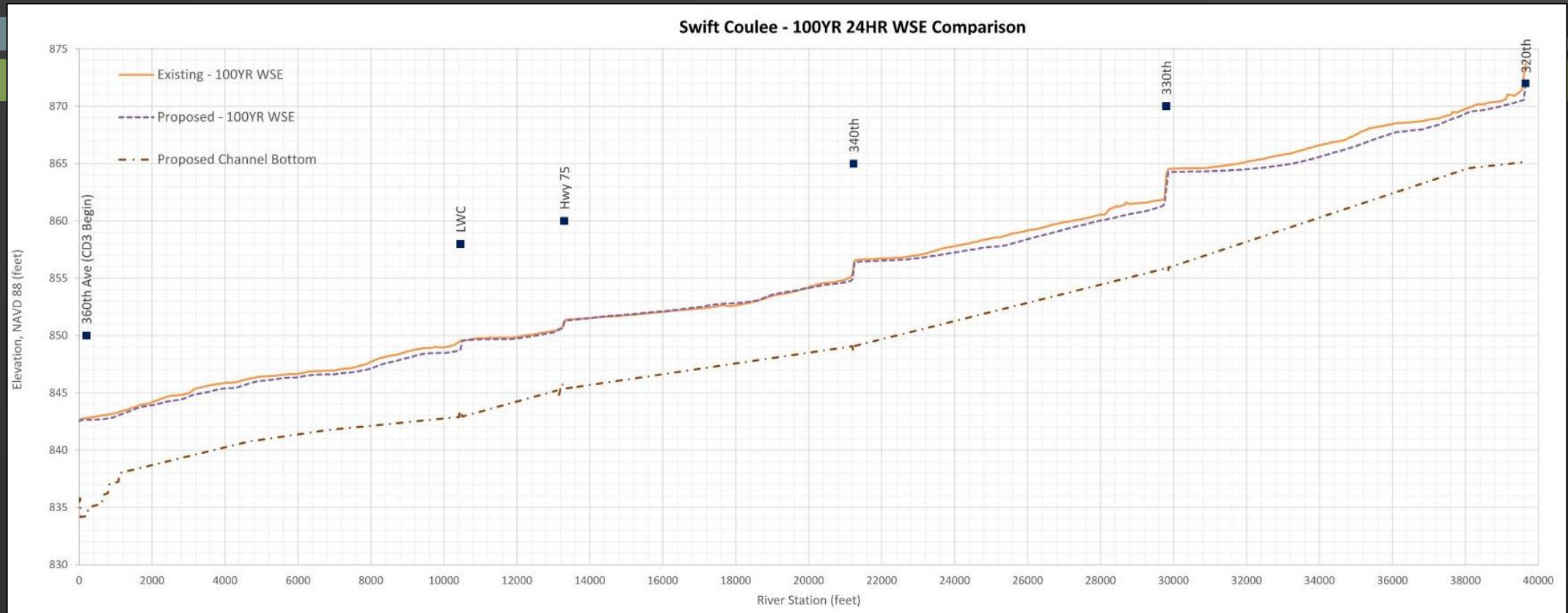


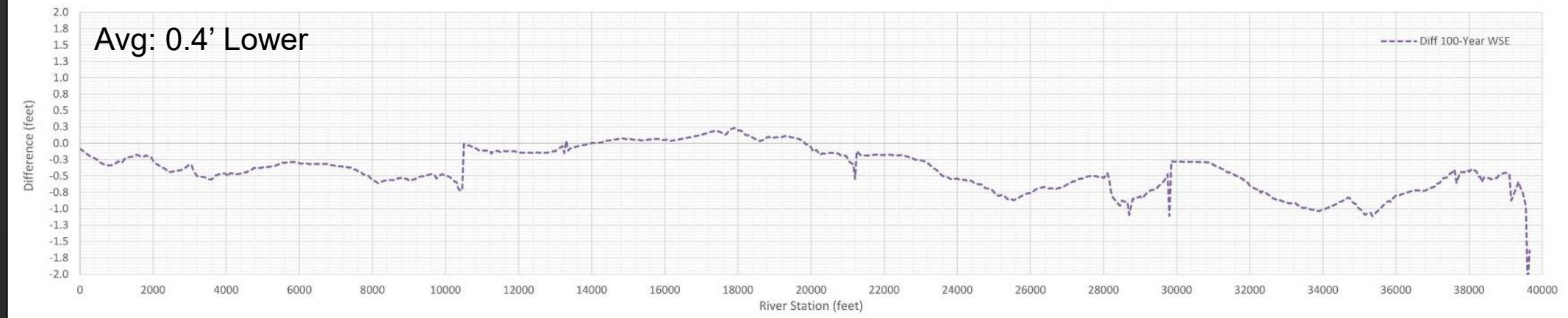
# CHANNEL RESTORATION 10-YEAR PROFILE COMPARISON RESULTS



# CHANNEL RESTORATION 100-YEAR PROFILE COMPARISON RESULTS



# PHASE 1 REMAINING TASKS

- Landowner RIM signup
- Legal Survey
- Finalize Design and H&H modeling
  - Construction plan development
- Environmental Permitting
- MSTRWD/Landowner Agreements – permanent flowage easement/temporary construction easement
- Project/Water Management District Establishment Hearing
- RIM Easement Completion
- Construction

# Questions/Discussion

# Board of Water and Soil Resources

- Water Management District

# Water Management Districts

Matt Fischer| Board Conservationist

BOARD OF WATER AND SOIL RESOURCES

# Water Management Districts (M.S. § 103D.729)

- Optional mechanism for funding targeted and specific watershed projects
- Fee structure is developed based on who contributes to a specific pollution problem or water resource issue (equitable)
  - Example: Land contribution of water volume for a flooding or water storage issue
  - Example: Sediment contribution for a water quality issue

# Water Management Districts

**SHOULD:**

- Be closely tied to hydrologic boundaries
  - May also consider ecological, economic, social, geopolitical, land use factors
- Be defined by an area of project need or benefit

**SHOULD NOT:**

- Contain more area than reasonably related to the need, purpose, benefit or outcome of the project
- Overlap or cover the entire watershed district, except in unique circumstances

# Water Management District Charges

**SHOULD:**

- Be considered as an option to fund projects
- Utilize a contribution basis as the mechanism for fee structures
- Define total amount to be raised, or define annual cap to be collected
- Be of a defined duration (perpetuity is acceptable)

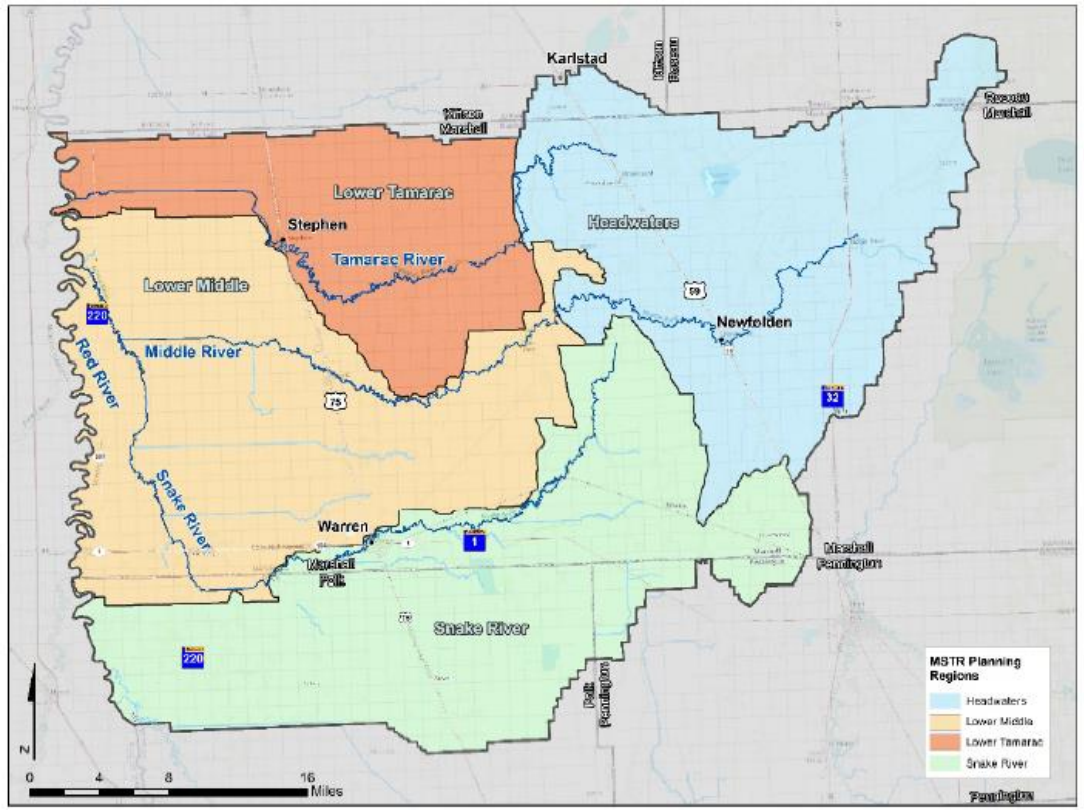
**SHOULD NOT:**

- Resemble an ad valorem tax or be based on property values
- Be collected in anticipation of projects that might happen or for projects not formally established and ordered by the WD managers

# How to Create a Water Management District

- Step 1: Amend or revise watershed district plan
  - Description of area to be in the water management district(s) (recommend supporting with maps)
  - Amount to be raised by charges (total amount or annual maximum)
  - Potential methods that will be used to determine the charges (General, don't need formula until project is established)
  - Duration (If perpetual, must establish local appeal process and evaluate water management district in each ten-year plan)
- Step 2: Approval of plan by BWSR
  - Public Hearing

# MSTRWD Water Management Districts




- Plan establishes the four planning regions as Water Management Districts
- Revenue limit is based on 0.10% of the taxable market value
- Four options for determining charges (total annual runoff, solids load contribution, combination of first two, drainage area)
- Exist in perpetuity

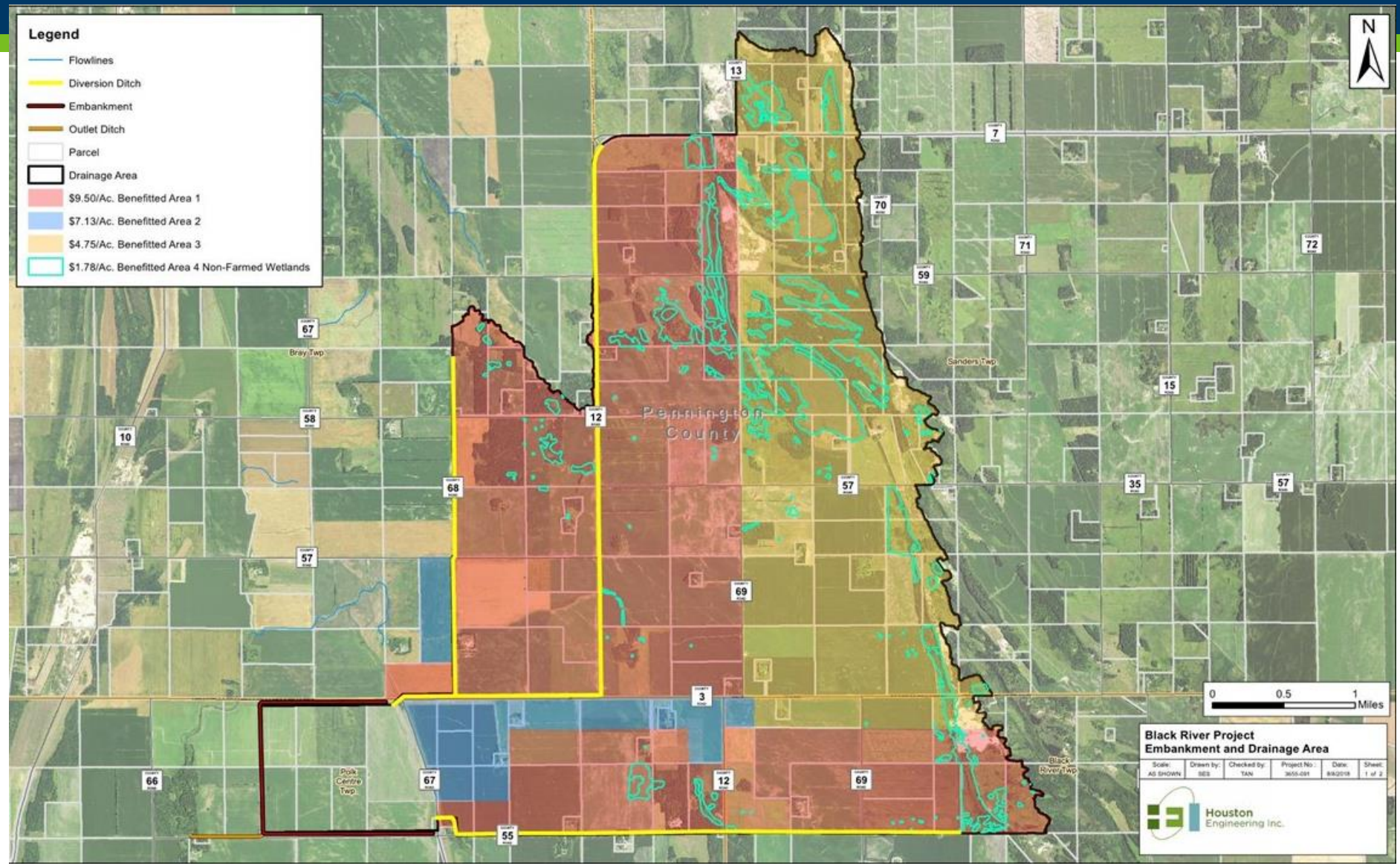
# Utilizing Water Management Districts for a Project

- Step 1: Watershed District establishes project
  - Ordered by the managers
  - Order must specify funding method(s)
  - WD must notify counties, cities, and towns within the affected area at least 10 days prior to a hearing or decision on the project
- Step 2: Refine methodology for computing charges based on final project scope
- Step 3: Determine and set charges for all properties within the water management district

# Implementing Water Management Districts

- Step 4: Develops collection mechanism
  - Request county to collect
  - Contract with private vendor (Example: electric cooperative)
  - Billing and collection by WD
- Step 5: Establish separate revenue fund for proceeds collected

# Red Lake WD – Black River Impoundment Example



# Red Lake WD – Black River Impoundment Example

Table N-3: Level of Service Summary Black River Impoundment

| Service Area | Level of Service Factor (LSF) |
|---|---|
| 1 | 5.33 |
| 2 | 4.00 |
| 3 | 2.67 |
| 4 | 1.00 |

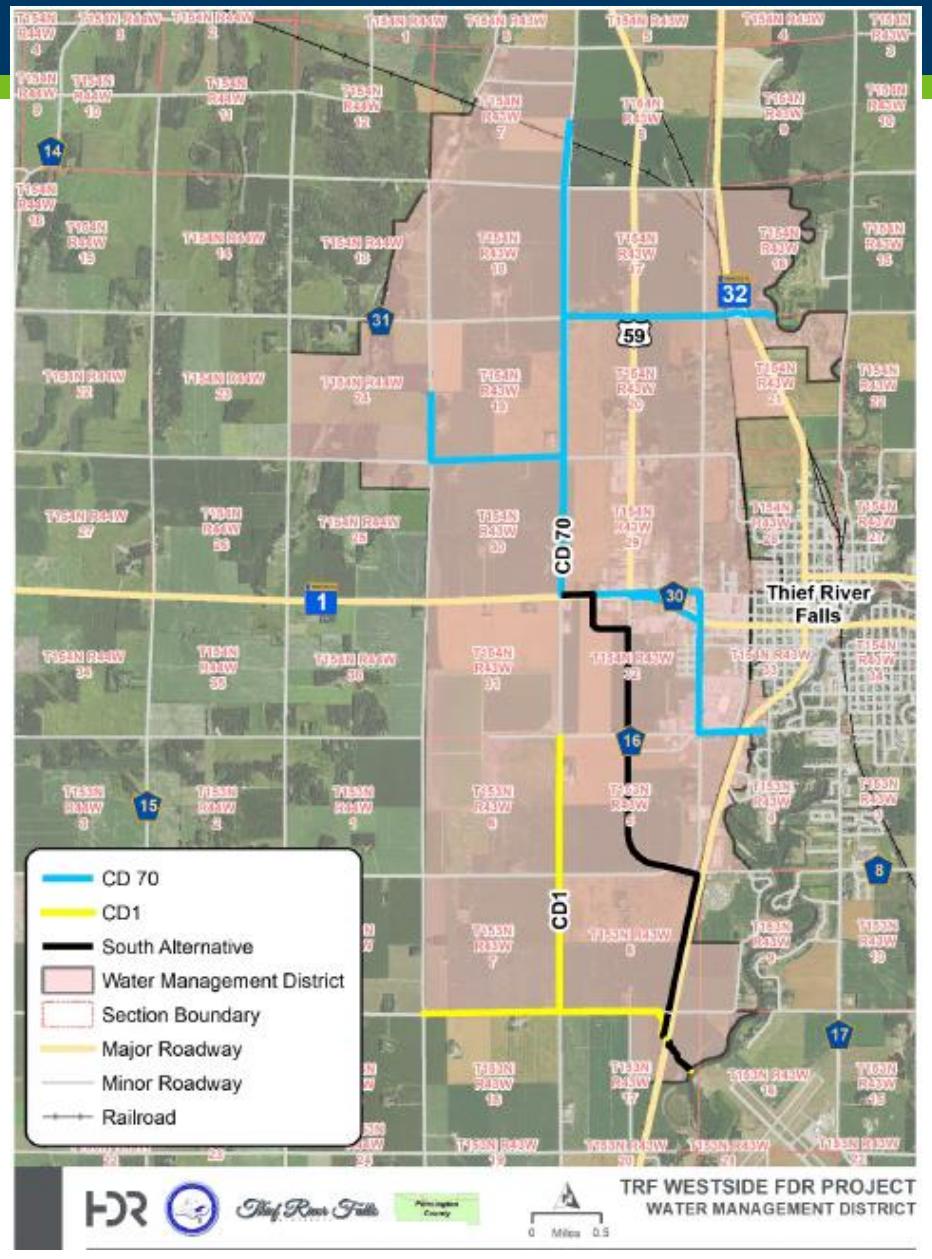
The base rate will be determined by the following formula:

*(Base Rate x 5.33 x Service Area 1 (Acres)) + (Base Rate x 4.00 x Service Area 2 (Acres)) + (Base Rate x 2.67 x Service Area 3 (Acres)) + (Base Rate x 1.00 x Service Area 4 (Acres)) = $75,000 Maximum*

The formula used for determining the total charge per parcel is as follows:

*Water Management District Charge = LSF Value x Base Rate x Size of Parcel Contributing to the Project Drainage Area (Acres)*

# Red Lake WD – Thief River Falls West Side Example



# Red Lake WD – Thief River Falls West Side Example

Table N-2: Level of Service Improvement Categories

| Level of Service Improvement (LSI) | Level of Service Factor (LSF) |
|---|---|
| 2 Year – 2 Year | Outlet Improvement (Base Rate = 1.0) |
| 10 Year – 10 Year | Outlet Improvement (Base Rate = 1.0) |
| 25 Year – 25 Year | Outlet Improvement (Base Rate = 1.0) |
| 10 Year – 25 Year | 2.0 |
| 2 Year – 10 Year | 3.0 |
| 2 Year – 25 Year | 4.0 |

The base rate will be determined by the following formula:

*(Base Rate x (Outlet Improvement LSF) x Total LSI Parcels (Acres)) + (Base Rate x (10Yr-25Yr LSF) x Total LSI Parcels (Acres)) + (Base Rate x (2Yr-10Yr LSF) x Total LSI Parcels (Acres)) + (Base Rate x (2Yr-25Yr LSF) x Total LSI Parcels (Acres)) = $1.0 Million Max*

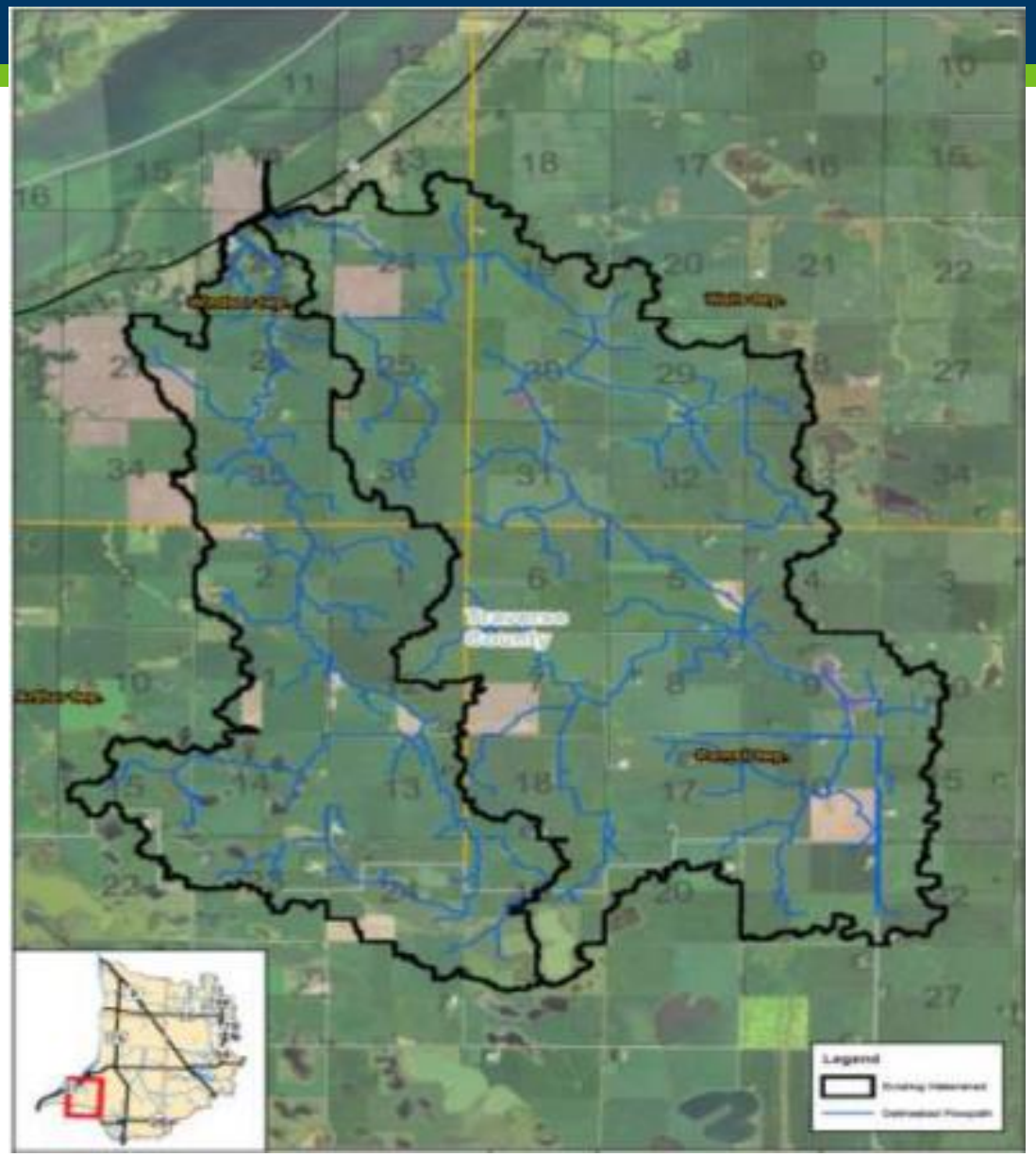
The formula used for determining the total charge per parcel is as follows:

*Water Management District Charge = (LSF) x Base Rate x Size of Parcel in Acres Contributing to the Project Drainage Area*

**Parcels outside of the City of Thief River Falls are capped at a maximum assessment of 20 acres per parcel.*

**The minimum LSF within the City limits is 2.0 due to urban impervious surface and associated drainage benefits provided by the Project.*

# Bois de Sioux WD Lake Traverse Example



# Bois de Sioux WD Lake Traverse Example

| Parcel | | | | | |
|---|---|---|---|---|---|
| PIN | Parcel Area (ac) | S | T | R | Percent Contribution |
| 01-0001000 | 80 | 1 | 125 | 48 | 0.16492% |
| 01-0001001 | 40 | 1 | 125 | 48 | 0.18275% |
| 01-0001002 | 39.8 | 1 | 125 | 48 | 0.03010% |
| 01-0002000 | 159.4 | 1 | 125 | 48 | 0.09697% |
| 01-0003000 | 160 | 1 | 125 | 48 | 0.55817% |
| 01-0004000 | 160 | 1 | 125 | 48 | 0.09794% |
| 01-0005000 | 159 | 2 | 125 | 48 | 0.09707% |
| 01-0006000 | 158.6 | 2 | 125 | 48 | 0.08479% |
| 01-0007000 | 160 | 2 | 125 | 48 | 0.09561% |

BOARD OF WATER AND SOIL RESOURCES

# Thank You!

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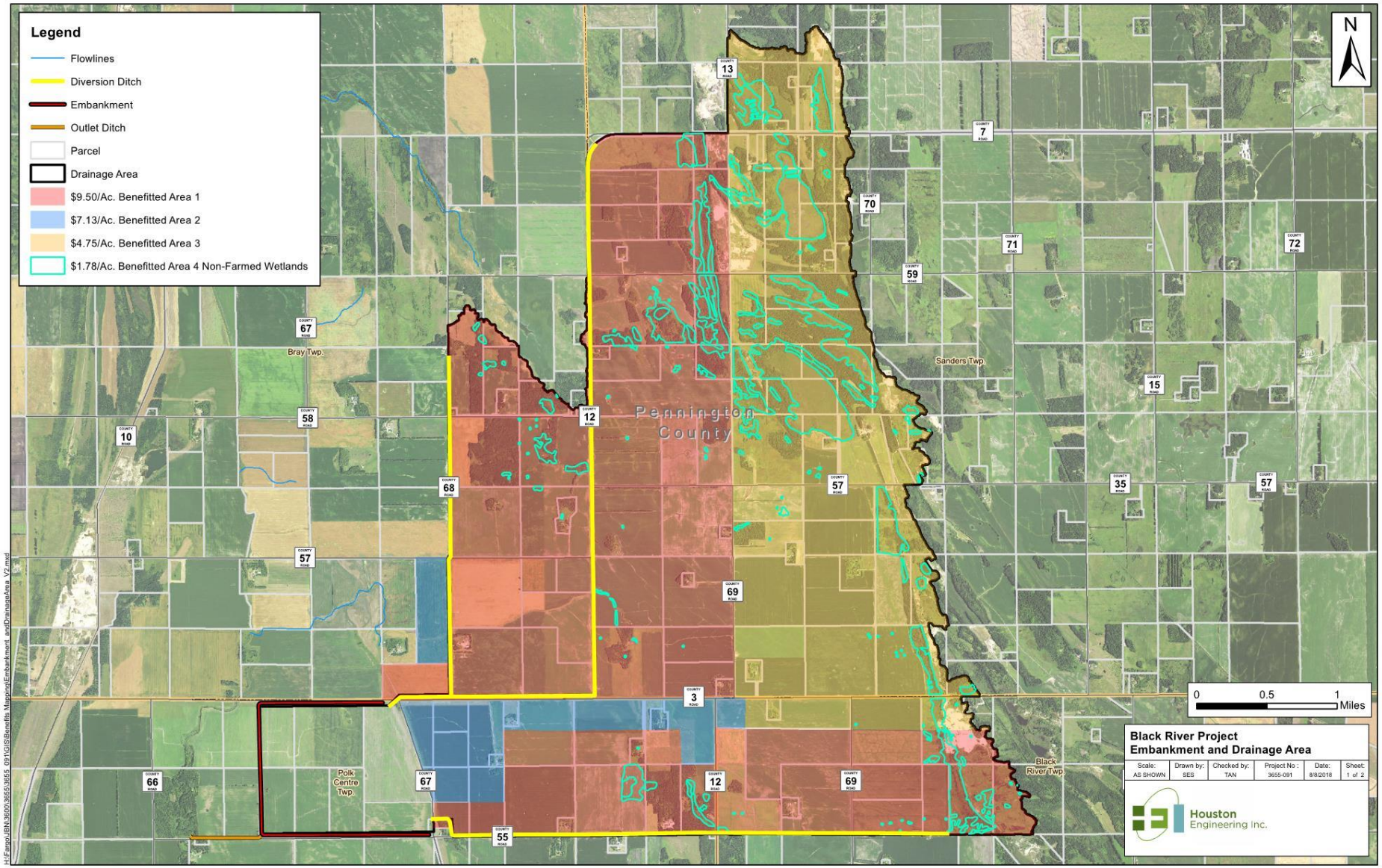
# Black River Future Maintenance Assessment on Project Inlet Ditches



# Future Maintenance Assessment on Project Inlet Ditches

- Maximum Yearly Assessment Approximately $75,000
  - Area 1 $9.50/acre
  - Area 2 $7.13/acre
  - Area 3 $4.75/acre
  - Area 4 $1.78/acre

- Typical Maintenance Year (Mowing Costs) $10,000
  - Area 1 $1.21/acre
  - Area 2 $0.91/acre
  - Area 3 $0.61/acre
  - Area 4 $0.23/acre