### Swift Coulee/Marshall County Ditch #3 Project Work Team Meeting Middle-Snake-Tamarac Rivers Watershed District



Google Earth 2015 Imagery

Hwy 75 Swift Coulee

August 10, 2016 Warren, MN



### **Purpose of Today's Meeting**

# Project Work Team Purpose, Roles & Responsibilities

### Recap of Swift Coulee/MCD #3 Previous Meetings

Watershed Setting & Resource Concerns

### **Public Comment**



# **Purpose of Today's Meeting**

- Objectives:
  - Decision on Whether to Continue with Project Work Team Approach
  - Need Local Representation for Project Work Team (Volunteers??) MSTRWD Board to Pick from Candidates
  - Decision on Whether to Survey Swift Coulee (Portions or all??) and make that recommendation to the MSTRWD Board



# **Project Work Team Members and Roles**

### Project Lead - Planning

- Define Meeting Objectives
- Coordination with other Team Members between Meetings
- Provide Documentation of meeting Outcomes
- Draft Deliverables for Team Review

### Watershed Stakeholders

- Represent Local Interests
- Provide Local Perspective on Suggested Alternatives brought forth by the Team
- Evaluate all Information Provided by Technical Resources
- Advisory Group (Local/State/Federal Agencies)
  - Represent Agency Concerns
  - Assist in Scoping the Affected Environments for Proposed Alternatives
  - Provide Input on Alternative Screening
  - Provide Input on Potential Resource Impacts



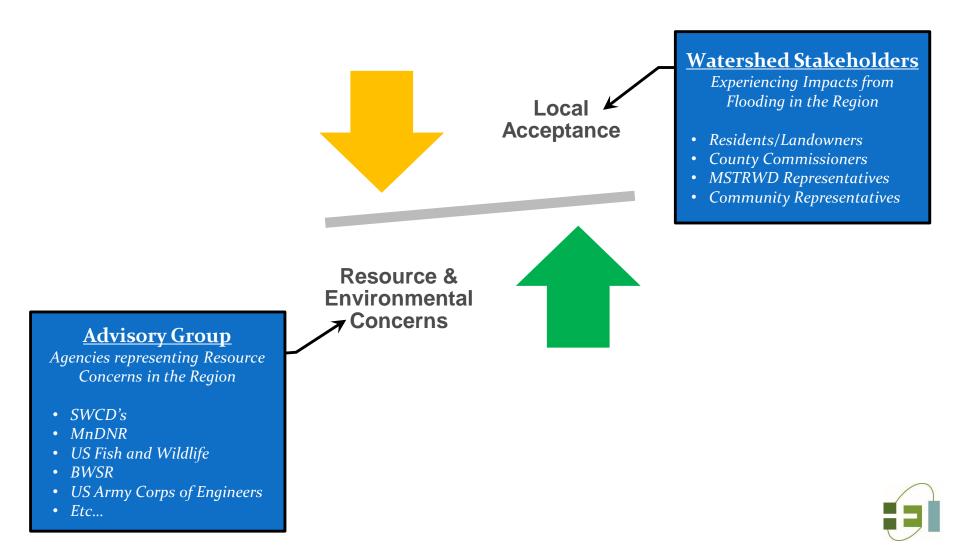
# **Project Work Team Responsibilities**

- Project Work Team Guidance (Stay on Track!!)
  - Define Purpose and Need of water problems within the sub-watershed
  - Define Array of Alternatives and Evaluate Alternatives to Carrie Forward
  - Selection of Alternative for Implementation
  - Make Recommendations to the Watershed District Board
- Project Work Team Goals
  - Obtain USACE Section 404 permit for Selected Project
  - Move forward with Design/Implementation of Project



# Watershed Stakeholders & Advisory Group

**<u>Goal:</u>** Consider technically feasible alternatives to determine the reasonable locally preferred alternative.



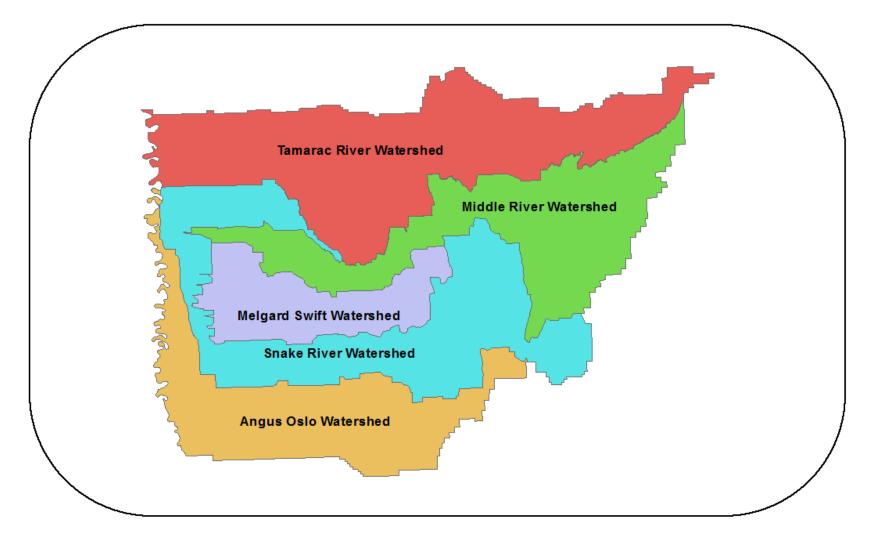
# Recap of Swift Coulee/CD #3 Previous Meetings

### Timeline:

- Last PWT meeting was February 26, 2009
  - Discussions
    - PWT purpose
    - Any Proposed Project would be a Watershed District Project
    - Known problems
    - Minnesota DNR Protected Water
- Informational Meeting was held on February 18, 2016
  - Public Interest

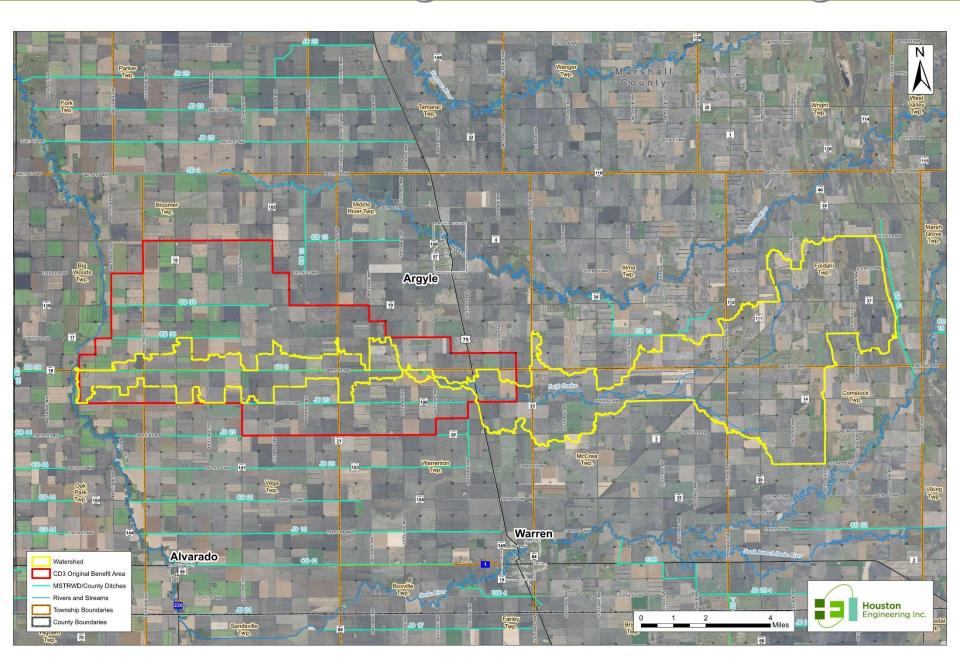


# Watershed Setting & Resource Concerns

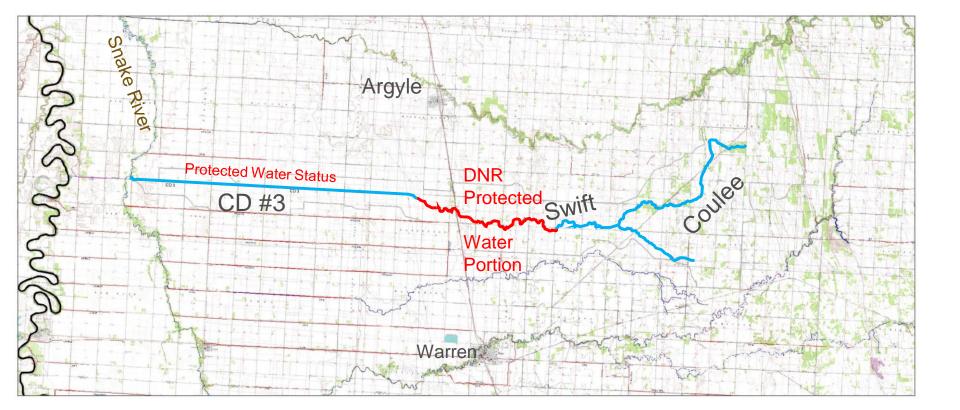




# Watershed Setting – Swift Coulee Region



# **Course of Swift Coulee & County Ditch #3**





# **Flood Impacts**

### SPRING RUNOFF 2008 CD #3





# **Flood Impacts**

### SPRING RUNOFF 2008 CD #3





# **Flood Impacts - Agriculture**

### JUNE 2007 RAIN EVENT LOOKING WEST AT EASTERN EDGE OF CD #3





# **Flood Impacts - Infrastructure**

### JUNE 2007 RAIN EVENT LOOKING EAST AT EASTERN EDGE OF CD #3

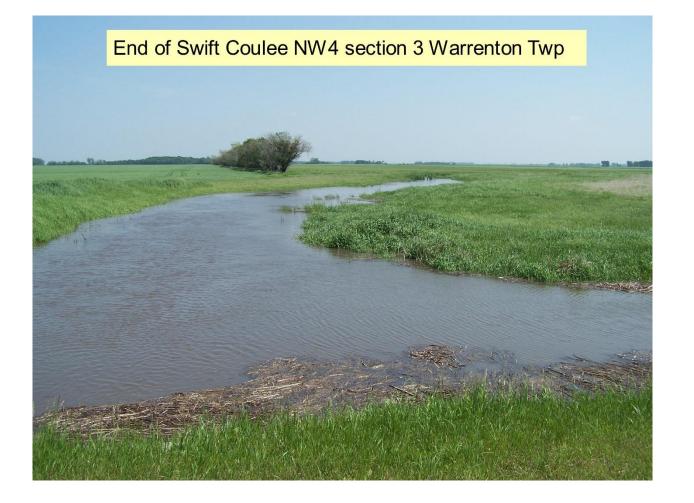


### (2) 6' x 12' Box culverts flowing full



# **Flood Impacts**

#### Swift Coulee/CD #3 Juncture NW4 Section 3 Warrenton Twp





# **Resource Concerns for Consideration**

### Potential Resource Concerns

- National Economic Development (NED)
- Cultural Resources
- · Ecologically critical areas
- Endangered and threatened species
- Environmental justice and civil rights
- Essential fish habitat
- Fish and wildlife (including coordination requirements)
- Floodplain management
- Forest resources
- Land use
- Migratory birds
- Natural areas

- Prime and unique farmland, and farmland of statewide significance
- Public health and safety
- Regional water resource plans (including coastal zone plans)
- Riparian areas
- Social issues
- Soil resources
- Water quality
- Water resources
- Waters of the United States, including special aquatic sites
- Wetlands

#### <u>Concerns Addressed to the MSTRWD During 10-</u> <u>Year Watershed Management Plan (May 2011)</u>

- Benefited area disproportioned to Drainage area
- Overland Flooding
- Channel Instability/Capacity
- Buffer strip needed on coulee/ditch
- Fish Habitat
- · Field erosion/deposition
- Breakout flows to Snake River
- Inadequate Outlet/Snake River
- Culvert Sizing

#### <u>Any additional concerns???</u>

- Increased Problem over past 10-yrs near TH#75
- Runoff/timing issues with eastern planning region
- · Channel/coulee filled with sediment
- Wind Erosion
- TSS, DO, & Bio (IBI) problems in streams



# **Conceptual Strategy Evaluation**

### Flood Damage Reduction Strategies to Consider:

- Increase Temporary Flood Storage
- Dams and Impoundments
- Create or Restore Wetlands
- Alter ground water through drainage
- Culvert sizing to meter runoff

- Increase Conveyance Capacity
- Channelization of existing water courses
- Drainage
- Diversions
- Set-back levees
- Increasing road crossing capacity

Reduce Flood Volume

Protection/Avoidance

- Create or restore wetlands
- Cropland BMPs
- Cropland Conversion
- Other Beneficial Uses
- Urban/Farmstead/Ag Levees
- Floodplain Evacuation
- Flood proofing
- Advanced Flood Warning Systems



## **Public Comments**

Middle-Snake-Tamarac Rivers Watershed District Swift Coulee/Marshall CD #3 Project Work Team Meeting

> August 10, 2016 10:00 p.m.

Public/Agency participation

To make the District more aware of what needs to be achieved we ask that known problems with the Swift Coulee and Marshall CD #3 be described here. Please write about the problems you know of.

