

# SAND HILL ECOSYSTEM RESTORATION PROJECT TEAM MEETING

Location: Sand Hill River Watershed District, Fertile, MN

Date: March 4, 2024

Time: 10:00AM - NOON



## Participants

April Swenby (SHRWD), Craig Engelstad (SHRWD) James Page (Reis Township Landowner), Jeremiah Gudvangen (Liberty Township Supervisor), Karl Tollefson (Scandia Township Supervisor), Moriya Rufer (HEI), Zach Herrmann (HEI/SHRWD), John Voz (BWSR), Alex Engelstad (Liberty Township Landowner), Nicole Bernd (West Polk SWCD), Scott Schroeder (MPCA), Mike Kelly (CWL Specialist), Nathan Olson (DNR – Fisheries), Stephanie Klamm DNR)

## Meeting Summary

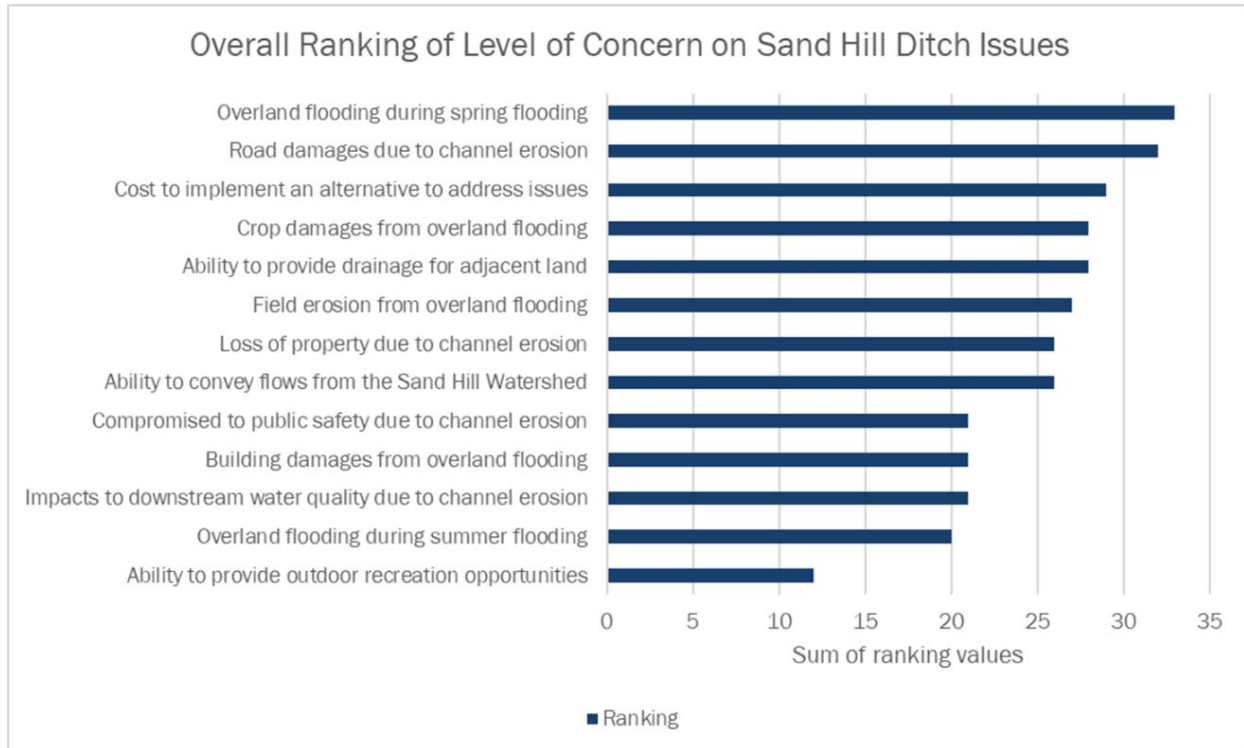
### Project Team Process

The meeting began with an overview of the Project Team process. Moriya Rufer, the facilitator, presented that the Project Team is advisory to the Project Sponsor (Sand Hill River Watershed District). The Project Team can contain anyone who is a stakeholder, permitter, or potential funder of the project (state and federal agencies, townships, local governments, local landowners, etc). A handout was provided highlighting the role of the Project Sponsor (Sand Hill River Watershed District) and the role delegated to the Project Team.

This Project Team has been working on data for three years, and over the next year will be meeting every few months to develop a project concept for the proposed project area.

### Landowner Survey

In February, a landowner survey was conducted to document their concerns with this area. Postcards were sent to everyone within the project area with a QR code for the survey. Recipients were also told they could go to the SHRWD office to fill out a paper survey. There were eight responses. The results are summarized below.



**Please describe your observations from prior flooding. If able, please indicate the year, severity, and discussion of damages.**

Response themes:

- Different since removal of dams
- More water
- Higher velocity
- Lack of flow control
- Over topped banks multiple years
- Damage roads and fields
- Ice jams
- Repeatedly no change
- Most recently the floods of 1997, 2009, 2011, 2019, 2022, 2023.
- Problems mostly occur when the ditch channel completely fills with snow

**Please provide any additional information that you feel would be beneficial to the Sand Hill River Watershed District while evaluating the Sand Hill Ditch:**

Response Themes:

- Hold water upstream
- Increase height of banks
- Consider Red River levels

## Purpose and Need

The Purpose and Need Statement is needed to define the problem and evaluate alternatives against. The Draft Purpose and Need Statement was presented by Zach Herrmann. The document includes documentation on flood damages in the project area, including encroachment onto private property, public safety concerns, flooding of agricultural lands, and roadway overtopping. The document also discussed other opportunities in the project area, including water quality, riparian habitat, and recreation. While not direct objectives for the project, an opportunity may be available to improve these resource conditions. The document also identified measurable objectives for the project, including reduction of channel incision, enhancement of public safety, and flood prevention.

## Feedback from Meeting Attendees

The meeting participants discussed the draft purpose and need document, with focus on the objectives. Additional detail will be added to the objectives related to reduction of channel incision and enhanced public safety. Flood prevention objectives will be modified to include reduced flooding in Scandia and Hubbard Townships. A downstream objective to do no harm downstream will be included. The document will be revised and distributed to the Project Team for review and comment.

Additionally, township officials and landowners expressed concern with the increased flow velocity that the rock fish ramps and rock riffles because it appears to change the timing of when channels become ice-free during spring runoff. The concerns indicated that the higher velocity leads to the upper portion of the Sand Hill Ditch opening quicker than historically, leading to increased flooding due to a snow/ice plugged channel downstream. The substantial change in elevation between Fertile and Beltrami as compared to Beltrami to Climax may also play a role. This information will be considered when developing alternatives.

## Preliminary Alternatives

A preliminary array of alternatives was reviewed based on an initial list developed using Red River Basin Flood Damage Reduction Work Group's TSAC Paper No. 11. The alternatives focused on different strategies that fit into four categories.

- **Reduce runoff volume:** Activities that reduce the volume of water entering the downstream channel.
- **Increase conveyance capacity:** Increase the ability to move water downstream.
- **Increase temporary flood storage:** Temporarily hold floodwaters to be released as downstream conditions allow.
- **Protection/avoidance:** Measures aimed at reducing flood damage potential.

Prior completed technical analysis of the flow reduction potential for restored wetlands based on the USFWS National Wetlands Inventory dataset was reviewed and concluded that wetland restoration would not attain project objectives. Additional prior completed technical analysis of land use conversion was reviewed and concluded that the number of acres required for cropland conversion to provide flow reductions at the project location was not practicable.

Strategies were analyzed based on practicability, technical feasibility, and potential to attain project objectives. Based on this initial review, the following strategies will be carried forward to develop alternatives for consideration by the Project Team.

1. **Upper Watershed Storage** – Use prior study results to determine if flow augmentation can reduce in-channel velocities to sufficiently address channel incision.
2. **Side Slope & Channel Stabilization** – Flatten side slopes to stabilize failing side slopes. Channel erosion control measures will be used as necessary to further stabilize channel degradation.
3. **Two Stage Channel & Channel Hardening** – Same as #2 above with a two-stage channel being used to stabilize failing side slopes.

### **Path Forward**

The next meeting will be scheduled in 2-3 months.

### **Additional information**

To see Project Team information such as past meeting minutes and studies, visit [http://www.sandhillwatershed.org/Project\\_Team.html](http://www.sandhillwatershed.org/Project_Team.html)