

March 8, 2021

To: Participants in the Locally Led Conservation II Training Series Session #2

From: LeAnn Buck, Executive Director, MASWCD
Keith Kloubec, Assistant State Conservationist-Programs, NRCS

Welcome to the March online training series where the spotlight is on **Locally Led Conservation**. Engaging speakers, important concepts, topic refreshers, and examples to apply are in this training package. Each session includes a handout packet of materials to support the key messages of the speakers.

This week's session is *Making Local Working Groups Informed* as relevant information helps a team develop options and make decisions. Based on survey data from you, this session focuses on making sense at the local level of the plethora of planning processes as well as the load/overload of technical information to inform priorities. Specifically, the aim is enhancing your ability to use key points from scientific data, existing plans, and partners to inform the LWG and to create a local conservation action plan.

- **Setting the Stage for Today** – Keith and LeAnn
- **Utilizing a Natural Resources Inventory**- Ryan Galbreath, NRCS - State Resource Conservationist
- **Aligning 1W1P planning, SWCD comprehensive plans, and LWGs**
 - Gregory Johnson, MPCA and Darren Newville, SWCD Manager, East Otter Tail and Wadena
- **Sharing Technical Findings and Reports with the Public and LWGs**- Justin Hanson, Mower SWCD
- **Small Group Discussion:**
How do I communicate scientific information as part of a planning conversation about conservation?
- **Developing a Conservation Needs Assessment** – Cory Walker, NRCS-District Conservationist and CST, Alexandria
- **Creating a Conservation Action Plan** – Keith Kloubec, NRCS



NOTES: Included in this packet is a handout with each segment of the agenda and space for your key take aways, notes, and action ideas to jot down as you go along.

TIPS FOR SUCCESS:

1. Log onto Zoom 5-10 minutes before the session begins to be sure your connections are working well. You will be in a waiting room.
2. Preference for participation is for video camera on and muted.
3. Use the chat feature to share questions and ideas, and as time allows a response will be given or look for follow-up information after the session.
4. The session will be recorded (exception is the breakout discussions) and posted in April after the conclusion of the series. We encourage live participation as that will have the greatest benefit.

Thank you for investing in this time. We appreciate your commitment.

Questions:

Please contact Donna Rae Scheffert leadershiptools@charter.net or call 612-360-4484

Locally Led Conservation Training Series

#2 Making LWG Informed



How to use key points from scientific data, existing plans, and partners to inform the LWG and to create a local conservation action plan.

Agenda and Presenters

Welcome, Purpose, Goals, and Game

LeAnn Buck, MASWCD _____

Keith Klobec, NRCS _____

Donna Rae Scheffert, LeadershipTools

Lisa Hinz, U of MN Extension _____

Key Ideas and Notes

Utilizing a

Natural Resources Inventory

Ryan Galbreath, NRCS _____

Website Resources:

https://www.nass.usda.gov/Statistics_by_State/Minnesota/index.php

National Resources Inventory | NRCS Minnesota ([usda.gov](https://www.nrcs.usda.gov))

Aligning 1W1P Planning, SWCD Comprehensive Plans, and LWGs

Greg Johnson, NRCS _____

Darren Newville, SWCD _____

**Sharing Technical Findings and Reports
with the Public and LWGs**

Justin Hanson, SWCD _____

Discussion:

*How do I share scientific information as
part of a planning conversation about
conservation?*

**Developing a Conservation Needs
Assessment and Action Plans**

Cory Walker, NRCS _____

Keith Kloubec, NRCS

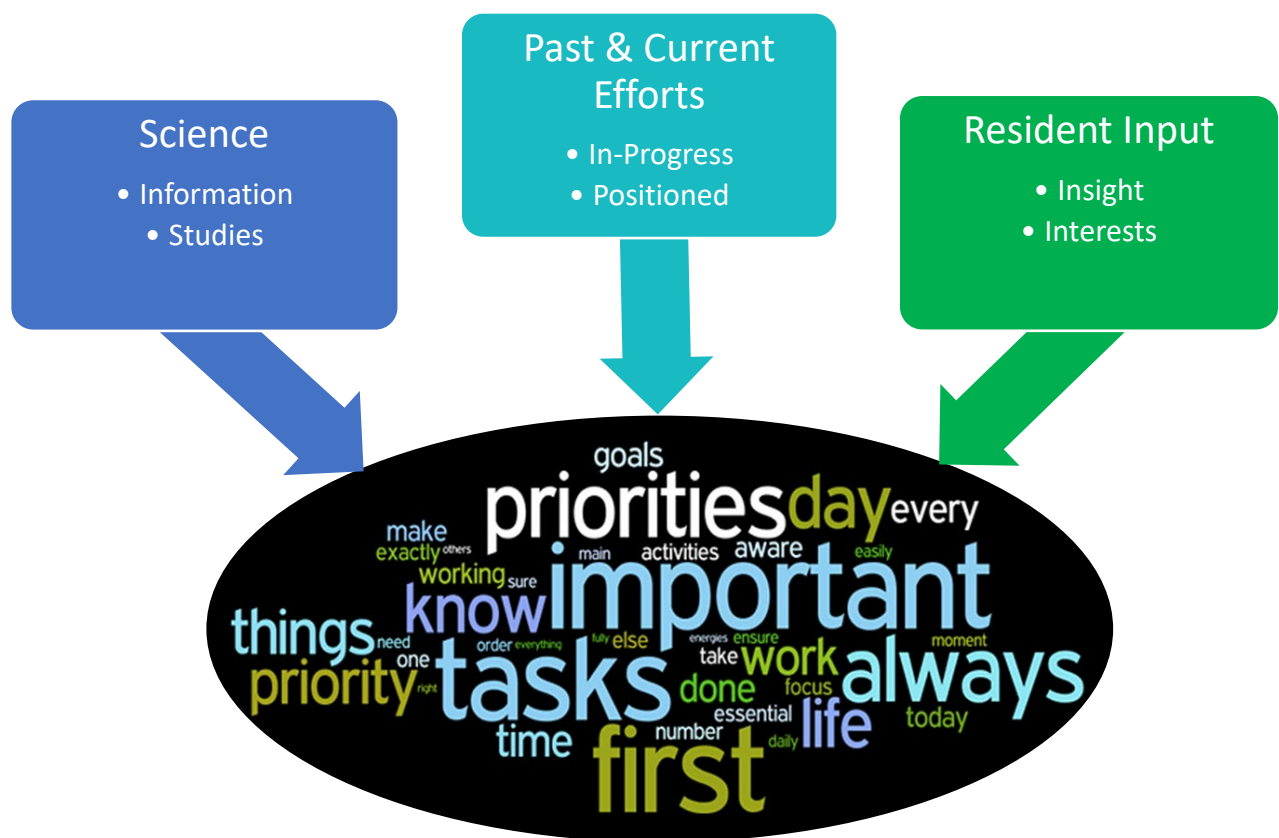
HOSTING EFFECTIVE LOCALLY LED CONSERVATION MEETINGS

Priority Setting with Science, Effort Analysis, and Local Input



Priority setting for your conservation work can be thought of as a 3-legged stool. First, science grounds you with information and studies that inform your potential work focus. The second leg looks at your efforts: past and present as well as what is positioned to be done next. The third leg seeks resident input to garner insights and gauge interest in various potential priorities.

These 3 legs come together to create a seat where your conservation priorities can land – AND take a place at the table.



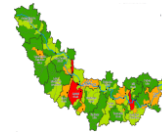
Minnesota Watershed Planning and Implementation



State



HUC-8



HUC-12



Site

Programs and strategies

Initial assessments, goals, priorities, & strategies

Identify specific sources, critical areas, practices and activities

Landowner practice selection, pre-design and cost analysis

Plans

- Nutrient Reduction Strategy
- Nitrogen Mgmt. Plan

- WRAPS
- 1W1P
- TMDLs
- GRAPS
- Comprehensive Plans

- NRCS Watershed Assessments – NWQI/ MRBI
- MPCA Section 319 9-Element Plans

- NRCS Conservation Planning Process
- WHP/ DWMSA

Process

Stakeholder engagement and Partnership building

Assess condition



Model impacts



Gather landscape data

MN Water Mgmt. Framework – NRCS Areawide Planning – Small WS Planning

Tools

- Monitoring
- IBIs
- NBS, BEHI/BANCS
- P Index
- WHAF
- NP-BMP
- HSPF, SWAT, SPARROW

- GSSHA, P8, WinSLAMM
- HSPF-SAM, EBI, WEPP
- BATHTUB, RUSLE2
- Land survey
- Soil survey
- Vegetation survey










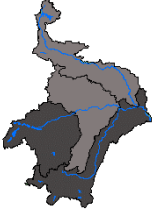

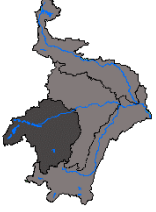
- Hydroconditioned LiDAR elev. data
- Terrain analysis
- PTMApp
- ACPF
- Zonation

- Landowner contacts
- BMP manual
- Cost-benefit
- NRCS GIS toolbox
- Agren design tool

Tier 1 Issues

Tier 1 are the most important issues that will be the focus of implementation efforts in the 10-year plan. They had a “high” ranking in at least one planning region and lined up with NRCS Resource Concerns.

Planning Region priority is noted with:  High;  Medium;  Low.

Category	Resource	Issue Statement	NRCS Resource Concern	Planning Region
	Drinking water	Shallow groundwater is highly vulnerable to contamination from numerous sources.	Water Quality Degradation – <i>Excess nutrients in groundwater</i>	
	Streams, Lakes	Soil erosion and runoff can cause sediment and nutrient enrichment and low dissolved oxygen in lakes and streams.	Soil Erosion – <i>sheet rill</i> ; Water Quality Degradation – <i>Excessive sediment in surface waters</i>	
	Streams	<i>E.coli</i> impairments in streams can make them unsafe for recreation.	Water Quality Degradation - <i>Excess pathogens/chemicals from manure, biosolids or compost</i>	
	Lakes	Projected development pressure and conversion of seasonal properties to fulltime homes has the potential to negatively affect lake water quality and riparian habitat.	Water Quality Degradation – <i>Excess nutrients in surface water</i>	
	Agricultural land	Soil health has the potential to impact agricultural productivity and water-holding capacity.	Soil Erosion – <i>Organic matter depletion</i>	
	Forests, Grasslands	Fragmentation and degradation of upland habitat by changes in land use can cause a loss of perennial vegetative cover and impact land resilience, habitat, surface, and ground water quality.	Inadequate Habitat for Fish & Wildlife – <i>Habitat Degradation & Habitat Continuity</i>	

Source: Leaf, Wing, Redeye One Watershed One Plan at <https://www.eotswcd.org/one/LWR1W1P/>

Local Work Group Resources for Conservation Needs Assessments FY2021

Local Working Groups (LWG) provide recommendations on local natural resource priorities and criteria for USDA conservation activities and programs. The below references and data sources can be used to provide an inventory of local data useful in developing your Conservation Needs Assessment and Conservation Action Plan. The information presented in your Conservation Needs Assessment can be used to facilitate further LWG discussions and provide a justification for your prioritizations. Identifying other sources of data and input from Local Work Group participants is also strongly encouraged.

Information on NRCS Resource Concerns, Land Uses and Conservation Practices

NRCS Resource Concern Fact Sheets: [Fact Sheets](#)

Spreadsheet listing NRCS Resource Concerns and Categories: [RC Spreadsheet](#)

Conservation Practice Standards and Conservation Practice Overviews: [FOTG Section IV](#)

NRCS Land Use Definitions: [National Planning Procedures Handbook \(NPPH\)](#)

Existing Plans

SWCD Annual Reports: Located on the SWCD Websites

County Comprehensive Plans: These plans often encompass the entire county and can provide data on demographics, natural resources, and more.

SWCD Local Water Plans: County water plans are prepared by counties address water problems in the context of watershed units and groundwater systems and cover the area within a county. Located on the SWCD Websites

One Watershed, One Plan: One Watershed, One Plan (1W1P) is a program through the Board of Water and Soil Resources (BWSR) that supports partnerships of local governments in developing prioritized, targeted, and measurable implementation plans. [1W1P](#)

Source Water Protection: The MN Department of Health has a Web Map Viewer with information available on wellhead protection areas, Drinking Water Supply Management Areas. The site also contains additional data and maps useful in identification of source water priorities in each county. [MDH SWP](#)

Minnesota Pollution Control Agency (MPCA): MPCA website has resources available on watershed descriptions, monitoring and assessment reports, restoration, and protection strategies, and more. <https://www.pca.state.mn.us/water/watersheds>

Additional and more detailed information on Watershed Restoration and Protection Strategies (WRAPS) can be found at [MPCA WRAPS](#).

Local Work Group Resources for Conservation Needs Assessments FY2021

Land Use Data

The MN Natural Resources Atlas has an interactive map that provides a basic set of GIS tools for viewing, searching, and manipulating mapped data. Data includes maps of cropland, cropland productivity, feedlot locations, State Lands, precipitation, erosion risk, and much more.

<https://mnatlas.org/gis-tool/>

The MN Geospatial Commons has information on Feedlots, Springs, Wildfires, Fall Nitrogen Fertilizer Application Restrictions, Oak Wilt Range, plus more.

Geospatial Data: <https://gisdata.mn.gov/group/environment>

Agricultural Data

The USDA National Agricultural Statistics (NASS) site has agricultural data for each county. Data includes number of farms, type of farms, farms by size, total cropland, crops grown, livestock types, economic values of crops and more.

[USDA - National Agricultural Statistics Service - Minnesota](#)

The NASS Census of Agriculture Report has county specific reports. [2017 Census by State - Minnesota | 2017 Census of Agriculture | USDA/NASS](#)

Other Data

Minnesota State Demographic Center: This site has county populations by age, sex, race and Hispanic Origin along with data on trends. <https://mn.gov/admin/demography/data-by-place/>

MDA Emerging Farmers in Minnesota Report:

<https://www.leg.mn.gov/docs/2020/mandated/200237.pdf>

Invasive Species: <https://www.dnr.state.mn.us/invasives/index.html>

Endangered Species: FWS <https://www.fws.gov/midwest/endangered/lists/minnesot-cty.html> and MN DNR <https://www.dnr.state.mn.us/ets/index.html>

MN Scientific and Natural Areas: <https://www.dnr.state.mn.us/snas/index.html>

[Clean water implementation project technical assistance](#) from regional/field staff with deep local knowledge of hydrology and stream geomorphology

[Watershed analysis and modeling](#) using the Gridded Surface Subsurface Hydrological Analysis (GSSHA) model to simulate changes in climate and land use, especially related to agricultural conservation practices

[Watershed Health Assessment Framework](#), a web map that makes it easy to explore and analyze sub-watershed-scale (and major watershed and basin scales) information related to water quality and other aspects of watershed health, including more than 20 different watershed health index scores

Our Tips for how to share scientific information as part of a planning conversation about conservation

Know your audience - understand their needs and interests

Use their perspective to relate to the resource needs you want to address

How will this affect their bottom line? \$\$\$

Explain what is important with the data (information) - how do we use it

Always THANK your attendees

Always do a follow-up with attendees.

Make it relatable , such as comparing to vehicle maintenance.

Present how the information effects producer locally and then how it expands and try to relate it to their family members (ie clean water for grandchildren to play in)

Keep it simple - too much info can be overwhelming

Use simple language and tell a story

Use Graphs (Don't use pie charts, they can be hard to read and misleading. Use Bar Charts!!!)

visuals

Use Maps

Use maps and graphs

Use terms that your audience can understand - no acronyms

Speak a common language.

Simplify things. "If it makes our eyes gloss over, it will do the same for others."

Stories

Visuals - pictures, diagrams

Photos of projects and meaningful, easy to understand graphs

Use Visual maps, before/after photos.

use drone flights before and after videos

Use common and shared language - terms, concepts

No acronyms

Use plain language. No acronyms.

dramatize your data, Ex - 1 cu. yd. of topsoil weighs as much as a full size vehicle

GIS layers

Video

Use past aerial photos compared to present situation

MPCA reports

List of priorities from Water Plan

Present and gather information based on watershed rather than county.

Once priority resource concerns have been developed for many years, they usually don't change much

Conservation practices are voluntary!

Its hard to present scientific information and gather feedback when no one shows up.

Our Tips for how to share scientific information as part of a planning conversation about conservation

Preplan with NRCS/SWCD to narrow down the Resource Concerns so they aren't overwhelming coming into the LWC meeting.

Understand what people know before sharing information.

Ask people what they know.

Relate new knowledge to what people already know.

Have landowner partners do presentations.

Stories

Had multiple "Waterside Chats" or public meetings in the Zumbro to try to convey info to the public.

I have sent a survey out with the invite to see what people are most interested in then we can prepare based on the survey and or have some extra info from some producers that cant attend the meeting.

Distinguish between collecting information on values of residents and the science of how to achieve goals.

a shared language is important. A misunderstanding of a term or action can derail a conversation.

Sometimes our partners at the table come forth of scientific data, when this happens, we do our best to break that data down into common language to better relate to the producers.

Don't provide too many details. Provide basic information and let the group have a conversation

Maps of BMP locations

Videos - great way to quickly provide a ton of information.

Easy to-understand charts, graphs, maps -- visuals

If someone brings scientific data, presenting in a visual form is nice - like a map.

MDH Well monitoring results and locations.

Use of Rusle2 and WinPST to how conservation results.

Use WRAPS data, maps and locations