



Steering Committee Meeting: July 28, 2021

AGENDA

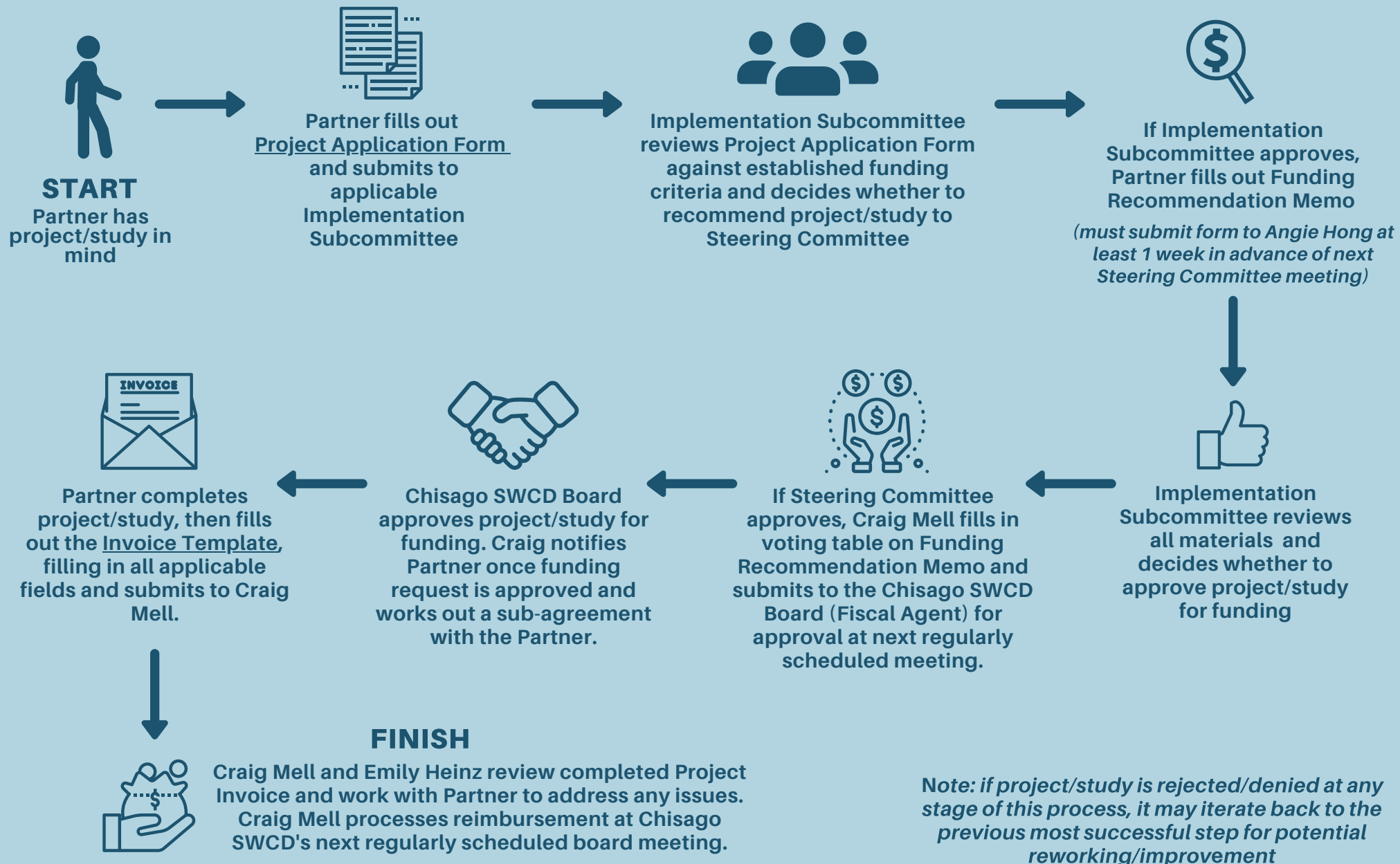
1. Introductions
2. Updates from Policy Committee meeting on July 26
 - Request to develop policy for emergency response projects
 - Sept. 27 project tour
3. Decision-making process and project application forms
 - Decision-making flowchart
 - Steering committee recommendation template
4. SharePoint folder network – <http://tinyurl.com/lscpartners>
5. Subcommittee Updates
 - **Agronomy Outreach** – Jay Riggs
 - **Urban and Agricultural Projects** – Craig Mell and Mike Isensee
 - See attached notes from subcommittee 2, 4 and 5 meeting on June 21
 - Discuss & decide whether to support the subcommittee recommendation of funding for the Pine SWCD Hinze cattle exclusion project
 - **Watershed Education** – Angie Hong and Barbara Heitkamp
 - Upcoming workshops and events - www.lsc1w1p.org/events
 - Lake Stewardship Program
 - Differentiating between EMWREP and LSC education programming
 - **Wetland Restoration** – Becky Wozney
 - **Internal Analyses** – Susanna Wilson-Witkowski
 - **Targeting Analyses** – Jay Riggs
 - See attached notes from subcommittee 8 meeting on July 1
6. Progress Update – Emily Heinz
 - Cumulative progress toward water quality goals -
7. Other discussion:
 - Topics for future meetings?

Anoka Soil and Water Conservation District - Brown's Creek Watershed District - Chisago County
Carnelian-Marine-St. Croix Watershed District - Chisago Soil and Water Conservation District
Comfort Lake-Forest Lake Watershed District - Isanti County - Isanti Soil and Water Conservation District
Middle St. Croix Watershed Management Organization - Pine County - Pine Soil and Water Conservation District
South Washington Watershed District - Sunrise River Watershed Management Organization
Valley Branch Watershed District - Washington County - Washington Conservation District

WBIF Project Process

Lower St. Croix Watershed Partnership

July 2021 version



MEMORANDUM
Lower St. Croix One Watershed One Plan

To: LSC Steering Committee **Date:**
From: [Requesting Organization]
Subject: WBIF Project Recommendation: [Project Name]

Narrative Description of Project (brief paragraph)

Project Details

Project Name	
Project Location (lat/long, address, or description)	
DNR Level 8 Subwatershed	
Applicable WBIF Work Plan Activity	
Estimated Construction Timeline	
Total Project Cost	
Estimated Lifetime Project Cost (incl. O&M)	
Requested Grant Funding	
Target Waterbody (from CWMP Table 5-2 or 5-3)	
Est. Phosphorus Load Reduction @ Target Waterbody	
Est. TSS Load Reduction @ Target Waterbody	
Project Lifespan	
Lifetime Cost-Benefit (\$/lb phosphorus removed)	

Required Attachments:

- Project Plans/Visual/Map
- Completed Project Targeting Criteria and Scoring Matrix [from LSC CWMP Appendix C]

Submit this form and attachments to Angie Hong at (ahong@mnwcd.org) one week prior to the Steering Committee meeting.

MEMORANDUM
Lower St. Croix One Watershed One Plan

Roll Call Vote

Roll call vote to recommend project for Lower St. Croix Watershed Based Implementation Funding in the amount of \$ _____.

Organization	Aye	Nay	Absent
Anoka SWCD			
Brown's Creek WD			
Carnelian Marine St Croix WD			
Chisago County			
Chisago Lakes LID			
Chisago SWCD			
Comfort Lake Forest Lake WD			
Isanti County			
Isanti SWCD			
Middle St. Croix WMO			
Pine County			
Pine SWCD			
South Washington WD			
Sunrise River JP WMO			
Valley Branch WD			
Washington CD			
Washington County			
TOTAL (need majority vote to pass)			

**LSC 1W1P WBIF Activities 2, 4, 5, and 9 Subcommittee Meeting
Wednesday, July 21, 2021 @ 8:30 via Microsoft Teams**

Attendees: Mike Isensee (CMSCWD), Jay Riggs (WCD), Tiffany Determan (ISWCD), Matt Moore (SWWD), Casey Thiel (CSWCD), Rebecca Nestingen (WCD), Aidan Read (CLFLWD), Barbara Heitkamp (LSC Partnership), Craig Mell (CSWCD), Zach Van Orsdel (PSWCD)

Meeting notes:

1) SWWD McQuade Ravine Project

Craig Mell provided an update that the Chisago SWCD board approved this project as recommended by the Steering Committee and that a sub-agreement between the Chisago SWCD and the SWWD for the WBIF's has been approved by both boards. Matt provided an update that the project has been completed and looks great. The SWWD board has approved the first partial payment. Matt will provide the required documents to Emily Heinz and Craig Mell when the final payment request has been completed by the SWWD.

2) Update on Agronomy Outreach Position

Jay Riggs provided an update that after lengthy consideration, the Lower St. Croix CWMP A1 sub-committee has decided to enter into a partnership with the University of Minnesota Extension to hire an embedded extension agent, who will office out of the Washington Conservation District. The goal is to have someone hired in 2-3 months. Jay will submit a request to the Chisago SWCD to utilize LSC WBIF's to subcontract with the University of Minnesota Extension for the Ag Outreach Position.

3) Review of Steering Committee Project Recommendation Template

Jay Riggs provided the following comments, consider how this integrates into an annual budgeting process so this does not digress into a competitive grant application; make sure we have one consistent process for all of the subcommittees; will this format work well with distributing program funds (eg incentive payments) in addition to structural BMPs? This request process is about providing information to the steering committee and Chisago SWCD Board for approvals, so fits well with adding to the information we provide to the groups.

Mike Isensee provided the following comments, On page 1 of the Steering Committee Project Recommendation, the "Project Details" notes that the "Target Waterbody" must be from CWMP Table 5-2 or 5-3. If the applicant is applying for a wetland restoration, the target waterbody is not required to be listed in either of those tables.

Rebecca Nestingen provided the following comment, add units to the TSS and Phosphorus load reduction lines such as lbs./yr. (to preclude applicants putting down a percent-based load reduction or project lifespan load reductions).

4) Pine SWCD Funding Request – Hinzie Access Control Fencing and Buffer Planting Project (Rock Lake)

Zach Van Orsdel provided background information about the site and the need for the project, currently livestock have unlimited access to Rock Lake for water. The proposal would include a use exclusion fencing and a 50-foot vegetated buffer. Unfortunately the technical staff person working on this project is unexpectedly out of the office potentially until tomorrow and Zach was unable to provide detail specifics about the overall project, including pollution numbers for the proposed project. The subcommittee unanimously approved recommending to the LSC 1W1P Steering Committee funding the Pine SWCD Hinzie access control fencing and buffer planting projects at \$5,100 (85%) pending the Pine SWCD provide a completed application prior to the Steering Committee considering this project.

5) Review of Activity 4: Non-Structural Ag/Urban BMP Implementation

In June the group agreed to utilize existing local SWCD non-structural ag BMP rates for projects this year. These rates would be applied within each county. In the future the committee will review the

rates/process to determine if a more centralized approach is appropriate. Currently only the CSWCD and WCD have BWSR approved non-structural Ag BMP Implementation local policies in the LSC watershed. Both Tiffany and Zach stated their SWCD could adopt one if needed. Jay recommend that all SWCDs in the LSC watershed should have a BWSR approved non-structural Ag BMP Implementation policy. Tiffany discussed concerns about the LSC CWMP pre-qualifier questions to be eligible for a funding request as they relate to cover crops, especially question #3 related to targeted analysis listing the need for a cover crop. The group agreed that projects in watersheds listed on the regionally significant rivers and streams (table 5-2) or lakes (table 5-3) list would be eligible for funding. At this time the group agreed that an individual member may bring a project forward for consideration, but the overall development of a LSC non-structural Ag BMP program would be developed once the new Agronomy Outreach person has started working in the watershed.

Mike Isensee stated there was nothing new to report regarding the non-structural urban BMP Implementation program since our last meeting, but his plan is to work on this task in August.

MEMORANDUM
Lower St. Croix One Watershed One Plan

To: LSC Steering Committee **Date:** 7/28/2021
From: Pine SWCD
Subject: WBIF Project Recommendation: Hinze Cattle Exclusion

Partners are working with the landowner to install new access control fencing to keep cattle out of Rock Lake, where they were previously allowed. There will be a 50' setback between the lakeshore and the new fencing. It is proposed to install a buffer strip in this area and use a native pollinator seed mix that has been used on NRCS projects elsewhere on the property. This project is awaiting funding. The combination of the new fencing and the buffer will help reduce runoff and nutrient loading that is directly entering Rock Lake.

Project Details

Project Name	Hinze Cattle Exclusion
Project Location (lat/long, address, or description)	6330 580 th St, Pine City, MN 55063
DNR Level 8 Subwatershed	Rock Creek
Applicable WBIF Work Plan Activity	Part A Implementatation for Agricultral Lands # 3 Lake WQ from Ag
Estimated Construction Timeline	August 15 th
Total Project Cost	\$5,889.62
Estimated Lifetime Project Cost (incl. O&M)	\$5,889.62
Requested Grant Funding	85%= \$5,006.18
Target Waterbody (from CWMP Table 5-2 or 5-3)	Rock Lake
Est. Phosphorus Load Reduction @ Target Waterbody	3.48lbs/yr
Est. TSS Load Reduction @ Target Waterbody	1.89 tons/yr Rock Lake
Project Lifespan	10 years
Lifetime Cost-Benefit (\$/lb phosphorus removed)	1,692.42

Required Attachments:

- Project Plans/Visual/Map
- Completed Project Targeting Criteria and Scoring Matrix [from LSC CWMP Appendix C]

Submit this form and attachments to Angie Hong at (ahong@mnwcd.org) one week prior to the Steering Committee meeting.

MEMORANDUM
Lower St. Croix One Watershed One Plan

Roll Call Vote

Roll call vote to recommend project for Lower St. Croix Watershed Based Implementation Funding in the amount of \$ _____.

Organization	Aye	Nay	Absent
Anoka SWCD			
Brown's Creek WD			
Carnelian Marine St Croix WD			
Chisago County			
Chisago Lakes LID			
Chisago SWCD			
Comfort Lake Forest Lake WD			
Isanti County			
Isanti SWCD			
Middle St. Croix WMO			
Pine County			
Pine SWCD			
South Washington WD			
Sunrise River JP WMO			
Valley Branch WD			
Washington CD			
Washington County			
TOTAL (need majority vote to pass)			

Project Name
Proposing Organization

Project Description (include summary of issue addressed, proposed solution, current status of the project)

Total Estimated Construction Cost
Total Lower St. Croix Partnership Funding Request
Minimum construction funding needed for the project to move forward
Planned Construction Date

Randy Hinzie Access Control Fencing and Buffer Planting Project
Pine SWCD

Partners are working with the landowner to install new access control fencing to keep cattle out of Rock Lake, where they were previously allowed. There will be a 50' setback between the lakeshore and the new fencing. It is proposed to install a buffer strip in this area and use a native pollinator seed mix that has been used on NRCS projects elsewhere on the property. This project is currently in the planning stage, but the combination of the new fencing and the buffer will help reduce runoff and nutrient loading that is directly entering Rock Lake.

\$5,889.62

\$5,006.18

\$4,417.22

8/15/2021

Project Name:

Pre-Qualification Questions

1 Prequalification Question

2 Prequalification Question

3 Prequalification Question

Scoring Criteria

1	Lake Restoration & Protection
2	Stream Restoration
3	Groundwater
4	Readiness
5	Urgency & Opportunity
6	Cost effectiveness
7	Partners & Funding

8	Multiple Benefit
9	Multiple Benefit
10	Multiple Benefit

*Lakes of Phosphorus Sensitivity Significance (LPSS)

Lake Phosphorus Sensitivity Significance, LPSS Prioritization, phosphorus sensitivity, and lake size, lake total phosphorus, and lake total phosphorus to the state's priority of focusing on "high quality, unimpaired" lakes.

1. Proposed projects or program location in the Implementation Table (Table 5-1). :

2. The activity is listed as a A or B in Implementation Table 5-1

3. Name the analysis completed and/or data are gathered to target and prioritize this specific project or name a project is outside an area with a completed prioritization but has a similar cost benefit as a previously analyzed project and benefits the same water resource as the completed analysis.

The project addresses total phosphorus on a priority lake (See table on page 2)

Project is located near stream reach and will address stream impairment or Lake St. Croix total phosphorus impairment)

Project improves groundwater quality/quantity (examples: soil health, nutrient management, pesticide reduction, recharge, infiltration, reuse)

Concept plans, cost estimates, and landowner agreements/easements are complete 3 or 0

Is the project contingent on securing funding now? (Example, BMP is part of a larger project that will move forward with or without the BMP; opportunity would be lost if not funded and implemented now)

Level of cost benefit when compared to all projects analyzed in particular SWA or similar targeting analysis.

Partnership and collaboration with agencies, organizations, or other groups is being leveraged or utilized by this project (Are there multiple partners providing funding, in-kind support, or other assistance or involvement?)

Project provides added benefit of habitat improvements (aquatic, riparian, upland, wetland). Note: water quality improvements are not considered habitat improvements for this criterion.

Project provides added benefit of education (examples: signage, demonstration project)

Project improves water quality while also addressing flooding concern (examples: pond, wetland restoration, or floodplain expansion)

- May 24, 2019: A ranked priority lake list based on sensitivity to additional phosphorus loading and

ty Class = Grouping of waterbodies based on the lake phosphorus sensitivity significance priority score, phosphorus concentration, proximity to MPCA's phosphorus impairment thresholds, and watershed distance. "The most impaired lakes at greatest risk of becoming impaired."

Response

Part A Implementatation for Agricultral Lands # 3 Lake WQ from Ag
Yes
Identified in the MAWQP Anaylisis

Proposed Score Committee Score

LPSS Priority Class* is "Impaired" or "Highest" = 5		
LPSS Priority Class is "High" or "Higher" = 3	5	
Within ¼ mile = 5 Within ½ mile = 3	0	
Yes = 3 No = 0	3	
Yes = 3 No = 0	3	
Yes = 3 No = 0	3	
Top 1% = 10 Top 10% = 7 Top 25% = 5 Top 50% = 3 < 50% = 0	5	
Yes = 1 No = 0	1	

Yes = 1 No = 0	1	
Yes = 1 No = 0	0	
Yes = 1 No = 0	1	

the significance of that s

e, which is a function of
irbance. Classes relate

Lake ID	Name	LPSS Priority Class
2002600	Linwood	Impaired
2003400	Martin	Impaired
13004200	Birch	NA
13000100	Blooms	NA
1300120	Chisago	Higher
13006800	Fish	Highest
13008301/13008302	Goose (North & South)	Impaired
13004102 /13004101	Green/Little Green	Highest
13003300	Little	Impaired
13003201	North Center Lake	Impaired
13003500	North Lindstrom	Higher
13006901/13006902	Rush (East & West)	Impaired
13002700	South Center	Impaired
13002800	South Lindstrom	Higher
30000800	Hoffman	NA
30001200	Horseleg	Highest
30000300	Horseshoe	Highest
30000700	Lower Birch	NA
58011700	Rock	Impaired
82004900	Big Carnelian	Higher
82005204	Big Marine	Highest
82004500	Clear	Higher
82003400	East Boot	Impaired
82000400	Edith	Higher
82010600	Elmo	Higher
82001400	Little Carnelian	Higher
82002500	Louise	Impaired
82003300	Mays	High
82002000	McKusick	High
82004600	Square	Highest
82003100	Terrapin	High



905' 4 strand barbed
0.6 ac native planting for buffer

297' 4 strand HT
Access control for wetland
& drainage protection

0 0.030.06 0.12 Miles
[Scale bar]

— Access Control Fence

Randy Hinze Access Control and Buffer

Pine SWCD
Assisted by: RC

Sheet & Rill Erosion Control

SLB_{PA}
Soil Loss Before per acre
(T/Ac/yr) 0.6

SLA_{PA}
Soil Loss After per acre
(T/Ac/yr) 0.0077

D
distance to surface water
(feet) 0

SLR_{pa}
Soil Loss Reduction per acre
= SLB_{pa} - SLA_{pa} (T/Ac/yr) 0.59

SLR = (SLR_{pa})(Ac)
Soil Loss Reduction (T/yr) 8.00

**SOIL = sand (1), silt (2), clay(3),
Peat(4)** 2

AC = units applied (acres) 13.5

CA = contributing acres (acres) 13.5

SEDB0_{pa} (T/A/Y)
= SLB_{PA} * SDR #DIV/0!
sed before/ acre

SEDA0_{pa} (T/A/Y)
= SLA_{PA} * SDR #DIV/0!
sed after /acre

SDR #DIV/0!

Filter Strip present
before installation
Y/N
n
1
Filter
Strip
Factor

= input
 = calculated value
 = result

SEDBpa
 =FS * SEDB0pa [#####]
 (T/A/Y)

SEDApa
 = FS * SEDA0pa [#####]
 (T/A/Y)

SEDR
 = (SEDBpa-SEDApa)*CA [DIV/0!]
Sediment Reduction (T/yr)

PBpa
 Pbefore/acre [DIV/0!]
 (lbs/A/yr)

1 [DIV/0!]
 2 [DIV/0!]
 3 0.00
 4 0.00

PApa
 P after/acre [DIV/0!]
 (lbs/A/yr)

1 [DIV/0!]
 2 [DIV/0!]
 3 0.00
 4 0.00

PR
 = (PBpa - PApa)*CA [DIV/0!]
P reduction (lbs/yr)

ENTER THIS DATA ON eLINK INDICATORS TAB	
SEDIMENT (TSS) T/yr:	#DIV/0!
SOIL (estimated savings) T/yr:	8.00
PHOSPHORUS (est. reduction) lbs/yr:	#DIV/0!

Gully Stabilization

SOIL =
 sand (1), silt (2)
 clay(3), peat(4)

SD SOIL density
 lbs/ft³
 tons/ft³

- 1 110
- 2 85
- 3 0
- 4 0

CF
 P Correction Factor

VOLV
 volume voided (ft³)

SLB = SD*VOLV/YR
 Soil Loss Before (Tons/yr)
 =
SLR Soil Loss Reduction
 Tons/yr

SEDR =
 SLB*SDR*FS
Sed. Reduction
 (Tons/yr)

YR
 number of years

PR =
 SEDR *(1.0 Lb/Ton)*CF
 P reduction (Lbs/yr)

Gully conditions
 channelized (1)
 non-channelized (2)
 landlocked (3)

D distance to
 surface water
 (feet)

SDR

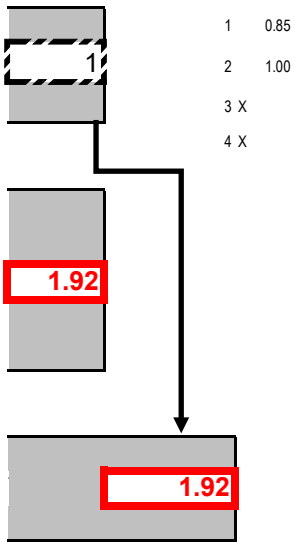
- 1 1.00
- 2
- 3 X

Filter Strip present
 before installation
 Y/N

 Filter
 Strip
 Factor (FS)

= input
 = calculated value
 = result

ENTER THIS DATA
 SEDIMENT (TSS) T/yr
 SOIL (estimated saving)
 PHOSPHORUS (est. r)



TA ON eLINK INDICATORS TAB	
:	1.92
igs) T/yr:	8.50
eduction) lbs/yr:	1.92

Stream & Ditch Bank Stabilization

SOIL =
 sand (1), silt (2) 3
 clay(3), peat(4)

SD SOIL density
 lbs/ft³ 70
 tons/ft³ 0.035

- 1 110
- 2 70
- 3 70
- 4 X

VOLV
 volume voided (ft3) 10000

SLB = SD*VOLV/YR
 Soil Loss Before (Tons/yr)
 = 35.00
SLR Soil Loss Reduction
 Tons/yr

YR
 number of years
 to erode bank to
 current position 10

D = 0

SDR = 1

= input

 = calculated value

 = result

ENTER THIS

SEDIMENT (TSS) T

SOIL (estimated sa

PHOSPHORUS (es

CF 1.15
 P Correction Factor

- 1 0.85
- 2 1.15
- 3 1.15
- 4 X

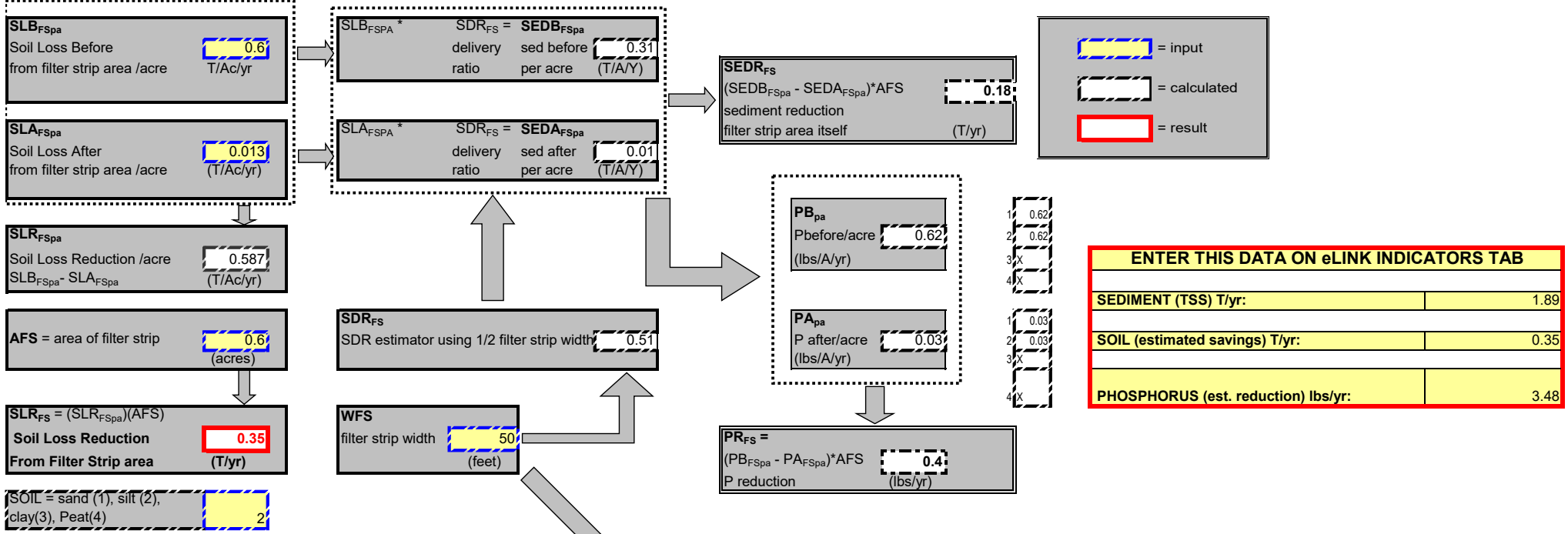
SEDR =
 $SLB * SDR = SLB * 1$
 (= SLR) 35.00
Sediment Reduction
 (Tons/yr)



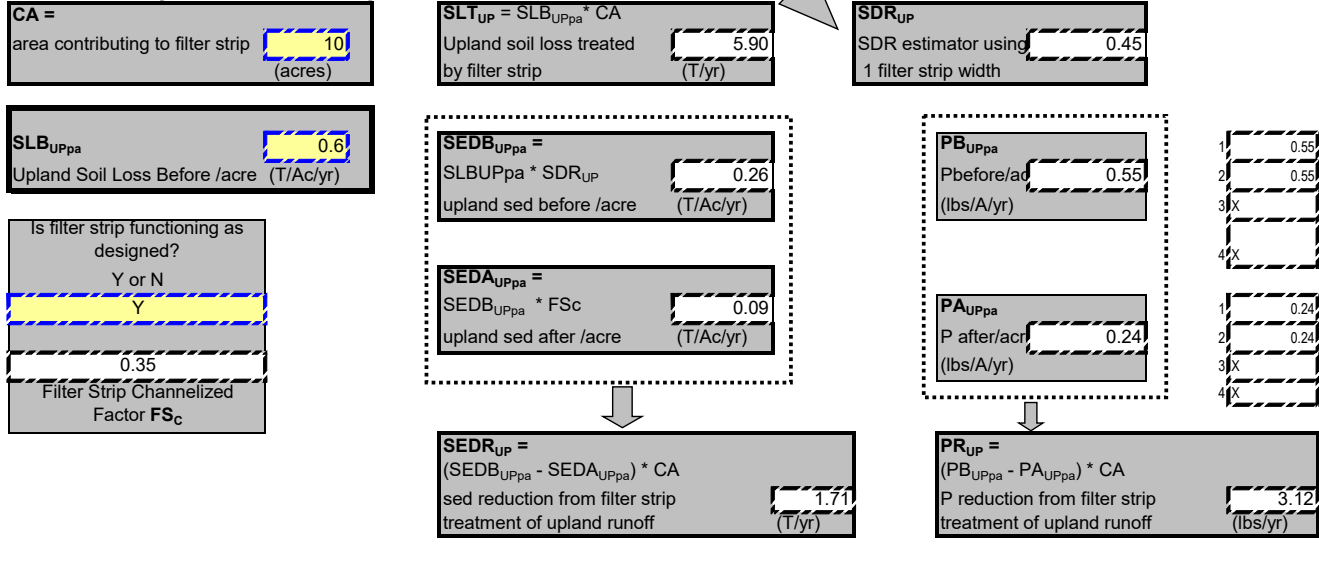
PR =
 $SEDR * (1.0 \text{ Lb/Ton}) * CF$ 40.25
P reduction (Lbs/yr)

DATA ON eLINK INDICATORS TAB	
/yr:	35.00
(Tons) T/yr:	35.00
(Tons reduction) lbs/yr:	40.25

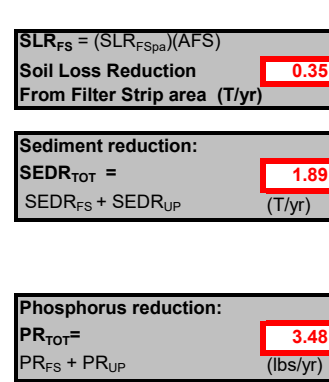
1. Area of Filter Strip Itself



2. Filter Strip Treatment of Upland Runoff



3. Total Benefits



RUSLE2 Worksheet Erosion Calculation Record

Info:

Owner name	Tract #	Field name
Randy Hinzie	pasture	**Field number**

Location	Soil	T value, t/ac/yr	Slope length (horiz), ft	Avg. slope steepness, %
USA\Minnesota\Pine County	Generic Soils\silt loam (mod-high OM)	3.0	150	4.0

Alternatives:

Description	Base management	Contouring	Strips / barriers	Diversion/terrace, sediment basin
	CMZ 04\A.Single Year/Single Crop Templates\FORAGES\Pasture\Graze continuous; moderate overuse, medium yield, z4	default	(none)	(none)
	Strip/Barrier Managements\Cool season grass; not harvested	default	(none)	(none)

Alternatives Results:

Description	Cons. plan. soil loss	Annual total biomass removal, lb/ac	Soil conditioning index (SCI)	SCI OM subfactor	SCI FO subfactor	SCI ER subfactor	STIR value	Wind & irrigation-induced erosion for SCI, t/ac/yr	Equiv. diesel use, gal/ac	Energy use, BTU/ac	Fuel cost, US\$/ac
	0.60	9800	0.53	0.025	0.92	0.76	7.8	0	0.000000170	0.0236	0
	0.013	0	1.4	2.0	1.0	0.99	0	0	0.000000100	0.00139	0

The **SCI** is the **Soil Conditioning Index** rating. If the calculated index is a negative value, soil organic matter levels are predicted to decline under that production system. If the index is a positive value, soil organic matter levels are predicted to increase under that system.

The **STIR** value is the **Soil Tillage Intensity Rating**. It utilizes the speed, depth, surface disturbance percent and tillage type parameters to calculate a tillage intensity rating for the system used in growing a crop or a rotation. STIR ratings tend to show the differences in the degree of soil disturbance between systems. The kind, severity and number of ground disturbing passes are evaluated for the entire cropping rotation as shown in the management description.

Urban protocols

Sprucing up protocols

Urban protocol is rigid – could be expanded – different ways to model and present data

Early SWAs geared toward % based reductions – newer SWAs using WinSlamm

SWA process Overview: Catchment prioritization, Field Analysis, BMP Modeling, and Cost-Benefit Analysis. Protocol update for all of these components.

Hotspot ID

Nonstructural vs structural integration into analysis

Jeremy – experience with cover crops – farmer led initiatives – can incorporate benefits into models – edge of field monitors showing significant reductions. Always a fan of diagnostic monitoring.

ID existing models and data

Blayne – interested in how we bring in land management changes into the prioritization – no guarantee the producer is going to adopt. Including diagnostic monitoring is key. Low tech DIY monitoring using handhelds for coarser scale work and then follow-up with grabs and other techniques to ID hotspots.

Casey – actually modeling nonstructural practices is hard to do on a per field basis without an in-depth conversation with the producer. Model assumptions for conversion from traditional to conservation practices are based on “typical” tillage practices and then converted to “conservation” on a broad scale. More of a narrative approach in the SWA report than a per field basis.

ID/Promote Conservation Planning as part of the SWA? Conservation planning HOTSPOTS. Hotspots for nonstructural.

Jeremy – One way to prioritize is to break things up into bite sized pieces – there are many basic models. STEPL. Can also stack BMPs.

Could we do some larger scale modeling on basin scale to help prioritize. LIDAR analysis on non-contributing areas. Jeremy says do it at HUC12! Mark Edlund. Jim Almindinger?

Document protocols for Hotspot analysis and modeling approach.

Can we support base data development? Soils, landcover, LIDAR?

Non-contributing drainage area analysis.

Amount of contribution from wetlands – wetlands ranked based on likelihood of contribution. Also ID'd wetlands that are high priorities for targeted monitoring.

Wetland subcommittee is looking at prioritizing wetland restoration – there must be a lot of partially drained wetlands that are puking out a lot of soluble P.

Wetland prioritization has to be part of the protocol. Hydrologic response units in Q. And then use diagnostic monitoring.

Climate change component as well. Wetland restoration has multiple benefits.

How do we update protocols to address multiple benefits? How do we put a cost-estimate for other parameters?

Regional Prioritization: regional modeling update at HUC12, LIDAR noncontributing analysis.

Protocol Update Items: nonstructural in urban and rural, targeted monitoring, updated input parameters for BMP models, multiple benefits integrated (add \$/bird), historical aerial/loads analysis (legacy loading), shoreline/gully model updates, HOTSPOT ID, Conservation Planning ID, wetland assessment.

Casey wants everybody to list out the protocols and models they have used.

Is it a Guidance Document or How-To Guide? Kind of both! Mary Jo would need about 40 hours to update detailed rural protocol.

Bryan is gonna work with Casey and Blayne to prep memo proposal for Protocol update.

Jeremy is reaching to Almindinger for SWAT.

Mike is reaching out to Talbot about LIDAR noncontributing analysis and Hotspot ID basin-wide.