

SHELL ROCK - WINNEBAGO RIVER 1W1P MEMORANDUM

Date: January 10, 2020

To: Shell Rock - Winnebago River 1W1P Advisory Committee

From: Julie Blackburn, RESPEC (julie.blackburn@respec.com or 651.605.5705)

RE: Summary of the feedback and input from the December 16, 2019 Advisory Committee meeting.

This memorandum presents the feedback and input received during the Advisory Committee's gallery walk exercise at their December 16, 2019 meeting as well as their prioritization results. There are separate summary notes that include the attendees and the small group report out summary comments.

FEEDBACK ON ISSUE STATEMENTS, DFCS, AND GOALS FOR STEERING COMMITTEE TO CONSIDER:

Generally, many of the comments provided are useful considerations for the Steering Committee to review, reflect, on and integrate into the next steps of developing the CWMP content. The comments included corrections or recommendations specific to issue statements, DFC's, or goals. However the majority of the comments appeared to be suggestions on strategies to meet goals and questions for clarification.

Below I have outlined specific comments that the Steering Committee should discuss to determine if any changes are needed before presenting to the Policy Committee. Please thoroughly review all the comments as there may be others that should be addressed at the meeting.

A1: Comments that there are two separate issues in this issue statement and that the risk if increased flooding is more than due to loss of wetlands.

A2: Goal Streams 5 – should there be a goal specific to Index of Biological Integrity?

B1: Comment PB2 regarding velocity; should we include rate control issues as well as water levels as an issue? Comment PB6 regarding that type of vegetation and geomorphology should be considered. Comment PB4 that there are two statements in this issue statement.

B2: the addition of "and the loss of nutrients and water in the soil column" in the DFC.

C2: the modification of the word "intensifying" to "intensified". The edits to the DFC.

E1: Comment regarding that there are two separate issue statements for this issue.

ADVISORY COMMITTEE PRIORITIZATION OF ISSUES

In general, the Advisory Committee's priorities aligned with Steering Committee, with several exceptions.

- The Steering Committee prioritized A1 - Surface Water Quantity, but it was fairly low on the Advisory Committees' priorities. This may be because the Advisory Committee did not have the conversation regarding the cascading impacts of water quantity.
- The Advisory Committee had a very strong indication that NR5 – Invasive species, was the

lowest of all priorities.

- The Advisory Committee priorities for both groundwater issues are higher than the Steering Committee, with GW2 – Protecting GW having the larger discrepancy from the Steering Committee.

Advisory Committee Voting Results							
Steering Committee Priority Ranking	Category	Green	Blue	Score of High Priority Votes	Yellow	Red	Score of Low Priority Votes
A1	SW1 - Quantity	1		1	2	1	3
A2	SW2 - Quality	5		5			0
B1	SW3 - Erosion & Sediment Control		4	4			0
B2	NR1 - Protect Soil Health	3		3			0
C1	NR2 - Manage, Enhance, Restore	1		1			0
C2	NR3 - Upland & Wetland Habitat		2	2	3	1	4
C3	GW1 - Quantity & Quality	1	3	4			0
D1	NR4 - Fish Habitat	1	1	2	5	1	6
D2	NR5 - Invasive species			0		10	10
E1	GW2 - Protecting GW		1	1	2		2

Table 1: Draft Issue Statements, Desired Future Conditions, and Goals for Each Issue Statement (as of 11/26/19)

Steering Committee Meeting Priority	Resource Category	Resource Concern	Issue Statement	Desired Future Condition	DRAFT 10-Year Plan Goal <i>(Please note that the actual measure for these goals is not yet determined. Draft goal statements are a first step in developing improvement targets and restoration strategies).</i>
A1	Surface Water Resources	Surface Water Quantity 1 blue 2 yellow 1 red	Landscape and channel alterations have caused adverse impacts to hydrology such as localized flooding. There is a risk of increased flooding due to loss of wetlands and this risk may be compounded due to increased rates of extreme weather events. • Yes, this is two separate issues More than "loss of wetlands"	Eliminate localized flooding during extreme weather events. • Surface water runoff is temporarily stored and released • Infrastructure is improved to prevent flooding • Better utilize existing lands for flood retention Consider downstream impact beyond watershed boundary	1) Reduce the frequency and intensity of flooding by X%. • Is a percent reduction realistic? • Identify major issues that cause flooding 2) Establish water storage • Keep and identify new opportunities o Within drainage systems • 2a: create floodplains o Purchase/no-build in floodplain 3) Education
A2	Surface Water Resources	Surface Water Quality 5 Green	Lakes and streams are threatened or impaired due to excess pollution including nutrients and sediment and bacteria. These excessive pollutants can cause eutrophication, impact aquatic life, and decrease recreational use opportunities. What role does altered hydrology play with this issue?	All lakes and streams meet or exceeds MPCA standards for aquatic life and recreational use. • Categorize different lakes and streams (classes and designated uses) Prioritize basins for improvement so the task is realistic	Lakes: 1) 50% reduction of internal phosphorus loading. • 1A: x90 external watershed P loads • Adopt new technologies to reduce P loading to SW • Store more water on the landscape to reduce pollutants 2) Increase lake Trophic Status Index (TSI) values by X%. 3) Decrease rough fish population/abundance by X lbs./acre 4) Education Streams: 1) Reduce E.coli source loading by X%. • 100% 2) Reduce sediment, and nutrient loading by X%. 3) Reduce TSS concentration by X%. 4) Improve DO conditions (flux and minimums) by X%. 5) What about aquatic life? Fish and bugs
B1	Surface Water Resources	Erosion and Sediment Control -4 blue	1) Increased and accelerated runoff have caused elevated or fluctuating water levels which result in shoreland and streambank erosion. Increased erosion and sedimentation issues in waterbodies is the result of a lack of vegetation on streambanks and shoreland areas as well as land management practices. 2) These impacts may be compounded due to increased rates of extreme weather events. Clarify—does this include upland, bluff, etc.? in addition to "lack of vegetation"—there are others	Excessive erosion and sedimentation in all land uses is controlled. Consider adding reconnecting floodplains in high priority areas Shoreland ordinances are effectively administered to protect the shoreline Drainage projects need to address impacts	1) Reduce streambank erosion by X%. a. Is this cost effective? b. Identify areas where this would make the most sense 2) Improve soil health conditions by educating landowners. a. Incentives & landowner awareness b. Most important activity 3) Reduce TSS concentrations in streams by X (%). a. Limit ditch cleanouts b. Implement BMP in drainage projects 4) Reduce loading (volume, TSS, TP) from MS4 areas by X%. – Enforcing/increasing shoreland ordinance a. Expand storage of stormwater and meter flow 5) Fortification – protection from extreme weather 6) Wetland & floodplain ac.

Commented [PM1]: "Separate into separate issues?"

Commented [PB2]: Yes, but is it more velocity?

Commented [PB5]: Upland, bluff, etc.?

Commented [PB6]: Or use 'managed'

Commented [PB3]: Not just lack but what type of vegetation and geomorphology

Commented [PB4]: More than one idea here. This should be 2 statements

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B2	Natural Resources	Protect Soil Health Identify & Encourage S.H. practices -3 green	Degraded soil conditions have resulted in erosion across the landscape and sedimentation in surface waters.	Improved soil health no longer causes erosion and sedimentation & <u>loss of nutrients and water in the soil column.</u> <ul style="list-style-type: none"> • Healthy crops • Future generations depend on healthy soils • New Markets for alternative crops 	1) Increase the number of soil health practices on agricultural land by X80% and/or X # of acres. <ul style="list-style-type: none"> a. Incentives that LOs are willing to implement- get buy in up front b. \$ 2) Better understand current soil health conditions in the watersheds. <ul style="list-style-type: none"> a. Do landowners even know there's a problem? b. Inform landowner of the benefits associated with healthy soil c. Information & Education to farmers of value of soil health (\$, Environmental Benefits, Demonstration) 3) Incentivize best management practices (carrot vs. stick) 4) Active Soil Health Team <ul style="list-style-type: none"> a. Landowners to teach landowners b. Establish who will be involved (SWCD, NRCS, AG Businesses, etc.)
C1	Natural Resources	Manage, Enhance, and Restore Habitat / Preserve Sites of High Ecological Value -1 green	Land alteration and altered hydrology have reduced, degraded, and removed significant portions of native habitat. The few remaining resources with high ecological value are at risk of degradation. <ul style="list-style-type: none"> • Does this include public & private? & existing easements? • Do we consider these together or separate? 	Significant portions of native habitat have been restored. The few remaining resources of high ecological value are protected. <ul style="list-style-type: none"> • Have a good sense of the value of these places 	1) All (100%) outstanding, high, and moderate biologically significant areas are protected. <ul style="list-style-type: none"> a. Desired but realistic? b. Identify what exists & where work still needs to be done 2) Restore X% and /or X # of acres of wetland, upland, and aquatic habitat. <ul style="list-style-type: none"> a. Acquire targeted parcels to improve water quality 3) Adequate resources to maintain current protected resources
C2	Natural Resources	Upland and Wetland Habitat -2 blue -3 yellow -1 red	Intensifying Intensified land use has resulted in reduced upland and wetland habitat, quality, and abundance. Areas of the watershed have more easements so this statement may not reflect entire watershed	High quality Existing upland and wetland habitat are <u>are of high quality and will be</u> protected. Upland acres are increasing (CRP/CREP) are we incorporating this? Consider sustainability w/ desired conditions Tile water is treated onsite before release	1) Restore X% and /or X # of acres of wetland, upland, and aquatic habitat. <ul style="list-style-type: none"> a. Include what's existing and maintain b. Add more wetland restorations to treat the water c. Acquire targeted parcels for restoration—water quality
D1	Natural Resources	Fish Habitat -1 green -1 blue -5 yellow	Native fish populations are threatened by a lack of habitat, poor biological quality, channelized streams and poor water quality <u>due to high sediment loading and algal blooms.</u> Is this limiting sources of impacts to healthy fish habitat?	Fish habitat fully supports <u>native fish communities.</u>	1) Improve MIBI/FIBI by X%. 2) Decrease rough fish population/abundance by X lbs./acre <ul style="list-style-type: none"> a. Add fish barriers where they are practical 3) Vegetation <ul style="list-style-type: none"> a. Re-establish native aquatic plants in basins

Commented [PB9]: Do we have an inventory of existing that need protecting? GOAL (10yr plan)

Commented [PB7]: This is to existing (even though few)

Commented [PB8]: Define

Commented [PB11]: By doing what?

Commented [PB10]: This seems like we're adding acres

Commented [PB13]: Please define these

Commented [PB12]: Examples are:

Steering Committee Meeting Priority	Resource Category	Resource Concern	Issue Statement	Desired Future Condition	DRAFT 10-Year Plan Goal <i>(Please note that the actual measure for these goals is not yet determined. Draft goal statements are a first step in developing improvement targets and restoration strategies).</i>
		-1 red	Do we have good #s for native fish reproduction vs. stocked populations? Are we trying to create habitat for fish that are not really native?		
D2	Natural Resources	Invasive Species --10 red	Invasive species threaten the health and quality of upland, wetland, riparian, and aquatic ecosystems. Invasive species need to be controlled to reduce their impact.	Invasive species have been controlled and no longer impact native ecosystems. Existing forests are managed to limit establishment of invasives – buckthorn.	1) Reduce AIS by X% on X # of waterbodies. <i>(carp, vegetation, all?)</i> . a. Define what these are & why it's important b. Target specific AIS vegetation species 2) Reduce wetland/upland invasive species by X # of acres. a. Control Purple Loosestrife in road ditches and aquatic areas (\$) 3) No newly detected invasive species will become established.
E1	Ground Water Resources	Protecting Ground Water Resources 1 Blue 2 Yellow	Groundwater recharge areas (and particularly karst areas and coarse textured soils) of watershed are vulnerable and difficult to protect. <u>There is a lack of information on where vulnerable groundwater resources are and how to protect them from pollution.</u> <ul style="list-style-type: none"> Identify vulnerable areas and implement conservation measures (SW) Break out into 2 ideas 	There is an understanding of groundwater vulnerability sufficient enough to allow protection of the resources. <ul style="list-style-type: none"> Ability to quantify annual water use, county wide, all uses Define audience and groundwater use 	Understanding use better and culminating efforts 1) Complete groundwater vulnerability study to expand knowledge. <ul style="list-style-type: none"> This needs more detail to understand what you want as an outcome, such as a plan Quantify water use by category 1a: conduct groundwater monitoring and modeling establish Ag irrigation; where irrigation is needed 2) Protect known highly vulnerable areas by x%. <ul style="list-style-type: none"> BMP implementation ? Ag irrigation: where irrigation is needed 3) Well Management <ul style="list-style-type: none"> Sealing wells, well inventory Well construction/maintenance 4) Enhance/Collaborate with existing well head protection plans
C3	Ground Water Resources	Drinking Water and Groundwater Quality and Quantity 1 green 3 blue	Groundwater and drinking water supplies are threatened by human actions <u>(and non-compliant septic systems)</u> as well as naturally occurring contaminants. <u>There may be areas that have low groundwater volume which could be impacted by high capacity wells.</u> <ul style="list-style-type: none"> Add additional issue i.e. nutrients, manure, etc. Define issues better, 2 separate issues 	To have sustainable, drinkable groundwater. <ul style="list-style-type: none"> Adopt new technologies for GW management Implement existing programs, expand the scope, new technologies 	1) Maintain aquifer withdrawal rates over the 10-year planning period by encouraging conservation while supporting growth <ul style="list-style-type: none"> Define what sustainable withdrawal is Incentives for conservation Lower per capita use rate 2) Reduce non-naturally occurring ammonia in groundwater by X% <u>(90% is the goal for the City of Albert Lea).</u> <ul style="list-style-type: none"> What about other contaminants? o Arsenic o NO3 3) Reduce failing and non-compliant septic systems by X% <ul style="list-style-type: none"> 100% SSTS ordinance, update if needed? 5) Improve X% of feedlots; feedlot compliance rates by X% <ul style="list-style-type: none"> Water appropriation permits Feedlot ordinance review and update if needed Think outside of the farm -> land application

Commented [PB14]: Is this achievable?

Commented [PM16]: "Public and private groundwater drinking H2O?"

Commented [PM15]: "Two separate issues?"

Commented [PM17]: "Seems strange to draw this one out."

Commented [PM18]: "Remove?"

Commented [PM19]: "Remove From final draft"