

RUM RIVER 1W1P MEMORANDUM

Date: December 9, 2019

To: Rum River 1W1P Technical Committee

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

RE: Draft measurable goals with comments and suggested edits

This memorandum presents the draft issue statements, desired future conditions, and the 10-year plan goal statements for each resource issue. The draft goals statements were developed at the November 6, 2019 Technical Committee meeting. They are being presented here with comments and recommendations for your consideration and refinement at the December 18, 2019 meeting.

Table 1: Draft Issue Statements, Desired Future Conditions, and Goals for Each Issue Statement (as of 12/9/19)

Issue Statement Number	Resource Category	Resource Concern	Issue Statement	Desired Future Condition	10-Year Plan Goal
SW1	Surface Water	Surface water rate and flow, quantity, flooding.	The increased and accelerated runoff due to land management and stormwater and drainage systems has caused flooding, streambank erosion, and low base flow which affects aquatic habitat. Additionally, there is a concern regarding water level management, the loss of water storage, and lack of rate control that has exacerbated these impacts. This risk may be compounded due to increased frequency and intensity of extreme weather events.	- Water rate and volume have not increased on average	- (Urban) No increase in rate and volume for new development - (Urban) Retrofit for storage in areas that are prone to flooding or at increased risk of flooding - (Rural) Increase water storage by X acre/feet proportionate to water rate and volume (due to climate change)
SW2	Surface Water	Surface water quality.	The lakes and streams are threatened or impaired due to excess pollution including E.coli, nutrients, and sediment. These excess pollutants can cause low oxygen and eutrophication, impact aquatic life and recreational use opportunities, and degrade downstream resources	- Lakes and streams are better than 5% of standard	- The number of impaired water bodies are decreased by __%, or delist 5 water bodies (delisting is an administrative function of MPCA/EPA; suggest 'meet water quality standards' instead
SW3	Surface Water	Surface water protection.	There are many high-quality water resources in the Rum River watershed that are threatened by changing land use, altered hydrology, and pollution. Protecting these resources, including cisco lakes, wild rice lakes, the Wild and Scenic Rum River, and others from the threat of degradation is of primary concern.	- A core of habitat around every water body (buffer, scenic river...)	- 5% nutrient reduction to the Rum River (this doesn't really address the issue and is more appropriate for SW2. SW3 is about protection and should include permanent protection such as easements or fee-acquisition or forest management plans as well as regulatory/land use tools); suggest a goal such as "subwatersheds with high quality water will achieve 25% protection status" or "loading into high water quality resources will be reduced by XX%" - No net decrease loss in water quality
GW1	Groundwater	Groundwater and drinking water quality.	Groundwater and drinking water supply are impacted by human actions, including manure and fertilizer application, use of sodium and chlorides, land management, and septic systems.	- No contaminants/no treatment needed	- Increase knowledge of where contaminants exist by _____ (is this a date? Geographical area? # of people?) - Decrease contaminants by _____ is this a percent? (not sure how this can be measured – maybe widgets; not sure about monitoring) - (contaminants include chlorides, nitrate, bacteria, pesticides)
GW2	Groundwater	Groundwater availability and quantity.	There is a significant increasing groundwater withdrawal trend resulting from expanding communities, agricultural irrigation, and non-crop irrigation. In addition to this increased demand on drinking water sources, there is also concern about the loss of recharge areas and water retention.	- Withdrawals = recharge (sustainable rate)	- Determine how much water is available for consumption (these two goals together = "Develop a groundwater budget" - Quantify amount of water being consumed in watershed

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GW3	Groundwater	Knowledge and data regarding groundwater.	There is not enough awareness or understanding of groundwater-surface water interaction and the extent to which land management decisions impact groundwater quality and quantity. More information is needed to identify and target vulnerable areas in protecting groundwater resources from pollution.	<ul style="list-style-type: none"> - Know the spectrum of vulnerabilities of groundwater-surface water interaction throughout the entire watershed 	<ul style="list-style-type: none"> - Increase <u>decision-makers and technical staff</u> knowledge of vulnerabilities of groundwater-surface water interaction (define spectrum of vulnerabilities) with decision-makers and technical staff - Every citizen understands their impact on groundwater (this reads like a DFC) - Increase (find out) who understands, and what they know
NR1	Natural Resources	Degraded fish habitat.	Fish habitat and fisheries are threatened by poor water quality resulting from increasing runoff, pollutant loads, and sedimentation. Riparian areas lack vegetation and habitat features there are barriers to fish passage.	<ul style="list-style-type: none"> - A balanced amount of population growth and habitat growth 	<ul style="list-style-type: none"> - Identify, protect, and restore critical spawning areas in the upper Rum River watershed - Correcting (?) <u>removing?</u> fish passage barriers in watershed by x % (or another variable)
NR2	Natural Resources	Invasive species.	Invasive species threaten the health and quality of upland, wetland, riparian, and aquatic ecosystems and need to be prevented and controlled and their impacts mitigated.	<ul style="list-style-type: none"> - Minimize by x% OR no new infestations 	<ul style="list-style-type: none"> - Reduction of current noxious invasive weed populations (<u>what about carp? What about insects like EAB?</u>)
NR3	Natural Resources	Habitat fragmentation and quality.	Existing habitat areas are at risk of being reduced in size and quality due to fragmentation, invasive species, and other impacts. Habitats with high ecological value, particularly those that provide habitat for rare and endangered species, should be protected. More options, guidance, and resources are needed to manage habitat for wildlife, ecosystem, watershed health, and enjoyment purposes for generations to come.	<ul style="list-style-type: none"> - All current high value sites are maintained or expanded 10 years, 20 years from now 	<ul style="list-style-type: none"> - Define, identify, and rank all high value areas. Maintain or increase acreage <u>and quality</u> - All counties update County Comp Plans <u>and associated land use ordinances</u> to reflect protections goals outlined in 1W1P
NR4	Natural Resources	Land use impacts to habitat.	Changes to upland habitats through intensifying land use and resulting pollution from urban, agricultural, and industrial uses negatively impact water quality and habitat. Wetlands, forests, and other ecosystems that can protect water quality should be managed, enhanced, and restored.	<ul style="list-style-type: none"> - A balanced amount of population growth and habitat growth - No net loss. Ideally a net increase of upland and wetland habitat 	<ul style="list-style-type: none"> - Increase wetlands and wetland banks (<u>banks are part of a regulatory program, may want to leave this more open</u>) within central region by 5% in 10 years - All counties update County Comp Plans <u>and associated land use ordinances</u> to reflect protections goals outlined in 1W1P