

Cannon River 1W1P

Technical Advisory Group

Meeting #5 Notes

February 21, 2018

9:00am – 12:30 pm

Rice County Government Center
320 Third St NW, Faribault, MN 55021

Technical Advisory Group: Cole Johnson (*City of Northfield*), Spencer Herbert (*MDA*), Shaina Keseley (*BWSR*), Melissa King (*City of Faribault*), Todd Piepho (*DNR*), Kristi Pursell (*CRWP*), Emily Resseger (*Met Council*), Justin Watkins (*MPCA*)

Planning Work Group: Brad Becker (*Dakota County*), Brad Behrens (*Rice County*), Ashley Gallagher (*Dakota SWCD*), Eric Gulbransen (*Steele SWCD*), Beau Kennedy (*Goodhue SWCD*), Josh Mankowski (*LeSueur County*), Steve Pahs (*Rice SWCD*), Glen Roberson (*Goodhue SWCD*), Michael Schultz (*LeSueur SWCD*), Brian Watson (*Dakota SWCD*).

Advisory Staff: Camilla Correll (EOR), Meghan Funke (EOR), Jason Naber (EOR), Jenny Mocol-Johnson (BWSR)

❖ Implementation chart

- Next step in the planning process will be the implementation plan. EOR would like to get a general sense of when people feel like activities items should be addressed. A chart was passed out for people to fill out during the meeting and hand in. The three columns of 2019-2022, 2022-2024 and 2025-2028 will give EOR a general sense of where to start placing items, and to help the group visualize when goals will be addressed over the 10-year plan so not all goals are addressed right at the start or at the end of the 10-year plan. There was a question about why the years were broken down this way. The response was that this is just a starting point for developing the implementation schedule, eventually the schedule will be defined 1 year at a time.

❖ Revised Maps

- Maps for Surface Water and Groundwater Priority areas were reviewed. Many thought the maps provided clarification and were a great addition. There was a question about why the shape of the groundwater map stretched down around Owatonna. The response was that this was based on the pollution sensitivity data from MDH, particularly based on nitrate results.

❖ Revised Measurable Goals for Resource Concerns

➤ Protection Lakes

- A reference to other related goals was added to the groundwater-dependent lakes goal. Cross references have been or will be added to other goals as needed.

➤ Impaired Lakes

- Sprague was removed as it does not have the necessary data in the WRAPS to assign goals at this point
- There was discussion on Goal 1: "Achieve 50% of the watershed portion of the phosphorus load reduction goals." We will know phosphorus budget by the end of the year from UMN study. There is some concern using this goal without having a Lake Management Plan complete and the group prefers to have the Goal reference the recommendations from the Lake Management Plans instead.
- MPCA has some text clarifications but will coordinate those outside of the TAG meeting.

➤ Impaired Streams

- Added the word 'pollutant' because the stream stressor issue assigned to Tier 2 is primarily based on non-pollutant stressors, such as habitat.
- Layers were mapped to select for streams with multiple benefits. The map was reviewed. Layers used include Aquatic Life impaired streams, top 25% TN, top 25% TP and groundwater priority area. Layering resulted in selection of six streams. People liked this method and the results.

- Goal 1 of “10% reduction in the number of TSS samples exceeding the water quality standard....” Lead to a discussion on monitoring. There is monitoring but not every year. MPCA will monitor on their 10 year cycle, however timing is not ideal as it was completed in 2011 and will start again in 2021. Some think it needs to be in our Plan that we create a watershed wide monitoring plan. We need baseline data if not using the 2011 data, however the MPCA believes that there are good baselines established. There was a question as to whether the Goal for TSS is base or storm flow. Response was that it would be best if it is a mix, and flow conditions will be clarified in Goal.
- The Desired Future Condition reference to baseline should be removed, or it should reference WRAPS.
- The Goal of “...no nitrate samples exceeding the water quality standard...” may or may not be obtainable in a ten year timeframe. MPCA will talk with MGS to see what a realistic goal may be.
- **Non-Pollutant Stream Stressors (Tier 2)**
 - Goals for Tier 2 priorities will be added if already developed or easily accessible, but less time will be spent on Tier 2 Goals.
- **Monitoring Data (Tier 2)**
 - Monitoring for Tier 1 resources will remain in Tier 1 and will be in the implementation plan.
 - This feels like a very large goal right now, but may become more defined as we begin to implement the Plan over the next 10 years.
 - Discussion on whether developing a plan for watershed-wide monitoring could become a Tier 1 item.
 - General comment for all Tier 2 priorities is to make goals more general. Group felt it was odd to have some very specific Tier 2 goals while some were not identified at all.
- **Wetland Storage**
 - Flood retention was the most highly rated function of wetlands for this plan.
 - Numbers need to be added to the goal such as percentage gain or ac-ft storage. This goal overlaps with development goals and needs to be referenced. The city studies do not give the numbers needed, to get certain numbers a hydrologic model would need to be completed. This may need to be an implementation item. For now we can look at pre-settlement layers and compare to post in order to create a number. The group would support this with the use of a percentage goal. There was also discussion on using USGS flow, but this is more complicated and was less supported.
 - Question on where the retention benefits of ponds and channel storage fits. Response is that they are not under this priority but depending upon the item they are under drainage or development.
 - Question on measurability of goals and if BWSR would support capacity based goals. Response is that yes there may be some goals that are based on capacity to implement in the 10 year timeframe. More discussion on wetland storage goals and using number of projects was an idea. BWSR would prefer an acre goal over a number of projects goal.
 - Hydrologic assessment should be added as its own goal.
 - Question on where the other benefits of wetlands are that seem to be overlooked in this goal. These were Tier 2 priorities and are currently under Wetland Services.
 - Discussion on priority areas and if this goal could focus only on the straight river priority area. Group felt that it should remain the straight river and the lakes region priority areas.
 - Title of the goal should be changed to ‘Wetland Restoration’.
 - The issue statement should be revised to incorporate ‘restoration’.
 - The Desired Future Condition could also include ‘multiple benefits’.
 - Question on if HSPF has any storage scenarios. Response is that the Cannon does not have this scenario but some scenarios have a storage aspect to them. Other information sources may be the BMP spreadsheet which quantifies suitable acres or the GSSHA model might have some goals.

➤ **Wetland Services (Tier 2)**

- This goal pertains to 'protecting and enhancing' existing wetlands, title and issue statement could be changed accordingly.

➤ **All Groundwater Priorities**

- Many felt this section looked good, and did not have many comments.
- There was discussion on the lack of shallow observation wells in the lakes area and within the whole watershed. This is an implementation activity.
- Add cross-references to other Goals to the Groundwater Goals.
- Question about where the implementation activity for 'tax credit' program for rewarding those in wellhead areas that implement BMPs came from. Response is that it is from an existing plan. Decision was to remove 'tax credit' from the implementation activity.

❖ **Draft Measurable Goals for Landscape Alterations**

➤ **Agricultural Runoff**

- Draft at the last TAG meeting had manure and fertilizer as a separate issue. In this draft it is part of the definition of agricultural runoff.
- Maps of the HSPF top 25% TN and top 25% TP subwatersheds were passed out as these areas are referenced in the Goals.
 - Need to add Mississippi River Direct drainage area to HSPF maps.
 - We cannot run PTMapp on entire watershed, even the top 25% is a lot, but this helps narrow down.
 - Nitrogen maps are only for surface water, not leaching, which could be confusing. Look into narrowing down nitrate implementation areas based leaching potential.
- Citations are needed in this section.
- Language of 'improper application' was not well received. Reword in Issue Statement.
- Questions on the Desired Future Conditions and why the years referenced from the Nutrient Reduction Strategy (NRS) were different. Response was that this is how the NRS is written. Follow-up question on what the baseline in the NRS is. Response is that baseline is data from mid-90s. Will be clarified in text.
- Goals will become more refined as PTMapp is run for the subwatersheds. There are BMP scenario spreadsheets from WRAPS that can be a starting point. MPCA will also work on getting the suitable acres maps used for these BMP spreadsheets in the WRAPS to visualize the spatial distribution of these areas.
- Goal 2 clarification was needed on whether it is 'local capacity' or 'implementation'. Groups response was both, so changing the 'to' to an 'and' would clarify this Goal.
- There was some discussion on implementation activities:
 - 'Prohibit winter application of manure' should be changed to 'proper'.
 - Commercial manure applicators education happening during licensing.

➤ **Soil Health**

- Issue statement language should be changed from 'Soil health has been degraded' to 'Soil health can be degraded' and overgrazing should be removed.
- Soil compaction from large equipment is an issue.
- Good citations are needed to beef up the soil health section.
- The group wanted to know if more current research on SOM and water holding capacity could be referenced. This is most referenced but could look into UMN and NRCS research. North Fork Crow (Margaret Johnson) also completed a study that may be helpful. Shaina will coordinate with North Fork Crow and the Soil Initiative.
- Implementation activities for Soil Health:

- The percentages are from WRAPS, they were estimates that were verified with local staff and seem reasonable.
- Need activities, possibly a goal related to compaction.
- Remove specific cover crop type references from activities.
- Define reduced tillage and take a closer look at 10% goal as WRAPS ranges is actually 10-50%.

➤ **Flooding of Communities**

- Need Hydrology and Hydraulics (H&H) models. This could be watershed wide or targeted to drainage areas to communities. Group supports targeting H&H models using other models such as SWAT for the remaining portions of the watershed.
- Cities have some H&H with FEMA but no rate requirements.
- Idea is to set parameters on H&H models so that they can be compared across the watershed.
- Add in-channel storage.
- Discussion on complexity of stormwater management in Waseca, as a large portion of LeSueur River water is diverted into the Cannon River Watershed. This could be a potential activity to address.
- Discussion on tile drainage and the lack of inventory we have on tile. Knowing where tile lines are could be helpful. There are also many assumptions built into models based upon soils and cropping that are fairly accurate. It was suggested that an early spring aerial photography flight was a good tool for identifying tile lines.

➤ **Shoreland Management**

- Goal 1 of no net loss may be difficult. Some counties award variances and it may be a good idea to track this. Can't base goals on current political environments, better to have a true goal.
- Question as to whether this Goal only pertained to lakes. Response was yes, lakes in the priority areas.
- Discussion on whether floodplain management was missing. Decision was to address Shoreland Rules within Shoreland Management and add Floodplain Management as a Tier 2 priority.

➤ **Ordinance Development**

- Discussion on MIDS, some would like to see rate controls for non-MS4 communities for under 1 acre development as MIDS is only over 1 acre.
- Concern with the use of 'program' and would prefer to use 'process' as program has an enforcement feel to it.
- Remove Elko from list of MS4 communities.

➤ **SSTS**

- Goal 1 and 2 could be combined.
- Change Goal 3 to a percentage instead of a number of inspections per year.
- Inventory of who has authority and functionality of the program may be helpful implementation activity. There is some reporting data available through MPCA. Establishing metrics for programs would be an implementation activity that would allow for comparison across the watershed.
- Group suggested the metric Josh uses in LeSueur might be appropriate watershed wide.

➤ **Drainage System Management**

- Some data and collection tools exist, but the group would still like to see modernization of drainage records in the Plan.
- Private drainage is different and if inventorying you can't force people to share information. Some discussion on focusing on new systems and have permitting. Those that pay into systems have a right to utilize it so permit system may not be feasible. Use aerial imagery or other model assumptions to determine tile.
- Remove the word 'comprehensive' from Goal 1.

- Discussion on whether there are priority drainage systems. No current prioritization but could get to this point by choosing systems above priority lakes and streams.
- Discussion on drainage coefficient and having goal of no net increase. This is probably not feasible.
- Some implementation activities may not be feasible as they contradict ditch law and get into regulation, such as requiring downstream analysis for private connections.
- Ideas for making goals more measurable where to add number of projects per year. This is not feasible as some counties have fewer systems. A percentage based goal would be preferred.
- EOR will coordinate with staff on their priority areas as a follow-up item.
- EOR to discuss the entire drainage system section with Mike Schultz and provide a revised section in advance of March 21 meeting where this topic will be discussed with the TAG.

❖ **Next Steps**

- Next meeting will be **March 21st**, 9am at the Rice County Government Services Building.
- Water Conversations: 5-6pm Open House, 6-8pm Meeting
 - March 6th in Northfield at the Archer House
 - March 15th in Owatonna at Cabela's