

Sustainable Use of Groundwater in the Little Rock Creek Area Plan

DNR Thoughts on Common Public Comments

April 2018

DNR Hears Support and Concern from Public Reviewers

On November 7, 2018, the Minnesota Department of Natural Resources released a public review version of a groundwater management plan for the Little Rock Creek Area in central Minnesota. Public review period ended December 22. Twenty two individuals responded using the DNR-provided online questionnaire. Eight others directly submitted letters or emails to the project manager. One person called. The DNR held a meeting in Little Falls and heard input from approximately 50 interested citizens. Public review comments are highlighted below.

“The DNR recognizes the importance of groundwater to agricultural irrigators, livestock operators, small businesses, municipalities and individual families in the Little Rock Creek Area,” DNR planning project manager Mark Hauck said. “Groundwater is the source of domestic water for nearly 6,000 local residents. As the area’s economy and population continue to develop and grow, groundwater will become even more important.”

The public review version of the draft action plan lays out the steps that the DNR will be taking over the next five years to:

- Better understand the relationship between groundwater use and the ecosystems of Little Rock Creek
- Work with people from the area on ways to manage water use in the future.

The public review version states that DNR will not modify existing groundwater appropriation permits during the next five years.

Essential Messages from the Public Reviewers

DNR used an online survey to collect feedback from the public on the review version of the plan. DNR received twenty two comments through the online survey. DNR also received eight letters and/or emails sent directly to the project manager that contained comments on the public review version of the plan.

Here are the essential messages DNR received from reviewers:

- We appreciate that DNR is using good science to identify the potential sustainable use problems
- We think DNR should be more aggressive in reducing existing use and limiting new future use
- We think DNR should be more focused on water quality problems in the aquifers of the area
- We are skeptical about the sustainable use problems DNR has identified
- We don't think DNR has enough long-term data to identify sustainable use problems
- We believe the science used by DNR is inadequate and biased
- We think DNR is overemphasizing the value of Little Rock Creek as a trout stream
- We don't think DNR should be promoting a cold water fishery in Little Rock Creek using a nonnative species like brown trout
- We think DNR is focusing too heavily on farmers and not on other groundwater users

How will DNR change the plan in light of the comments?

The DNR received public comments that will result in changes to the Little Rock Creek Area Plan. These changes are mostly clarifications and corrections that do not significantly change the DNR's approach as outlined in previous drafts. Here are the highlights:

- ❖ Despite the comments to the contrary, DNR still believes there are potential sustainable use problems in the Little Rock Creek Area.
- ❖ We will move forward with data collection and analysis to verify if there are any sustainable use problems in the Area.
- ❖ We will work with local stakeholders to identify actions DNR and others should take in response to any verified sustainable use problems during the next five years.
- ❖ We will clarify that we will be using the long-term data that is available in our analysis (for example, water use data), while we collect additional data and information.
- ❖ We will describe how water measurement and analysis has changed through time.
- ❖ We will make some corrections the implementation schedule so that it matches other statements in the plan.
- ❖ We will add language about the Benton County Soil and Water Conservation District irrigation scheduling initiative.
- ❖ We will make additional changes to increase clarity of the plan, including:
 - Clarify that "The Little Rock Creek Area is home to a variety of livestock (add) operations that depend on groundwater.
 - Add the word "Delineate" to the definitions section (exhibit A).
 - Modify DNR action #4. d. to read "Increase groundwater recharge while protecting water quality."
- ❖ We will update Water Use Type and Reported Water Use figures to include recently available data.
- ❖ Explain more clearly that the current cumulative use in the Area may be increasing frequency of drought-like low flows in Little Rock Creek.
- ❖ On Page 13, Drinking Water section, add the following: "Water from Little Rock Creek flows into the Mississippi River. The cities of St. Cloud, Minneapolis and St. Paul draw water from the Mississippi River to provide drinking water to their residents."

Specific DNR thoughts on reviewer comments

The DNR heard a wide range of comments and suggestions in the written responses. Below are comments we received from the public, followed by our thoughts on the comments.

A comment from the public: The DNR has not shown proof that there is a problem.

***DNR's thoughts on the comment:** There is strong evidence that current groundwater use is having an effect on the baseflows in Little Rock Creek. However, it is not clear whether those effects are creating a negative impact on the Creek, which would violate state law.*

As described in the plan, DNR intends to collect and analyze new and existing data to determine whether total permitted groundwater use (i.e., cumulative groundwater use) is or is not having a negative impact on Little Rock Creek.

If it is verified that groundwater use is having a negative impact on Little Rock Creek, DNR will work with groundwater users and other stakeholders to decide on the best course of action. (See Strategy 4 in the plan which states that "...DNR will work with stakeholders to determine the most appropriate management actions to keep permitted water use within the sustainable diversion limit.")

A comment from the public: The plan seems to say that the DNR will be using only two years of data gathering to evaluate sustainable use. DNR should be using at least 12 years of data.

***DNR's thoughts on the comment:** It has been our practice and is our intention to continue to collect both groundwater and stream flow data throughout the implementation of the plan and beyond. We use long term data sets if they are available, many of which extend beyond 12 years. We did not communicate this very effectively in the public review version of the plan. We will clarify it in the final version.*

A comment from the public: We commend DNR for its scientifically based decision-making. Current data support DNR's concern that groundwater use in the Little Rock Creek Area may be harming ecosystems.

***DNR's thoughts on the comment:** We are committed to evaluating the effects of cumulative groundwater use on stream flow to ensure that we are not having a negative impact. Our evaluations will be open to outside experts and stakeholders for their review and comment.*

A comment from the public: Cropland irrigation uses less water than deep rooted native vegetation. If you want more water to flow into Little Rock Creek from groundwater, remove the native vegetation from the area and convert the land use to annual crops.

DNR's thoughts on the comment: Row crop landscapes often have lower annual evapotranspiration rates than deep rooted, native, perennial vegetation. The model we are using to assess groundwater use effects on Little Rock Creek has been modified to address this concern based on discussions with the project advisory team.

A comment from the public: The draft plan seems to focus on monitoring the creek and punishing the farmers in the area. Have you looked outside the "farming" community to see if the issues may lie with home owners and businesses?

DNR's thoughts on the comment: Farmers are very important groundwater users in the Little Rock Creek Area. Over 95% of the groundwater use in the Area is for crop irrigation. DNR wants individuals, communities and businesses, especially farming businesses, to keep using groundwater in a sustainable way.

A comment from the public: There are four serious water problems mentioned in the DNR plan and this plan only addresses the one under DNR responsibility. Forming a new Little Rock Creek Watershed District would be a way to coordinate stakeholders, local and state governments.

DNR's thoughts on the comment: It is possible that another governmental organization could be a valuable addition in the Little Rock Creek Area. We did not explicitly explore this possibility with our advisory team.

DNR wrote the plan to guide its own actions and remain transparent to current groundwater users and other stakeholders. We focused on those groundwater challenges in the Area for which the DNR has some management responsibility.

A comment from the public: People interested in water use in the Little Rock Creek Area should have opportunities to be engaged.

DNR's thoughts on the comment: We agree wholeheartedly. We will continue to engage individuals, communities and businesses, especially farming businesses, as we work together to ensure we are using groundwater in a sustainable way. DNR will host at least two informational meetings a year to discuss groundwater management in the Area, and we will use our website to keep people informed as we implement the plan.

A comment from the public: The DNR seems to be more concerned about trout than it is about groundwater levels.

DNR's thoughts on the comment: DNR is equally concerned about trout and groundwater levels in the Little Rock Creek Area.

It is true that DNR has a strong focus on trout fishing. Minnesotans have expressed a strong commitment to trout streams, as reflected in our laws and rules, and many anglers avidly engage in trout fishing.

Little Rock Creek is a designated trout stream. Groundwater supports the baseflow in the creek. This groundwater baseflow, in turn, supports the coldwater ecosystem, including the trout fishery.

So we are concerned about groundwater, cold water ecosystems and trout.

A comment from the public: DNR should issue a moratorium on new high-volume water appropriation permits during the five year term of the action plan.

DNR's thoughts on the comment: *We do not want to issue a moratorium on new high-volume water appropriation permits during the five year term of the action plan. Groundwater use is vital to the people and economy of the Little Rock Creek Area. We want individuals, communities and businesses to keep using groundwater, while we determine if groundwater use is causing a negative impact to Little Rock Creek.*

A comment from the public: DNR should ensure it takes into account how varying groundwater use will impact the concentration of nitrates in the ecosystem and drinking water. Not only for groundwater but for the Mississippi River, which is used for drinking water.

DNR's thoughts on the comment: *The DNR is cooperating with Minnesota Pollution Control Agency (MPCA), Minnesota Department of Health (MDH), and Minnesota Department of Agriculture (MDA) to ensure safe drinking water in the Little Rock Creek Area. MDA is taking the lead on managing nitrates from fertilizers, and MDH is taking the lead on managing nitrates in drinking water. All four agencies are working together in the Little Rock Creek Area.*

A comment from the public: DNR should not stock invasive brown trout in Little Rock Creek. Little Rock Creek should not be designated as a trout stream.

DNR's thoughts on the comment: *Brown trout are not considered an invasive species in Minnesota. The DNR re-evaluated all designated trout streams in the state in 2016 and 2017. Little Rock Creek is a unique cold water stream in Central Minnesota and remains a designated trout stream.*