

ISSUE STATEMENT #2: GROUNDWATER AVAILABILITY AND QUANTITY

There is an 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. These two trends may threaten the future groundwater balance.

DESIRED FUTURE CONDITION

Withdrawals = recharge (sustainable rate) in all aquifers even as climate changes and populations grow.

GOAL 1: Develop a sustainable groundwater budget by quantifying the amount of water being consumed in the watershed and determine how much water is available for consumption.

Measurable outcome: Policies and practices are adjusted based on the results of the developed groundwater budget.

Measure: Completion of groundwater budgets in targeted areas; Recommended policies and practices are adjusted to address the results of the groundwater budget.

Frequency of measure:

Considerations/Notes regarding analysis and assessment:

- This typically is a DNR exercise/study.

Potential measures of level of effort/activity to address goal:

Targeting implementation activities:

- There are specific areas that should have budgets developed, such as stream areas that are most effected by baseflow and lakes that are groundwater fed.

GOAL 2: Increase the number of aquifer monitoring wells to ensure any negative long-term trends are noticed.

Measurable outcome:

1. 13 groundwater monitoring wells are installed in moderate and high sensitivity DWSMA's.
2. Establish a network of 10 to 20 groundwater monitoring wells in sensitive areas of the watershed.

Measure: Progress towards completion of well installations.

Frequency of measure: Annual

Considerations/Notes regarding analysis and assessment:

1. Work with MN Dept. Health (MDH) Hydro Geologists to site and design monitoring wells. MDH hydrogeologist developed a monitoring plan for each well and MDH analyzes samples.
2. Work with MN Dept. Health (MDH) Hydro Geologists and MN DNR Hydrologists to site and design monitoring wells. State agency staff developed monitoring plan for each well and analyzes samples.

Potential measures of level of effort/activity to address goal:

1. Plan funds pay for installation of wells and well development in year 4 or 5 of plan, agency starts sampling after installed.
2. Plan funds pay for installation of wells and well development in year 4 or 5 of plan, agencies start sampling after installed.

Targeting implementation activities: