

Using the Watershed Context Report

The Watershed Context Reports provide a consistent overview of ecological and human systems in each of the 81 major watersheds in Minnesota. By reviewing this information, you may discover conditions that influence watershed health, increase or decrease sensitivity to risks, show the distribution of human infrastructure, and reveal population trends. This context will help you interpret and address health challenges facing the watershed.

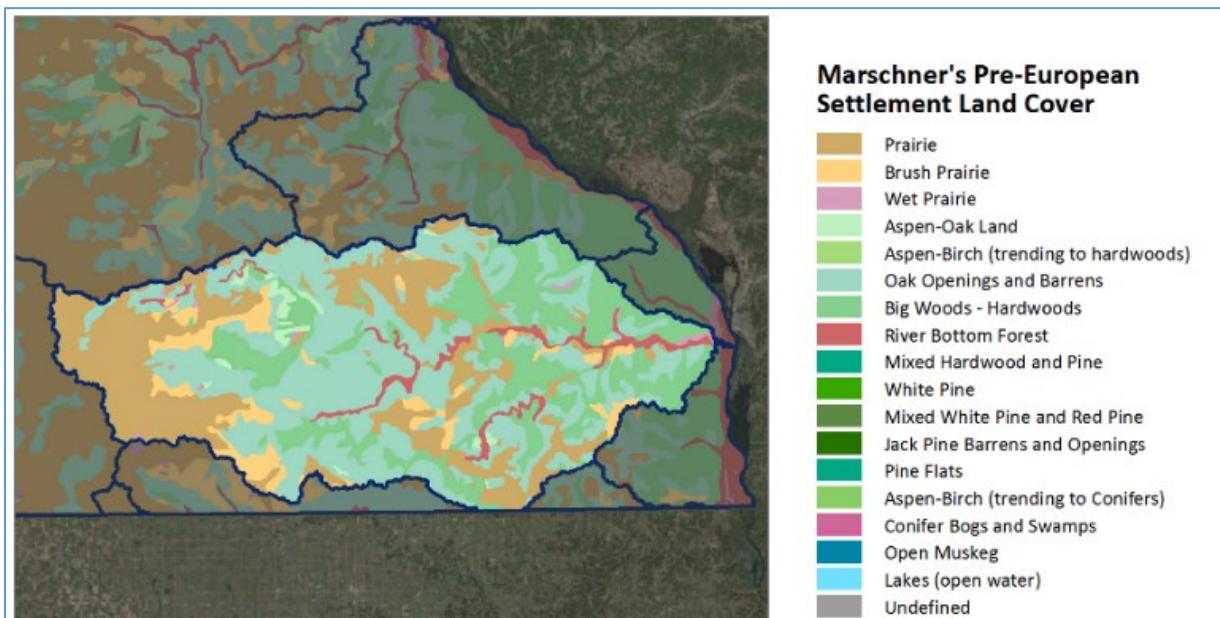
The Root River Example

Each watershed has a unique combination of physical landscape and land use history. Historic land use decisions and ecological attributes interact to create today's watershed conditions and will influence watershed health tomorrow.

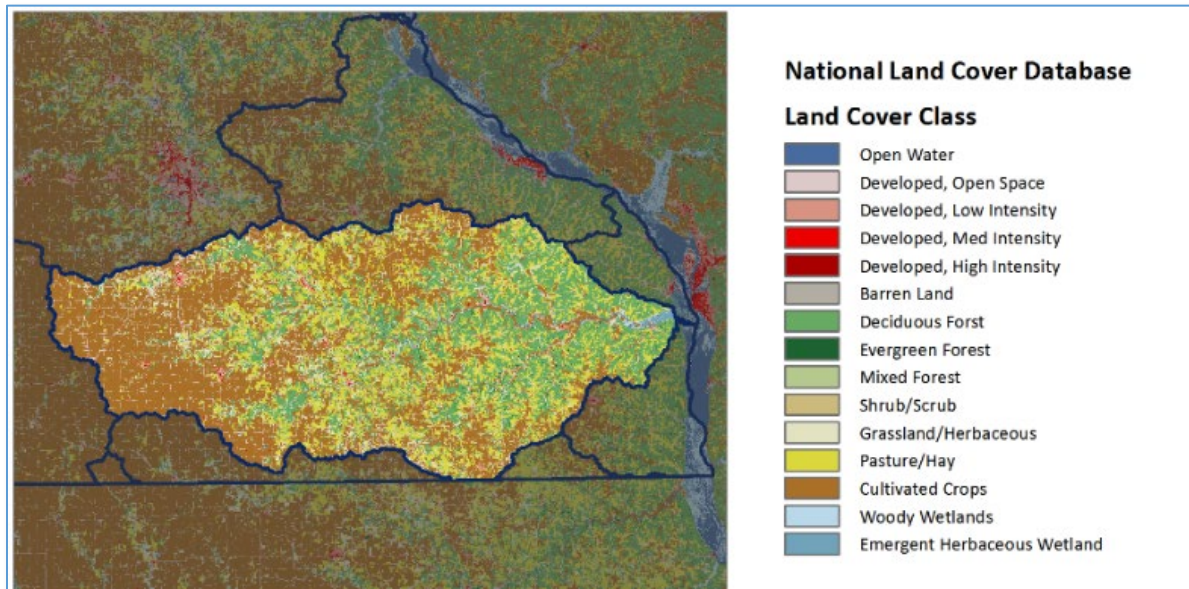
[The Root River Context Report](#) is a great example of how the shape of the landscape has influenced land use patterns throughout the watershed. Flat land with fertile soils formed under former prairies in the uplands to the west. Scenic steep slopes and bluffs contribute runoff and groundwater to cold-water trout streams that feed to the main stem Root River, and on to the Mississippi River.

Land Use: The flat headwater areas of former prairie and oak openings are now agricultural row crops and the valleys hold bluffs and forested hills, smaller farms and scattered towns.

1890's Land Cover:



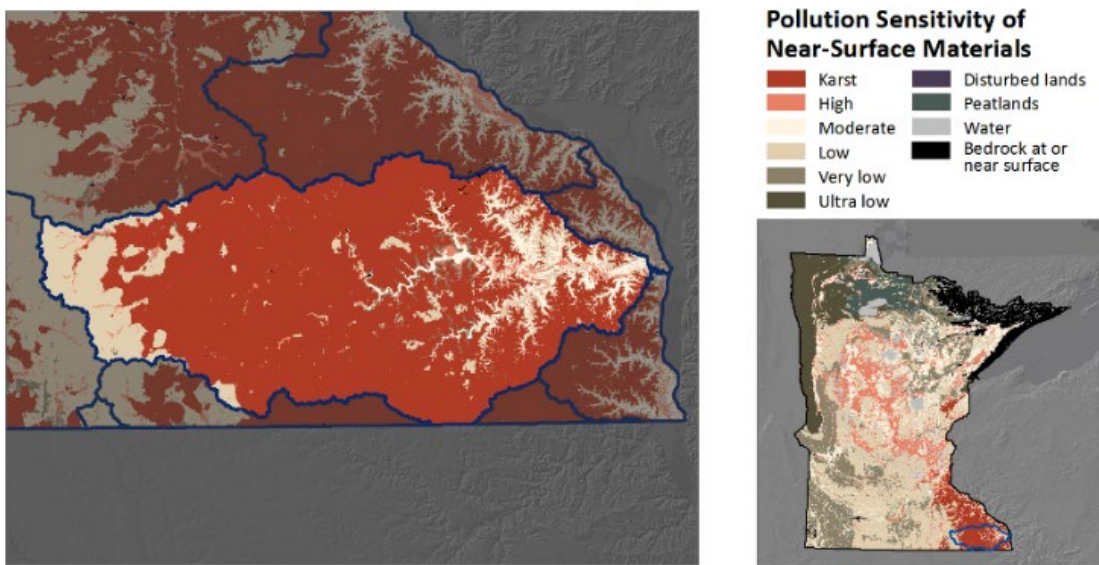
Current (2016) Land Cover:



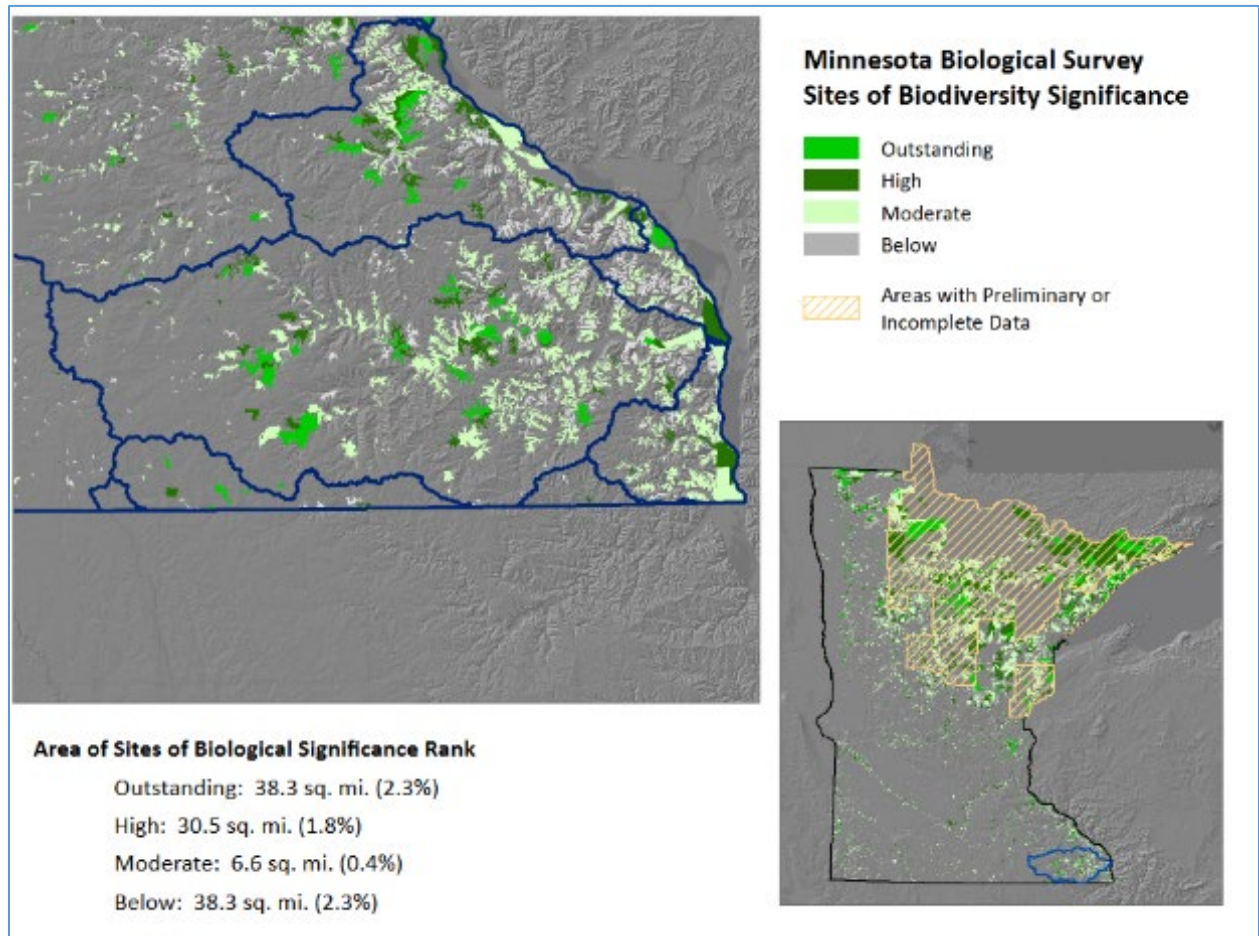
Sensitive Resources: The groundwater in the Root River Watershed is especially vulnerable due to Karst formations that include Minnesota’s highest density of sinkholes and springs. These geologic features found in limestone dominant landscape directly connect runoff from the land to groundwater reserves.

Groundwater

The Pollution Sensitivity of Near-Surface Materials delineates different rates at which contaminants may travel through the top 10 feet of the soil profile. The different rates across the state show the range in risk level for contamination to infiltrate toward groundwater resources. In some areas, the surface is so hard that it limits infiltration of water, but increases the risk that contaminants may run over the surface directly into lakes and streams.



Biodiversity: The diverse topography of steep slopes and streams hold important remnant habitats with significant biodiversity. These reserves of native habitat are particularly rare due to their adaptation to the unique landscape features found in southeastern Minnesota.



Explore Context Reports with the Interactive WHAF Map

The Watershed Context Reports are a companion document for exploring watershed health with the interactive map. The Context Report provides a general description of each topic area, but to interpret the information for your major watershed, it is necessary to explore further with the WHAF Map.

To make that process easier, we provide a [Context Report Appendix - Map Links](#) to open WHAF 2.0 with the data layers used in the Context Report. Each map opens statewide so you can view the data at that broad scale, and then navigate to your location of interest.