

Priority Issue Category	Priority Issue Statement	Priority Area	Goals
Surface Water Quality	<p>Failing septic systems can contaminate groundwater, surface waters and localized drinking water, leading to imminent threats to public health.</p>	<p>Midway, Thomson, Cloquet River, Simian Creek</p>	<ul style="list-style-type: none"> Identify and address ground and surface water quality problems stemming from inadequate wastewater treatment by supporting the enforcement of SSTS ordinances and inventory and upgrade 50% of non-compliant systems in priority areas with a high probability to impact water quality
	<p>Pollutants (e.g., nutrients, bacteria, sediment, chloride, mercury, etc.) are a source of degradation leading to the impairment of aquatic life, aquatic consumption, and aquatic recreation uses.</p>	<p>Swan River, Upper Sand River, Midway, Thomson, Cloquet River, Keene, Sucker, Stoney Brook, Simian Creek</p>	<ul style="list-style-type: none"> Complete farm projects on 50% (8 farms) of properties identified as needing enhancements (e.g., livestock exclusion, manure storage, pasture management) where there are bacteria impairments. 60% (7 of 11) of municipalities with identified bacteria impairments are implementing plans to reduce bacteria in surface waters. Manage chlorides reaching surface and ground water from road salts and water softener salts by ensuring 100% (22) of municipalities have Smart Salt Certified Staff, 50% (12) Communities achieved Level 2 Certified & education & outreach to 100% of priority landowners.
Drinking water Protection	<p>Drinking water quality and quantity from surface water and groundwater sources is threatened by land use activities and water appropriations.</p>	<p>Swan River, Upper Sand River, Midway, Thomson</p>	<ul style="list-style-type: none"> Protect groundwater quality by sealing 55 unused, unsealed wells watershed wide.

Land Use	Urbanization, development, and road expansion can impact watershed health and increase nutrient and other pollutant loadings when <u>stormwater</u> is not effectively managed.	Swan River, Upper Sand River, Midway, Thomson, Keene	<ul style="list-style-type: none"> Promote the implementation of low impact development techniques to reduce stormwater runoff volume and rate control in 50% (9) of communities.
	Water- and land-based <u>recreational activities</u> can impact the quality of lakes and streams, stress wildlife, degrade habitats, and lead to conflict between different uses.	Cloquet Headwaters	<ul style="list-style-type: none"> Educate and increase stewardship of recreational land users and landowners on their impact to natural resources in 50% of high use and high priority areas Inventory the water quality impacts of recreational use and implement projects on 5 locations of identified impacted water resources at high-use and high priority areas
	<u>Aggregate mining</u> (gravel mining) can alter natural hydrology, impacting baseflows for nearby streams and local and regional aquifers.	Cloquet River	<ul style="list-style-type: none"> Evaluate impacts of aggregate mining at 100 % of high priority sites that have the potential to impact sensitive surface and ground water resources.
Altered Hydrology	<p><u>Channel instability, excess sedimentation, and disruption of natural sediment transport and flow</u> are present throughout the Planning Area.</p> <p><i>(Causes include: channelization, improperly installed culverts, drainage activities, and land use changes)</i></p>	Swan River, Upper Sand River, Midway, Thomson, Cloquet River, Cloquet Headwaters, Keene, Sucker, Stoney Brook	<ul style="list-style-type: none"> Reconnect 56 miles (27 culverts/dams) of priority streams and tributaries to benefit aquatic life and improve water quality. Restore stream reaches that have been altered by human activity, including impounded, straightened, and incised stream reaches on 21,600 Linear Feet (29 Projects) of high priority streams and tributaries.
	Loss of water storage, altered flows, and changes in watershed boundaries are the result of land development, drainage, and legacy mining that <u>alter natural hydrologic processes</u> .	Swan River, Upper Sand River, Keene, Sucker, Stoney Brook	<ul style="list-style-type: none"> Increase X acre/feet of watershed storage by restoring wetlands in identified priority areas where they have been lost and/or altered due to ditching or development activities.

Habitat	<p>Forest fragmentation and loss can affect ecological community processes, community resilience and adaptive capacity, habitat connectivity and quality, species migration capacity, and surface water and groundwater quality.</p>	<p>Midway, Thomson, Cloquet River, Cloquet Headwaters, Sucker, Stoney Brook</p>	<ul style="list-style-type: none"> Protect & manage 15,164 acres (~380 Landowners) of private owned forests in areas that protect surface water, drinking/groundwater water quality and riparian habitat.
	<p>Aquatic, riparian, and shoreland habitats are impacted by land use changes, pollution, climate change and altered flows which can lead to degraded resources, incisement and floodplain disconnection, impeded fish passage, and fragmentation.</p>	<p>Midway, Thomson, Cloquet River, Keene, Sucker, Stoney Brook, Simian Creek</p>	<ul style="list-style-type: none"> Shoreline ordinances are updated, developed, and enforced for 100% of municipalities with priority resource shoreline areas. 16,000 linear feet of shoreline in prioritized lakes and streams have natural buffers and near shore areas are protected and restored to reduce erosion using bank stabilization, bioengineering, etc. techniques. Protect/Restore x% of 3 high priority wild rice stands/populations (water levels, disturbance, shoreland development).
	<p>Aquatic and terrestrial invasive species pose a threat to individual habitats and overall biodiversity.</p>	<p>Sucker, Stoney Brook</p>	<ul style="list-style-type: none"> Identify and manage 15 high priority sites/resources for invasive species.