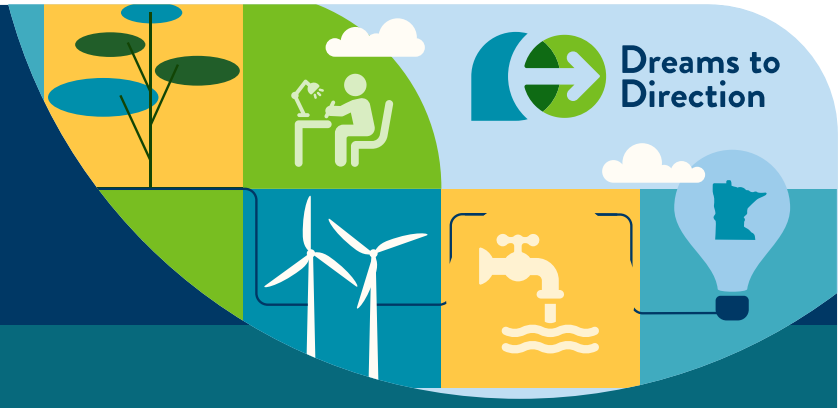
Long-Range Planning Issue Brief

Long-Term Water Quantity & Quality



From the headwaters of the Mississippi River to the shores of the Great Lakes, Minnesota's freshwater resources are globally significant—and central to the state's identity, economy, and long-term resilience. Safeguarding both water quality and quantity is essential for the future of Minnesota. Water quality refers to the health and safety of water for drinking, farming, and ecosystems, while water quantity concerns the sustainable supply of water across communities and industries. Both are under pressure. Rising nitrate levels, PFAS contamination, and other pollutants are affecting urban and rural areas alike. At the same time, some communities already face constraints on water availability that limit growth and pose long-term risks.

These quantity concerns must also be seen in the context of growing national debates around state water rights and interstate use. **A cohesive, long-term strategy for sustainably managing Minnesota's water resources is essential to ensure future generations have reliable access to safe, clean water for drinking, farming, industry, and healthy ecosystems.**

Where Are We Now?

Water is an issue of interconnection. From reimagining jurisdictional boundaries to managing all natural resources as part of a connected ecosystem, water protection in Minnesota is, and must be, complex and multi-faceted.

Decades ago, Minnesotans had the foresight to establish watershed districts and management organizations with regulatory and taxing authority to protect water resources. Building on this success, Minnesota now has an opportunity to move toward a broader, globally informed approach to regional water governance.

Water transcends political boundaries and is managed by multiple state agencies, including the Board of Water and Soil Resources (BWSR), the Environmental Quality Board (EQB), the Department of Natural Resources (DNR), Metropolitan Council, the Department of Health (MDH), the Pollution Control Agency (MPCA), and the Department of Agriculture (MDA), as well as regional and local partners. These entities work across groundwater, surface water, drinking water, wastewater, and stormwater. Continued progress must build on EQB's comprehensive long-range water resources plan, which focuses on the intersection of water and climate and includes a framework to align agencies, legislative priorities, and local government policies. There is meaningful work already underway, and a long road ahead to ensure Minnesota's water is protected for generations to come.

By the Numbers

Minnesota contains **11,842 lakes** (a lake is defined to be at least 10 acres).[1]

As of 2022, over **2,900 water bodies in Minnesota are impaired**, with urban and agricultural stormwater runoff playing a major role in water pollution.[2]

Approximately three out of every four **Minnesotans rely on groundwater for drinking water**.[3]

Roughly half of Minnesota's **83,000 stream miles have been physically altered** (e.g., ditched or channelized), which increases the speed and volume of stormwater runoff, worsens erosions, and allows more pollutants to enter water bodies unchecked.[4]

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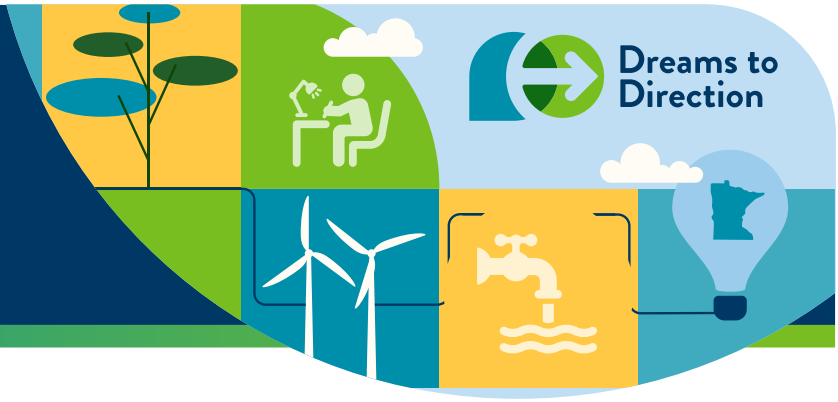

What Could Progress Look Like?

Minnesota's waters are a globally significant asset, and protecting their quantity and quality is key to a thriving future. With more than 11,000 lakes, vast groundwater reserves, and major rivers like the Mississippi, the state holds a unique responsibility and opportunity to lead in sustainable water stewardship. Minnesota also benefits from a legacy of natural abundance, innovation, and leadership in water management.

Still, growing challenges call for renewed investment and collaboration. Aging infrastructure, agricultural and industrial runoff, groundwater overuse, and climate-driven shifts in rainfall and drought patterns are putting increasing pressure on water systems. In urban and suburban areas, stormwater runoff – exacerbated by impervious surfaces and rapid drainage – contributes to flooding, river erosion, and reduced groundwater recharge. Small towns face infrastructure challenges too, especially related to water and wastewater systems.

Minnesota is well-positioned to respond. Communities are advancing innovative conservation strategies, applying best practices in irrigation and industrial reuse, and piloting smart infrastructure. Declining water use in recent years shows that meaningful progress is possible. Water use for power generation—the state's largest water use sector—has remained steady or declined due to efficiency improvements.

But future decisions must consider future conditions. Many communities rely on outdated data, even as climate models predict more frequent and severe weather. The "100-year flood" is happening more often, and Minnesota must prepare for the possibility of both drought and flooding happening at once.

These challenges offer a chance to design smarter, more resilient systems that protect people, ecosystems, and economies. By building on its strong foundation and investing in forward-looking solutions, Minnesota can secure clean, abundant water for future generations—and lead in sustainable water management.

How Can Long-Range Planning Help?

An Advisory Task Force on the Future of Minnesota's Water was recently established by the Minnesota Attorney General, who describes the council as "not about regulation, but imagination; not about pointing fingers or assigning blame, but about our best thinking for expanding what's possible for us as stewards of Minnesota's water." The Long-Range Planning (LRP) team's work would need to dovetail with all existing state water efforts, including the State Water Plan developed by the Environmental Quality Board. The plan outlines five goal areas that will guide future work: (1) ensure drinking water is safe and sufficient, (2) manage landscapes to protect and improve water quality, (3) manage built environments and infrastructure for greater resiliency, (4) manage landscape to hold water and reduce runoff, and (5) promote resiliency in quality of life. The LRP team could fill gaps in long-term visioning, data analysis, Tribal Nations collaboration, interagency coordination, and regional and global approaches to protecting Minnesota's water —building on generations of water stewardship.

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Get Involved

Join us in shaping Minnesota's future! If you have questions or want to participate, contact the Long-range Planning team at planning.mmb@state.mn.us.