

Study Summaries

White Bear Lake Area Comprehensive Plan

Study	Status	Description	Amount of water saved	Estimated cost
Study 1 – Redirect stormwater to augment White Bear Lake	In Progress	<p>Study 1 by Kimley-Horn explores redirecting water that is collected in nearby stormwater ponds to augment White Bear Lake.</p> <p>April 2025 Update: Work group members collectively agreed they do not want to move forward with studying this method further due to its lack of effectiveness. Instead, they proposed to evaluate pumping reuse water from Bald Eagle Lake, Ramsey/Washington Counties Ditch 1, Centerville Lake, and areas of Grant that are known to have excess surface water.</p> <p>July 2025 Update: Met Council presented a proposal to amend Study 1 to evaluate additional surface water sources for augmentation. The amended Study 1 includes evaluating pumping surface water from Bald Eagle Lake, Ramsey/Washington Counties Ditch 1, Centerville Lake, and areas of Grant that are known to have excess surface water. Amended Study 1 will be presented at the April 2, 2026 work group meeting.</p>	Not applicable for Study 1 since base evaluation was determined not feasible. To be determined for Amended for Study 1.	Not applicable for Study 1 since base evaluation was determined not feasible. To be determined for Amended for Study 1.
Study 2 – Convey treated surface water from St. Paul Regional Water Services	In Progress	Study 2 by SEH evaluates conveying treated surface water from either St. Paul Regional Water Services or a new regional surface water treatment plant to select White Bear Lake area communities in the north and east metro area. The results of this study will be presented at the July 16, 2026 work group meeting.	To be determined	To be determined
Study 3 – Reuse of treated wastewater for industrial and agricultural users	Completed	<p>Study 3 by SEH evaluated reusing treated wastewater from nearby Met Council interceptors for industrial and agricultural users in the White Bear Lake area.</p> <p>July 2025 Update: Due to the very minimal estimated improvement to White Bear Lake water levels (less than 0.1 feet), the work group members collectively agreed to not move forward with further studying this method and to use the project funds for other studies for now but can come back to it later.</p>	123.3 million gallons per year	Capital cost - \$296,000,000 Annual O&M cost - \$1,350,000
Study 4 – Stormwater reuse for irrigation	In Progress	Study 4 by Barr Engineering will evaluate using stormwater reuse for irrigation to reduce groundwater pumping from the acquired. The results of this study will be presented at the July 16, 2026 work group meeting.	To be determined	To be determined
Study 5 – Reuse water discharged from contaminated wells	In Progress	Study 5 by MPCA evaluates constructing multiple extraction and injection remediation wells in Oakdale, Lake Elmo, and other areas located near PFAS plumes and treating this water for municipal water use in Oakdale and Lake Elmo. The purpose of this method is to prevent the migration of PFAS to neighboring communities and private wells if Oakdale and Lake Elmo pumped significantly less	To be determined	To be determined



		groundwater from its existing municipal wells to supply its drinking water systems. The results of this study will be presented at the July 16, 2026 work group meeting.		
Study 6 – Treat wastewater and inject into the aquifer to raise groundwater elevations	In Progress	<p>Study 6 by SEH evaluated reusing treated wastewater from a Met Council interceptor and injecting it into the aquifer through injection wells or by direct lake augmentation into White Bear Lake.</p> <p>July 2025 Update: Met Council worked with the DNR to complete additional groundwater modeling analysis and sent those results to the work group for their review.</p> <p>October 2025 Update: Work group suggested additionally comparing current and projected wastewater volumes to existing water use scenarios.</p> <p>January 2026 Update: The study concluded that aquifer injection and augmentation with treated wastewater reuse is expensive with regulatory challenges and the additional need to also treat chloride with advanced treatment, but the estimated lake level improvements to White Bear Lake would be significant and especially with direct augmentation. The work group decided to keep this study open for comparing to other completed studies at the end of the project.</p>	486 to 924 million gallons per year	<p>Capital costs - \$201,200,000 to \$329,300,000</p> <p>Annual O&M costs – \$1,450,000 to \$2,360,000</p>
Study 7A – Water quality study as it relates to lake augmentation study	In Progress	<p>Study 7A by Barr Engineering evaluates potential water quality impacts to White Bear Lake and the underlying aquifer that supplies drinking water for the 14 White Bear Lake area communities if White Bear Lake was augmented using treated water from the Mississippi River and chain of lakes, which is the primary source of drinking water for Saint Paul Regional Water Services.</p> <p>July 2025 Update: New scope of work for the third and final phase of Study 7A will focus on modelling the lakes and watersheds by Barr Engineering. The results of this study will be presented at the July 16, 2026 work group meeting.</p>	To be determined	To be determined
Study 7B – Lake augmentation from the chain of lakes into White Bear Lake	In Progress	<p>Study 7B by SEH evaluates the infrastructure costs to pump and treat surface water from the chain of lakes to augment White Bear Lake. The study is using the recommended mitigation methods for the chain of lakes water from Study 7A to study the water treatment requirements and estimate the costs. The results of this study will be presented at the July 16, 2026 work group meeting.</p>	To be determined	To be determined
Study 8 – Stormwater collection and infiltration to raise groundwater elevations	Completed	<p>Study 8 examined collecting stormwater and raising groundwater elevations through infiltration of stormwater into the aquifer. This method would need to bring in significant amounts of water and from outside the watershed to be impactful.</p> <p>April 2025 Update: The work group collectively agreed not to move forward with studying this method further due to its lack of effectiveness and the high vulnerability of the aquifer with respect to non-treated stormwater being infiltrated into the aquifer.</p>	Unknown due to termination of additional study	Unknown due to termination of additional study

Study 9A – Raise outlet elevation of White Bear Lake (Initial evaluation)	Completed	<p>Study 9A by Kimley-Horn evaluated raising the outlet elevation of White Bear Lake to increase water storage in the lake and determining how it could impact flooding to property owners around and near the lake.</p> <p>July 2025 Update: Work group members collectively agreed to continue studying this method and proceed to Study 9B to study the infrastructure requirements to raise the lake outlet elevation.</p>	400 to 800 million gallons per year	Costs not evaluated for Study 9A (see Study 9B)
Study 9B – Raise outlet elevation of White Bear Lake (modeling and infrastructure evaluation)	In Progress	<p>Study 9B by Kimley-Horn evaluates potential impacts from raising the outlet elevation of White Bear Lake including impacts to infrastructure, properties, flood risk, and cost.</p> <p>October 2025 Update: Work group collectively agreed to continue studying this method and reviewing a secondary outlet option.</p> <p>January 2026 Update: Due to challenges with increasing discharge rates, it was not recommended to continue to pursue outlet modifications due to the high level of potential impacts from flooding to property owners around and near White Bear Lake. However, the work group advised Met Council and Kimley-Horn to continue studying this option by estimating the costs to purchase existing properties around and near the lake that are located within 4 feet from the flood plain. The results of this additional analysis will be presented at the April 2, 2026 work group meeting.</p>	400 to 800 million gallons per year	Full costs to be determined
Study 10 – Lawn watering restrictions (day of week and time)	In Progress	<p>Study 10 by Kimley-Horns estimates potential water savings from implementing lawn watering restrictions and enhancing existing watering restrictions based on days of the week and implementing irrigation system controllers. The results of this study will be presented at the April 2, 2026 work group meeting.</p>	To be determined	To be determined
Study 11 – Implement/require/encourage water reuse for irrigation and process water	In Progress	<p>Study 11 by Kimley-Horn evaluates reusing and treating surface water from East Vadnais Lakes for irrigation and process water in White Bear Lake, Vadnais Heights, and Gem Lake (via Vadnais Heights).]</p> <p>January 2026 Update: Additional data will be gathered from users to better inform the study and will be shared with the work group at a future meeting. The results from this study will be presented at the April 2, 2026 work group meeting.</p>	To be determined	To be determined
Study 12 – Tiered increasing block water utility rates	In Progress	<p>Study 12 by Kimley-Horn evaluates potential water savings from tiered increasing block water utility rates. The results from this study will be presented at the April 2, 2026 work group meeting.</p>	To be determined	To be determined
Study 13 – Potential water savings from alternative low input turf grasses	In Progress	<p>Study 13 by Kimley-Horn evaluate potential water savings from implementing alternative low input turf grasses that require significantly less irrigation water for the 14 White Bear Lake area communities. The results from this study will be presented at the April 2, 2026 work group meeting.</p>	To be determined	To be determined
Study 14A – White Bear Lake	Completed	<p>Study 14A by the Minnesota Department of Health (MDH) evaluated</p>	Not applicable	Not applicable



Area Groundwater Flow Pathline Analysis for PFAS		<p>and modeled groundwater flow path lines for future groundwater pumping conditions for PFAS contamination and how PFAS could travel over 50 years in the White Bear Lake area communities if select communities stopped pumping groundwater and switched to a surface water supply source.</p> <p>October 2025 Update: The MDH study determined that most areas induce minor changes to the direction of flow and areas near altered, added, or removed wells showed the greatest impact although minor. Based on the groundwater modeling results, it was determined not necessary to proceed with Study 14B to evaluate the infrastructure and estimate the costs to implement drinking water treatment for PFAS.</p>		
Study 14B – Infrastructure to Treat PFAS	Cancelled	<p>Study 14B would have evaluated the infrastructure and potential costs to treat PFAS in municipal wells that were predicted by MDH groundwater modeling to become significantly contaminated from the migration of PFAS if upgradient municipal wells stopped pumping groundwater in communities that switched to a surface water source. The results from Study 14A did not warrant the need to proceed with Study 14B.</p>	Not applicable	Not applicable
Study 15 – Serve North Oaks from Shoreview	Upcoming – April 2026	<p>Study 15 by Kimley-Horn will evaluate constructing two additional wells in Shoreview and expand the city’s existing water treatment plant capacity to serve North Oaks’ projected ultimate development with treated groundwater.</p>	To be determined	To be determined
Financial Analyses Study	In Progress	<p>The financial analyses study by Hazen and Sawyer includes developing a financial water rate model to estimate potential water utility rates to implement each of the potential solutions being evaluated by the technical consultants as an alternative funding method.</p> <p>January 2026 Update: Hazen and Sawyer presented the preliminary rate model to the work group and summarized water affordability for each of the work group member communities. Certain work group members objected to evaluating potential rate impacts to communities as an option to finance a potential solution. This topic will be discussed again at the April 2, 2026 work group meeting.</p>	Not applicable	To be determined

