



Update for September 17 survey results



Top 5 ranked potential infrastructure solutions (1 of 2)

1. Potential Solution 17: Augment White Bear Lake from East Vadnais Lake (Study 7B)

- up to 2 billion gallons per year
- surface water treated for suspended solids, aquatic invasive species, phosphorus, nitrogen, total organic carbon and manganese

2. Potential Solution 26: Augment White Bear Lake from East Vadnais Lake*

- up to 780 million gallons per year
- surface water treated for suspended solids, aquatic invasive species, phosphorus, nitrogen, total organic carbon, and manganese

3. Potential Solution 18: Augment White Bear Lake from East Vadnais Lake (Study 7B)

- up to 1 billion gallons per year
- surface water treated for suspended solids, aquatic invasive species, phosphorus, nitrogen, total organic carbon, and manganese
- a facility that is designed to be expanded up to a 2 billion gallons per year pumping and treatment capacity in the future if needed

** Reflects rankings from only eight work group members. Rankings were needed from other work group members to equally compare the solutions from the first survey.*

Top 5 ranked potential infrastructure solutions (2 of 2)

4. (tie) Potential Solution 21: Augment White Bear Lake from Saint Paul Regional Water Services (Study 7B Amendment)

- up to 2 billion gallons per year of purchased partially treated surface water
- with no additional clarifier and recarbonation/ozonation basin (low range cost estimate) or with an additional clarifier and recarbonation/ozonation basin (high range cost estimate), water booster station, and transmission main

4. (tie) Potential Solution 22: Augment White Bear Lake from Saint Paul Regional Water Services (Study 7B Amendment)

- up to 1 billion gallons per year of purchased partially treated water
- with no additional clarifier and recarbonation/ozonation basin (low range cost estimate) or with an additional clarifier and recarbonation/ozonation basin (high range cost estimate), water booster station, and transmission main
- with a pumping facility that is designed to be expanded up to a 2 billion gallons per year pumping capacity in the future if needed

Top 5 ranked potential infrastructure solutions comparison

Potential Water Infrastructure Solution	10/12 Rank	9/17 Rank	9/17 Rank (funded by others only)	10/12 Rank (weighted)
Solution 17. Augment White Bear Lake from East Vadnais Lake with up to 2 BGY	1	1	1	2
Solution 26. Augment White Bear Lake from East Vadnais Lake with up to 780 million gallons per year	2	NA	NA	4*
Solution 18: Augment White Bear Lake from East Vadnais Lake with up to 1 BGY	3	2	2	1
Solution 21: Augment White Bear Lake with up to 2 BGY partially treated water from SPRWS	4 (tie)	3 (tie)	3 (tie)	5 (tie)
Solution 22: Augment White Bear Lake with up to 1 BGY partially treated water from SPRWS	4 (tie)	3 (tie)	3 (tie)	5 (tie)

* The 3rd ranked solution for the weighted survey was #19 Augment White Bear Lake from East Vadnais Lake with up to 2 billion gallons per year (BGY) of surface water treated for suspended solids and aquatic invasive species only (Study 7B). This showed up ranked 6th on the 10/12 survey and 5th on both of the 9/17 surveys.

Rankings for potential water savings solutions

1. Potential Water Savings Solution 1: Install smart controllers on all lawn irrigation systems (day of week and time) (Study 10)
2. Potential Water Savings Solution 2: Increase tiered increasing block water utility rates (Study 12)
3. Potential Water Savings Solution 3: Alternative low input turf grasses (Study 13)
4. Replace all remaining outdated plumbing fixtures, water softeners, and appliances with high-efficiency plumbing fixtures, water softeners, and appliances.
5. Implement stormwater reuse for irrigation in existing and future development areas (Study 4)

** Rankings were the same whether funding was from a combination of sources or funded by others-only. No weighting was applied in the survey that had that as an option.*