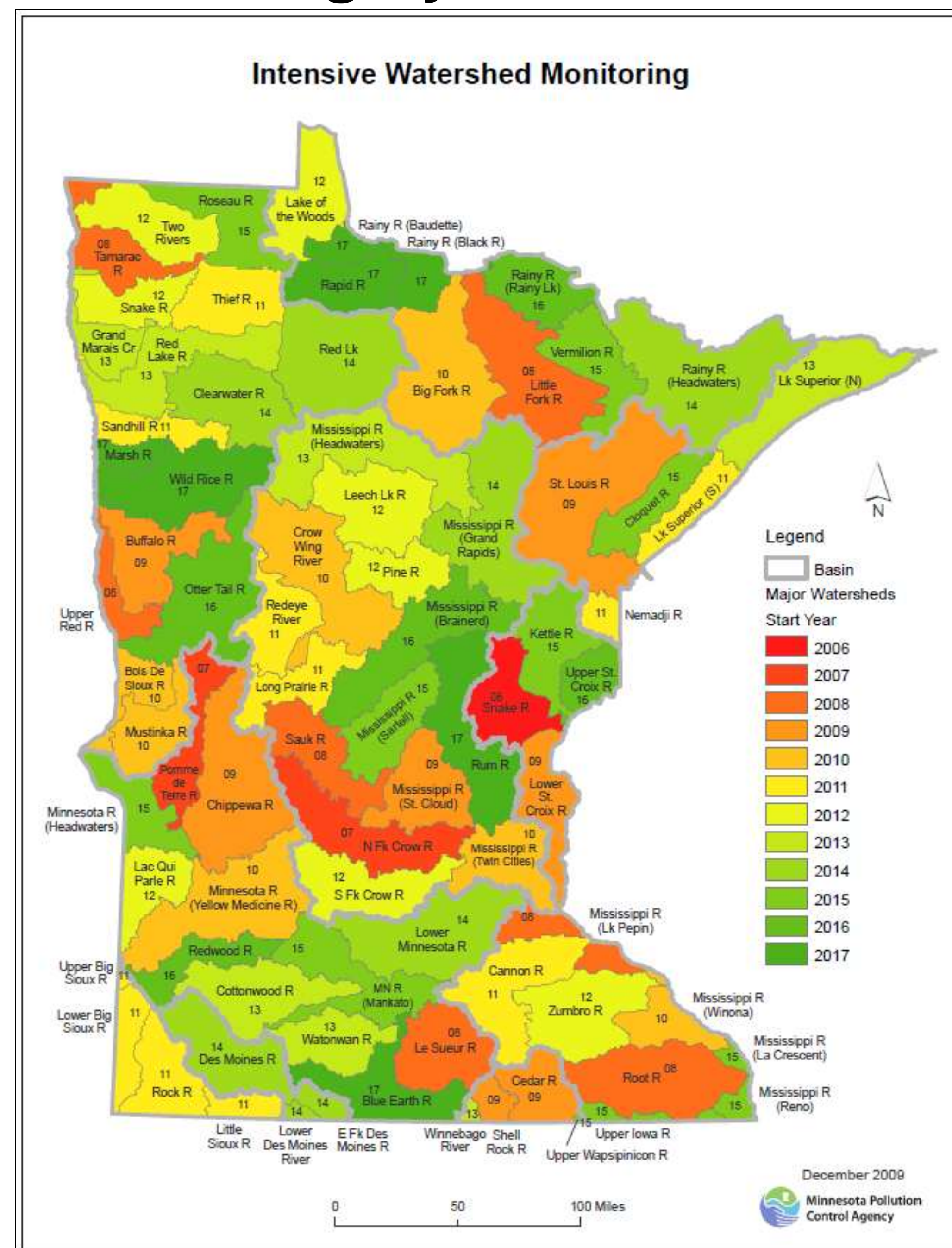


Monitoring & Assessment Results Lake Superior South Watershed

The Watershed Approach and Clean Water

- Framework for protecting & restoring Minnesota's watersheds
- Integrates resource management efforts into one plan
- Creates a predictable cycle
- Facilitates coordinated watershed management activities
- Effectively engages public & stakeholders

Intensive Watershed Monitoring by Year

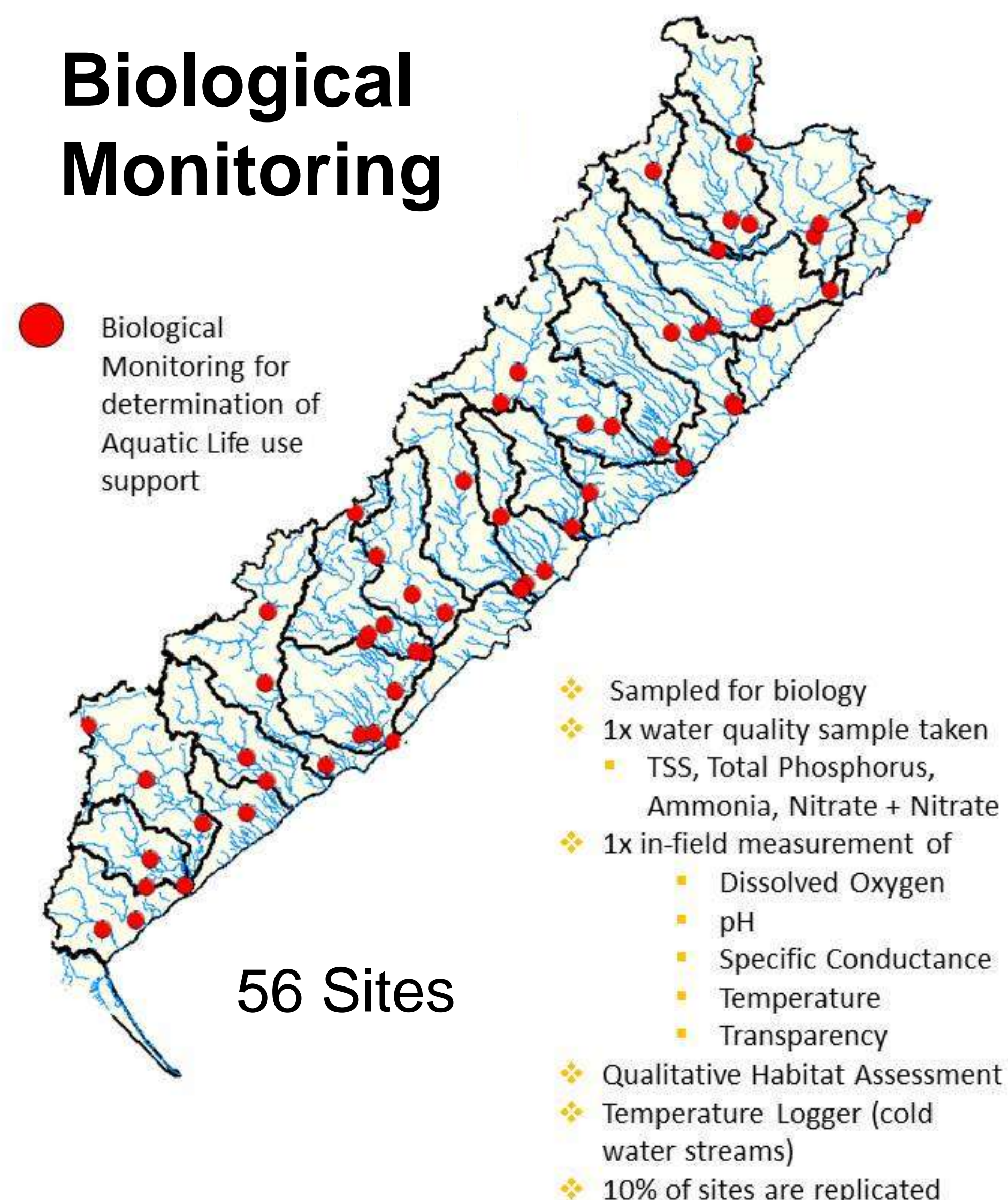


Lake Superior South Watershed

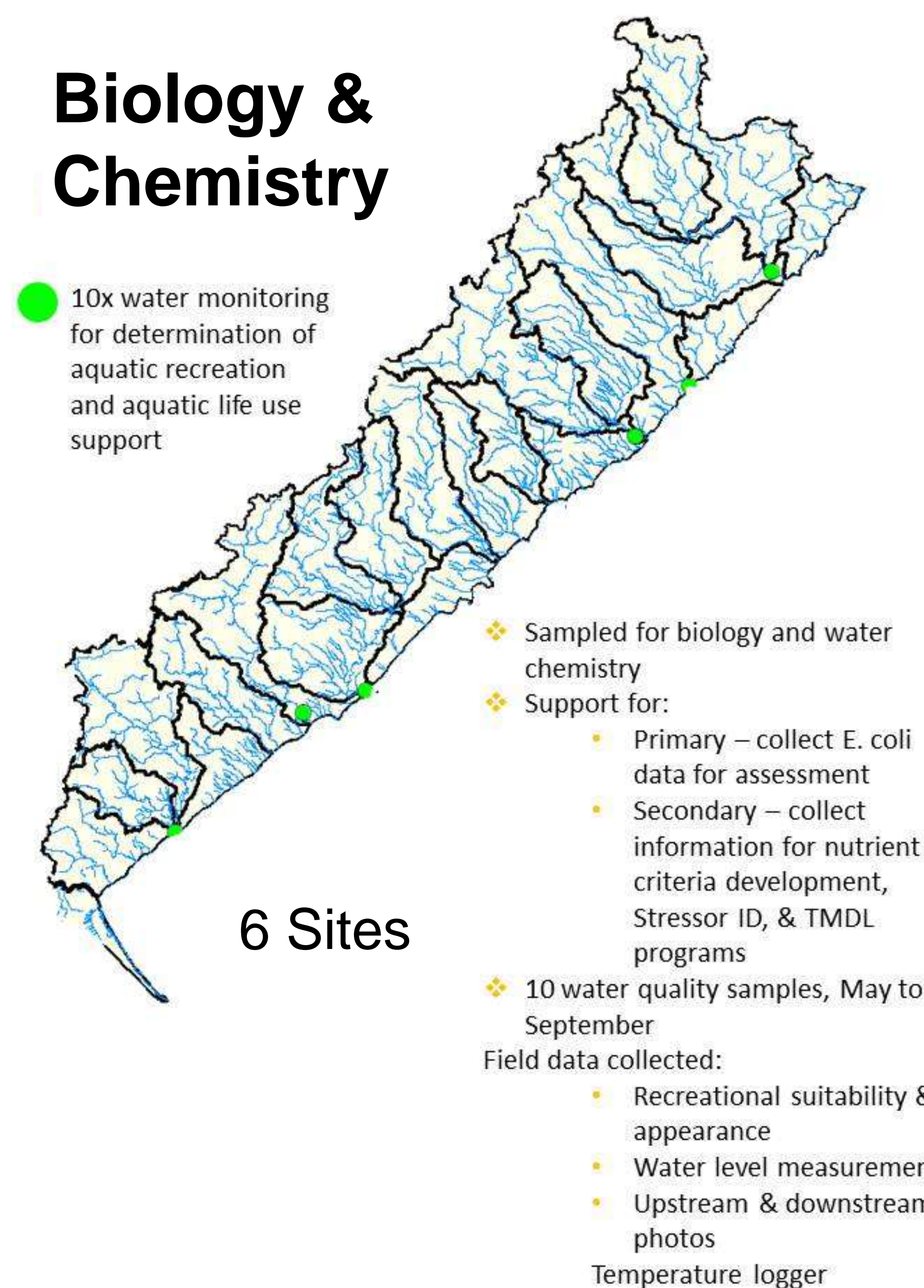
The Lake Superior South watershed encompasses approximately 625 square miles, from Duluth (Brewery Creek) to Silver Bay (Palisade Creek).

- **Major Rivers:** Beaver, Knife, Gooseberry & Lester
- **Major Lakes:** Lax, Stewart, Christianson & Highland
- **800 miles of coldwater streams (class 2A)**
- **Largest Communities:** Duluth, Two Harbors, Silver Bay & Beaver Bay

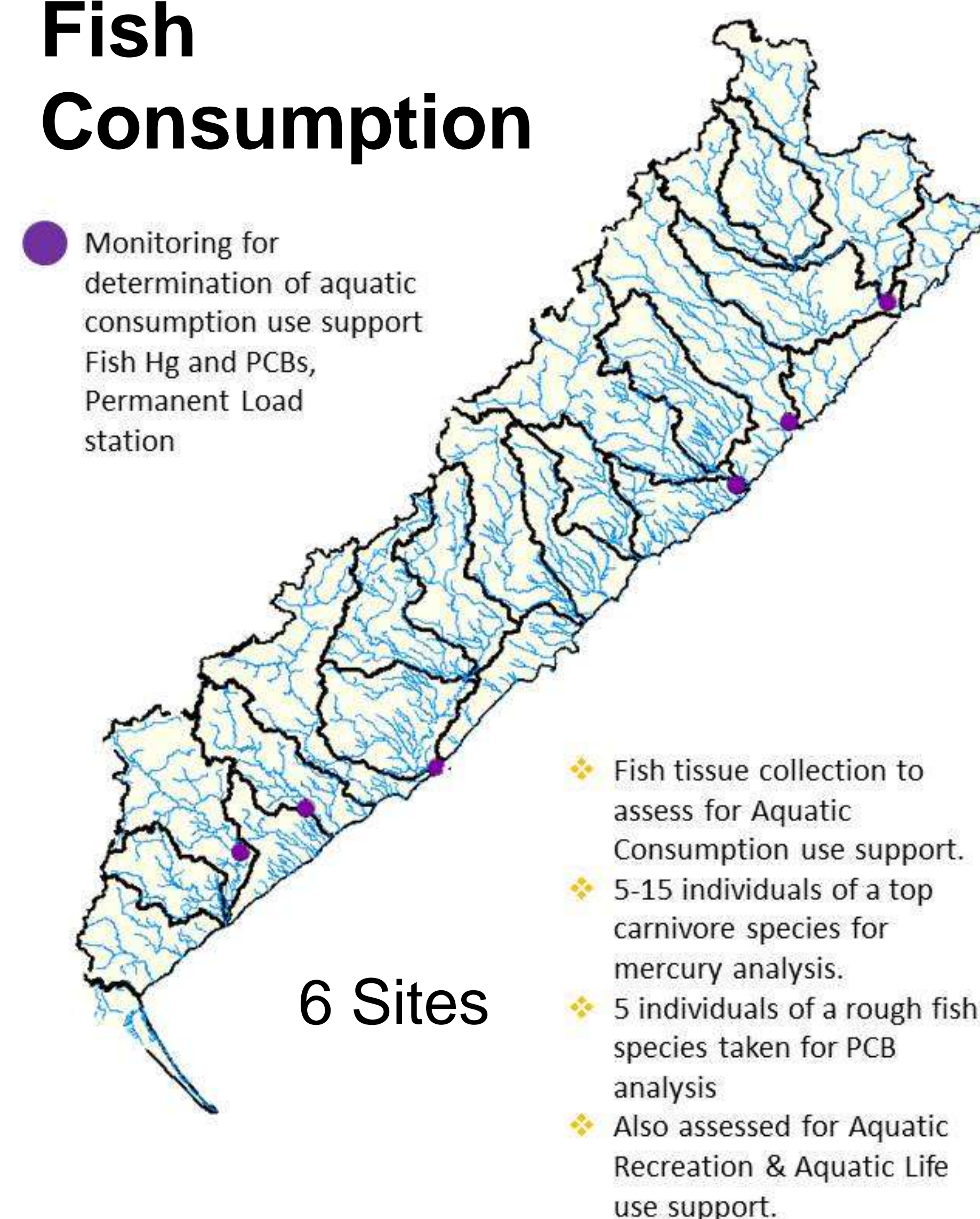
Biological Monitoring



Biology & Chemistry



Fish Consumption



Assessment Summary

- 46 Stream segments
- 6 Lakes
- 41 Beaches (LSS + LSN + SLR)

New Impairments

- 9 Stream segments
- 0 Lakes
- 5 Beaches (LSS + LSN + SLR)

Draft 2014 Impairments:

Streams	Affected Use	Pollutant/Stressor
Chester Creek	Aquatic Recreation	Escherichia coli data
Tischer Creek	Aquatic Recreation	Escherichia coli data
Amity Creek, East Branch	Aquatic Life	Turbidity
Lester River	Aquatic Consumption	Mercury in fish tissue
Lester River	Aquatic Consumption	Mercury in fish tissue
Talmadge River	Aquatic Life	Fish Bioassessments
Skunk Creek	Aquatic Recreation	Escherichia coli data
Beaver	Aquatic Life	Fish Bioassessments
Beaver, West Branch	Aquatic Life	Fish Bioassessments
Beaver, West Branch	Aquatic Life	Macroinvertebrate Bioassessments

Beaches	Affected Use	Pollutant/Stressor
Burlington Bay	Aquatic Recreation	Escherichia coli data
Leif Erickson Park	Aquatic Recreation	Escherichia coli data
Clyde Avenue (St. Louis River)	Aquatic Recreation	Escherichia coli data
20th St./Hearding Is. (St. Louis River)	Aquatic Recreation	Escherichia coli data
15th St Harbor Side (St. Louis River)	Aquatic Recreation	Escherichia coli data

Total Impairments

- 21 Stream segments
- 0 Lakes
- 5 Beaches (LSS + LSN + SLR)

Ongoing & Next Steps:

- Stressor Identification
- Civic Engagement
- HSPF Modeling
- TMDLs & WRAPS Report

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Minnesota Pollution Control Agency