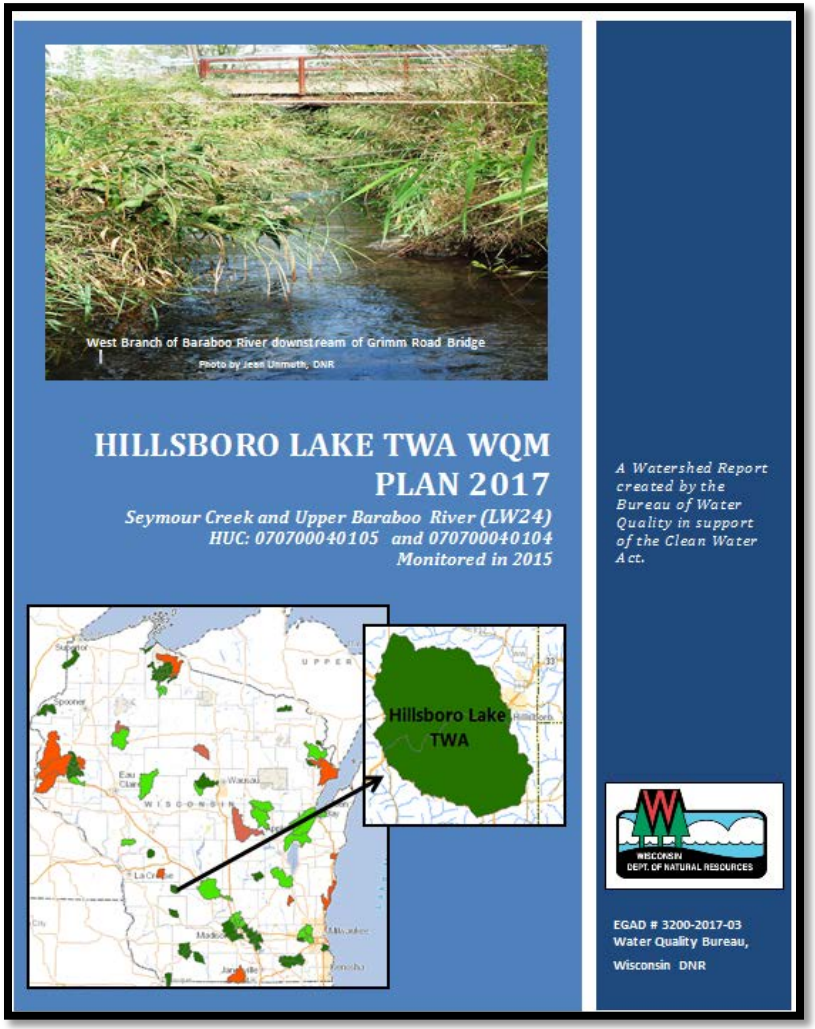
Hillsboro Lake TWA WQM Plan 2017

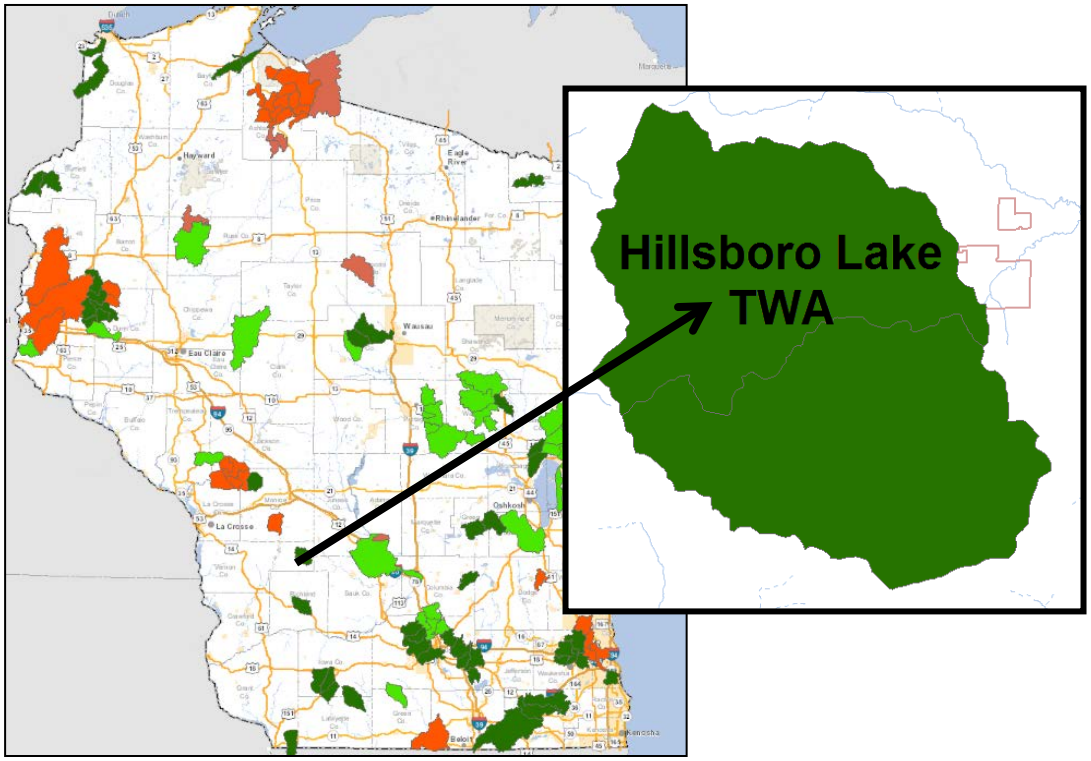
Seymour Creek and Upper Baraboo River (LW24)

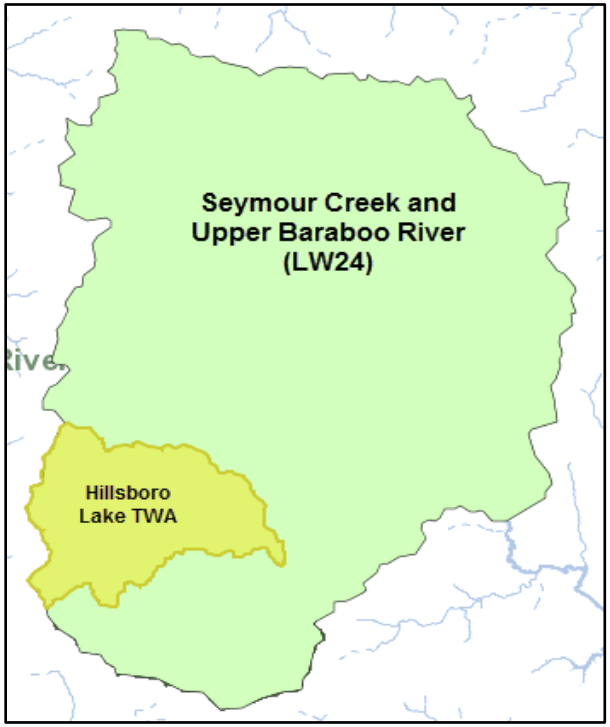
Jean Unmuth, DNR Stream Biologist

Throughout the presentation when you see this symbol, put your cursor over the box to read more detail.



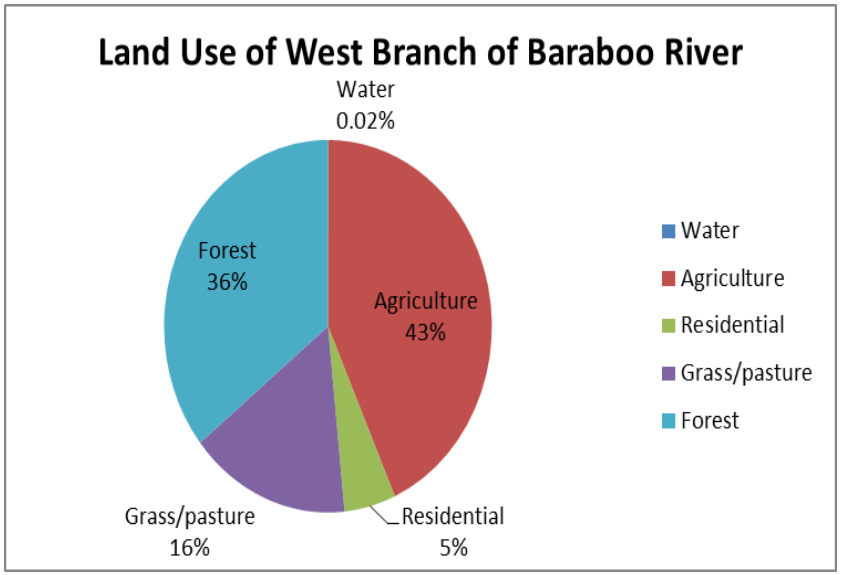
Hillsboro Lake TWA Project Location



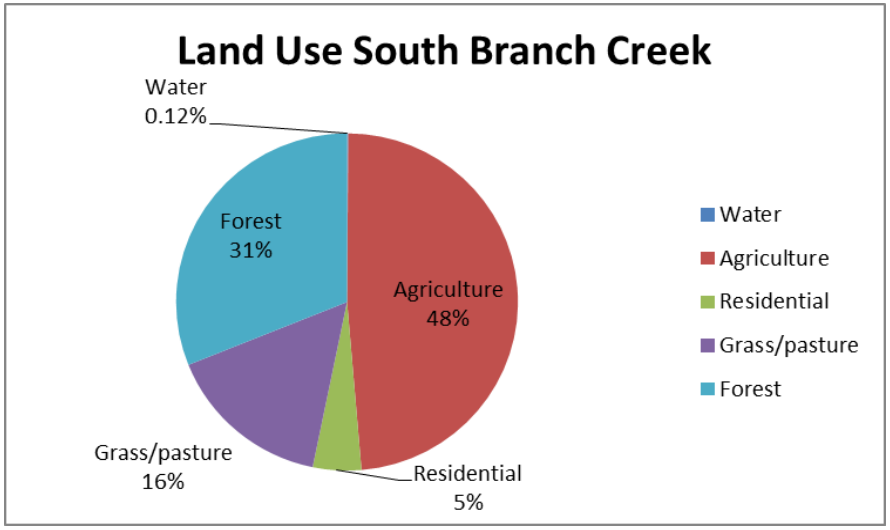


Hillsboro Lake TWA is located in the Seymour Creek and Upper Baraboo River Watershed.

Land Use in the Lake Hillsboro TWA

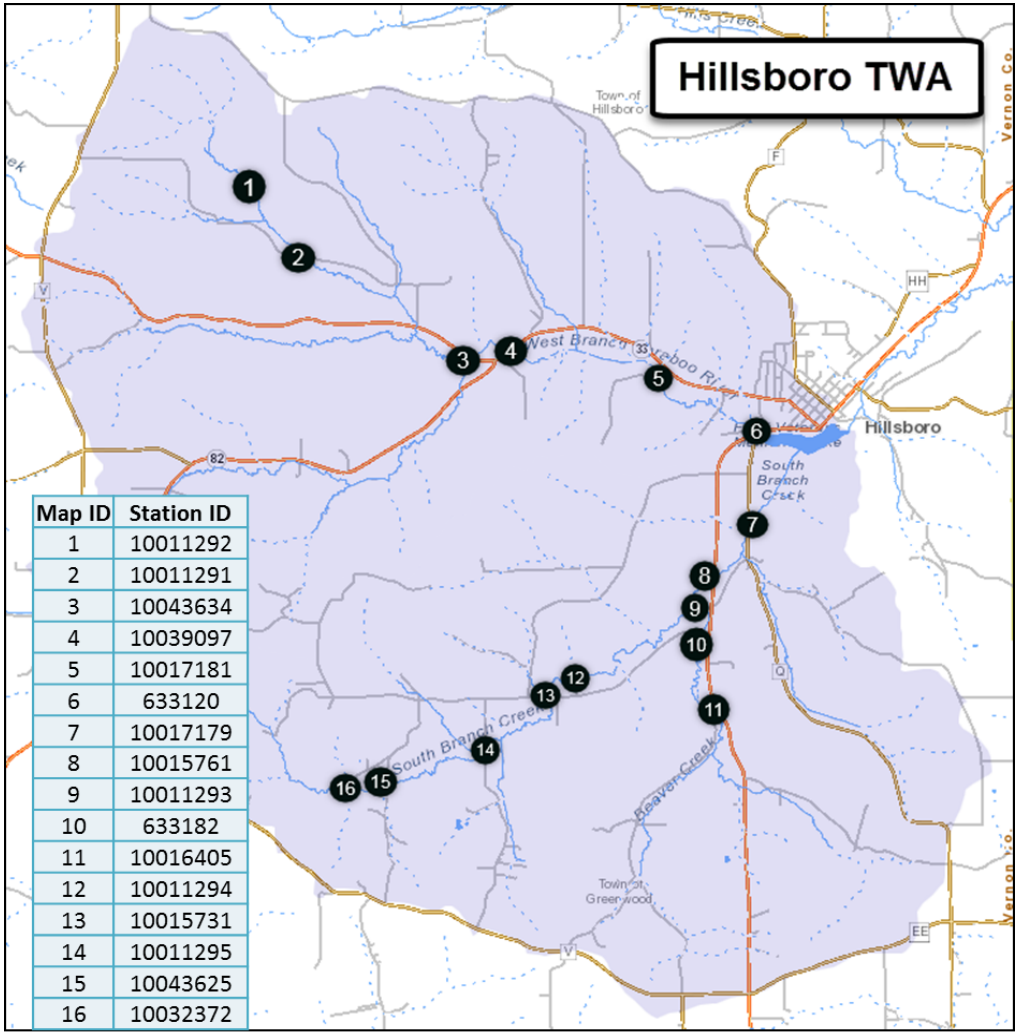


Hillsboro Lake TWA contains two major streams: West Branch of the Baraboo River and South Branch Creek.



Purpose & Sites

- Monitoring the effectiveness of implementing agricultural best management practices in the Hillsboro Lake watershed.
- Monitored 11 sites in 2015 to identify the status of two HUC 12s.
- Parameters measured: fish, habitat, macroinvertebrate, and water chemistry



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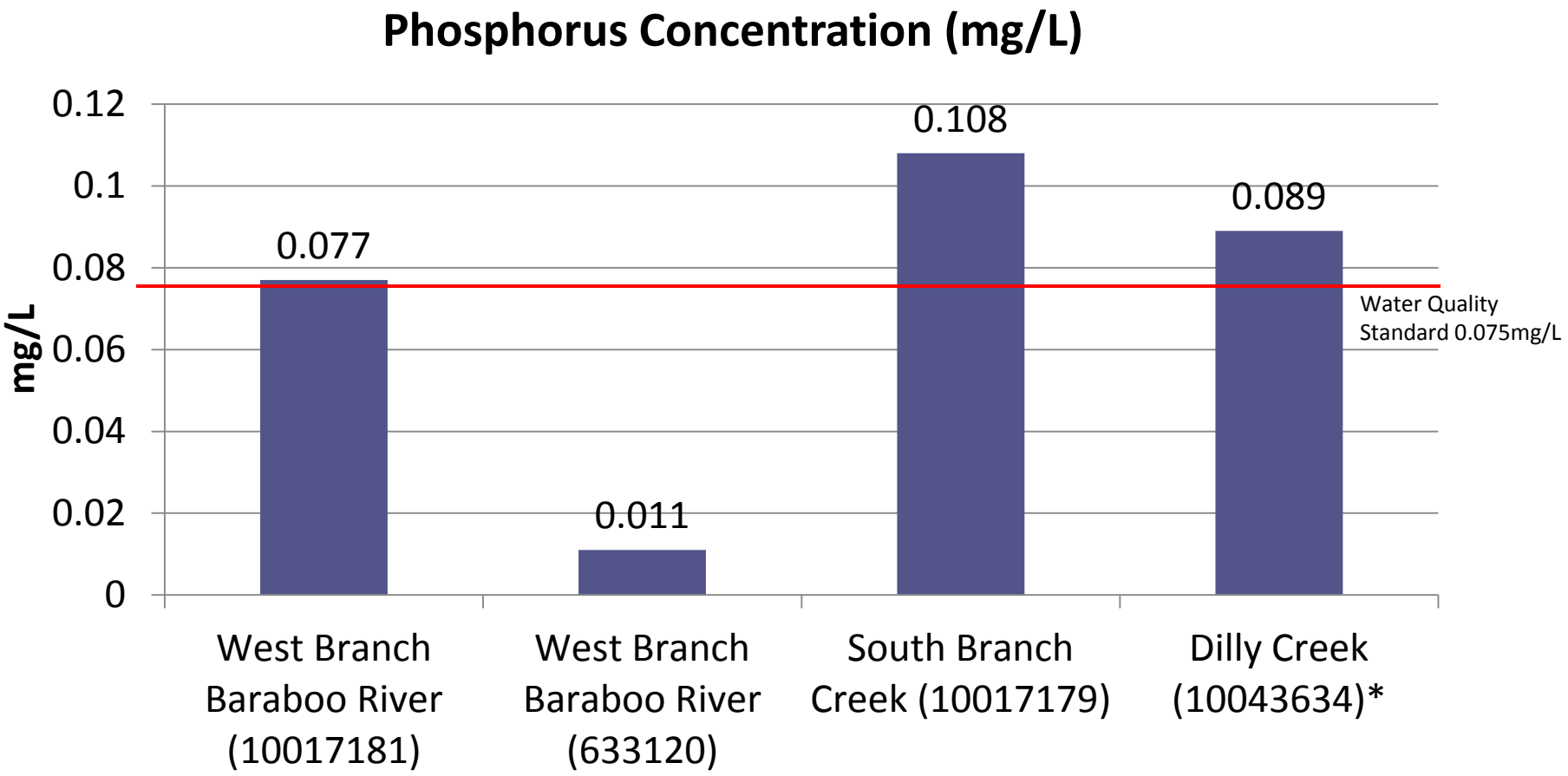
16	10032372

Study Results – Phosphorus



* Single sample was taken.

Study Results – Natural Community

- The West Branch of Baraboo River and the unnamed tributary (Dilly Creek) are cool-cold natural communities.

- South Branch Creek and Beaver Creek the thermal composition of species indicated the stream resembles a cool-warm system, rather than a cool-cold system.

DNR Staff conducting a fish survey on Beaver Creek

Study Results – Macroinvertebrates and Habitat

- Quantitative habitat ratings ranged from excellent in the upper stream segment to good in the West Branch Baraboo River
- Macroinvertebrate results were variable in the two subwatersheds and ratings ranged from poor to good during the 2015 monitoring season.

Management Priorities

- Install agricultural best management practice
- Remove overgrown woody vegetation from stream banks
- Stabilize stream banks to reduce soil erosion

Recommendations

- Install BMPs to reduce soil erosion and nutrient inputs
- Investigate management actions to increase baseflow and dissolved oxygen to the West Branch of the Baraboo River.
- Research opportunities for harvestable buffers
- Restore fish lunker structures in the West Branch of Baraboo River.
- Develop environmental programs and citizen monitoring of streams and Hillsboro Lake through the CLMN and the WAV Programs.

Contacts

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  - TWA WQM Plans website
  - Draft Hillsboro Report