

## Fish Creek Watershed Study Annual Report-for the Year 2017

*Vision: To have and maintain a healthy stream ecosystem that supports both the environmental and economic interest of the community.*

The Fish Creek Watershed Study began in 1998 on behalf of the Town of Gibraltar and the community of Fish Creek, and has been active each year since. It has twice been the recipient of the University of Wisconsin-Extension's Volunteer Stream Monitoring Award thanks to the dedicated work of many volunteers.

Town of Gibraltar - 20 Year Comprehensive Plan (2004): Chapter 1 – Agricultural, Natural & Cultural Resources

Goal 1: The Town of Gibraltar's natural areas and resources – land, water and air, as well as plant and animal life and habitat – are preserved, protected, conserved, restored, enhanced and maintained for future generations.

Objective 1.2: Preserve and protect the quality of ground and surface waters

Objective 1.2i: Continue monitoring and collecting data on Fish Creek, its watershed and Fish Creek Harbor. (Beach testing in Door County is done by U.W. Oshkosh students as part of their studies.)

The Fish Creek Watershed Study was designed to establish physical, chemical and biological baseline data. Monthly field testing and periodic sampling results are then compared to the body of baseline data for the purpose of detecting changes in the water quality over time. The data can be used not only to improve the surface waters of the creek but the quality of the ground water beneath it and the surface waters of Fish Creek Harbor.

Lab Tested Grab Samples for 2017 – Town Funded

- Hwy Bridge Site was sampled twice – April snowmelt, June rainfall, Sept. dry
- South (west) headwaters was sampled twice – April snowmelt, June rainfall
- Samples from each site were sent to Northern Lake Service, Inc. Crandon, to test for Alkalinity (total), Conductivity, Ammonia (NH<sub>3</sub>), Nitrate + Nitrite, Kjeldahl TKN (nitrogen) and Phosphorus
- Also sent to Analytichem Laboratory Services, Luxemburg, to test for Total Coliform & E Coli
- Field tests for clarity, transparency, pH, temperature and dissolved oxygen were also done at the same time as the grab samples
- All work done by volunteers

Field Testing for 2017 – DNR Water Action Volunteers (WAV) - Hwy 42 Bridge Site

- Field testing was done monthly at the Hwy 42 Bridge Site
- Field tests performed each month – clarity, transparency, pH and dissolved oxygen
- Data was entered into DNR SWIMS data bank. To view the WAV annual report go to:

<http://watermonitoring.uwex.edu/level2/reportsbycounty/index.html>

On the map of Wisconsin, click on Door Co. then click on Fish Creek 2017

- A device called a thermistor, provided by the DNR, was placed in the creek to record the temperature of the water 24/7. At the end of the season it was returned to the DNR and the data was downloaded to the SWIMS data bank.
- All work was done by volunteers.

#### Citizen Science Research Project Participation

The Fish Creek Watershed volunteers participated, as citizen scientists, in a research project through the Shedd Aquarium in cooperation with U.W. Madison, to study the spring spawning migration of suckers.

#### Goal for 2018

- Monitor Fish Creek according to guidelines set forth in the Fish Creek Watershed Plan adopted by the Town in October of 2017. The plan can be found on the Town website <http://www.townofgibraltar.com> click on the Community tab.
- Assist in the implementation of the Fish Creek Watershed Plan (See separate handout)

The Fish Creek Watershed volunteers would like to thank the Gibraltar Town Board for their continued support of our work in maintaining quality ground and surface water in the Town of Gibraltar for both present and future generations.

We would also like to thank all the many volunteers that have given their time over the years to monitor the health of our ground and surface water in the Town of Gibraltar.

Anyone who is interested in learning more about the Fish Creek Watershed Study or who would like to become a volunteer can contact Linda Merline at 920-868-3453.

Respectfully Submitted,

Linda Merline, Volunteer Coordinator, Fish Creek Watershed Study - April 17, 2018

