



Delavan Lake Improvement Association

In 2008 Delavan Lake experienced a major rain event. That storm dumped 48 truckloads of sedimentation into the lake. Although statistics from the 2017 flood are not yet available, a similar outcome may occur.

What does that mean for us?

Delavan is a drainage lake receiving water from a large surrounding watershed area. It takes roughly 2.5 years for total water turnover in the lake. Therefore, management is extremely important to keep Delavan Lake clean and healthy for us all to enjoy. Measurements from the 2008 rain storm found an estimated 48 truckloads of sediment entered the lake through Jackson Creek. Shocking, isn't it? (compiled by Lake & Pond Solutions from USGA data reports.)

Below are management practices currently ongoing by the DLIA, the Delavan Lake Sanitary District & the Town of Delavan Lake Committee.

Managing Sediment Runoff at Its Source Through Cover Crops

The DLIA is actively identifying areas and working with local farmers around the lake to encourage the planting of buffer strips and/or cover crop to slow down sediment runoff. The DLIA assists the operator with reimbursement for the loss of acres taken out of production. A per acre dollar amount is established and the farmer bills the DLIA each year they participate in the program.

This practice is not only beneficial to the lake, but for the farmer; less soil is lost along with fertilizer that would otherwise require replacement. Benefits for the lake is less sediment and chemicals entering the water from agricultural runoff.

COVER CROPS ARE THE MOST IMPORTANT LONG-TERM SOLUTION TO LAKE SEDIMENTATION BIOMASS ISSUES. THEY SIGNIFICANTLY REDUCE AGRICULTURAL RUNOFF INTO THE LAKE.

Thank you DLIA members for supporting this important lake management

practice.

Managing Existing Sedimentation in Slow Flow Areas

What about the sludge already in the lake? The low flowing areas in our bays and channels accumulate significant amounts of muck. Some communities around the lake are experimenting with the use of Sludge Reducing Pellets (Triton SRP). Roy Carlson, CEO of Lake and Pond Solutions is working with homeowner associations & individuals to introduce and track results. SRP's are slow-release pellets that sink to the bottom to speed up the breakdown of organic waste (muck). According to Mr. Carlson, pellets are most effective in areas that accumulate the largest biomass; this includes areas in the inlet, channels & outlet.

Triton SRP's have shown promising results in two low flow areas on the lake. Data listed below is for Viewcrest & Ravenswood subdivisions located on the south bays of the lake.

Viewcrest

- According to Roy Carlson, Viewcrest preliminary data (5/24/17 to 7/20/17) has shown an average decrease in sediment depth of 1.83 feet.
- The greatest change in any single sample point came from the back of the channel. The change was a 3.3 foot decrease in sediment.
- The least amount of change came from the entrance of the channel with only a 0.45 foot decrease in soft sediment.
- Overall, pellet application is very encouraging.

Ravenswood

- Ed Foster who is on the Ravenswood Community Board is actively working with Roy Carlson to reduce sediment along a 50-ft. section of shoreline.
- Ravenswood began the pellet program in May 2016. At that time sample measurements were taken at specific points. Measurements were taken again at the end of July 2017. Below are the results.

34 Ft. from Shore	May 2016 - 1 inch	July 2017 - 1/2 - 1/4 inch
42 Ft. from Shore	May 2016 - 3 inches	July 2017 - 2 / 1-1/2 inches
51 Ft. from Shore	May 2016 - 5 inches	July 2017 - 2 inches

As you can see from the measurements Sludge Reducing Pellets do produce positive results. But what happens in a big rain event? If 2017 data turns out to be like 2008, it will be interesting to see how the pellet results hold up. Once data is available we will pass it along to our members.

Thank you for your continued support of the Delavan Lake Improvement Association. And, feel free to contact us anytime!

**If you haven't renewed your membership yet,
please do so today to help us help the lake.**

Click on this link to go to our membership form: <http://www.delavan-lake.org/membershipform.html>