Deer Lake Conservancy Report



Summer Edition





JULY 2019

NEW CONSTRUCTION AND LAKE STEWARDSHIP

There are signs of change all over Deer Lake. Look around the lake and you'll see new, larger homes that have taken the place of small cabins. Garages and pole buildings are popping up on back lots to keep boats, vehicles, and other property secure. These amenities are signs of positive change for lake homeowners who may have waited years to make these improvements. However, we need to take precautions to ensure that these improvements to real estate don't negatively impact the lake and reverse the progress that has been made in reducing runoff and improving lake water quality over the last 20 years.

SOIL EROSION DURING CONSTRUCTION

Constructions sites are notorious as a source of erosion and resulting sediment and nutrients carried in runoff to lakes and rivers. We understand there are many priorities during a construction project. For the sake of the lake, please make construction site erosion control a top priority if you undertake new building or remodeling. The main culprit is exposed soil. Without the protection of vegetation, a single one-acre lot in close proximity to a lake or storm sewer system can deliver as much sediment as 75-acres of cropland!



A one-acre construction site can deliver as much sediment as a 75-acre crop field!

While regulatory oversight varies with the type and size of construction site, the basic principles are the same. As the owner, you are ultimately responsible to ensure that your contractor follows construction site erosion control rules. At a minimum there should be a silt fence installed surrounding the entire construction site. However, be aware that with steep slopes and lots of bare ground, silt fences are frequently overtopped causing sediment-laden water to run to the lake.

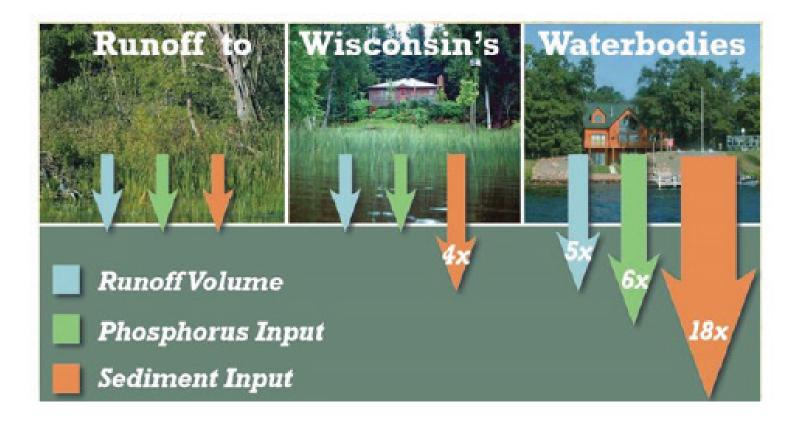
EROSION AND SEDIMENT CONTROL BASIC PRINCIPLES TO PROTECT THE LAKE

- 1. Minimize disturbed areas with bare soil by phasing or sequencing construction and preserving existing vegetation, including trees, where possible. Tree canopies provide umbrella-like shelters against the force of rain.
- 2. Divert runoff water away from disturbed or exposed areas.
- 3. Install best practices to control erosion and sediment and manage storm water. A simple best practice is to seed quickly germinating grasses like annual rye or oats to cover bare soil. Additional best practices include silt fences and diversions.
- 4. Inspect the site regularly and properly maintain silt fences, diversions etc., especially after rainstorms.
- 5. Make changes if your erosion control practices aren't working! Re-enforce this as a priority for your contractor.

STORMWATER MANAGEMENT AFTER CONSTRUCTION

More impervious/hard surfaces, such as roofs, driveways, and parking areas, lead to more runoff to the lake. Runoff carries nutrients that fuel the growth of algae in Deer Lake. Research supported by the Wisconsin DNR tells us that a lot with a small cabin and most vegetation intact results in little change in runoff and pollutant loading from natural background levels. However, with increases in impervious surfaces and removal of natural vegetation from new construction, runoff volume and phosphorus and sediment inputs increase significantly.

The good news is that there are ways to mitigate these impacts by encouraging infiltration and maintaining or restoring natural vegetation. Our Direct Drainage program offers free technical assistance to Deer Lake property owners to mitigate these impacts.



DIRECT DRAINAGE PROGRAM

The Wisconsin Department of Natural Resources awarded a \$127,000 Lake Protection Grant to the Deer Lake Conservancy in April 2019. Our grant application success was due in large part to Deer Lake homeowners who expressed interest in completing runoff mitigation projects in the direct drainage area of our watershed. Much of this direct drainage area consists of waterfront properties. While a good deal of this funding is already committed to the homeowners who volunteered to complete projects prior to the grant application, funds and technical assistance are still available!

If you are interested in considering a project, contact our consultant Cheryl Clemens at 715-268-9992 (harmonyenv@amerytel.net). You may also begin with discussions with your landscaper. Many area landscapers have years of experience in designing and installing these projects. If you go this route, be aware that landscaper designs and cost estimates need to be approved prior to installation to maintain eligibility for grant funding. Also, because of grant requirements, we are unable to provide funding for installation if projects are required as a condition of a permit.

FREE WATERFRONT SITE VISITS AVAILABLE

Contact Cheryl at: Harmony Environmental harmonyenv@amerytel.net 715.268.9992

JOHNSON PRESERVE UPDATE

BUCKTHORN CONTROL

For three years in a row, the Wisconsin Department of Natural Resources awarded a grant to the Deer Lake Conservancy for buckthorn control. This year's \$14,000 grant will pay for chemicals, labor, and equipment with the required match contributed by volunteer labor. This collaborative effort has removed thousands of invasive buckthorn from our conservation areas, allowing native plants to thrive. Those of you with buckthorn on your properties know how difficult this invasive shrub is to control! The past year's effort was focused in the Johnson Preserve along trails and near the lake frontage. Many thanks go to Wisconsin Department of Natural Resources Polk County Forester, Paul Heimstead for continued help in obtaining these grants.

FENCES

Conservancy volunteers have worked for more than a year on the repair of the split rail fences around portions of the Johnson Preserve, piecing together much of the original perimeter fence. The former owner, Julian Andersen requested this when the Conservancy took over ownership and management of the Preserve. The effort to restore the fence to its former state of repair is, in part, a gesture of gratitude toward the Andersen family for their support in establishing this heritage property for Deer Lake. It is also a demonstration of our pride in and stewardship of this important conservation property.



CONSERVANCY TRAILS

If you haven't been out on the Conservancy trails, you are missing a great experience! Being out on the trails helps to instill an understanding of the critical impact our conservation areas have on preserving the quality of Deer Lake. The Deer Lake Conservancy strategically acquired conservation areas to allow us to manage the inflow of water to the lake. By acquiring drainage ravines, we are able to manage the runoff from thousands of acres of agricultural land. This runoff carries phosphorus and sediment into the lake which, if unchecked, negatively impacts water quality.

Our trail system allows you to view the many practices installed to manage runoff over the years. The Conservancy maintains almost five miles of trails. Along the trails, you can view acres of native prairies that have replaced crop fields, sedimentation basins, and wetland and pond restorations. The trails are open all year, and each season offers a unique experience: from the colors of an autumn leaf tour, to snow shoeing in winter, streams running full in spring, and a shaded walk on a warm summer day.





FLAGSTAD FARM PRAIRIE MAINTENANCE

In past centuries, prairies were maintained by periodic wildfires. Without fire, trees take over prairie flowers and grasses. The Deer Lake Conservancy uses fire to maintain our prairies in conservation areas. We have been unable to burn in recent years because of unfavorable weather conditions. As a result, there is quite a bit of growth of popple/aspen and willow trees. We contract with Prairie Restorations to manage our prairie burns. A burn is planned for this fall. If weather doesn't allow, we are promised to be high on their priority list for next spring.

Deer Lake Conservancy P.O. Box 1139 St. Croix Falls, WI 54024

2019 CONSERVANCY OFFICERS AND DIRECTORS

Phillip Foussard, President Jim Miller, Vice President Tom Pesek, Secretary/Treasurer Mark Boyken Tom Bradley Rod Johnson Tom McBride John Patterson John Wright



Annual Flagstad Farm Celebration Hosted by the Deer Lake Conservancy and the Deer Lake Improvement Association

Live music and refreshments at the Flagstad Farm Saturday, July 27, 2019 • 6-9 PM All ages and guests are welcome



2019 ANNUAL MEETING

Please join us for our Annual Meeting Saturday, July 13th 9:00 a.m. Trollhaugen Convention Center