



SAAWA wants to see St. Albans Bay Town Park restored for full summer use and enjoyment by area residents and visitors.

## WEED HARVESTING: A REAL STEP TOWARD CLEANER WATER.

The SAAWA harvester removes approximately 500 lbs. of phosphorous each summer. Not only have we seen immediate results in improved water quality, we expect to see a long term improvement in water quality due to a reduction in nutrients existing in the sediments lying on the lake bottom.

We hope to double our harvesting efforts during the 2015 season which will remove at least 1,000 lbs. of phosphorus along with choking, nuisance weeds from Saint Albans Bay. With enough volunteer support, we also hope to explore ways to coordinate shoreline cleanup and weed removal in the Town Park as well as around the shoreline.

If you would like to be part of this effort, please contact **Steve Cushing** at 802.527.2894 or email SAAWA at [info@saintalbanswatershed.org](mailto:info@saintalbanswatershed.org).

Donations may be made online at: [SAAWAVT.ORG](http://SAAWAVT.ORG)

The **ST. ALBANS AREA WATERSHED ASSOCIATION** was created in 2002 with the primary goal of restoring the water quality of St. Albans Bay and the surrounding watershed. We are a grassroots group of individuals -- young and old -- who love the lake and want to see crystal clear waters return to the Bay for the enjoyment and health of people and animals.

SAAWA is not an organization of property owners. We strive to serve as a voice for all of us in this watershed (lakeshore, city and town) to express the need for change, and to coordinate action for real, in-lake clean-up. We are tired of studies and lack of polluter participation in voluntary programs which have promised results for years but have failed to deliver.

We strongly support implementation of the following public policies:

- more mandatory regulation of agricultural and developed lands
- support for in-lake remediation
- blue-green algae and weed control

We have, and will continue to advocate for requirements to improve agricultural land use practices and for greater investment in enforcement.

We invite you to join us in these efforts as a member, supporter or volunteer. Please visit [SAAWAVT.org](http://SAAWAVT.org) for more information or to make a donation.



**st. albans area watershed**  
A S S O C I A T I O N

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Visit us online: [SAAWAVT.ORG](http://SAAWAVT.ORG)

The St. Albans Area Watershed Association is a non-profit corporation with tax exempt status under IRS section 501(c)(3) TIN 41-2196343. Donations are tax-deductible to the extent allowed by law.



# WEED HARVESTING ON ST. ALBANS BAY

Local action.

Real results.

Cleaner water.



**st. albans area watershed**  
A S S O C I A T I O N



*The deserted Town Park on St. Albans Bay. A beautiful spot which used to receive 65,000 visitors per year, it is now unusable to the public in the hot summer months when weed growth reaches critical levels, washes onto shore and begins to deteriorate in the water. The resulting blue green algae, thick mats of weeds, turbid water and the nauseating odor makes swimming impossible, and lake water dangerous for people and animals.*

## THE SAAWA HARVESTER

SAAWA has been harvesting weeds for a decade. Over that time we have developed a cost effective operation. We have a weed harvester and trailer that we purchased used, and operate it with the help of numerous volunteers. Funds come from local municipalities and the contributions of local residents.

The weeds that we harvest are land-applied and care is taken that the nutrients are returned to the soil, not returned to the lake.

For the first three years we contracted Aquatic Control Technology, Inc. to mechanically harvest weeds at a cost of approximately \$30,000.00 per season which included rental of a tractor and dump cart that was operated by volunteers.

In 2008 SAAWA purchased an Aquarius Systems EH-420 harvester and TRC-12 Trailer Conveyor for \$27,500.00 which we ran during the summers of 2009 through 2014. The weed harvester is operated by an independent local contractor, John's Car Clinic, Inc., who also maintains the machine.

By operating the harvester and contracting locally, we are able to maintain a cost-effective, responsive program. We have reduced the cost of weed harvesting to approximately \$12,000.00 per season which includes the \$2,500.00 cost of tractor rental. SAAWA continues to supply volunteers to maintain the weed harvester, operate the tractor which transports the weeds, and contribute time to fund raising efforts for operation.

## WHY HARVESTING?

Weed harvesting improves water quality by enhancing water circulation and wave action. During each season we remove approximately **400 tons of weeds**. After composting, the organic matter is reduced to about 40 tons having the nutrient value of composted cow manure: 0.6% phosphorous, 2.5% nitrogen and 2.3% potassium. We are currently removing about 500 lbs. of phosphorous, 2000 lbs. nitrogen and 1840 lbs. potassium from the bay each summer.



Various studies indicate that 10 tons of phosphorous enters the Bay each year. To have a clean Bay the same studies suggest that the TMDL (total maximum daily loading) must be reduced to 5 tons. Weed harvesting is presently producing 5% of that amount. With an additional weed harvester, we will remove more than 1000 lbs of phosphorous during the season, or 10% of the suggested amount for a clean Bay.

## BENEFITS

Harvesting is one of the few lake clean-up activities that makes an immediate improvement in the clarity and quality of the water. The health of the bay will ultimately begin to return when non-point source runoff is finally ended. Until then, however, this is the only effort to clean the lake that truly establishes success through removal of measurable amounts of nutrients from the lake.

- Removing weeds from the lake improves circulation which improves water quality and limits further weed growth.
- Through weed harvesting, organic matter that otherwise would settle to the lake bottom, decompose and contribute to the sedimentation of the bay is removed,
- Recreational opportunities are enhanced for boaters, kayakers, fisherman and swimmers and the shoreline areas where toxic algae blooms originate can be cleared of decaying weed masses.
- Without weed harvesting, some areas of the Bay become inaccessible due to the weed masses.
- Harvested plants make good garden mulch, soil conditioner and composting material, since the thin cell walls of aquatic plants break down rapidly.

