

### New Vermont Lake Plan in the Works

In November, the State of Vermont issued a "Proposal for a Clean Lake Champlain (Draft for Discussion, 11/20/13)." Following rejection of it's Phosphorus TMDL (Total Maximum Daily Load) plan, which was judged insufficient by the U.S. Environmental Protection Agency (EPA), Vermont must develop and implement a new restoration plan for Lake Champlain and its tributaries that will meet federal requirements. More importantly, its aim is to reduce the damaging water pollution that is degrading Lake Champlain and its tributaries. This pollution increases the cost of drinking water and wastewater treatment, hurts tourism and recreation businesses that depend on clean water, endangers health of people and animals, and depresses property values.

We believe the State's latest effort is the first

SAAWA Board Meetings take place the 3rd Wednesday of every month at 5 pm St. Albans Free Library, 11 Maiden Lane **Join us!**  plan put out by any Governmental agency to credibly address the pollution in Lake Champlain. As currently constructed, however, the plan does not go far enough.

In addition to providing input during the public comment process, SAAWA also contributed the following recommendations during the public discussion period. We believe adopting these ideas, will increase the probability of success. We want to avoid the creation of another expensive, ineffective program which does nothing to improve actual water quality of the lake and its tributaries.

#### 1. Turn DEC into a true regulatory agency.

Vermont will not achieve the goal of a clean lake unless people start changing their behavior in ways that are inconvenient and go against their economic interest. This will not happen unless the expected costs of ignoring these regulations are greater than the cost of compliance, which is not the case today. Farmers, in particular, can ignore regulations, pollute the lake and be fairly certain that the penalty will be minor at worst. Compare this

# Politics & Lake Scum

Advocates for cleaner lake water generally agree that elected officials could do more to prevent blue-green algae blooms. A partial list includes:

- Increase enforcement of existing regulations.
- Ensure that all farms have continuous cover crops so that the soil is held in place and nutrients aren't flowing into the lake.
- Exclude livestock from streams.
- Purchase and conserve farmed shoreline areas prone to regular flooding.
- Increase random inspections of agricultural operations and construction sites and assess high penalties for violations.
- Establish a "whole farm water quality certification plan" that addresses a farm's land base, production area, and nutrient balance.
- Require all communities to do stormwater master planning and identify and fix pollution hot spots.
- Minimize river corridor and floodplain encroachments and prevent adverse channel modifications.

continued on page 2

Source: Lake Champlain Committee

### New Vermont Lake Plan in the Works (continued)



to the attitude of compliance with the IRS and OSHA regulations. Without this change in attitude at the DEC all the other good work in this plan will not lead to successes.

2. Transition State regulations from specifications based to performance based.

Currently, the regulations for stormwater and agricultural practices are generally specifications based; for example, buffers must be 25 feet from lakes and rivers. A performance based specification would address what we want to happen; for example, there should be no direct flow from fields to streams. Performance based specifications are harder to write and enforce, but would allow for more economical, creative and effective solutions to pollution.

3. Transition from a permitting system to a compliance system. Currently, when DEC sees a problem they create a system for permitting a behavior. In many cases a more effective system for enforcement would be to write a set of specifications and require individuals to meet them, followed by a system to check compliance. This is the model the IRS and OSHA use. They put out requirements and have a robust enforcement process, with penalties at a level that ensures compliance even though the chance of

inspection is very low.

- 4. Get out on the Lake and repair the damage. After years of damage, nature needs a helping hand. Some in the DEC are loathe to alter 'naturally' occurring phenomena. This attitude works against cleaning the lake. We need to repair stream banks that are eroded. We should aggressively work to eliminate neurotoxins in the water, naturally occurring or not. Excessive weed blooms should be harvested away. Waiting for 'mother nature' to fix manmade problems puts us on a path to no progress.
- to Blue/Green algae blooms. Currently, the reaction to outbreaks is to put up signs. We must do better than this. The state should be working on a protocol to address these toxic outbreaks. The targeted and directed use of algaecides should be examined. Are there other actions we can take to deal with these outbreaks?



#### 6. Combat invasive species.

The goal of a clean lake won't be achieved until invasive species are addressed. For much of the summer, Saint Albans Bay is unusable due



to infestations of Eurasian Milfoil and Water Chestnuts. Without an effective way to deal with these infestations, the State's plan will not change the usability of the lake.

7. Address pre-existing phosphorus accumulations.

The phosphorus at the bottom of Lake Champlain and its polluted bays needs to be addressed. After years of heavy phosphorus discharge from our watershed, the bottom of the lake has heavy concentrations of phosphorus that need to be cleaned up. Though the science is not clear or certain, the problem of phosphorus laden mud creating its own discharge will have to be addressed. The State plan must address the phosphorus accumulation already in water bodies.

- 8. Ensure Nutrient
  Management Plans are an
  adequate vehicle to address
  farm runoff. The Vermont
  plan relies on NMPs to reduce
  pollution. Are they adequate
  for that purpose? Do they
  have all the components of
  the Erosion and Sediment
  Control Plans?
- 9. Institutionalize programs that create farm- and land-



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The SAAWA Newsletter is a publication of the Saint Albans Area Watershed Association

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based solutions to pollution problems. Flood plain restoration can be an effective way to attenuate stormwater flow and reduce sediment. We need a system where these projects are developed and funded systematically, not on an ad hoc basis. Storm water utilities, charged with responsibility of finding these projects, would be an effective vehicle to develop them. Relying on volunteer organizations to develop effective projects is inadequate relative to the scope of the problem and the benefits to the lake and to farmers that would be gained through systematic project implementation.

The EPA is expected to make a ruling on the a final restoration plan in the summer of 2014.

# 2013 Weed Harvesting Report : Eighth Season Brings New Challenges, Blue Green Algae



Spring 2013 was dry with lower than normal lake water levels followed by record rainfall amounts in June and early July leading to record high water levels for late June and July. Abundant weed growth was not anticipated however large masses of drifting weeds began to accumulate along the easterly shore of St. Albans Bay by the second week of July. Because the State of Vermont has imposed the condition in our mechanical weed harvesting permit that operation cannot begin until July 15 the of each year, weed growth was ahead of us when we started. It should be noted that in 2010 we experienced an early spring, relatively low water levels, good water clarity and abundant sunshine which created ideal conditions for heavy weed infestation.

During the first two weeks of operation, efforts were concentrated along the easterly shore from the former Kissane residence to near the Town Garage. Weed masses extended 50 feet from the shoreline on average and from the water's surface to the bottom. Numerous shore line property owners and volunteers aided in guiding the weed masses onto the pickup head conveyor and we were able to clear about a mile of shore line before decomposition of the weeds occurred.

On August 14<sup>th</sup> we observed dense weeds and an algae bloom around the Town dock. On Thursday August 15<sup>th</sup> we harvested eight loads from this area and it appeared that the bloom had been stopped however, on Friday the 16<sup>th</sup>, the lake became calm with 80 degree temperatures and blue green algae was observed in areas of decomposing weeds east of the dock in the vicinity of the former King's Cove restaurant. By Saturday the entire Bay was in full bloom with blue green algae seen all the way to Hathaway Point Bay. In the future we will be more vigilant to the conditions around the town dock and try to keep this area free of weed masses.

The decaying weed masses along the shore are dramatically impacting the water quality of St. Albans Bay. When harvesting these areas of decaying weeds the operator of the weed harvester has noticed that a great amount of heat is generated by the decomposing weeds. When allowed to decompose in the water, sufficient heat is generated to effect the release of phosphorous from sediments and provide the nutrients for an algae bloom.

We know that removing weeds from St. Albans Bay reduces the amount of phosphorus in the Bay which would accumulate if allowed to decompose in the lake. A ton of weeds allowed to compost out of water has a nutrient content comparing favorably with cow manure (0.6% phosphorus, 2.5% nitrogen and 2.3% potassium). Removing the weeds also reduces the amount of organic matter accumulating at the bottom of the Bay. More than 40 cubic yards of weeds were removed during each day of operation (approximately six 7-yard dump truck loads).

Removing the dense weed masses along the shore dramatically improves water circulation and allows wave action to reach the shore. Wave action and water circulation improves water quality through oxygenation and reduces the occurrence of algae blooms.

SAAWA operates the harvester program on an annual budget of \$12,000–\$14,000. Our revenue/expense report for 2013 follows:

#### 2013 Revenue

TOTAL	\$13,800.00
Contributions from individuals	3,800.00
Town of Georgia	2,500.00
Town of St. Albans	\$7,500.00

#### Expenses

TOTAL	\$12,030.00
Maintenance to date	780.00
Fuel	750.00
Tractor rental (10weeks @ \$250.00/wk)	2,500.00
Operation for 8 weeks @ \$1,000.00/wk	\$8,000.00
T	

We will continue to seek assistance and resources to harvest more weeds. We believe that to run additional weed harvesters in a year like the one just experienced would greatly improve the water quality of the bay. We are aware that weed harvesting only addresses a symptom the real problem, the continued flow of nutrient rich sediments into the bay.

The St. Albans Area Watershed Association (SAAWA) has coordinated mechanical weed harvesting on St. Albans Bay for eight seasons and for five years have used the Aquarius Systems EH-420 harvester and TRC-12 Trailer Conveyor operated by an independent contractor, John's Car Clinic, Inc., who also maintains the weed harvester.



## Time for Bold Legislative Action to Clean up the Lake

At the SAAWA Annual Meeting in August, President Steve Cushing presented the following statement which expressed frustration at the lack of progress over the years, and laid out a plan of action for the future. Since that time, the State has moved forward with formulating a new plan for cleaning up the Lake, but plans alone won't stop continued deterioration of St. Albans Bay. The appalling outbreak of blue green algae is still fresh in our minds and SAAWA will continue to press for real and continuing action to restore the Lake.

In August we experienced the worst algae bloom in memory. Fed by decades of nutrient runoff, the bay continues to get worse. For decades political leaders have made a promise to clean up the lake. That promise has not been kept. For decades, studies and assessments have determined that 60% to 70% of the nutrient loading in the bay comes from agricultural lands, yet the policies adopted by the state to address nutrient runoff from farms have not resulted in improved water quality. In fact, it's worse.

For decades the State of Vermont has recognized that a change in agricultural land use practices is needed to effect a clean lake, yet has been unwilling to adopt mandatory requirements. Enough is enough. It is within the power of the state to clean up the lake. The time has come to prohibit nutrient runoff from farms into our public waters.

For decades the State of Vermont has avoided the conversation of mandating changes to agricultural land



use practices. Instead, the state's policy is to rely on federally funded programs in which participation is voluntary. Millions of dollars have been spent assisting farms with facility improvements, constructing manure pits and creating vegetative buffers along streams, with no effect on water quality improvement. Much of this money has facilitated the conversion of farms to confinement feed operations. This model of dairy farming necessitates the storage of manure for the period when the corn is growing and during winter months when manure spreading is banned. Farms must spread manure on bare ground in the spring and fall when we typically experience the heaviest rain fall. Although recommended application amounts of manure per acre exist, there is little oversight. Many farms find it necessary to spread excessive amounts of manure in the spring

and fall to accommodate the next six months of manure build up. Little is done to restrict where manure is spread in relation to our streams, lakes and rivers.

Farming has defined Vermont for many years. Our most valued exports for over a century are Vermont's children, raised on family farms and instilled with skills which make them successful through out the world. Our beautiful landscape is a product of agricultural stewardship. We all have an ideal image of the family farm yet, in this watershed and others, the family farm has been replaced by medium and large confinement feed operations which rely heavily on corn for feed. Much of the prime ag soil lies adjacent to streams, lakes and in flood plains. These lands are plowed, and planted with corn in the spring and harvested by early October. The land is then harrowed and lies without vegetative cover from October through much

of May. The number of acres now cultivated with corn has increased dramatically in the last two decades. Large parcels of this highly productive land are now owned by farming enterprises located outside this watershed. Their primary goal is maximum production of corn per acre.

It is widely known that the removal of vegetative cover promotes storm water runoff, erosion and nutrient runoff. And yet there is no restriction on removing vegetative cover from agricultural lands. We see cultivation occurring adjacent to streams and rivers and in flood plains. Contour plowing is recommended yet the common practice is to plow perpendicular to streams to promote drainage. We witness sheet flow runoff from cultivated lands running through residential lawns and into the bay. When the introduction of regulatory measures has been suggested to reduce nutrient runoff from

farms, the state suggests that such measures would be too great a financial burden and would drive farms out of business. Yet, there are numerous agricultural practices and alternatives to corn cultivation which can be implemented, that have little or no additional cost and which would significantly reduce nutrient runoff.

An article in the *Burlington* Free Press regarding massive algae blooms in Lake Erie quoted the chair of the International Joint Commission on Lake Erie

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saying "There's really a strong need to change agricultural practices or else just say you're going to sacrifice Lake Erie." Will the State of Vermont sacrifice Lake Champlain in favor of a policy which promotes the financial interest of a business over a clean lake? We don't believe that any elected official would advocate such a policy yet, when regulation of agricultural land use practices is suggested, opponents argue such measures would be too great a financial burden.

agricultural lands. SAAWA recognizes that we are all part of the problem. All segments of the community must change land use practices to reduce erosion and nutrient run-off. Developers are now required to implement features to reduce erosion and storm water runoff from projects at great cost. Homeowners are now required to obtain a state permit and install professionally designed waste water disposal systems when constructing a new residence (or in the event of septic failure), sometimes

having slope .This organization supports in principal the Bill. If we are asking the agricultural community to have land use practices regulated, we must also recognize our responsibility toward the goal of a clean lake.

The biggest problem

to reduce nutrient runoff from agricultural lands. Over the next 18 months, this watershed association will focus on working with lawmakers to introduce legislation to address this issue. You can join in this effort by engaging in this discussion and by letting your elected representatives know that they have your support in achieving the goal of a clean lake through bold legislative action.

costing as much as \$20,000.00. Legislation is being discussed which would require owners of residential property adjacent to public waters to obtain a permit if they intend to create 500 square feet or more of impervious surface next to those waters. It is well understood that removing vegetative cover on slopes and adjacent to waterways results in the pollution of the lake. Yet there is no restriction on cultivating lands which experience annual flooding or on lands

Shoreline Stabilization

of water quality in Lake Champlain today is the result of the reluctance of elected officials and public servants to honestly address the issue. It is time that an honest discussion be initiated to adopt regulatory measures

Mark Your Calendars!

# *Coming...*Saturday, June 7, 2014

ST. ALBANS BAY TOWN PARK

Again this spring, SAAWA will organize a timed run/walk beside the lake from Kill Kare State Park to St. Albans Bay Town Park. The event will conclude with prizes and refreshments at the Stone House, St. Albans Bay Town Park.

#### **SCHEDULE:**

8:00 am | Registration (Bay Park) begins at 8 am. 8:45 am | Runners Take Shuttle Bus to KillKare 9:00 am | Race Begins at Kamp Kill Kare State Park

Join us for a fun, family-friendly race event and support the effort to clean up St. Albans Bay!

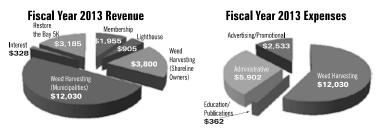


### Citizens & Volunteers Support SAAWA

SAAWA continues to fund efforts to clean up the Bay entirely through support from the citizens of the Town of St. Albans, the Town of Georgia, and many individuals concerned about our lake. SAAWA is a grass-roots organization, run by volunteers, with the help of a part-time administrator. We appreciate your support.

This year, overall expenses for 2013 were \$20,827 and we received \$20,173 in revenues. Tables below show how the money is spent. The largest expense, by far, is weed harvesting in the Bay.

SAAWA is a small, tenacious group dedicated to seeing real clean up measures in the Bay. We need your financial support but, even more, we need your help organizing the 5K in June, supporting the Lighthouse Committee, at the annual meeting in August and on the Membership/Marketing committee. SAAWA members attend public meetings, gather information on progress (or lack of it) and developments on the State of Lake Champlain, and help in voicing concerns about water quality. With your help, we hope environmental health and year-round beauty may finally be restored to Saint Albans Bay.



### <u>Become a Member!</u>

The St. Albans Area Watershed Association depends on your financial support to continue its mission of advocating for a clean lake as well as for operataion of the weed harvester in Saint Albans Bay. The annual cost of weed harvesting is approximately \$14,000.00 and we are facing harvester maintenance costs around \$7,000 to keep it in good running condition.

Supporting SAAWA helps keep the harvester going. Renewing your membership, becoming a new member or making a donation specifically to weed harvesting will help directly to combat invasive weed species land SAAWA believes weed harvesting helps remove excess phosphorus-producing weeds from the Bay.

Please complete the form below and return to:

St. Albans Area Watershed Association PO Box 1567, St. Albans, VT 05478

   	NameAddress					 -    -	
' 	Email			Phone			 
	Shoreline property owner?	□yes	□no				
L							 _



Recognized for their continued commitment toward cleaning up the Bay were Gould Susslin, Bob Wood, Eric Wolinsky, Peter Rath and Gerry Morong (not pictured), .

# Annual Meeting Charts New Direction; Honors Past Officers

The SAAWA annual meeting was held September 20th at the St. Albans Town Park Pavilion. The meeting began at 5:30 p.m. with hors d'oeuvres and refreshments, followed by the meal at 6:00. Jeff's Seafood prepared the food which was delicious as usual. Following dinner, President Steve Cushing called the meeting to order. The first order of business was the annual election of officers by the members of the St. Albans Area Watershed Association. Officers elected for 2014 are:

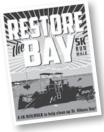
President: Steve Cushing
Vice President: Brad Ferland
Treasurer: Josh Koldys
Secretary: Lori Coseo

A brief weed harvesting report (see page 2) was given by Steve Cushing followed by a presentation of service awards by Brad Ferland. Recognized for their years of commitment, energy and service toward cleaning up the bay were Gould Susslin, Bob Wood, Pete Rath, Gerry Morong and Eric Wolinsky.

Eric Wolinsky spoke on the state of the Bay and observations of the watershed, particularly the land use practices existing along watershed tributaries which contribute to the nutrient loading of the lake. His talk was accompanied by a slide show highlighting this year's blue green algae bloom.

President Steve Cushing delivered a prepared statement regarding the need to regulate agricultural land use practices if a clean lake is to be achieved. (See "Time for Bold Action") A lively discussion regarding efforts to clean the lake ensued. Approximately 40 SAAWA members attended the meeting. Also in attendance were Steve Coon, St. Albans Town Selectboard; Lynn Dickinson, VT House of Representatives; Laura DePietro, VT Department of Agriculture; Ross Saxton, LCI; Denise Smith, exec. director, Friends of Northern Lake Champlain.

## 2013 SAAWA Kill Kare-to-Bay Park 'Restore the Bay 5K' Best Yet! More than 80 runners and walkers participated in



last year's 5K in June 2013. Participants registered at the Town Park and then bused to the starting line at Hathaway Point. Saint Albans City Police escorted the runners who were able to see their 5K time at the finish line. Water, bananas, cookies, ice cream and more were provided by Hannaford and Ben & Jerry's.

We would like to thank all our sponsors and participants for supporting this annual event.

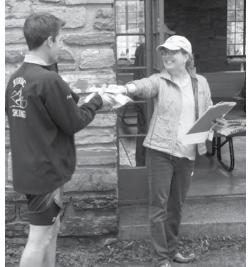
Congratulations to Scott Hitchcox, Fastest Overall Male Runner and to Mary Woodhouse, Fastest Overall Female Runner.













Be sure to join us again this coming  $\pmb{June~7^{\text{th}}}$  at The Bay Park for another fun, family-friendly 5K race!



Name U-13	M/F	Age	Time
Poquette, Trey	М	U-13	22:42.91
Monahan, Liam	М	U-13	25:20.57
Hodgeman, Brook	М	U-13	28:33.21
Poquette, Tanner	М	U-13	29:43.56
Conger, Zachary	М	U-13	41:08.60
Edwards, Mallory	F	U-13	28:11.02
Lynch, Mikayla	F	U-13	30:44.38
14-18			
Coseo, Wylie	М	14-18	18:43.77
Putnam, Cody	М	14-18	18:51.45
Hoben, Connor	М	14-18	21:22.96
Edwards, Garrett	М	14-18	23:19.04
Blossey, Myles	М	14-18	23:31.92
19-29			
#1 Male overall:			
Hitchcox, Scott	М	19-29	17:36.54
Towne, Brent	М	19-29	19:17.93
Preiss, Nick	М	19-29	20:13.65
Airoldi, Alex	М	19-29	21:54.58
Zawisza, Ethan	М	19-29	24:21.71
Zawisza, Jed	M	19-29	32:12.58
Zawisza, Zachary	M	19-29	32:14.20
Sturgeon, Danielle	F	19-29	29:58.62
Quiroz, Ashleigh	F	19-29	32:14.68
Howrigan, Chelsey	F	19-29	32:39.52
Ovitt, Mallory	F	19-29	35:26.59
30-39			
Lynch, Andrew	M	30-39	24:23.06
Bailey, Jacob	М	30-39	25:06.77
Sturgeon, Mead	M	30-39	26:11.05
Branon, Grace	F	30-39	23:50.47
Gonyeau, Sarah	F	30-39	24:05.44
Larner, CC	F	30-39	25:30.47
Atkins, Renee	F	30-39	26:18.17
Lemieux, Kristy	F	30-39	26:32.29
Hill, Mary	F	30-39	27:17.27
Kennedy, Tracy	F	30-39	28:19.14
Reynolds, Cynthia	F	30-39	28:30.96
Kittell, Vanessa	F	30-39	28:52.33
Blow, Dana	F	30-39	29:42.52

Howrigan, Nicole	F	30-39	30:45.71
Conger, Lisa	F	30-39	32:07.58
Dalmer, Rachel	F	30-39	33:09.98
Moulton, Sandra	F	30-39	33:56.50
Blossey, Dena	F	30-39	34:15.15
40-49			
Bessette, Mike	М	40-49	20:24.46
Boudreau, Bernie	М	40-49	25:38.00
Bombardier, Alan	М	40-49	26:37.70
Boudreau, Luke	М	40-49	27:09.71
Hodgeman, Chris	М	40-49	28:33.94
DeBellis, David	М	40-49	28:53.01
Gaudreau, Leo	М	40-49	31:39.31
Conger, Chad	М	40-49	41:09.05
Edwards, Verlaine	F	40-49	23:08.49
Walsh, Chandra	F	40-49	24:02.38
Boudreau, Michelle	F	40-49	25:13.79
Monahan, Meredith	F	40-49	25:21.14
Larner, Ginny	F	40-49	25:29.92
Poquette, Keri	F	40-49	29:53.36
Hauschel-Boulerice, Greta	F	40-49	32:40.04
Lavoie, Gwen	F	40-49	35:02.79
50-59			
# 1 Female overall:			
Woodhouse, Mary	F	50-59	23:00.23
Metayer, Barb	F	50-59	28:12.59
Howrigan, Mary	F	50-59	28:47.82
Fontaine, Elisabeth	F	50-59	29:14.49
60-69			
Demeritt, Nan	F	60-69	34:41.41





PO Box 1567 St. Albans, VT 05478

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working to restore Saint Albans Bay



# Save the Date! RESTORE THE BAY

**Currently scheduled for Saturday, June 7, 2014.**