



Where do we go from here? VT TMDL Implementation Plan Brings Promise, Bears Watching

SAAWA has seen more movement this year in the effort to clean up St. Albans Bay and Lake Champlain than any year in the last 20. SAAWA leadership and all the members of SAAWA should be proud of our contribution to this effort.

SAAWA has 4 main goals.

We strive to:

1. Bear witness to the situation on the ground and clearly, loudly speak the truth;
2. Directly improve water conditions in the Bay;
3. Lobby for more aggressive regulatory action;
4. Be in the vanguard as to what efforts should be undertaken by regulators to clean up the lake.

What is the TMDL?

The EPA has rewritten the TMDL for Lake Champlain, which is the plan for how much pollution, in our case phosphorus, can enter the lake and still have acceptable water quality. TMDL stands for total maximum daily load.

Originally written in 2002, it has governed the water quality improvement efforts. The Conservation Law Foundation sued the Federal Government to overturn it, viewing it as inadequate. We were one of the few voices to support the CLF. As a settlement to that suit, the EPA agreed to revise the plan which is in the final approval phase. The new TMDL will

govern the water quality improvement efforts in the next few years. The new TMDL is now almost universally recognized as a watershed (no pun intended) moment in the lake cleanup efforts.

The TMDL has some key points for St. Albans Bay. The new plan requires a 24% reduction in all phosphorus entering the Bay. Specifically, the TMDL requires reduction in the waste water treatment plant of 60%, developed land of 10%, agricultural production areas of 80%, forests of 5%, stream bank of 55% and agricultural of 34%. These reductions are significant, and in many cases will require significant changes of practices to achieve.

As a response to the revised TMDL and in recognition that current efforts were not adequate, the State enacted Act 64, the Vermont Clean Water Act. This echoes the

historic Federal Clean Water Act of 1972. An element of Act 64 is the Clean Water Fund of \$3.5 million per year. The other element is that it gives state regulators additional responsibility and tools to clean up the lake.

The Federal Government does not have the authority to regulate 'non-point sources,' which are all the sources of pollution in our watershed that are not waste water treatment plants or factories. State law exempts lawsuits against the creators of many non-point sources. This is the worst of all possible worlds because this pollution is not regulated but exempt from lawsuit. The federal government has circumvented this problem by threatening onerous regulation of point sources if water quality doesn't improve, but it is up to the State to press for change.

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**SAAWA Board Meetings take place
the 3rd Wednesday of every month at 5 pm**
Email info@saintalbanswatershed.org for directions.
Join us!

2015 Weed Harvesting Report:

An Additional Machine, Essential Maintenance Boosts



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SAAWA again conducted weed harvesting in the Bay during the summer of 2015. In addition to annual funding from the Towns of St. Albans and Georgia, and the City of St. Albans; SAAWA received \$5,000.00 from the St. Albans Rotary Club and an \$11,500.00 grant from the Vermont Department of Environmental Conservation Aquatic Nuisance Control Grant-in Aid . The purpose of the grant was to help fund mechanical weed harvesting in St. Albans Bay by hiring two additional employees to operate and maintain the two weed harvesters and tractor. A second weed harvester was purchased from the Town of Franklin for \$3,000.00.

The “old harvester” an Aquarius Systems EH-420 Weed Harvester (Aquarius) was removed from storage July 1, 2015. From July 1 to July 31, 2015 the weed harvester was completely sanded, all fluids removed from the hydraulic system, necessary repairs made and completely painted. The weed harvester was launched on August 3. The expected date to begin weed harvesting was July 15 which is the earliest start date specified by the mechanical weed harvesting permit. However, because of less weed growth this year and the funding for additional labor, it became practical to do these long needed repairs.

A second weed harvester, an Aquamarine H5-200 (Aquamarine), purchased from the Town of Franklin, was launched on July 27, 2015. Limited operation took place from July 27 - July 31 training the new employees on the Aquamarine harvester.

From August 3 - August 14 the two weed harvesters operated in the Hathaway Point area. From August 17 - August 25 the two weed harvesters operated in the area of Ferrand Road and Bingham Shore. During the period of August 26 - September 4 both machines returned to the Hathaway Point Area. And from September 7 - 15 the machines operated from The Pines and along the north end of Lazy Lady Island.

The Aquarius Systems harvester was hauled September 16th.

During this period Nikkolas Barratt worked a total of 106 hours pressure washing the Aquarius systems machine, changed the oil and prepared the machine for storage. He also worked on the fabrication of the trailer for the Aquamarine machine. The steel for this trailer was purchased from Queen City Steel. Two house trailer axels with wheels and springs were purchased and narrowed to fit the frame. After assembly the trailer was painted with three coats of rust resistant paint. Both machines were covered and stored on October 26th.

No major problems were encountered this season. Although we anticipated that the additional labor would facilitate the removal of more weeds from the Bay, the conditions this year afforded the opportunity to recondition our equipment. Because there were fewer weeds, more funds were available to complete maintenance on both machines. The Aquarius Systems machine was long overdue for paint. It now looks like a new machine with all new graphics



Workers sand and paint the Aquarius System EH-420 which, along with other needed repairs, will extend the functional life of the SAAWA harvester.

2016 Harvester Capacity

and new hydraulic oil which is environmentally safe. The trailer for Aquarius was also painted. John, Andy and Johnny Pelletier (John's Auto Clinic) were again contracted to operate the Aquarius Harvester and provided the expertise in restoring the harvester and fabricating the new trailer.

Approximately 126 tons of weeds were removed from the Bay during this weed harvesting season. This is dramatically less than past seasons when 400 tons or more have been harvested. Observations would suggest that the relatively low water during the winter of 2015 with prolonged cold and greater than average ice thickness followed by very high lake water levels in June thru mid July retarded weed growth.



Operator Andy Pelletier stands atop the newly painted and repaired harvester.

2015 Weed Harvesting Financial Summary

2015 Weed Harvesting Expenses

9 weeks operation and maintenance@ \$1,000.00/wk	\$9,000.00
Labor	9,165.00
Materials and parts	1,959.76
Harvester restoration materials & labor (Johns Auto Clinic)	1,823.73
Fuel	456.50
Workman's Comp. Ins.	1,580.00
Tractor rental	2,500.00
Total weed harvesting operating costs	\$27,522.10
Additional weed harvester purchase	
1985 Aquarius Systems H5-200 (Town of Franklin)	3,000.00
Trailer construction	3,431.13
Hydraulic motors & cylinders rebuild (Charlebois)	609.02
Total cost of weed harvester, trailer & repairs	7,040.15
TOTAL	\$34,562.25

2015 Weed Harvester Funding

Town of St. Albans	\$7,500.00
Town of Georgia	2,500.00
City of St. Albans	10,500.00
St. Albans Rotary(contribution to weed harvester purchase)	5,000.00
ANR Grant (to date)	6,150.00
TOTAL FUNDING TO DATE	\$31,650.00

Where do we go from here?

SAAWA and the TMDL

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Vermont's TMDL Phase 1 Implementation Plan includes significantly more regulation on all creators of pollution. Worthy of note is the Plan's creation of RAP's (Required Agricultural Practices) to replace the old AAP's (Acceptable Agricultural Practices).

In addition, there will be additional permitting requirements for roads and impervious surfaces.

The TMDL requires significant changes in how people operate. Farmers must change their operations — in many cases significantly. There will be new investments in waste water treatment plants. Municipalities will change how they handle storm water, in fact most everyone with impervious surfaces will have to change how they manage their operation.

Where does SAAWA go from here?

This is the end of the beginning, not the beginning of the end. There are significant concerns. There is not a good model or historical precedent for improving water quality by changing non-point sources. In addition, there is concern that some of the targeted reductions are not realistic, agriculture for example.

The rewritten TMDL, State Act 64, the State's TMDL Implementation Plan and Required Agricultural Practices include many actions that SAAWA has been actively lobbying for, for years, in the face of much opposition. This gives us the confidence that our activities are focused on the correct areas.

Not all that we have lobbied for as been adopted. Areas of emphasis for the future efforts include:

1. SAAWA will lobby for more aggressive treatment of toxic algae. A tepid state response is simply unacceptable.
2. SAAWA will act as a watchdog on activities and insist on a change to the lax enforcement of existing regulation.
3. SAAWA will lobby for laws and regulations that improve water quality.
4. SAAWA will work on solutions that improve water quality NOW. This includes weed harvesting and finding innovative in-lake treatments.

The leadership of SAAWA recognizes that this has been a long and difficult process, but are heartened by our results. We've updated our mission statement, revitalized our board and board process. We are actively recruiting new members and new board members. We invite you to join this effort.

If you would like to become a member,
please join or renew your membership online at
saawavt.org

If you have an interest in becoming a
SAAWA Board Member, please contact Steve Cushing,
SAAWA president at 524-2897.

Join us and speak up for clean water!

Dealing with stormwater: "slow it, spread it, sink it..."

NRPC Leads DIY Homeowner Stormwater Remediation Workshop

On November 21, 2015, the Natural Resources Planning Commission hosted their first official "Do It Yourself" Stormwater workshop. Hosted by Amanda Holland and Jimmy Young of the NRPC, around 20 St. Albans area residents attended. NRPC plans to conduct more workshops in the near future.

Attendees were provided with a folder containing the following materials:

- Managing stormwater runoff on your property workbook: a do-it-yourself residential site assessment;
- Information to help residents calculate property area and natural and manmade features with an online mapping service;
- Google Earth maps of residents properties showing property features, as well as property stormwater site assessment maps;
- A Green Stormwater Infrastructure (GSI) fact sheet packet;
- A guide to evaluate soil sustainability based on the capacity of the soil to retain and infiltrate stormwater runoff and to support naturalized or ornamental vegetation; and
- A bibliography of helpful online resources.

The workshop took three phases to create a common understanding of stormwater runoff, learn how to assess runoff on one's personal property, and presented a variety of solutions for home implementation.

Phase One covered our local watershed geography; a breakdown of the natural



water cycle; an awareness of contributing factors to stormwater runoff and how rain water gets polluted, an understanding as to how stormwater runoff and phosphorus are related, as well as a clear picture of the results and problems associated with stormwater runoff.

Specifically, this workshop began with the goal in mind: How can a citizen make a difference with stormwater and create an analysis of one's property, develop a plan, and then implement a way to manage or sustain one's plan?

A PowerPoint presentation allowed the members to understand the geographical landscape of the Northwestern Vermont Watersheds, including Lake Champlain, the Lamoille River, and the Missisquoi River. A natural water cycle visual was then provided for the members in order to demonstrate the impacts of how urban and rural development plays a significant role in stormwater runoff.

A brief rundown was also provided about the definition of stormwater runoff, followed by urban, rural, and house run off examples. The last three topics presented during phase one focused on how rain water gets

polluted, how are stormwater and phosphorus are related, and why stormwater is a problem?

Phase Two helped attending residents to identify features (manmade or natural) existing on their property, map their property features, estimate how much stormwater runoff is generated on their property, understand the impact of these features, and create and sustain a plan to help reduce the amount of stormwater runoff.

After reviewing impervious and pervious surfaces, we began to understand how to map our property features by looking at the landscaped areas, natural vegetation, built environment and water features.

Participants viewed their personal properties via Google Earth maps and labeled the features on their property. They were then presented with a take-home exercise to determine the amount of stormwater runoff that results from our property based on calculations of square footage and property features.

Activity three involved mapping the flow of water on homeowner properties. We located where water flow areas and took note of any potential ponding, soil erosion, downspouts or overhangs, etc.



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St. Albans, VT 05478

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

Board of Directors

President
Steve Cushing
Vice President
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Treasurer
Josh Koldys
Secretary
Jeff Moulton

Visit us on the web:
www.saawavt.org

Amanda and Jimmy encouraged us to verify this map and its waterfall on a rainy day. We were then able to estimate how much stormwater runoff is generated.

Phase Three introduced a procedure to help identify property soil conditions and we began to consider options for what we could do to fit into the slogan, "slow it, spread it, sink it." The Green Stormwater Infrastructure (GSI) and Best Management Practices (BMP) packet allowed us to do this by taking a look at rooftop disconnection ideas, tree canopies, native meadows, riparian buffers, rain gardens, dry wells, pervious pavers, etc.

Learn more on the Franklin County Stormwater website at www.fcsvt.org.

2015 Annual Meeting Recap

The annual meeting of SAAWA was held September 24th at the Bayside Pavilion. Although the meeting was well attended, the absence of long time board member Gould Susslin was very noticeable. Gould dedicated more than 50 years advocating for the clean-up of St. Albans Bay and his passion is greatly missed.



SAAWA founder and long-time board member Gould Susslin

The meeting was called to order by Jeff Moulton. His opening remarks addressed the need of SAAWA for better organization, and better communication with the membership. The first item of business was the election of directors. New to the board are Dan DeGraff, Jeff Moulton and Steve Langevin who join current board members Josh Koldys, Kate Wolinsky, Tim Camisa, Eric Wolinsky and Steve Cushing. The membership nominated and elected officers as follows:

- Steve Cushing *President*
- Dan Degraff *Vice President*
- Josh Koldys *Treasurer*
- Jeff Moulton *Secretary*

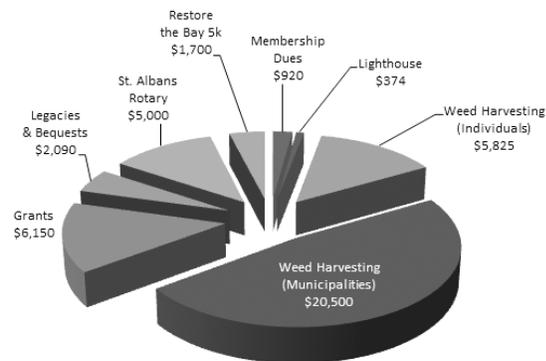
President Steve Cushing reported on weed harvesting (see p. 2). Treasurer Josh Koldys presented the financial report which can be found on p. 3. Eric Wolinsky summarized the EPA mandated plan to clean up the lake. The plan now proposed by the State of Vermont includes municipal wastewater plant upgrades, requirements by municipalities to reduce runoff from roads, required agricultural practices on farms and addressing storm water runoff from developed lands. The goal for St. Albans Bay is to reduce phosphorous loading by 36%. The reduction goal from agriculture is 8,290 pounds of phosphorous annually

The guest speaker was John Thurgood, Natural Resources Conservation Service (NRCS) District Conservationist and Coordinator for the St. Albans Bay Watershed Strategic Planning Partnership. The local team of the strategic planning group is a partnership of farmers, NRCS & USDA staff, representatives of local watershed groups and the Vermont Department of Environmental Conservation. Mr. Thurgood previously worked in Sullivan County, New York with a similar program which successfully reduced nutrient runoff from farms into the reservoirs and lakes which supply drinking water to New York City. He outlined the practices which will be implemented in the St. Albans Bay watershed to reduce the amount of phosphorous coming from agricultural lands into the Bay. A lengthy question and answer session followed.

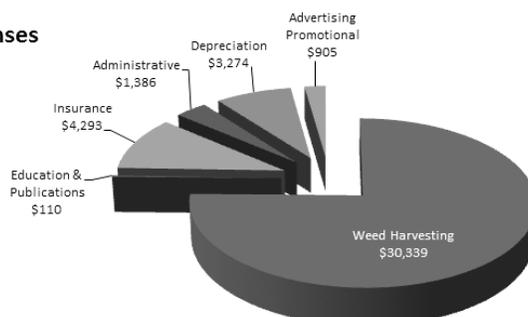
SAAWA would like to thank Chuck Lowe and Joey Lowe for their generosity in making Bayside available for our annual meeting. We also thank the staff of Bayside for their effort in providing the ample and delicious refreshments.

SAAWA 2015 Revenue & Expense Summary

2015 Revenue



2015 Expenses



Become a Member!

The St. Albans Area Watershed Association depends on financial support from our members to continue its mission of advocating for a clean lake as well as for operation of weed harvesters in Saint Albans Bay.

Renewing your membership, becoming a new member or making a donation specifically to weed harvesting will help directly to combat invasive weed species and SAAWA believes weed harvesting helps remove excess phosphorus-producing weeds from the Bay. It will also help us press for efforts to implement additional lake clean up efforts directly affecting St. Albans Bay such as blue-green algae remediation.

Please complete the form below and return to:

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

Name _____	
Address _____	
Email _____	Phone _____
Shoreline property owner? <input type="checkbox"/> yes <input type="checkbox"/> no	
Membership Level	
<input type="checkbox"/> \$10 Individual	<input type="checkbox"/> \$20 Family
<small>(Individual, Family and Student memberships receive SAAWA newsletter)</small>	
<input type="checkbox"/> \$50 Lake Advocate	<input type="checkbox"/> \$5 Student
<small>(SAAWA Hat)</small>	<small>(Winslow book on Lake Champlain)</small>
<input type="checkbox"/> \$100 Lake Steward	<input type="checkbox"/> \$150 Business Sponsor
<small>(Website Link)</small>	

▶▶▶ You may also donate online by visiting: www.SAAWAVT.org

Vermont Organics Reclamation Wins Burpee Contract for Phosphorus Export of Organic Growing Material

SAAWA Board Member Tim Camisa, co-founder of Vermont Organics Reclamation (VOR) is making a big dent in the Franklin County Watershed phosphorus load through shipments of soil products. Following is reproduced from a press release by VOR.

As Vermont Agriculture Secretary Chuck Ross prepares to collect public input on new farm rules that are tied to water quality, one northwestern Vermont Company has spent the last two weeks exporting phosphorous from Franklin County watersheds.

On Friday, Nov. 13, Vermont Organics Reclamation (VOR), based in St. Albans, sent its second part of a four-phase delivery to Burpee Seed, in Pennsylvania. When this major order/delivery is filled by the Monday after Thanksgiving, VOR will have exported 250 pounds of phosphorous from Franklin County watersheds.

"From solids that we've purchased from Franklin County farms, we have manufactured three 53-foot tractor trailer loads

of inert growing material for Burpee's seeds — a total of 72 pallets," says Tim Camisa, co-founder of VOR, and an inventor and innovator of systems that return carbon to the ground and focus on the Earth's three key elements: air, water and soil.

In the early 2000s, Camisa initially founded VOR — now a company that focus on concepts that surround climate change — on the premise that he would purchase manure solids from local farmers and manufacture organic soil products with them, as a way to export phosphorous from Franklin County watersheds and prevent them from feeding algae blooms in Lake Champlain.

"We're still exporting phosphorous today, even as the state is about to write new rules for farmers in the wake of new water quality legislation," Camisa said. "It's fitting that we're performing this phosphorous export this month."

The Vermont Agency of Agriculture has released a draft



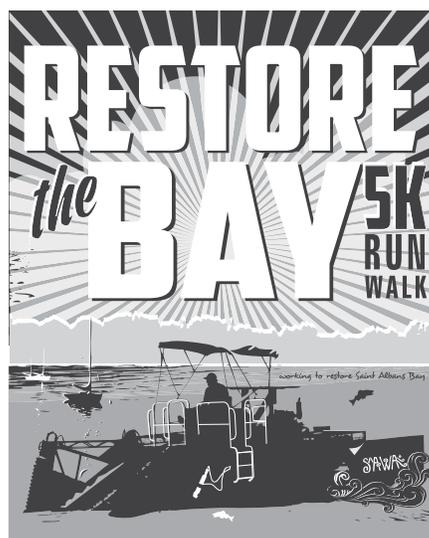
Tim Camisa finishes loading a trailer with growing material, composted from Vermont farm waste and destined for Burpee Seeds.

of new farm rules that are part of the state's clean water law, and is holding public hearings this week in Franklin and Addison counties this week to discuss and gather input on them.

The agency says they are farm and land management techniques that will control and reduce agricultural source pollution and subsequent nutrient losses from farm fields and production areas to surface and ground waters.

"I'm rooting for the farmer

with these new rules," Camisa said. "I hope this process gives farmers new and effective tools for moving ahead through this terribly complicated issue for them. And I emphasize the word 'new' with hopes that we can keep farms in business when all of this sugars off." For more information on Vermont Organics Reclamation, visit their website: vermontorganics.com. Vermont Organics is located off Wilder Drive, on Rte. 7 N/S, just on the edge of St. Albans and Georgia.



Mark your calendars...
Sunday, June 5, 2016 (TENTATIVE)
ST. ALBANS BAY TOWN PARK

Again this year, 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. Join us for a fun, family-friendly race event and support efforts to clean up St. Albans Bay!

More info and pledge sheets
 will be on line in May.

www.saawavt.org

SAAWA
 st. albans area watershed
 ASSOCIATION

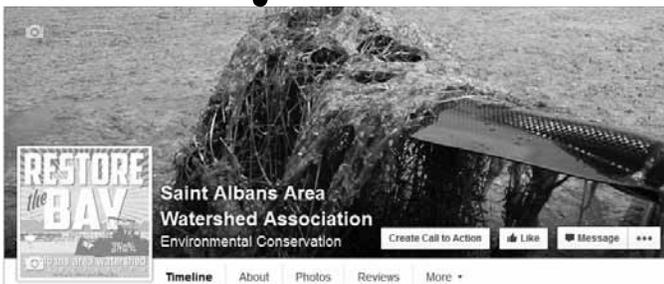


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www.saawavt.org

working to restore Saint Albans Bay

stay connected!



SAAWA has a new Facebook page!

We have moved to a new page and will be using our new page to stay better connected to members and the community.

Please visit and 'Like' our new page:
www.facebook.com/saawavt/
to stay in the loop.



Connect on Twitter... @SAAWAVT

SAAWA is beginning to use Twitter to communicate on lake issues, upcoming events, meetings, lobbying efforts. Join in and 'Follow' SAAWA to stay connected..

