

# Town of Colchester



## 2011 Annual Report for:

**General Permit 3-9014  
National Pollutant Discharge Elimination System (NPDES)  
Number: VTR040000**

**For:  
Storm Water Discharges From Small Municipal Separate Storm Sewer Systems  
(MS4's)**

***Submitted to:***

**Vermont Agency of Natural Resources  
Department of Environmental Conservation  
Water Quality Division, Storm Water Management Program  
103 South Main Street, Building 10 North  
Waterbury, Vermont 05671-0408**

***Submitted by:***

**Town of Colchester  
P.O. Box 55, 781 Blakely Road  
Colchester, Vermont 05446**

***Date Submitted:***

**March 31, 2012**

**TOWN OF COLCHESTER  
GENERAL PERMIT 3-9014  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
NUMBER: VTR040000**

**2011 ANNUAL REPORT**

**Section 4.2.1**

**Public Education and Outreach on Storm Water Impacts**

The Town of Colchester has participated throughout 2011 in the Regional Storm Water Education Program, (RSEP) along with other MS4 communities from Chittenden County. Activities as identified in the MOU contained in the Town's NOI and application have been successfully completed, and are more specifically outlined in the Chittenden County Regional Storm Water Educational Program, Annual Review: 2011 Program Summary, Prepared by Marketing Partners, Inc.

The Town has also developed a storm water web site, which displays a variety of storm water related information, including the Town's MS4 Permit Plan. The information can be viewed at [www.colchestervt.gov/PublicWorks/Stormwater.shtml](http://www.colchestervt.gov/PublicWorks/Stormwater.shtml).

**Section 4.2.2**

**Public Involvement and Participation**

1. *Citizen volunteers established to complete stenciling of the second 50% of the storm water structures within the MS4 designated areas.* – The Town of Colchester, working with volunteers from the community, completed an extensive stenciling program during the summer of 2004. Residents from the Hidden Oaks sub-division in Colchester worked with the Department of Public Works to stencil approximately 800, or about 98% of all storm water structures throughout the community. The Department purchased the necessary equipment and materials to perform the work, which was completed primarily through the use of curb markers. Actual stenciling on the pavement was used where no curbs existed. The volunteers included several young children from residential neighborhoods. Training, supervision and a general education on good water resource management was provided by the Town. The efforts received media coverage through the local new papers. This accomplished all of the required work under this activity for years two and three of the permit. In 2006, the last two remaining sub-divisions that had not yet been stenciled were completed by high school students as a school project. Regular inspection accomplished through basin cleaning, street sweeping and regular travel on the transportation system had revealed that only a limited number of curb markers required replacement.

These were done by DPW crews as they are identified. However, in 2007 a Cub Scout volunteer did assist the Town with these efforts.

At this point, regular inspections are concluding that many of the markers and stenciling now need to be replaced or updated. The Town has formed a partnership with both the Boy Scouts and Cub Scouts in Colchester. Building on the Boy Scouts of America, "Leave No Trace" program, the partnership will work toward annual stenciling of the Town's storm water basins as part of their regular and ongoing curriculum. While stenciling is being done in each neighborhood, other scouts will go door to door handing out educational materials regarding their efforts as well as other storm water related issues. These materials will also serve to direct citizens to the RSEP web site for further information. The Town provides all materials including program training for the scouts. Training materials have included products from RSEP as well as a stenciling training video developed by the Colchester Public Works Department. This video may be viewed on the storm water page of the department's web site. Select; "Education" and then; "Catch Basin Stenciling". The goal is to develop a long term relationship of public involvement and participation, and more importantly, involve younger citizens to more effectively create an improved and sustainable understanding of storm water related issues within our community.

2. *Citizen volunteers established to participate in a stream corridor clean-up day and complete clean-up of 40% of Sunderland Brook* – In 2004, the Town of Colchester was able to secure funding through the Chittenden Solid Waste District, under the District's Community Cleanup Fund, to retain a consultant to perform field reconnaissance of the Sunderland Watershed. This effort resulted in the identification and inventorying of nine (9) illegal dumping sites within the watershed. All information was collected in GIS format and mapped for future clean up efforts.

From 2004 – 2006, the Town cleaned up six of the nine sites as described in previous annual reports, much of which involved the use of citizen volunteers. The sites that were cleaned up included sites A-1, A-2, A-3, A-4, J-1 and J-3 as identified in the 2004 field reconnaissance. In 2008, the Town focused on the three remaining dump sites. It was discovered that site J-2 had already been cleaned up and restored by others. The Town with its own forces cleaned up sites A-5 and J-4 using Local Community Implementation Grant funds awarded to the Town by the VDEC. Of the nine sites identified through the 2004 field reconnaissance, all sites have now been cleaned up with volunteer assistance through the first six years of the MS4 Program. Similar to the Town's stenciling program, volunteers in some cases included children supervised by adults, with their efforts published in the local news papers.

The Town has a significant volunteer base who regularly participates in activities aimed at preserving the community's abundant natural resources. During Green Up Day, a total of 344 Colchester citizens participated in cleanup activities filling

750 trash bags. At the annual Green Up day picnic, the Town served the volunteers over 100 hotdogs. In total, Colchester citizens removed 4.4 tons of trash, 132 tires and 0.1 tons of scrap metal.

During the 2011 Green Up Day activities, the Town also worked with its Conservation Commission to specifically target its clean up efforts toward high priority areas. These high priority areas included a total of 25 significant stream crossings of the Town's transportation system. Within these areas, the conservation Commission removed 163 bags of trash, 19 tires and a pile of roofing shingles.

3. Storm Water Watch Groups established within 100% of the sub-watersheds located within the MS4 designated areas – The Town has previously identified and mapped all eleven sub-watersheds within Colchester. This past summer, the services of three additional community volunteers were secured to serve on our watershed watch groups. This brings the total number of volunteers serving in this capacity to fifteen. The volunteers live in a total of eleven different sub-watersheds, resulting in 100% coverage. Initial educational materials were provided to each of the volunteers to help them understand the types of conditions that can contribute to water quality problems. Information is periodically sent to them on an as needed basis. Future efforts will include using the existing storm water watch group network to solicit the participation of additional citizens to serve in this capacity.

### **Section 4.2.3 Illicit Discharge Detection and Elimination**

1. Update storm water system base map as required – This activity will be an ongoing process for the Town as additional development and associated storm water infrastructure is added. To maintain this data base, a three tiered approach has been developed to document 1) existing storm water infrastructure, 2) additional storm water infrastructure added through the Town's maintenance efforts and/or capital improvement projects, and 3) additional storm water infrastructure associated with new development.

**Existing Storm Water Infrastructure** - The Town has been the recipient of a \$1.5 million EPA Demonstration Grant. One of the many activities contained within the scope of work is a comprehensive update of the Town's storm water system mapping. This work is now completed and can be viewed on the Town's project website at [www.colchesterwaters.net](http://www.colchesterwaters.net).

**Future Town Installed Storm Water Infrastructure** - The Department of Public Works continues to move toward additional in house GIS capabilities. In support of this approach, the Town has added two additional GIS Arc View work stations within the Public Works Department., and has obtained GPS data collection equipment.

**Future Developer Installed Storm Water Infrastructure** - The Town has approved amendments to its Sub-division regulations to require that developers provide the Town with as-built information associated with new development, in digital form.

2. *Develop and implement an Illicit Discharge Ordinance* – The Town has developed and implemented an Illicit Discharge Ordinance. The ordinance regulates the contribution of pollutants to the MS4 from storm water discharges by any user, prohibits illicit connections and discharges to the MS4, and establishes legal authority to carry out the IDDE Plan, including conducting inspections, monitoring, and enforcement procedures to ensure compliance with the ordinance. The ordinance was adopted by the Colchester Select Board on July 26, 2005.
3. *Perform inspection of all storm water outfalls within the MS4 designated area, and sample all outfalls with dry weather flows.* – The Town completed inspections of all permitted outfalls with reporting requirements as identified within the Town’s IDDE Plan, and outfalls identified in an Outfall Reconnaissance Inventory completed for the Town of Colchester, by the Department of Environmental Conservation in March of 2006. A total of 34 storm water outfalls were inspected. Testing included the *E-coli*, use of optical brighteners, as well as testing for pH.
4. *Identify any illicit discharges and take the appropriate actions to correct all illicit discharges detected.* – There were no illicit discharges detected during the outfall inspections conducted in 2011.
5. *Update training for public employees as a part of the Town’s program for Pollution Prevention and Good Housekeeping.* – In 2011, the Colchester Public Works employees received training at the Municipal Employees MS4 Training Workshop.
6. *Provide updated educational materials to the Colchester Community Development Corporation for distribution to the business community.* – Educational brochures developed for local businesses were distributed through the Town’s Community Development Office. Approximately 130 brochures were provided for distribution.
7. *Accomplish additional educational outreach as outlined in Section 4.2.2.2.3* – The Town has accomplished additional educational outreach through the development and implementation of a storm drain stenciling program, stream corridor clean up initiatives, and the establishment of citizen storm water watch groups.

8. Document all actions. – The Town has established files to maintain all documents relating to the management of illicit discharges. A complaint system has also been established to receive citizen complaints through a storm water hotline. The hotline is posted on the Town’s web site. There were no calls recorded in 2011.

#### **Section 4.2.4**

##### **Construction Site Storm Water Runoff Control**

1. Conduct plan review for all land disturbances requiring permits under Planning and Zoning – The Town continues to perform plan review of all projects involving land disturbance as a part of the site plan review process and the issuance of building permits. In 2011, the Town reviewed and issued permits for a total of 696 projects involving land disturbances.
2. Inspect all locally permitted projects causing land disturbance for compliance to local erosion control ordinance, and take appropriate actions, including enforcement for violations. Report any suspected violations to ANR. – In 2011, Town inspectors performed 1,104 site visits associated with 696 permitted projects involving land disturbances to ensure compliance to local erosion control ordinances.

#### **Section 4.2.5**

##### **Post-Construction Storm Water Management in New Development and Redevelopment.**

1. Conduct development review process for all land disturbances requiring permits and require the appropriate post-construction storm water controls. - The Town continues to perform plan review of all projects involving land disturbance as a part of the site plan review process and the issuance of building permits. In 2011, the Town reviewed and issued permits for a total of 696 projects involving land disturbances. Projects were required to conform to the Town’s storm water regulations.
2. Attach O&M permit conditions to approvals for all land disturbances that are not taken under public ownership – All permit conditions associated with projects involving land disturbance are included in the approved Findings of Fact and Order approved by the Development Review Board. This document becomes the instrument for enforcing the Board’s approval.

3. Perform inspection activities as outlined in Section 4.2.5.2.3 and report any suspected violations to the appropriate jurisdiction. - In 2011, Town inspectors performed 1,104 site visits associated with 696 permitted projects involving land disturbances to ensure compliance to local erosion control ordinances.

## Section 4.2.6

### Pollution Prevention/Good Housekeeping for Municipal Operations

1. Maintain the improvements and procedures outlined in the MCAP program – On September 19, 2010, John Daly, Environmental Assistance Specialist within the Vermont Department of Environmental Conservation, conducted an inspection of the Town's Public Works Maintenance Facility. The Town is in compliance with each of the Direct Compliance Issues identified in the report. Spent diesel and gas fuel filters are being disposed of as outlined. The Town discontinued the use of clay absorbents several years ago. The Town has previously tested its sand blast waste for heavy metals with negative results. No changes in procedures or materials have been made since that time. Debris from both street sweeping and catch basin cleaning is currently being stored on site at the maintenance facility. The charges from landfills to accept the material as cover material have become cost prohibitive. Subsequently, the Town has had these materials tested and determined that they can be safely disposed of at alternative sites.
3. Maintain the improvements and procedures outlined in the Multi-Sector General Permit for the Town's Public Works Maintenance Facility – The Town currently understands from the VANR Legal Council that MSGP's are not required for Public Works Garages. The Town has however completed several improvements which would be required under a MSGP if one were required. These include the covering of construction materials such as asphalt, manhole frames and covers, and scrap metal. The sand blasting area has been paved to facilitate the clean up of the waste material after each occurrence. A holding tank has been installed which is connected to the floor drains within the maintenance facility to capture wash water associated with cleaning equipment. The waste water is periodically removed and discharged into the Town's municipal sewer system. Voters of Colchester recently approved bonds to allow improvements to several Town buildings, including \$750,000 for the Public Works maintenance Facility. As a part of this project, a 3,720 square foot cold storage facility has been constructed, allowing much of the Town's equipment and construction materials to be placed under cover. This project also included the replacement of an aging salt storage facility.

3. Maintain operation and maintenance program as identified in Section 4.2.6.2.1 –  
The maintenance program as identified in Section 4.2.6.2.1 reflects the Town's standard operating procedures and basic maintenance requirements within the community. Current and future budget plans reflect a continuation of these activities.
  
4. Conduct employee training as specified in Section 4.2.6.2.1 – In 2011, the Colchester Public Works employees received training at the Municipal Employees MS4 Training Workshop.

## **Section 4.2.1**

### **Public Education and Outreach on Storm Water Impacts**

**Attachments:**

1. **Regional Storm Water Educational Program -- 2011 Recap of Public Education and Outreach Activities.**
2. **Invoice and payment of 2011 RSEP contribution.**
3. **Public Works storm water web page.**

## **Chittenden County Regional Stormwater Educational Program Annual Review: 2011- 2012 Program Year Summary**

The 2011-2012 program year (March 1, 2011 through February 29, 2012) of the Regional Stormwater Educational Program (RSEP) maintained a consistent stream of public education and outreach. This year's program focused on using paid media and a drive to website to educate the public about the effects of stormwater runoff on water bodies and the simple steps that the public can take to reduce these effects. Given the record flooding of Lake Champlain in the spring and the widespread effects of Tropical Storm Irene in many parts of the state in late summer and fall, stormwater runoff and its impact on Vermont's water bodies has never been more apparent.

As in previous years, key messages of the campaign have remained the same, and include stormwater runoff and stormwater systems education, and tips on prevention methods related to fertilizer/chemicals. The focus of this program year was to reduce fertilizer use and runoff through the use of soil testing to determine if fertilizer was needed.

Marketing Partners, Inc. continues to work on a contract basis with RSEP to implement the public outreach campaign. RSEP Communications Plan goals achieved in 2011-2012 have included:

- Updated television media from analog to digital and closed-captioning, update print ads for new year of campaign.
- Extension of the "Soil Test" campaign in partnership with the University of Vermont (UVM) Agricultural Testing Lab to provide residents within the MS4 a free soil test. The ad campaigns drove people to the RSEP website where 163 eligible residents downloaded a printable coupon during this program year. UVM continues to track the number of coupons redeemed during paid media campaigns running in the spring and fall. Thirty-six tests were submitted (an increase of 11 from 2010).
- The 2011 spring media campaign included four weeks of radio spots on VPR, WCPV, and WEZF; four weeks of cable TV spots in the Chittenden County area; four weeks of spots during local news on broadcast TV; print ads in member community newspapers; and three weeks of advertising on Front Porch Forum (an opt-in community e-newsletter). The spring 2011 media budget totaled \$19,353, an increase from 2010.
- Another paid media campaign was completed throughout Chittenden County in fall of 2011 that consisted of two weeks of print ads in member community newspapers; two weeks of radio spots on VPR, WCPV, and WEZF; two weeks of cable TV spots in the Chittenden County area; two weeks of spots during local news on broadcast TV; and two weeks of placement on Front Porch Forum. The fall 2011 ad campaign budget totaled \$10,000. This also represents an increase in media budget compared to fall 2010.
- Continued to compile website visibility tracking data and coupon download and redemptions in order to monitor outreach effectiveness.
- Continued to collaborate with partners in furthering stormwater education outreach.

## Gross Impressions/Audience Reach, 2011-2012 Program Year Summary Chittenden County Regional Stormwater Educational Program

### 1. Unpaid Media (Public Relations)

At the request of RSEP, program year 2011-2012 did not include any public relations efforts. However, two news reports about using rain barrels to reduce run-off featured RSEP in June 2011. The Champlain Water District *Water Quality Report 2011* also included RSEP.

### 2. Total Paid Media Impressions, 2011 (Spring and Fall campaigns)

The 2011-2012 paid media budget was increased to \$31,000 from the prior year budget of \$12,250. The same media strategies of increased online sponsorship in addition to commercial advertising were used with increased frequency and additional weeks during the spring flights. This year's paid media schedule resulted in an increase of 149.5% in gross impressions, as delineated below:

Print: 1,149,876\*  
 Broadcast TV: 136,260 (Nielsen households using television, Chittenden County, program ratings)  
 Cable TV: 77,220 (Nielsen program ratings by cable market penetration)  
 Radio: 383,912 (based on Arbitron ratings of adult listeners in Chittenden County, M-F 6a – 7p)  
 Online: 56,500 (based on circulation reported by media outlet)

**Total gross impressions: 1,803,768**

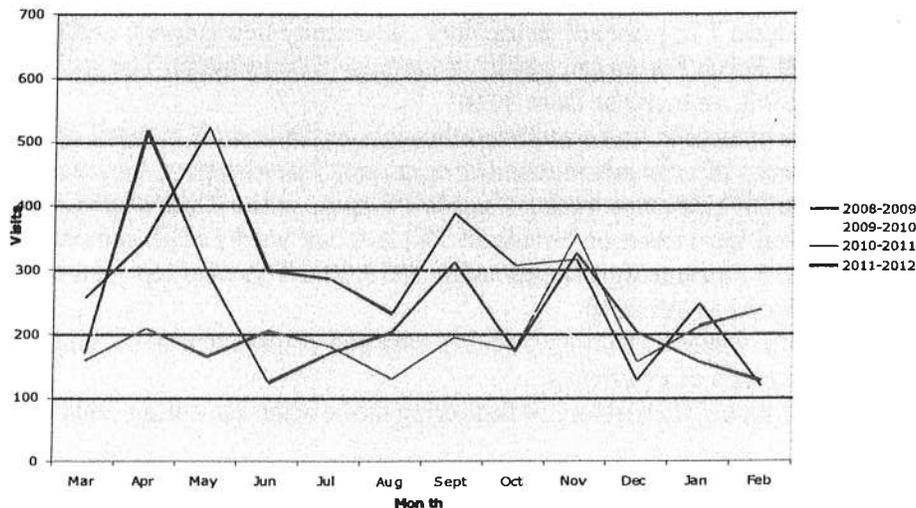
*\*Impressions are based on circulation as reported by outlet and an average readership of 2.34 per issue for community newspapers.*

### 3. Website

Below is the website visitor information for 2011, as compared to the three most recent preceding years. The program year had 2,774 visits, a decrease of nearly 20%; however, page views per visit and time on site increased. Website traffic increases/spikes are marked in conjunction with paid media campaigns.

#### Smartwaterways.org Website Visits

4-Year Comparison



NOTE: Data from Google Analytics for [www.smartwaterways.org](http://www.smartwaterways.org).

**Regional Stormwater Education Program**

110 West Canal Street  
Suite 202  
Winooksi, VT 05404

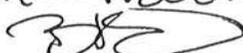
**Invoice**

Invoice #: 31  
Invoice Date: 7/1/2011  
Due Date: 7/16/2011  
Project:  
P.O. Number:

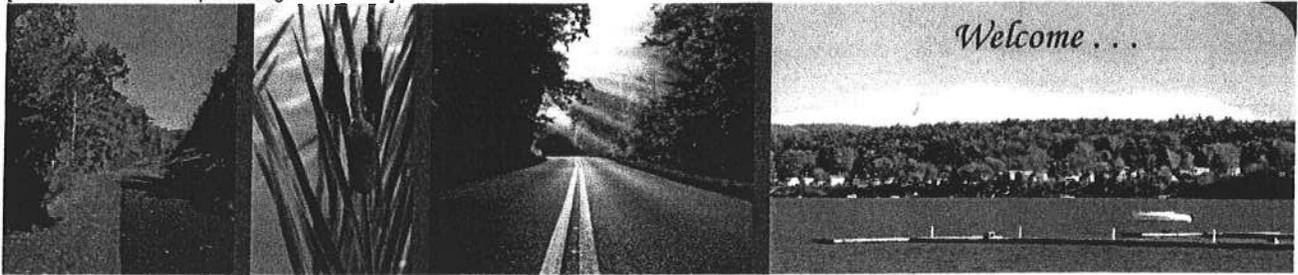
**Bill To:**

Mr. Brian Osborne  
Director of Public Works  
Town of Colchester  
PO Box 55  
Colchester, VT 05468

Description	Hours/Qty	Rate	Amount
Regional Stormwater Education Program, Year 9		5,000.00	5,000.00
<b>Total</b>			\$5,000.00
<b>Payments/Credits</b>			\$0.00
<b>Balance Due</b>			\$5,000.00

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Town of Colchester, VT - Public Works Department 781 Blakely Rd., PO Box 55, Colchester, VT 05446 (802) 264-5620 8:00 am - 5:00 pm Mon - Fri

March 27, 2012

- Town Departments
- Public Works Home
- Volunteer Opportunities
- Meet the Director

Capital Improvements
Data Collection
Education
Maintenance
Ordinance
Permits
Public Involvement
Reports
Stormwater Plans

### Welcome to the Stormwater Page

The Town of Colchester is rich in natural resources. There are approximately 30 miles of shoreline on Lake Champlain, while the arms of Malletts Bay surround almost 10 square miles of the lake. The Town's southern border has about 9 miles of frontage on the Winooski river, and the northwestern border has about 3 miles of frontage on the Lamoille River. Inland from the lake lies Colchester Pond, a 186 acre water body. With 165 mapped wetlands, comprising a total of 3,066 acres, and many unmapped wetlands, Colchester has one of the most diversified and valuable collections of habitats in Vermont. For these reasons and many more, Colchester has made water quality a priority for many years. In keeping with these priorities, the Colchester Public Works Department has focused substantial resources on managing stormwater runoff within the community.

Stormwater Hotline: 264-5628  
[stormwater@colchestervt.gov](mailto:stormwater@colchestervt.gov)

Regional Stormwater Education  
 Program Member



#### What is Stormwater Runoff?

#### Why is Stormwater Runoff a Problem?

#### Why and how to manage Stormwater?



## **Section 4.2.2**

### **Public Involvement and Participation**

#### **Attachments:**

1. Greenup Day results and coordination.
2. Information and records relating to the establishment of Storm Water Watch Groups.
3. High priority Green Up Day locations and removal quantities.

## Bryan Osborne

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**From:** Lisa Halvorsen [Lisa.Halvorsen@uvm.edu]  
**Sent:** Wednesday, May 11, 2011 4:21 PM  
**To:** Bryan Osborne  
**Subject:** Green Up Day results

Bryan,

Chuck Kirker said that you were interested in totals for Green Up Day. We had 344 volunteers and handed out about 750 bags. Chittenden Solid Waste District should let us know the trash tonnage in another week or so.

In case you are interested, I just compiled the list of volunteer numbers for the Conservation Commission, which has been organizing the event since the mid-1990s. Our first year 75 people showed up.

Here's what we had for participation for the past nine years.

2003 (227)  
2004 (229)  
2005 (263)  
2006 (291)  
2007 (337)  
2008 (258)--very rainy day  
2009 (518)  
2010 (341)--local schools already on vacation  
2011 (344)

Let me know if you want to know anything else about Green Up Day this year.

Lisa

**Bryan Osborne**

**From:** Charles Kirker [ckirker@dps.state.vt.us]  
**Sent:** Thursday, June 02, 2011 7:06 AM  
**To:** Bryan Osborne  
**Subject:** FW: CORRECTED 2011 Green Up data

I just got this, haven't had time to see what the correction is but assume it means Colchester did more than originally reported.

Charles A. Kirker, Chief of Police  
 Colchester Police Department  
 P. O. Box 37  
 Colchester, VT 05446-0037  
 Direct Line 802 264-5540

**From:** sharoninv@gmail.com [mailto:sharoninv@gmail.com]  
**Sent:** Wed 6/1/2011 10:46 AM  
**To:** Amber Van Zullen; Elizabeth Chant; Pamela Loranger; Patrick Volz; Theresa Carroll; Theresa Carroll 2; Charles Kirker  
**Subject:** Fwd: CORRECTED 2011 Green Up data

FYI, updated totals: 4.4 tons of garbage for us.

----- Forwarded message -----

**From:** Marge Keough <mkeough@cswd.net>  
**Date:** Tue, May 31, 2011 at 4:05 PM  
**Subject:** CORRECTED 2011 Green Up data  
**To:** Marge Keough <mkeough@cswd.net>, dmitchell@town.milton.vt.us, pscheidel@essex.org, slunderville@essex.org, mayor@onioncity.com, jctrzepacz@onioncity.com, pkschmoll@onioncity.com, townclerk@westfordvt.us, underhillclerk@yahoo.com, dkinville@sburl.com, chaag@shelburnevt.com, stgeorgevtclerk@comcast.net, imparent@gmavt.net, jcushing@town.milton.vt.us, jerichovermont@yahoo.com, huntingtonclerk@gmavt.net, hinesburgclerk@gmavt.net, krichard@town.colchester.vt.us, mary@townofcharlotte.com, jleopold@ci.burlington.vt.us, Jennifer Green <jgreen@ci.burlington.vt.us>, Betty Couture <betty@town.milton.vt.us>, Carrie Violette <cviolette@town.milton.vt.us>, Nicole Losch <nlosch@ci.burlington.vt.us>, townclerk@essex.org, susan@essexjunction.org, Deb Beckett <beckettd@willistontown.com>, Judy Lance <jlance@shelburnevt.org>  
**Cc:** deborah@townofboltonvt.com, mauramcclure@gmavt.net, nbeaudoin@ci.burlington.vt.us, johnq@gmavt.net, sharoninv@gmail.com, mberry@essex.org, ppouech@gmavt.net, michel@wellspring-learning.com, jerichovermont@yahoo.com, frankieb789@aol.com, mincar@gmavt.net, pmorrow11@yahoo.com, 7lakeview@gmail.com, faustfavro@gmavt.net, barbara\_verrick@antiochne.edu, juliekemore@gmail.com, jandreoletti@willistontown.com, carol.lachaussie@casella.com, Todd Deuso <Todd.Deuso@casella.com>, skonieczny@iswaste.com, ebbaley@winooski.vt.org, Paul Conner <pconner@sburl.com>, Jenny Davis <jdavis@ci.burlington.vt.us>, Joe Reinert <JReinert@ci.burlington.vt.us>

Hi All,

Due to the sharp eyes of a few of you and more information received, below is a corrected version of the 2011 Green Up data. Please delete the previous email and refer to this. And please let me know if you have any questions.

Best,

Marge

Marge Keough | Outreach Coordinator | Chittenden Solid Waste District | 1021 Redmond Rd. | Williston, VT 05495 | P 802-872-8100 x 234 | F 802-878-5787 | E: mkeough@cswd.net |

TOWN	TRASH (tons)						
	2000	2001	2002	2003	2004	2005	2006
Bolton	1.1	1.6	2.0	1.7	1.4	2.8	1.6
Burlington	5.2	3.1	3.6	2.9	6.0	6.1	6.4
Charlotte	2.5	1.6	2.3	3.0	2.4	2.3	2.5
Colchester	7.2	3.3	5.8	3.9	3.3	3.4	5.3
Essex Town	1.1	2.1	3.2	2.6	3.6	2.6	4.4
Essex Junction	0.5	0.6	0.8	1.3	1.1	0.7	0.6
Hinesburg	2.8	2.3	4.0	4.2	3.2	2.8	3.2
Huntington	0.9	0.9	1.7	1.1	0.8	1.1	0.7
Jericho	2.8	0.7	1.4	1.1	1.6	1.7	1.7
Milton	4.6	4.1	8.0	2.0	5.6	5.1	4.4
Richmond	2.7	2.3	2.6	2.1	2.1	2.7	2.2
Shelburne	0.6	0.7	0.4	0.8	0.9	1.1	0.8

6/2/2011

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	AVG
South Burlington	0.3	0.1	1.5	1.0	1.3	1.3	1.7	0.7	1.4	2.5	2.8	6.1	1.7
St. George	0.3	0.3	0.7	0.2	0.3	0.4	0.5	0.6	0.4	0.1	0.1	0.0	0.3
Underhill	n/a	n/a	n/a	n/a	1.4	1.3	0.7	1.0	0.5	0.4	0.7	0.4	0.8
Westford	3.8	0.6	1.1	0.7	1.9	4.0	2.0	1.0	2.6	1.4	1.2	1.1	1.8
Williston	2.3	2.2	1.9	2.2	2.4	1.4	1.7	1.7	1.6	1.6	1.1	1.4	1.8
Winooski	10.9	6.0	1.2	2.1	2.1	2.1	0.3	0.6	3.2	1.5	1.2	3.0	2.8
State Highway	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.7	0.8	1.0	0.5	0.0	0.3
<b>TOTALS</b>	<b>49.7</b>	<b>32.5</b>	<b>42.0</b>	<b>33.0</b>	<b>41.4</b>	<b>42.8</b>	<b>41.7</b>	<b>35.9</b>	<b>37.6</b>	<b>39.5</b>	<b>30.3</b>	<b>38.1</b>	<b>38.7</b>
<b>TIRES (#)</b>													
TOWN	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	AVG
Bolton	85	155	86	185	87	0	172	125	80	167	51	90	107
Burlington	81	166	71	241	70	176	53	34	240	249	134	91	134
Charlotte	59	47	87	65	47	107	94	64	96	80	51	119	76
Colchester	410	215	345	242	325	201	303	165	332	291	189	132	263
Essex Town	49	52	160	116	55	8	211	2	97	115	35	145	87
Essex Junction	2	7	11	33	2	3	113	220	3	48	21	14	40
Hinesburg	331	373	193	100	105	110	97	155	251	119	100	51	165
Huntington	111	30	150	37	19	37	36	103	85	100	24	31	64
Jericho	54	48	93	4	61	35	47	74	66	74	49	83	57
Milton	660	150	0	180	178	198	124	187	195	270	177	189	209
Richmond	109	60	81	75	243	36	88	64	165	73	64	79	95
Shelburne	16	13	19	11	84	125	60	165	61	78	82	147	72
South Burlington	0	20	18	3	18	127	6	19	57	107	162	46	49
St. George	2	16	14	5	0	10	0	0	9	14	0	0	6
Underhill	n/a	n/a	n/a	n/a	10	98	92	134	156	238	33	60	103
Westford	637	127	17	74	32	0	0	135	208	101	97	187	135
Williston	17	31	105	32	36	63	33	10	52	41	87	5	43
Winooski	17	18	5	18	13	0	0	1	4	9	12	10	9
State Highway	0	0	0	0	0	0	212	97	177	37	336	299	96
<b>TOTALS</b>	<b>2,640</b>	<b>1,528</b>	<b>1,455</b>	<b>1,421</b>	<b>1,385</b>	<b>1,334</b>	<b>1,741</b>	<b>1,754</b>	<b>2,335</b>	<b>2,212</b>	<b>1,703</b>	<b>1,778</b>	<b>1,773</b>
<b>METAL (cubic yards)</b>													
TOWN	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	AVG
Bolton	0.0	0.0	0.0	d/k	20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8
Burlington	5.5	14.0	5.5	3.4	11.3	4.0	6.0	0.0	0.0	0.0	4.0	0.5	4.5
Charlotte	4.0	5.0	3.5	6.0	8.0	1.0	0.0	0.0	6.0	0.0	0.0	0.0	2.8
Colchester	0.0	0.0	1.0	8.0	0.5	0.0	5.0	2.0	1.0	3.3	0.0	0.1	1.7
Essex Town	2.0	7.0	9.0	7.0	4.5	6.0	0.0	0.3	0.0	0.0	0.0	0.0	3.0
Essex Junction	1.0	0.5	1.0	0.5	1.0	0.0	0.0	2.0	0.3	1.0	0.0	0.5	0.6
Hinesburg	6.3	7.0	6.5	7.0	7.0	3.0	5.0	4.0	2.0	2.0	2.8	0.0	4.4
Huntington	8.0	6.0	9.5	d/k	4.0	2.0	1.0	1.0	0.0	0.0	2.3	0.0	3.1
Jericho	6.0	7.0	6.5	1.0	5.0	4.3	2.0	2.0	2.0	0.0	0.0	0.0	3.2
Milton	0.0	0.0	0.0	12.0	3.0	3.2	5.0	7.0	2.0	4.0	1.8	2.0	3.3
Richmond	0.0	0.0	3.5	d/k	d/k	0.0	1.0	0.0	2.0	0.0	0.0	0.0	0.7
Shelburne	0.3	1.0	3.5	1.0	0.3	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
South Burlington	0.0	0.5	3.5	1.0	0.5	2.0	0.0	2.0	1.0	6.0	9.0	0.0	2.1
St. George	2.5	3.0	0.0	1.0	0.3	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
Underhill	n/a	n/a	n/a	n/a	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
Westford	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Williston	2.5	5.0	3.5	3.5	1.3	1.5	0.5	0.3	0.1	1.5	0.0	0.2	1.7
Winooski	0.0	0.0	28.6	10.7	d/k	0.0	0.5	0.0	0.0	0.0	4.0	0.0	4.0
State Highway	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.1
<b>TOTALS</b>	<b>38.1</b>	<b>56.0</b>	<b>85.1</b>	<b>62.1</b>	<b>69.6</b>	<b>34.7</b>	<b>28.3</b>	<b>20.6</b>	<b>17.4</b>	<b>17.8</b>	<b>23.9</b>	<b>3.3</b>	<b>39.2</b>

## Green Up Day 2011

## Quantities by Municipality and Costs

Town	Trash (tons)	Tires (#)	Metal (yd <sup>3</sup> )	total tons	% Tons	% Pop.
Bolton	1.5	90	0.0	2.5	4.3%	0.76%
Burlington	3.0	91	0.5	4.1	7.1%	27.10%
Charlotte	1.9	119	0.0	3.2	5.5%	2.40%
Colchester	4.4	132	0.1	5.8	10.0%	10.90%
Essex Town	3.5	145	0.0	5.1	8.7%	6.59%
Essex Junction	0.9	14	0.5	1.2	2.0%	5.92%
Hinesburg	2.4	51	0.0	2.9	5.1%	2.81%
Huntington	1.2	31	0.0	1.5	2.6%	1.24%
Jericho	1.1	83	0.0	2.0	3.4%	3.20%
Milton	2.8	189	2.0	5.4	9.3%	6.61%
Richmond	2.9	79	0.0	3.7	6.5%	2.61%
Shelburne	0.5	147	0.0	2.1	3.6%	4.56%
South Burlington	6.1	46	0.0	6.6	11.4%	11.44%
St. George	0.0	0	0.0	0.0	0.0%	0.43%
Underhill	0.4	60	0.0	1.0	1.8%	1.93%

## Bryan Osborne

---

**From:** Bryan Osborne [bosborne@colchestervt.gov]  
**Sent:** Tuesday, April 26, 2011 12:02 PM  
**To:** 'Pamela Loranger'  
**Subject:** RE: 2 items

Thanks Pam. It may very well be the discharge to someone's sump pump who has problems with water in a basement area or something like that. These are normally discharged into a roadside ditch but I become curious when you say it discharges directly onto the roadway.

Bryan

Bryan K. Osborne  
Director of Public Works  
Town of Colchester  
P.O. Box 55, Colchester, Vt. 05446  
Tel. (802)264-5625  
e-mail bosborne@colchestervt.gov

---

**From:** Pamela Loranger [mailto:zatarahinv@yaho.com]  
**Sent:** Tuesday, April 26, 2011 11:21 AM  
**To:** Bryan Osborne  
**Subject:** RE: 2 items

Hi Bryan,

I will put the word out about the shoreline debris. I expected driftwood would not be allowed which the neighbors tend to latch onto like it was gold anyway. Early "scavengers" grab the smaller pieces as soon as the waters recede.

Item #2. I was driving on the way to an appointment when I noticed the PVC pipe but I will try to get a more precise location on my way to Select Board meeting tonight.

Thanks,  
Pam

--- On Tue, 4/26/11, Bryan Osborne <bosborne@colchestervt.gov> wrote:

From: Bryan Osborne <bosborne@colchestervt.gov>  
Subject: RE: 2 items  
To: "'Pamela Loranger'" <zatarahinv@yaho.com>  
Cc: "Brian Tuttle" <btuttle@colchestervt.gov>  
Date: Tuesday, April 26, 2011, 8:29 AM

Hi Pam. On the first item, we would be happy to help with this with conditions. Debris will be limited to trash only. In other words, no drift wood. We will reserve the right to leave anything that

does not look like trash collected from the shorelines. You can leave it by the mail boxes and I will have our Highway Division remove this after Green Up Day.

On item # 2, we do not have much of anything for mapping in these areas but I am interested in this. It would be somewhat unusual for a pipe to be draining onto a roadway. Can you provide more information about the location and exactly what is happening?

Thanks, Bryan

Bryan K. Osborne  
Director of Public Works  
Town of Colchester  
P.O. Box 55, Colchester, Vt. 05446  
Tel. (802)264-5625  
e-mail bosborne@colchestervt.gov

---

**From:** Pamela Loranger [mailto:zatarahinv@yaho.com]  
**Sent:** Monday, April 25, 2011 10:38 AM  
**To:** Bryan Osborne  
**Subject:** 2 items

Good Morning Bryan,

1. With all the rain and high water we have a significant amount of debris on the shoreline. I will be busy May 7 helping at the Police Station. I would like to start clearing up some of the debris and would like to place it in several locations for pick up on Green Up Day to contribute to the count. One area I could leave stuff would be across from 111 Causeway. Another spot could be at the Mail boxes and bus stop. I am hoping to get other folks to participate. Will this be a problem? I will photo the debris collected to memorialize the amount.

2. I noticed a pipe draining onto the road between Sand Dunes and Broadlake. I could not tell if there was a catch basin near by. Do you happen to have a map of the catch basins over this way? Now that the weather has improved and my bike is out of the shop, I could take a tour around periodically to check the basins.

Enjoy the weather....while it lasts.  
Best,  
Pam Loranger

## **Bryan Osborne**

---

**From:** Bryan Osborne [bosborne@colchestervt.gov]  
**Sent:** Monday, May 09, 2011 8:15 AM  
**To:** 'Lisa Halvorsen'  
**Subject:** RE: ALERT--Green Up Day pick up spots

Thanks Lisa. I will forward this information to our Highway Division. We will take a look at the dumpsites to see if it is anything we would want our crews to do. In the past, Town employees have been seriously injured by chemicals and other materials trying to clean up these sites. You never know what might be in them. We have as an alternative funding available through the Solid Waste District to fund the cleanup of illegal dump sites. I am not sure how much money we have left in this fund given that it was recently used to clean up a dump site over in the Fort.

Thanks, Bryan

Bryan K. Osborne  
Director of Public Works  
Town of Colchester  
P.O. Box 55, Colchester, Vt. 05446  
Tel. (802)264-5625  
e-mail bosborne@colchestervt.gov

-----Original Message-----

**From:** Lisa Halvorsen [mailto:Lisa.Halvorsen@uvm.edu]  
**Sent:** Sunday, May 08, 2011 11:24 PM  
**To:** Bryan Osborne  
**Subject:** ALERT--Green Up Day pick up spots

Bryan,

I just wanted to alert your crew to a few Green Up Day clean up spots that might not have been marked on the map on Saturday so they can swing by and pick up the green bags on Monday morning to include with the Green Up Day totals.

**\*\*Fort Ethan Allen--Someone cleaned up the ravine at Fort Ethan Allen. I believe it is on the "back side of the fort" on the side closest to Essex.**

**\*\*Also, there should be bags to pick up near Winchester Apartments adjacent to the fort, as well as some along Rte. 15 near St. Michael's College.**

**\*\*Poor Farm Road. All the trash was left at the first pull-off, just off Route 7**

In addition, these places/dumpsites were reported by volunteers as needing clean up by the town since the volunteers were unable to handle:

--Niquette Bay Road, about one-third of the way down on the right there is a large pile of old plywood.

--Sunny Hollow, a mattress and tire at the turn-off

--Bay Road, at the pull-off with the red fire hydrant. A long-time dumpsite with tires, computer monitors, etc. at the bottom of a steep incline.

Thanks.

Lisa Halvorsen  
on behalf of the Conservation Commission, the Green Up Day organizers

## Bryan Osborne

---

**From:** Lisa Halvorsen [Lisa.Halvorsen@uvm.edu]  
**Sent:** Sunday, May 08, 2011 11:24 PM  
**To:** Bryan Osborne  
**Subject:** ALERT--Green Up Day pick up spots

Bryan,

I just wanted to alert your crew to a few Green Up Day clean up spots that might not have been marked on the map on Saturday so they can swing by and pick up the green bags on Monday morning to include with the Green Up Day totals.

✓ \*\*Fort Ethan Allen--Someone cleaned up the ravine at Fort Ethan Allen. I believe it is on the "back side of the fort" on the side closest to Essex.

✓ \*\*Also, there should be bags to pick up near Winchester Apartments adjacent to the fort, as well as some along Rte. 15 near St. Michael's College. Done

✓ \*\*Poor Farm Road. All the trash was left at the first pull-off, just off Route 7 Done

In addition, these places/dumpsites were reported by volunteers as needing clean up by the town since the volunteers were unable to handle:

✓ --Niquette Bay Road, about one-third of the way down on the right there is a large pile of old plywood. Done

✓ --Sunny Hollow, a mattress and tire at the turn-off Done

\* --Bay Road, at the pull-off with the red fire hydrant. A long-time dumpsite with tires, computer monitors, etc. at the bottom of a steep incline. 4-6 Men / Steep Bank 6 tires, Small Mis. Items  
1 fender

Thanks.

Lisa Halvorsen  
on behalf of the Conservation Commission, the Green Up Day organizers

\* D Munson Road, fallen tree - Hire out  
D SAND BAGS

## Bryan Osborne

---

**From:** Lisa Halvorsen [Lisa.Halvorsen@uvm.edu]  
**Sent:** Tuesday, May 10, 2011 12:54 PM  
**To:** Bryan Osborne  
**Subject:** Green Up bag on WVMT Road

Hi Bryan,

Someone just let me know that there is a Green Up Day bag that was not picked up. It's on the dirt road leading to the WVMT/WXXX radio station, and I assume from clean up on the high school grounds.

I got the message but didn't check it out. But it would be great if one of your crew has time to swing by and pick it up.

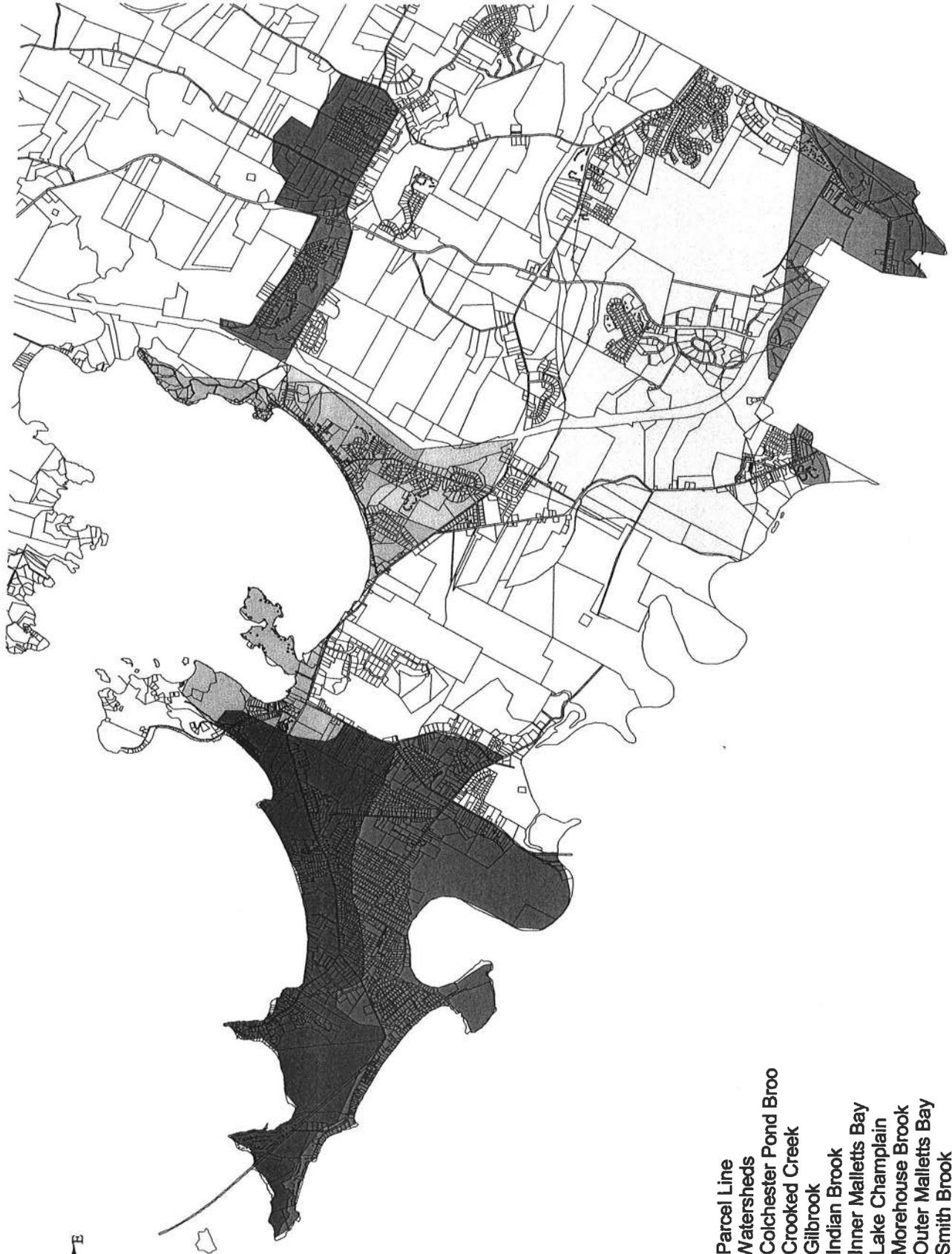
Thanks.

For the record, we had 344 volunteers turn out for Green Up Day, the second highest number since the Conservation Commission began coordinating the event in 1995 or '96.

Lisa

## Storm Water Watch Group

<u>Watershed</u>	<u>Representative</u>
1. Inner Malletts Bay	Tom Berry Moe Germain Anita Socinski
2. Smith Brook	Jeff Barton
3. Colchester Pond Brook	Betsy Orselet
4. Winooski River	Evan Fitzgerald Marc Landry
5. Crooked Creek	Harlan Lachman
6. Indian Brook	Jean Osborne
7. Sunderland Brook	Meg McGovern
8. Morehouse Brook	Sherry LaBarge
9. Outer Malletts Bay	Tracy Byrnes
10. Gilbrook	Alan Dicinson
11. Lake Champlain Watershed	Pam Loranger Buzz Hoerr



- Parcel Line
- MS4 Watersheds
- Colchester Pond Broo
- Crooked Creek
- Gilbrook
- Indian Brook
- Inner Malletts Bay
- Lake Champlain
- Morehouse Brook
- Outer Malletts Bay
- Smith Brook
- Sunderland Brook
- Winooski River

**Bryan Osborne**

---

**From:** Berry, Tom (Leahy) [Tom\_Berry@leahy.senate.gov]

**Sent:** Monday, June 13, 2011 3:55 PM

**To:** Bryan Osborne

**Subject:** RE: Storm Water Watch Groups

Not that I've sent you many messages. But I do have a thought now regarding storm water. First the name – I you have not yet got Buzz Hoerr tagged, or Brian Costello . . . get some eyes on the broad lake and outer bay.

As far as issues. I'm sure you are thinking about fact that we will have a completely unprecedented amount of construction work taking place all along the Colchester shoreline later this summer into the fall, and next year as well as folks clean-up, demolish, rebuild and work on sea walls, septic systems etc. in response to the flooding. Heavy machinery will be on the beaches moving dirt and debris, new structures going up etc. Every new project will be newly disturbed or exposed.

What can be done to get ahead of this – mitigate the impacts of construction activities on the lake?

**From:** Bryan Osborne [mailto:bosborne@colchestervt.gov]

**Sent:** Monday, June 13, 2011 3:48 PM

**To:** Alan Dickinson; Anita Socinski; Ann Smith; Betsy Orselet; Evan Fitzgerald; Harlan Lachman; Jean Osborne; Mark Landry; Maurice Germain; Meg McGovern; Pamela Loranger; Sherry Labarge; Berry, Tom (Leahy); Tracy Byrnes

**Subject:** Storm Water Watch Groups

Greetings.

First I would like to thank you all for your ongoing help in keeping a watchful eye out for any potential storm water pollution problems that may jeopardize our natural resources. Many of you have brought issues to our attention, which in turn, we have been able to address to better protect our natural resources. At this point, we have at least one citizen working in this capacity within every watershed within the community. To expand upon this successful and effective effort, I would ask that each of you give some thought to whether there may be other citizens within the community that you may know, that would like to join our team. If you know of anyone, please have them contact me and I will provide the necessary information to them to get them going.

Again, thanks for all of your help.

Bryan

Bryan K. Osborne  
Director of Public Works  
Town of Colchester  
P.O. Box 55, Colchester, Vt. 05446  
Tel. (802)264-5625  
e-mail [bosborne@colchestervt.gov](mailto:bosborne@colchestervt.gov)

6/14/2011

**Bryan Osborne**

**From:** Pamela Loranger [zatarahinv@yaho.com]  
**Sent:** Tuesday, June 14, 2011 7:50 AM  
**To:** Bryan Osborne  
**Subject:** Re: Storm Water Watch Groups

Bryan,

I "floated" this out to our neighborhood group and believe I have one recruit thus far. I told you I would be willing to stencil the catch basins on Mills Point. Once we get past the 25th and 26th perhaps you could advise how you want to proceed on that project.

Best,  
Pam

--- On Mon, 6/13/11, Bryan Osborne <bosborne@colchestervt.gov> wrote:

From: Bryan Osborne <bosborne@colchestervt.gov>  
Subject: Storm Water Watch Groups  
To: "Alan Dickinson" <adickinson@smcvt.edu>, "Anita Socinski" <anitasocinski@gmail.com>, "Ann Smith" <asmithvt@adelphia.net>, "Betsy Orselet" <betsy311@comcast.net>, "Evan Fitzgerald" <evan@fitzgeraldenvironmental.com>, "Harlan Lachman" <harlan@eeivt.com>, "Jean Osborne" <jeanosborne501@msn.com>, "Mark Landry" <donmurc@aol.com>, "Maurice Germain" <moegermain@msn.com>, "Meg McGovern" <mcgovernvt@netzero.com>, "Pamela Loranger" <zatarahinv@yaho.com>, "Sherry Labarge" <labargesherry@yahoo.com>, "Tom Berry" <Tom\_Berry@leahy.senate.gov>, "Tracy Byrnes" <byrnes9@comcast.net>  
Date: Monday, June 13, 2011, 3:48 PM

Greetings.

First I would like to thank you all for your ongoing help in keeping a watchful eye out for any potential storm water pollution problems that may jeopardize our natural resources. Many of you have brought issues to our attention, which in turn, we have been able to address to better protect our natural resources. At this point, we have at least one citizen working in this capacity within every watershed within the community. To expand upon this successful and effective effort, I would ask that each of you give some thought to whether there may be other citizens within the community that you may know, that would like to join our team. If you know of anyone, please have them contact me and I will provide the necessary information to them to get them going.

Again, thanks for all of your help.

Bryan

## Bryan Osborne

---

**From:** Buzz Hoerr <hoerrfam@msn.com>  
**Sent:** Tuesday, June 14, 2011 9:09 AM  
**To:** Meg McGovern; Bryan Osborne  
**Subject:** RE: Storm Water Watch Groups

Sure, glad to help, Bryan is copied on this. Let me know if I can help.

Buzz Hoerr, CEO  
ElectroCell Technologies, Inc.  
P 802 863 2486  
C 802 734 1621  
[www.electrocell.us](http://www.electrocell.us)

---

**From:** meg@donahueassociatesvt.com  
**To:** hoerrfam@msn.com  
**Date:** Mon, 13 Jun 2011 19:03:23 -0700  
**Subject:** FW: Storm Water Watch Groups

Hi Buzz,  
I am guessing that you do more than the watchgroup, but thought you would be a great person to add to our team!

---

**From:** Bryan Osborne [mailto:bosborne@colchestervt.gov]  
**Sent:** Monday, June 13, 2011 3:48 PM  
**To:** Alan Dickinson; Anita Socinski; Ann Smith; Betsy Orselet; Evan Fitzgerald; Harlan Lachman; Jean Osborne; Mark Landry; Maurice Germain; Meg McGovern; Pamela Loranger; Sherry Labarge; Tom Berry; Tracy Byrnes  
**Subject:** Storm Water Watch Groups

Greetings.

First I would like to thank you all for your ongoing help in keeping a watchful eye out for any potential storm water pollution problems that may jeopardize our natural resources. Many of you have brought issues to our attention, which in turn, we have been able to address to better protect our natural resources. At this point, we have at least one citizen working in this capacity within every watershed within the community. To expand upon this successful and effective effort, I would ask that each of you give some thought to whether there may be other citizens within the community that you may know, that would like to join our team. If you know of anyone, please have them contact me and I will provide the necessary information to them to get them going.

Again, thanks for all of your help.

Bryan

Bryan K. Osborne  
Director of Public Works  
Town of Colchester  
P.O. Box 55, Colchester, Vt. 05446  
Tel. (802)264-5625  
e-mail [bosborne@colchestervt.gov](mailto:bosborne@colchestervt.gov)

## Bryan Osborne

---

**From:** Bryan Osborne [bosborne@colchestervt.gov]  
**Sent:** Monday, June 20, 2011 9:53 AM  
**To:** 'hoerrfam@msn.com'  
**Subject:** Storm Water Watch Group  
**Attachments:** watchgroupbriefing.doc; ms4.pdf

Hi Buzz. Thanks for agreeing to participate in our storm water watch group network. I have attached a briefing package for your review along with other information and resources. Please give me a call with any questions and again, thanks for your help.

Bryan

Bryan K. Osborne  
Director of Public Works  
Town of Colchester  
P.O. Box 55, Colchester, Vt. 05446  
Tel. (802)264-5625  
e-mail bosborne@colchestervt.gov

6/20/2011

## Bryan Osborne

---

**From:** Bryan Osborne [bosborne@colchestervt.gov]  
**Sent:** Friday, June 24, 2011 2:30 PM  
**To:** 'Brian Costello'  
**Subject:** RE: Storm Water Watch Group  
**Attachments:** watchgroupbriefing.doc; ms4.pdf

Brian. Thanks for agreeing to participate. I have attached a briefing paper along with other information. Please feel free to contact me with any questions.

Again, thanks for your help.

Bryan

Bryan K. Osborne  
Director of Public Works  
Town of Colchester  
P.O. Box 55, Colchester, Vt. 05446  
Tel. (802)264-5625  
e-mail bosborne@colchestervt.gov

---

**From:** Brian Costello [mailto:brian@localmotion.org]  
**Sent:** Thursday, June 23, 2011 3:28 PM  
**To:** Bryan Osborne  
**Subject:** Re: Storm Water Watch Group

Sure, count me in. Thanks for thinking of me, sounds like good company. I could focus on runoff into the lake from the lakeside perspective; another excuse to go boating! Let me know the details.

Brian

On Mon, Jun 20, 2011 at 10:00 AM, Bryan Osborne <bosborne@colchestervt.gov> wrote:  
Hi Brian. I was wondering if you would be interested in participating in our Storm Water Watch Group program. We currently have 15 citizens participating in this program with at least one citizen from each sub-watershed. There are no meetings, no home work, no title, and no pay. You simply report any potential water quality issues to us for further investigation and where appropriate, corrective measures. Other participants include such people as Betsy Orselet, Tom Berry, Buzz Hoerr, to name a few. Interested?

Thanks, Bryan

Bryan K. Osborne  
Director of Public Works  
Town of Colchester  
P.O. Box 55, Colchester, Vt. 05446  
Tel. (802)264-5625  
e-mail bosborne@colchestervt.gov

6/24/2011

## Bryan Osborne

---

**From:** Bryan Osborne <bosborne@colchestervt.gov>  
**Sent:** Friday, September 16, 2011 2:43 PM  
**To:** 'jbarton171@gmail.com'  
**Subject:** Storm Water Watch Group  
**Attachments:** watchgroupbriefing.doc; ms4.pdf

Hi Jeff.

Thanks for agreeing to serve as part of our Storm Water Watch Group. I have attached some orientation materials for you to review at your convenience. Please let me know if you have any questions, and again, thanks for your help.

Bryan

Bryan K. Osborne  
Director of Public Works  
Town of Colchester  
P.O. Box 55, Colchester, Vt. 05446  
Tel. (802)264-5625  
e-mail [bosborne@colchestervt.gov](mailto:bosborne@colchestervt.gov)

## Storm Water Watch Group Briefing

To: Jeff Barton  
Watershed: Smith Brook Watershed

Greetings and thank you for agreeing to be a part of a storm water watch group we are assembling throughout the community. The establishment of this citizen network is a key part of our overall water quality plan. Community involvement accomplishes an important component of public education, which is essential to an effective plan.

Your role is to provide your eyes and ears relative to water quality problems in your area, and report them to us. We will then evaluate the problem, and attempt to address it in the best way we can. Periodically, we will send you information that will hopefully assist in your efforts.

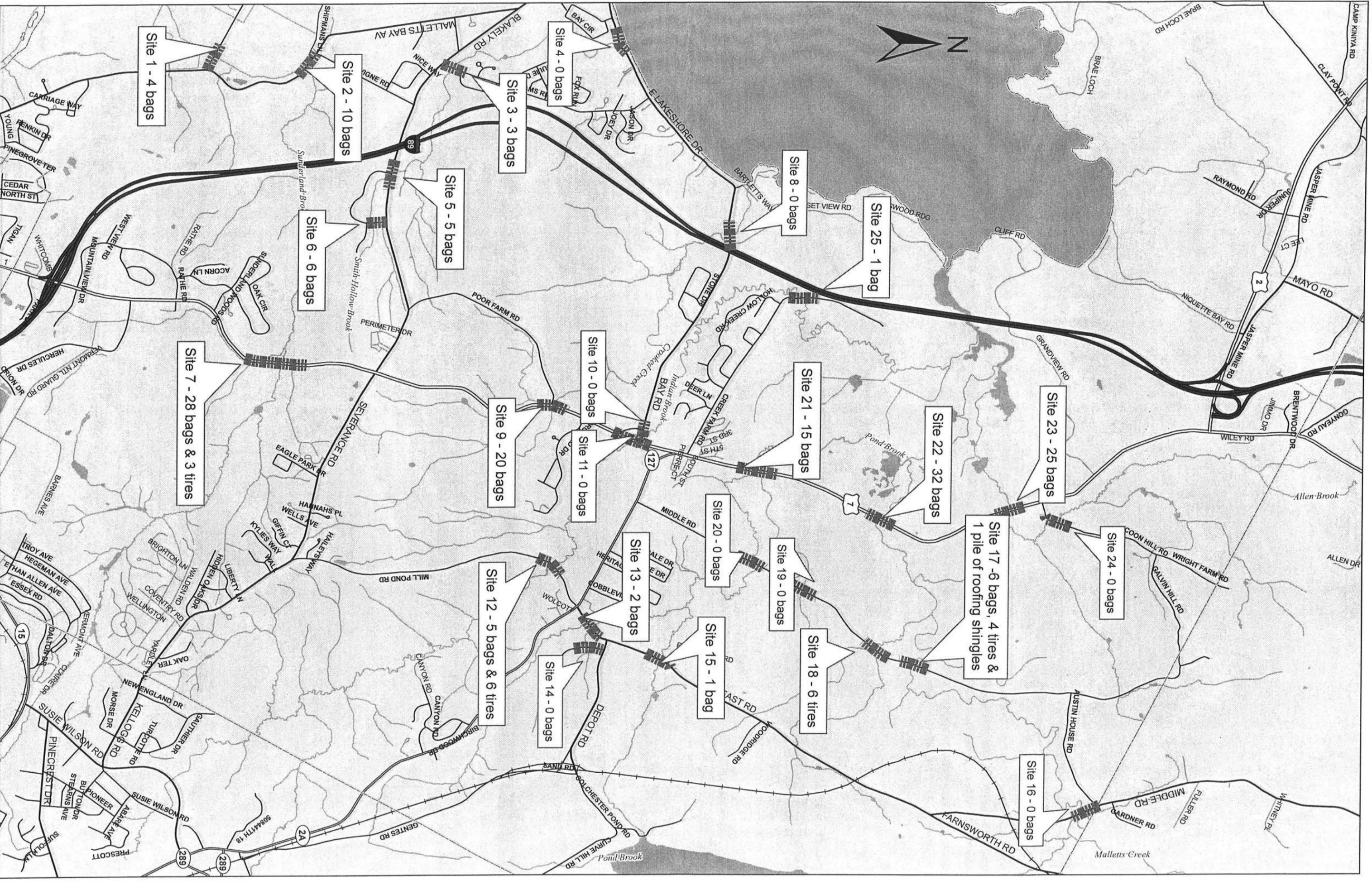
Attached to this e-mail, I have included a map that illustrates the sub-watersheds where the full storm water watch group will be established. There are now representatives working in the following water sheds:

- Colchester Pond Brook
- Crooked Creek
- Indian Brook
- Inner Malletts Bay
- Morehouse Brook
- Outer Malletts Bay
- Smith Brook
- Sunderland Brook
- Winooski River
- Gilbrook
- Lake Champlain

One of the leading problems relative to storm water pollution is sediment. Sediment comes from a variety of different sources. We spread sand on the roadways as a part of our winter maintenance operations. In order to prevent this practice from being problematic, it is critical that we have sound street sweeping and basin cleaning programs to remove the sand before it finds its way into a receiving waterway. It also comes from construction sites or other forms of land disturbance, both big and small. When the soil is exposed and it rains, erosion occurs and washes the sand and soil into receiving waterways. It also occurs from channel erosion where storm flows have reached a level where stream channels are being eroded and transferring sediment down stream.

Although a primary concern with Vermont's waterways is sediment, we are also concerned about other pollutants as well that may enter into our storm water systems and waterways. These are referred to as illicit discharges. These are typically discharges to the storm water system that consist of flows other than pure storm water. Examples would include oils, chemicals or untreated sewage.

Generally the types of things you should be looking for are erosion problems, anything other than storm water being placed or directed into the storm water system, or flows coming out of storm water systems during dry weather conditions.



## **Section 4.2.3**

### **Illicit Discharge Detection and Elimination**

#### **Attachments:**

1. Information and records relating to the Town's IDDE Program.
2. Sign in sheet for training for DPW maintenance crews
3. IDDE information provided to the Colchester Community Development Office for distribution to the business community.

<i>Location</i>	<i>ID#</i>	<i>Date</i>	<i>Flow</i>	<i>pH</i>	<i>OB</i>	<i>E.Coli</i>
Lexington Road	6 / CP1397	9/11/2011	Y	6.8		250
102 Wyndham	7 / CP1399	9/11/2011	Y	7.2		4
Coventry Road	8 / CP1398	9/11/2011	N	7.2		
196 Liberty Lane	11 / CP1402	9/11/2011	Y	7.4		53
122 Foreman Drive	18 / CP1428	9/11/2011	N	7.2		
12 Woodrose	5 / OC1483	9/19/2011	Y	7.2		27
Severance Road	48 / CP1391	9/11/2011	N	7.8		
Troy Avenue	21					
Troy Avenue	55					
Young Street		11/20/2011	N	7.4		
W. Lakeshore Drive	B3-016	12/13/2011	Dry			
W. Lakeshore Drive	B3-017	12/13/2011	Y	8.0	Slight	11
E. Lakeshore Drive	B3-018	12/13/2011	Dry			
1086 Bay Road	C2-001	12/13/2011	Y	7.2		<1
1063 Bay Road	C2-002	12/13/2011	Y	8.0		38
35 Bay Road	C2-003	12/13/2011	N	8.0		
1277 Bay Road	C2-004	12/13/2011	Y	8.0		<1
Bay Road	C2-005	12/13/2011	Dry			
Granite Creek	C2-006	11/6/2011	N	7.6		
Granite Creek	C2-007	11/6/2011	N	7.2		
Tower Ridge	C3-002	11/20/2011	Dry			
Ever Breeze	C3-003	11/20/2011	Y	7.2		12
Blakely Road	C3-004	11/20/2011	N	7.2		
796 Bay Road	C3-005	12/13/2011	N	7.6		
903 Bay Road	C3-006	12/13/2011	Y	7.2		16
Acorn Lane	C3-018	11/20/2011	Y	8.0		44
Acorn Lane	C3-019	11/20/2011	N	7.6		
Champlain Drive	C3-021	11/20/2011	N	7.4		
118 Orchard Drive	C3-025	11/6/2011	Y	8.0		4
Route 2 & 7 (Shaw)	C4-015	9/11/2011	Dry			
Hercules Drive	C4-017	11/6/2011	N	8.0		

St. Michaels Colleg	C4-018	11/6/2011	N	7.2	Slight	
Orion Drive	C4-019	11/6/2011	N	8.0		
<i>Main Street</i>	<i>D3-010</i>	9/19/2011	Y	8.0		27
Fort Ethan Allen	D4-001	9/19/2011	Y	7.2		31
Fort Ethan Allen	D4-002	9/11/2011				
Fort Ethan Allen	D4-003	9/11/2011	Y	8.0		3

## **IDDE Hours 2011 - 2012**

<b>Date</b>	<b>Hours</b>	<b>Purpose</b>	<b>Mileage</b>
24-Jun	5	Meeting with Bryan / Research plan / Make proposal	
29-Jun	3	Work aligning maps & developing plan	
11-Sep	5	Gathering of samples	42
12-Sep	2	Collection of samples and delivery to lab	22
19-Sep	2.5	Gathering of samples	31
6-Nov	4.5	Gathering of samples	25
7-Nov	3	Collection of samples and delivery to lab	22
20-Nov	3.5	Gathering of samples	27
13-Dec	4.75	Gathering of samples	34
14-Dec	3	Collection of samples and delivery to lab	22
30-Dec	1	Testing of material & logging of data	
1-Feb	1	Testing of material & logging of data	
4-Mar	3	Testing of material / Logging of data / Preparing report	
	41.25		225

## Bryan Osborne

---

**From:** Pease, Jim <Jim.Pease@state.vt.us>  
**Sent:** Monday, September 12, 2011 7:20 AM  
**To:** Armstrong, Jon; Laurie Adams (LAdams@ci.burlington.vt.us); Erik Bailey ; Jim Jutras (ejctwwtf@sover.net); Linda Seavey (Linda.Seavey@uvm.edu); Heather Kendrew; Andy Legg ; Dennis Lutz (DENNIS@essex.org); Bernie Gagnon ; Floyd Sheesley; Regina Mahony (rmahony@town.milton.vt.us); Bryan Osborne; Dean Pierce (dpierce@shelburnevt.org); Aaron Martin; Bob Penniman; Digiammarino, Craig; Greg Goyette; Jessica Andreoletti; Bill Nedde; Lisa Sheltra; Megan Moir; Sarah Hadd; Tom DiPietro  
**Cc:** dalbrecht@ccrpcvt.org  
**Subject:** Municipal Employees Workshop-Thursday

The Municipal Employee stormwater workshop is this Thursday and below are the reservations I have. FYI I do not know if we will have the Fish and Wildlife portion of the workshop as I have not heard back from the department due to the flooding disruption. I assume it is on unless I hear otherwise. There is limited seating so please do not send any employees in excess of your reservation. Again the workshop will be at the Essex DPW Training facility at 188 Sand Hill Rd in Essex, just south of Rte 15.

MS4	10-11:30	11:30-1
Winooski	10	
Williston	5	
Essex Jct	6	6
BTV	9	8
S Burlington		16
Shelburne	5	
Essex	8	8
Colchester	5	5
Burlington		6

**DEPARTMENT OF PUBLIC WORKS  
Town of Colchester, VT**

# Memo

**To:** All Highway Employees  
**From:** Anja Twite *ajtwite*  
**Date:** August 9, 2011  
**Re:** Municipal Employee Training

This year's municipal employee training workshop will be held on September 15 at the Essex Fire Department. Each session will cover Hazardous Waste Spill Prevention and Urban Wildlife Management Issues.

Bryan would like as many of you as possible to attend. Please pick a session and return to me ASAP:

Session A (10 AM to 11:30 AM)	Session B (11:30 AM to 1 PM)
<i>Bob Provost</i>	<i>MARVIN Siple</i>
<i>Tom M</i>	<i>Gary Jennings</i>
<i>Jeff Sweet</i>	<i>David Vanat</i>
<i>DANE P. McGRATH</i>	<i>Scott Smith</i>
<i>Buzzy Julien</i>	

The 50 spaces per session will be filled on a first come, first serve basis.

Let me know if you have any questions.

PLEASE  
SIGN IN

10/11/2020

NAME

TOWN/URUSHY

JUSTIN KEELTY  
JOHN DEVLIN  
JAMIE CAMPBELL  
ROBERT CUSHMAN

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Bob Whitter

TOWN OF ESSEX  
ESSEX

## Illicit Discharge Information

Based upon population density, Colchester Vermont has been designated as an operator of a Phase II regulated Small Municipal Separate Storm Sewer System (MS4), and is required to develop a storm water management program to meet the conditions of its National Pollutant Discharge Elimination System (NPDES) permit. The development of an Illicit Discharge Detection and Elimination Plan is one of six minimum control measures that are required within the program.

### What is an "Illicit Discharge"?

Federal regulations define an illicit discharge as "...any discharge to an MS4 that is not composed entirely of storm water...." with some exceptions. These exceptions include discharges from NPDES-permitted industrial sources and discharges from fire-fighting activities. Illicit discharges are considered "illicit" because MS4s are not designed to accept, process, or discharge such non-storm water wastes.

### Why are Illicit Discharge Detection and Elimination Efforts Necessary?

Discharges from MS4s often include wastes and wastewater from non-storm water sources. Illicit discharges enter the system through either direct connections (e.g., wastewater piping connected to storm water drains) or indirect connections (e.g., spills or disposal of used paint, oil, etc., into a storm water drain.) The result is untreated discharges that contribute high levels of pollutants, including heavy metals, toxics, oil and grease, solvents, nutrients, viruses, and bacteria to receiving water bodies. Pollutant levels from these illicit discharges have been shown in EPA studies to be high enough to significantly degrade receiving water quality and threaten aquatic, wildlife, and human health.

### Colchester's Storm Water Management Program

The Town's Storm Water Management Program will include the development of an Illicit Discharge Detection and Elimination Plan, as well as, an Illicit Discharge Ordinance. You are encouraged to provide you valuable input into the development of these initiatives. The overall program also contains a strong education component. This education bulletin is one example of the implementation of these efforts. For further information, please visit the following links:

- U.S. Environmental Protection Agency [www.epa.gov](http://www.epa.gov)
- Vermont Agency of Natural Resources [www.anr.state.vt.us](http://www.anr.state.vt.us)

Or contact:

- Town of Colchester, Department of Public Works [bosborne@town.colchester.vt.us](mailto:bosborne@town.colchester.vt.us)

### Sources of Illicit Discharge

- Sanitary wastewater
- Effluent from septic tanks
- Car wash wastewaters
- Improper oil disposal
- Radiator flushing disposal
- Laundry wastewaters
- Spills from roadway accidents
- Improper disposal of auto and household toxics

# Town of Colchester

## Department of Public Works

Presents:

## An Informational Bulletin for Local Business



## U.S. EPA Storm Water Phase II Final Rule

## Illicit Discharge Detection And Elimination Minimum Control Measure

".....improve the overall quality of life within the community through the development of a superior infrastructure that promotes and encourages planned responsible commercial, industrial and residential growth in a manner that preserves and enhances our environment and natural resources."

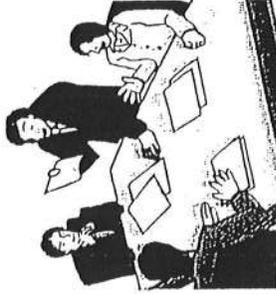
Colchester Public Works  
Mission Statement



1. Ok folks, Corporate says we have some water quality issues to deal with



2. So Bob, what is an illicit discharge anyway?



3. Bill, it's basically any discharge that is not composed entirely of storm water



4. What does that mean?



5. Well Bill, it could be things like sanitary waste, improper oil disposal or industrial cleaning products.



6. Bob, how do these discharges happen?



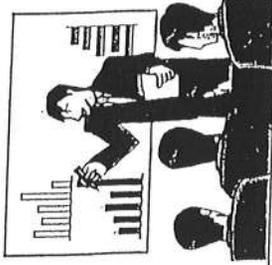
7. Bill, pollutants can enter the storm water system either through direct pipe connections, or spills collected by drain outlets.



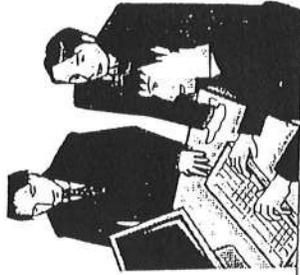
8. So what's the big deal Bob, doesn't it all get treated at the plant?



9. No Bill, storm water doesn't go to treatment plants. It goes directly to rivers and lakes



10. Studies have shown that these pollutants can damage aquatic, wildlife and human health.



11. Hmm, environmental damage, that's not good for business



12. Ok, people, lets get to work. I want a plan on my desk by Friday to prevent illicit discharges from our company

## **Section 4.2.4**

### **Construction Site Storm Water Runoff Control**

#### **Attachments:**

1. Report of land disturbing activities greater than 1 acre, and greater than 5 acres.



SELECT BOARD

L. RICHARD PAQUETTE  
HERBERT DOWNING  
MARC LANDRY  
MYRON PALMER  
NADINE SCIBEK

TOWN MANAGER

ALBIN VOEGELE  
264-5501

DIRECTOR OF PLANNING &  
ZONING

SARAH HADD  
264-5602

ZONING ADMINISTRATOR

LISA RIDDLE  
264-5604

ASSISTANT ZONING  
ADMINISTRATOR

JANE DION  
264-5603

BUILDING INSPECTOR

DEREK SHEPARDSON  
264-5607

ADMINISTRATIVE ASSISTANT

TAYLAR FOSTER  
264-5606

WASTEWATER OFFICIAL

DENISE JOHNSON-TERK  
264-5601

RECORDS CLERK

CARLA BABINEAU  
264-5608

FAX NUMBER

(802) 264-5503

MEMORANDUM

TO: Bryan Osborne, Director of Public Works  
FROM: Sarah Hadd, Director of Planning & Zoning *SH*  
DATE: February 7, 2012  
RE: Stormwater Reporting Calendar Year 2011

---

Please find attached a spreadsheet enumerating projects advanced to construction for the period January 1, 2011 through December 31, 2011 with more than an acre of land disturbance. In calendar year 2011, the Department issued in total 696 permits and conducted 1,104 inspections including violation investigations.

Should you need any additional information, including copies of the individual permits, please feel free to contact me directly.

<u>Project</u>	<u>Project Description</u>	<u>Location</u>	<u>Contact</u>	<u>Acreage Disturbed</u>	<u>Impervious Surface Acreage</u>
Camp Dudley @ Kiniya	Master Plan to include : 1) construction of a new multi-use building; 2) remove and relocate Cabins 1 – 8; 3) replace an eleven bed cabin; 4) reconstruct/replace 4 or 5 cabins on same location; 5) demolish existing staff cabins and construct a 30' x 40' staff cabin; 6) construct new motor boat shed (5 bays); 7) new pavilion at Jr. beach; 8) addition to barn, dining hall, infirmary, arts and crafts, shop and office; 9) construction of new cabins	1317 Camp Kiniya Road, TM 79, P 2	Camp Dudley at Kiniya YMCA II, LLC	7.5	.938 acres
Ireland Industries, Inc.	Building 11 - Commerce Drive	Tax Map 8 Parcel 37 & 37-1	SD Ireland	less than 1 ac.	.08 acres
Ireland Industries, Inc.	Perimeter Drive Building 7	Tax Map 8 Parcel 37 & 37-1	SD Ireland	less than 1 ac.	.198 acres

<u>Project</u>	<u>Project Description</u>	<u>Location</u>	<u>Contact</u>	<u>Acres Disturbed</u>	<u>Impervious Surface Acreage</u>
Sisters & Brothers	Site Plan application to amend a previously approved Site Plan for a Dunkin-Donuts with a drive-thru window. The amendment consists of: 1) removal of the existing Dunkin-Donuts Store; 2) removal of existing shed; and 3) construction of a 6,095 sq. ft. shopping center, including Dunkin-Donuts with a drive-thru window.	25 & 39 Macrae Rd., Tax Map 41, Parcels 97 & 98	Trudell Consulting Inc.	less than 1 ac.	.651 acres
Antell	1 lot	645 Colchester Point Road, Tax Map 34, Parcel 77	Donna Antell	less than 1 ac.	up to 0.372 acres
Brosseau, Lauretta & Fitzgerald, Daniel & Christine	19 unit Planned Residential Development	80 Jasper Mine Road and 172 Watkins Road, Tax Map 16, Parcels 16 & 20	David Burke	More than 5 ac.	up to 6.86 acres

<u>Project</u>	<u>Project Description</u>	<u>Location</u>	<u>Contact</u>	<u>Acres Disturbed</u>	<u>Impervious Surface Acres</u>
Hayward, Nathaniel	Planned Residential Development on 22 undeveloped acres consisting of: 1) 14 single family lots, 2) two common area parcels, and 3) installation of a new public road	Niquette Bay Road, Tax Map 17, Parcels 15-1	Nathaniel Hayward	More than 5 ac.	Up to 4.4 acres
Thibault	4 lots: 1) lot #1 a 1.84 acre lot with existing duplex, 2) lot #2 a 1.45 acre parcel with a proposed single-family residence; 3) lot #3 a 1.45 acre parcel with a proposed single-family residence; and 4) a 7.39 acre vacant lot	2133 Malletts Bay Avenue, Parcel 03-051000	Krebs & Lansing Engineers	1 to 5 ac.	Up to 1.4 acres
Wells, Ray	subdivide a 5.05 acre parcel into nine single family lots and for the construction of 730 feet of public road	926 Severance Road, Tax Map 4, Parcel 24	O'Leary - Burke Civil Assoc.	less than 1 ac.	Up to 1.01 acres

<u>Project</u>	<u>Project Description</u>	<u>Location</u>	<u>Contact</u>	<u>Acres Disturbed</u>	<u>Impervious Surface Acres</u>
Wright, Seth & Wendy	subdivide a 23.4 acre lot into four single-family lots. Lot #1 a 5.01 acre parcel; Lot #2 a 5.08 acre parcel; Lot #3 a 5.15 acre parcel with existing single family residence and barn; and Lot #4 a 8.15 acre parcel	1480 East Road, Tax Map 12, Parcel 21	Seth Wright	1 to 5 ac.	Up to 1.03 acres on lots 1 and 2; up to 1.63 acres on lot 4
ADB Inc.	construction of 435 ft. of public road and to subdivide a 28.66 acre lot into three lots: Lot #1 a .46 acre parcel; Lot #2 a 6.4 acre parcel; and Lot #3 a 21.8 acre parcel	263 Church Road, Tax Map 50, Parcel 46-1	O'Leary - Burke Civil Assoc.	1 to 5 ac.	.53 acres

## **Section 4.2.5**

### **Post-Construction Storm Water Management in New Development and Redevelopment**

#### **Attachments:**

1. Report of land disturbing activities that resulted in more than 1 acre of impervious surface.



SELECT BOARD

L. RICHARD PAQUETTE  
HERBERT DOWNING  
MARC LANDRY  
MYRON PALMER  
NADINE SCIBEK

TOWN MANAGER

ALBIN VOEGELE  
264-5501

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CARLA BABINEAU  
264-5608

FAX NUMBER

(802) 264-5503

MEMORANDUM

TO: Bryan Osborne, Director of Public Works  
FROM: Sarah Hadd, Director of Planning & Zoning *SH*  
DATE: February 7, 2012  
RE: Stormwater Reporting Calendar Year 2011

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Please find attached a spreadsheet enumerating projects advanced to construction for the period January 1, 2011 through December 31, 2011 with more than an acre of land disturbance. In calendar year 2011, the Department issued in total 696 permits and conducted 1,104 inspections including violation investigations.

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<u>Project</u>	<u>Project Description</u>	<u>Location</u>	<u>Contact</u>	<u>Acreage Disturbed</u>	<u>Impervious Surface Acreage</u>
Camp Dudley @ Kiniya	Master Plan to include : 1) construction of a new multi-use building; 2) remove and relocate Cabins 1 – 8; 3) replace an eleven bed cabin; 4) reconstruct/replace 4 or 5 cabins on same location; 5) demolish existing staff cabins and construct a 30' x 40' staff cabin; 6) construct new motor boat shed (5 bays); 7) new pavilion at Jr. beach; 8) addition to barn, dining hall, infirmary, arts and crafts, shop and office; 9) construction of new cabins	1317 Camp Kiniya Road, TM 79, P 2	Camp Dudley at Kiniya YMCA II, LLC	7.5	.938 acres
Ireland Industries, Inc.	Building 11 - Commerce Drive	Tax Map 8 Parcel 37 & 37-1	SD Ireland	less than 1 ac.	.08 acres
Ireland Industries, Inc.	Perimeter Drive Building 7	Tax Map 8 Parcel 37 & 37-1	SD Ireland	less than 1 ac.	.198 acres

<u>Project</u>	<u>Project Description</u>	<u>Location</u>	<u>Contact</u>	<u>Acreege Disturbed</u>	<u>Impervious Surface Acreeage</u>
Sisters & Brothers	Site Plan application to amend a previously approved Site Plan for a Dunkin-Donuts with a drive-thru window. The amendment consists of: 1) removal of the existing Dunkin-Donuts Store; 2) removal of existing shed; and 3) construction of a 6,095 sq. ft. shopping center, including Dunkin-Donuts with a drive-thru window.	25 & 39 Macrae Rd., Tax Map 41, Parcels 97 & 98	Trudell Consulting Inc.	less than 1 ac.	.651 acres
Antell	1 lot	645 Colchester Point Road, Tax Map 34, Parcel 77	Donna Antell	less than 1 ac.	up to 0.372 acres
Brosseau, Lauretta & Fitzgerald, Daniel & Christine	19 unit Planned Residential Development	80 Jasper Mine Road and 172 Watkins Road, Tax Map 16, Parcels 16 & 20	David Burke	More than 5 ac.	up to 6.86 acres

<u>Project</u>	<u>Project Description</u>	<u>Location</u>	<u>Contact</u>	<u>Acreage Disturbed</u>	<u>Impervious Surface Acreage</u>
Hayward, Nathaniel	Planned Residential Development on 22 undeveloped acres consisting of: 1) 14 single family lots, 2) two common area parcels, and 3) installation of a new public road	Niquette Bay Road, Tax Map 17, Parcels 15-1	Nathaniel Hayward	More than 5 ac.	Up to 4.4 acres
Thibault	4 lots: 1) lot #1 a 1.84 acre lot with existing duplex, 2) lot #2 a 1.45 acre parcel with a proposed single-family residence; 3) lot #3 a 1.45 acre parcel with a proposed single-family residence; and 4) a 7.39 acre vacant lot	2133 Malletts Bay Avenue, Parcel 03-051000	Krebs & Lansing Engineers	1 to 5 ac.	Up to 1.4 acres
Wells, Ray	subdivide a 5.05 acre parcel into nine single family lots and for the construction of 730 feet of public road	926 Severance Road, Tax Map 4, Parcel 24	O'Leary - Burke Civil Assoc.	less than 1 ac.	Up to 1.01 acres

<u>Project</u>	<u>Project Description</u>	<u>Location</u>	<u>Contact</u>	<u>Acreage Disturbed</u>	<u>Impervious Surface Acreage</u>
Wright, Seth & Wendy	subdivide a 23.4 acre lot into four single-family lots. Lot #1 a 5.01 acre parcel; Lot #2 a 5.08 acre parcel; Lot #3 a 5.15 acre parcel with existing single family residence and barn; and Lot #4 a 8.15 acre parcel	1480 East Road, Tax Map 12, Parcel 21	Seth Wright	1 to 5 ac.	Up to 1.03 acres on lots 1 and 2; up to 1.63 acres on lot 4
ADB Inc.	construction of 435 ft. of public road and to subdivide a 28.66 acre lot into three lots: Lot #1 a .46 acre parcel; Lot #2 a 6.4 acre parcel; and Lot #3 a 21.8 acre parcel	263 Church Road, Tax Map 50, Parcel 46-1	O'Leary - Burke Civil Assoc.	1 to 5 ac.	.53 acres

## **Section 4.2.6**

### **Pollution Prevention/Good Housekeeping for Municipal Operations**

**Attachment:**

1. Sign in sheet for training for DPW maintenance crews
2. Memo documenting MS4 cleaning activities.
3. Testing results of materials removed form catch basins and roadways.
4. 2011 MS\$ Indicators

## Bryan Osborne

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**From:** Pease, Jim <Jim.Pease@state.vt.us>  
**Sent:** Monday, September 12, 2011 7:20 AM  
**To:** Armstrong, Jon; Laurie Adams (LAdams@ci.burlington.vt.us); Erik Bailey ; Jim Jutras (ejctwwtf@sover.net); Linda Seavey (Linda.Seavey@uvm.edu); Heather Kendrew; Andy Legg ; Dennis Lutz (DENNIS@essex.org); Bernie Gagnon ; Floyd Sheesley; Regina Mahony (rmahony@town.milton.vt.us); Bryan Osborne; Dean Pierce (dpierce@shelburnevt.org); Aaron Martin; Bob Penniman; Digiammarino, Craig; Greg Goyette; Jessica Andreoletti; Bill Nedde; Lisa Sheltra; Megan Moir; Sarah Hadd; Tom DiPietro  
**Cc:** dalbrecht@ccrpcvt.org  
**Subject:** Municipal Employees Workshop-Thursday

The Municipal Employee stormwater workshop is this Thursday and below are the reservations I have. FYI I do not know if we will have the Fish and Wildlife portion of the workshop as I have not heard back from the department due to the flooding disruption. I assume it is on unless I hear otherwise. There is limited seating so please do not send any employees in excess of your reservation. Again the workshop will be at the Essex DPW Training facility at 188 Sand Hill Rd in Essex, just south of Rte 15.

MS4	10-11:30	11:30-1
Winooski	10	
Williston	5	
Essex Jct	6	6
BTV	9	8
S Burlington		16
Shelburne	5	
Essex	8	8
Colchester	5	5
Burlington		6

**DEPARTMENT OF PUBLIC WORKS  
Town of Colchester, VT**

# Memo

**To:** All Highway Employees  
**From:** Anja Twite *ajtwite*  
**Date:** August 9, 2011  
**Re:** Municipal Employee Training

This year's municipal employee training workshop will be held on September 15 at the Essex Fire Department. Each session will cover Hazardous Waste Spill Prevention and Urban Wildlife Management Issues.

Bryan would like as many of you as possible to attend. Please pick a session and return to me ASAP:

Session A (10 AM to 11:30 AM)	Session B (11:30 AM to 1 PM)
<i>Bob Provost</i>	<i>MARVIN Siple</i>
<i>Tom M</i>	<i>Gary Jennings</i>
<i>Jeff Smart</i>	<i>David Vagat</i>
<i>DANE P. McGRATH</i>	<i>Scott Smith</i>
<i>Buzzy Julien</i>	

The 50 spaces per session will be filled on a first come, first serve basis.

Let me know if you have any questions.

PLEASE  
SIGN IN

10/20/2020

NAME

TOWN/USCY

JUSTIN KEELTY  
JOHN DEVLIN  
JAMIE CAMERON  
ROBERT CUSHMAN

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Bob Whitter

ESSEX  
Town of ESSEX

# Memo

**To:** Bryan K. Osborne, Director of Public Works

**From:** Floyd Sheesley, P.E., Town Engineer *FS*

**Cc:**

**Date:** March 23, 2012

**Re:** MS4 Permit information

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We currently have 35 Stormwater Permits that have an annual inspection requirement. The number of outfalls associated with these permits is 58. The number of catch basins associated with these permits is 314.

Catch basin cleanings totaled 30 cubic yards of material and the town collected approximately 60 cubic yards of street sweepings last year.



## Laboratory Report

Colchester, Town of	100580
PO Box 55	
Colchester, VT 05446	
Atten: Anja Twite	

PROJECT: Street Sweepings  
WORK ORDER: 1106-07277  
DATE RECEIVED: June 02, 2011  
DATE REPORTED: June 15, 2011  
SAMPLER: Floyd Sheesley

Enclosed please find the results of the analyses performed for the samples referenced on the attached chain of custody. All required method quality control elements including instrument calibration were performed in accordance with method requirements and determined to be acceptable unless otherwise noted.

The column labeled Lab/Tech in the accompanying report denotes the laboratory facility where the testing was performed and the technician who conducted the assay. A "W" designates the Williston, VT lab under NELAC certification ELAP 11263; "R" designates the Lebanon, NH facility under certification NH 2037 and "N" the Plattsburgh, NY lab under certification ELAP 11892. "Sub" indicates the testing was performed by a subcontracted laboratory. The accreditation status of the subcontracted lab is referenced in the corresponding NELAC and Qual fields.

The NELAC column also denotes the accreditation status of each laboratory for each reported parameter. "A" indicates the referenced laboratory is NELAC accredited for the parameter reported. "N" indicates the laboratory is not accredited. "U" indicates that NELAC does not offer accreditation for that parameter in that specific matrix. Test results denoted with an "A" meet all National Environmental Laboratory Accreditation Program requirements except where denoted by pertinent data qualifiers. Test results are representative of the samples as they were received at the laboratory

Endyne, Inc. warrants, to the best of its knowledge and belief, the accuracy of the analytical test results contained in this report, but makes no other warranty, expressed or implied, especially no warranties of merchantability or fitness for a particular purpose.

Reviewed by:

Harry B. Locker, Ph.D.  
Laboratory Director

[www.endynelabs.com](http://www.endynelabs.com)



160 James Brown Dr., Williston, VT 05495  
Ph 802-879-4333 Fax 802-879-7103

56 Etna Road, Lebanon, NH 03766  
Ph 603-678-4891 Fax 603-678-4893



CLIENT: Colchester, Town of  
 PROJECT: Street Sweepings  
 REPORT DATE: 6/15/2011

WORK ORDER: 1106-07277  
 DATE RECEIVED: 06/02/2011

TEST METHOD: EPA 8260B

001 Site: Street Sweeping Catch Basin - Cleaning Pile Date Sampled: 6/2/11 14:15 Analysis Date: 6/14/11 W MGT

Parameter	Result	Unit	Nelac	Qual	Parameter	Result	Unit	Nelac	Qual
Dichlorodifluoromethane	< 95.0	ug/Kg, Dry	N		Chloromethane	< 57.0	ug/Kg, Dry	A	
Vinyl chloride	< 38.0	ug/Kg, Dry	A		Bromomethane	< 95.0	ug/Kg, Dry	A	
Chloroethane	< 95.0	ug/Kg, Dry	A		Trichlorofluoromethane	< 38.0	ug/Kg, Dry	N	
Diethyl ether	< 95.0	ug/Kg, Dry	U		1,1-Dichloroethene	< 19.0	ug/Kg, Dry	A	
Acetone	< 190	ug/Kg, Dry	N		Carbon disulfide	< 95.0	ug/Kg, Dry	N	
Methylene chloride	< 95.0	ug/Kg, Dry	A		t-Butanol	< 380	ug/Kg, Dry	N	
Methyl-t-butyl ether (MTBE)	< 38.0	ug/Kg, Dry	A		trans-1,2-Dichloroethene	< 19.0	ug/Kg, Dry	A	
Di-isopropyl ether (DIPE)	< 38.0	ug/Kg, Dry	U		1,1-Dichloroethane	< 19.0	ug/Kg, Dry	A	
Ethyl-t-butyl ether (ETBE)	< 38.0	ug/Kg, Dry	U		2-Butanone	< 190	ug/Kg, Dry	A	
2,2-Dichloropropane	< 38.0	ug/Kg, Dry	N		cis-1,2-Dichloroethene	< 19.0	ug/Kg, Dry	N	
Bromochloromethane	< 38.0	ug/Kg, Dry	N		Chloroform	< 19.0	ug/Kg, Dry	A	
Tetrahydrofuran	< 190	ug/Kg, Dry	U		1,1,1-Trichloroethane	< 19.0	ug/Kg, Dry	A	
Carbon tetrachloride	< 19.0	ug/Kg, Dry	A		1,1-Dichloropropene	< 19.0	ug/Kg, Dry	N	
Benzene	< 19.0	ug/Kg, Dry	A		t-Amylmethyl ether (TAME)	< 38.0	ug/Kg, Dry	U	
1,2-Dichloroethane	< 19.0	ug/Kg, Dry	A		Trichloroethene	< 19.0	ug/Kg, Dry	A	
1,2-Dichloropropane	< 38.0	ug/Kg, Dry	A		Dibromomethane	< 38.0	ug/Kg, Dry	N	
Bromodichloromethane	< 19.0	ug/Kg, Dry	A		cis-1,3-Dichloropropene	< 19.0	ug/Kg, Dry	A	
4-Methyl-2-pentanone (MIBK)	< 190	ug/Kg, Dry	N		Toluene	< 19.0	ug/Kg, Dry	A	
trans-1,3-Dichloropropene	< 38.0	ug/Kg, Dry	A		1,1,2-Trichloroethane	< 19.0	ug/Kg, Dry	A	
Tetrachloroethene	< 19.0	ug/Kg, Dry	A		1,3-Dichloropropane	< 19.0	ug/Kg, Dry	N	
2-Hexanone	< 190	ug/Kg, Dry	N		Dibromochloromethane	< 38.0	ug/Kg, Dry	A	
1,2-Dibromoethane	< 19.0	ug/Kg, Dry	N		Chlorobenzene	< 19.0	ug/Kg, Dry	A	
Ethylbenzene	< 19.0	ug/Kg, Dry	A		1,1,1,2-Tetrachloroethane	< 38.0	ug/Kg, Dry	N	
Xylenes, Total	< 38.0	ug/Kg, Dry	A		Styrene	< 19.0	ug/Kg, Dry	N	
Bromoform	< 38.0	ug/Kg, Dry	A		Isopropylbenzene	< 19.0	ug/Kg, Dry	A	
1,1,2,2-Tetrachloroethane	< 38.0	ug/Kg, Dry	A		Bromobenzene	< 19.0	ug/Kg, Dry	N	
n-Propylbenzene	< 19.0	ug/Kg, Dry	A		1,2,3-Trichloropropane	< 38.0	ug/Kg, Dry	N	
2-Chlorotoluene	< 19.0	ug/Kg, Dry	N		1,3,5-Trimethylbenzene	< 19.0	ug/Kg, Dry	A	
4-Chlorotoluene	< 19.0	ug/Kg, Dry	N		t-Butylbenzene	< 19.0	ug/Kg, Dry	A	
1,2,4-Trimethylbenzene	< 19.0	ug/Kg, Dry	A		s-Butylbenzene	< 19.0	ug/Kg, Dry	A	
4-Isopropyltoluene	< 19.0	ug/Kg, Dry	A		1,3-Dichlorobenzene	< 19.0	ug/Kg, Dry	A	
1,4-Dichlorobenzene	< 19.0	ug/Kg, Dry	A		n-Butylbenzene	< 19.0	ug/Kg, Dry	A	
1,2-Dichlorobenzene	< 19.0	ug/Kg, Dry	A		1,2-Dibromo-3-Chloropropane	< 38.0	ug/Kg, Dry	N	
1,2,4-Trichlorobenzene	< 38.0	ug/Kg, Dry	N		1,3,5-Trichlorobenzene	< 38.0	ug/Kg, Dry	U	
Hexachlorobutadiene	< 19.0	ug/Kg, Dry	N		Naphthalene	< 38.0	ug/Kg, Dry	A	
1,2,3-Trichlorobenzene	< 38.0	ug/Kg, Dry	N		Surr. 1 (Dibromofluoromethane)	97	%	A	
Surr. 2 (Toluene d8)	100	%	A		Surr. 3 (4-Bromofluorobenzene)	97	%	A	
Unidentified Peaks	1		U						



