2018 Chittenden County Stormwater Awareness Study

Prepared for Chittenden County Regional Planning Commission

by





Polling Institute



Methodology

- Respondents selected using ABS from United States Post Office's Delivery Sequence File (DSF)
- Invitation letter to 2,400 residential households in 9 Chittenden County communities; postcard followup
- Sample was proportionately stratified based on number of residencies in the nine communities
- Response rate = 16%; Cooperation rate approximately 19 percent
- First 2 contacts \rightarrow Mail push to web

Methodology (2)

- Third contact with paper copy of survey and SASE
- Paper version made to replicate web version
- Unique ID employed to ...
 - Track response
 - Avoid duplicates
- Total responses = 386
 - Web = 214
 - Mail = 172
- Sampling error: +/- 5 percentage points
- Change in methodology from 2013 survey

Regional Representation

Community	Total population (2016)	Total households (2016)	Households as a percent of the nine communities	Percent of households in the survey sample	Difference between population and sample
Burlington city	42417	16119	31%	31%	0.7%
Colchester town	17067	6314	12%	12%	0.0%
Essex Junction	9271	3875	7%	11%	-3.2%
Essex town	10316	4012	8%	7%	0.5%
Milton town	10352	3889	8%	6%	1.3%
Shelburne town	7144	2880	6%	7%	-0.9%
South Burlington city	17904	7987	15%	17%	-2.0%
Williston town	8698	3514	7%	5%	1.6%
Winooski city	7267	3197	6%	4%	2.3%

Respondent Demographics





Respondent Demographics





Respondent Demographics

- 61 percent of respondents live in single family houses
- 20 percent live in condominiums or townhouses
- Respondents are older and better educated than the population in general

Age	Рор	Sample	Dif
18 to 24 years	20%	3%	-17%
25 to 34 years	17%	11%	-6%
35 to 44 years	14%	11%	-3%
45 to 54 years	17%	13%	-4%
55 to 64 years	16%	26%	10%
65 to 74 years	9%	22%	13%
75 to 84 years	5%	9%	5%
85 years and over	2%	4%	2%
Total	100%	100%	

Attitudes & Behaviors

From a representative sample of the general public

Has _____ become more polluted over past 10 years?



In general, compared to ten years ago, do you think Lake Champlain is ...



Age Differences: Lake Champlain is...



Chi Square = 23.37, p < .005

Compared to ten years ago, do you think your local streams and waterways are...

■ 2013 ■ 2018

60%



Water flowing into storm drains goes to ...



Impact of rain run-off ...



Rain run-off from _____ has a "great impact"



Rain run-off fromRain run-off fromRain run-off fromRain run-off fromresidential roofsparking lots forlawns andfarmsroadsand drivewaysstores or officesgardens

Personal actions affect the quality of water in Lake Champlain



Personal actions affect the quality of water in Lake Champlain (by education)



 $t \approx 2.389, p < 0.017$

Lawn maintenance practices

68% 58% 57% 40% 36% 36% 23% 18% 6% 5% 6% Leave (mower) Compost (mower) Leave (raked) leaves Compost (raked) Bag (raked) leaves Bag (mower)

■ 2013 ■ 2018

Leave (mower) Compost (mower) Bag (mower) Leave (raked) leaves Compost (raked) Bag (raked) leaves clippings on lawn clipping on property clippings for pickup on the lawn or leaves on property for pickup or dump or mulch on lawn or take to dump ground or mulch on lawn

Dog waste ... on sidewalks



Dog waste ... on trails



Dog waste ... in the winter



Dog waste ... in your own yard



Least polluting method of car washing



Least polluting method for handling rain run-off



Primary Sources of Daily News



Willingness to pay (monthly) to address stormwater issues



Willingness to pay (monthly) to address stormwater issues



Critical issues facing Chittenden

2013 2018



Potential adoption of practices to address stormwater runoff



Install a rain barrel Plant a rain garden Have my lawn care Plant more trees to catch rainwater to capture company use on my property from my roof rainwater from my natural lawn care roof, driveway practices and/or walkway

Final thoughts ...

- Residents are doing more composting leaves and grass – in 2018 than they did in 2013
- Concern about pollution from farm runoff has increased since 2013
- Addressing dog waste has not changed, except for when walking dogs on trails
- Concern about stormwater runoff, compared with air pollution, has increased
- Residents express greater willingness to pay for addressing stormwater runoff than they did 5 years ago

Contact information

Rich Clark, Ph.D. 6 Alumni Drive, LVH 108 Castleton, Vermont 05735 802-468-1306 (o)

802-774-8716 (m)

rich.clark@castleton.edu

