

Public Education and Outreach Plan

(Effective September 2015)

Central Virginia Community College (CVCC) operates a Stormwater Management Program in compliance with the Virginia General Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4 General Permit). In accordance with Section II.B.1 of the permit, CVCC implements a Public Education and Outreach Program (PEOP) on stormwater impacts.



Consistent with the MS4 General Permit, the PEOP considers the following goals:

- Increase the knowledge of CVCC's students, faculty, and staff about steps that can be taken to reduce stormwater pollution, placing priority on reducing impacts to impaired waters and other local water pollution concerns;
- Increase CVCC's student, faculty, and staff knowledge of hazards associated with illegal discharges and improper disposal of waste, including pertinent legal implications; and
- Implement a diverse program with strategies that target audiences most likely to have significant stormwater impacts.

These goals are intended to be met as part of an iterative program that will measure effectiveness of the Program by assessing the level of knowledge, over time, of the college's public that is defined as the CVCC students, faculty, and staff. The Program is designed consistent with the MS4 General Permit to:

- Identify three high-priority water quality issues and provide rationale for the selection of each issue;
- Identify and estimate the population size of the target audience who is most likely to have significant impacts on each water quality issue; and
- Identify the relevant message and associated educational and outreach materials for distribution to the target audiences.

Public participation during the development of the PEOP included the distribution of a survey through email that incorporated questions regarding stormwater runoff and surface water quality (Attachment A). The survey was intended to gauge CVCC students, faculty, and staff on their knowledge of stormwater impacts. Response to the survey included feedback from 1 student, 38 faculty, and 38 staff. Insightful results from the survey found:

- 71% of respondents are not aware CVCC has a stormwater program in place
- 84% felt they had somewhat, very little, or no knowledge of steps to take to reduce stormwater pollution
- 83% are interested in improving surface water quality
- 90% are not aware of any CVCC projects to improve surface water quality
- 88% do not know where storm inlets on the campus drain

Selection of high-priority water quality issues was based on feedback derived from the survey results, applicable Total Maximum Daily Loads (TMDLs) for the Chesapeake Bay and general

knowledge of campus operations. CVCC's high-priority water quality issues for the PEOP are provided below. Based on measures of effectiveness for each, any may be replaced or refined with approval of the Department of Environmental Quality (DEQ) as part of an iterative stormwater program.

Water Quality Issue No. 1: Public education on stormwater impacts

Rationale: This issue was selected based on the results of the public survey that indicate a strong need for improved public education. This rationale is supported with the survey results in Attachment A.

Target Audience: Survey results indicate that the majority of CVCC's public audience needs general stormwater education since over 88% do not know that stormwater is discharged to surface water and all could have an impact in the improvement of stormwater runoff with knowledge of steps to reduce stormwater pollution. This audience includes:

- ±4,300 students,
- ±450 faculty and staff.

Relevant Message: To address goals of the Program and concerns stemming from the survey results, the relevant message will include:

- General information about stormwater runoff (why it's important, where it drains, pollutants, etc.)
- Steps that can be taken to reduce stormwater pollution
- Knowledge of hazards associated with illegal discharges and improper disposal of waste, including pertinent legal implications
- Information for reporting a potential illicit discharge (what are pollutants of significance, who to contact if an illicit discharge is observed, how to reduce community impact)
- Information regarding CVCC's Stormwater Program

Outreach Materials to Convey the Relevant Message: An email sent to the entire target audience that includes a brochure with the relevant message and a link to the CVCC stormwater webpage. Email was selected as the appropriate distribution mechanism based on 78% of survey respondents identifying it as the most effective way to reach them with educational material.

Schedule: Outreach material will be distributed a minimum of once a year to at least 20% of each target audience.

Method to Determine Effectiveness: As deemed appropriate for a community college, the public survey described above will be distributed every two years. New results will be compared to prior surveys to determine if the public's knowledge of stormwater runoff and its impacts have increased.

Water Quality Issue No. 2: Education on special water quality concerns (Chesapeake Bay TMDLs)

Rationale: The CVCC campus is located in the Chesapeake Bay TMDL watershed where the pollutants of concern are nitrogen, phosphorous and sediment.

Target Audience: Grounds staff responsible for nutrient management and areas of land disturbance. This audience includes:

- ±22 staff

Relevant Message: Information regarding the implementation of CVCC's Nutrient Management Plan and stabilization, prevention, and perimeter controls for sediment.

Outreach Materials to Convey the Relevant Message: The message will be conveyed using the CVCC Good Housekeeping/Pollution Prevention Program Manual and Nutrient Management Plan during annual training of the target audience.

Schedule: Training will be provided to the target audience annually.

Method to Determine Effectiveness: A water knowledge quiz assessing the audiences' knowledge of the training material will be given at the conclusion of each training session. Results from the quiz will be analyzed and compared to quiz results of previous training throughout the permit cycle. The comparison will determine if the audiences' knowledge of the CVCC Nutrient Management Plan and methods for reducing the discharge of sediment is satisfactory or increasing over time.

Water Quality Issue No. 3: Good Housekeeping and Pollution Prevention Practices on the CVCC campus

Rationale: Based on field inspections, the potential for pollutants to be exposed to precipitation on the CVCC campus is most likely to occur from day-to-day operational activities. The top three pollution concerns identified in the CVCC public survey were pesticides and insecticides, motor oil, and fertilizer. The most likely sources of these top pollutants are CVCC grounds operations.

Target Audience: Grounds staff performing day-to-day activities that include materials that could be exposed to precipitation if improperly managed, handled, or stored. This audience includes:

- ±22 staff

Relevant Message: Daily implementation of proper management, handling, and storage of potential pollutants and best management practices for activities incorporated into CVCC's Good Housekeeping/Pollution Prevention Program Manual.

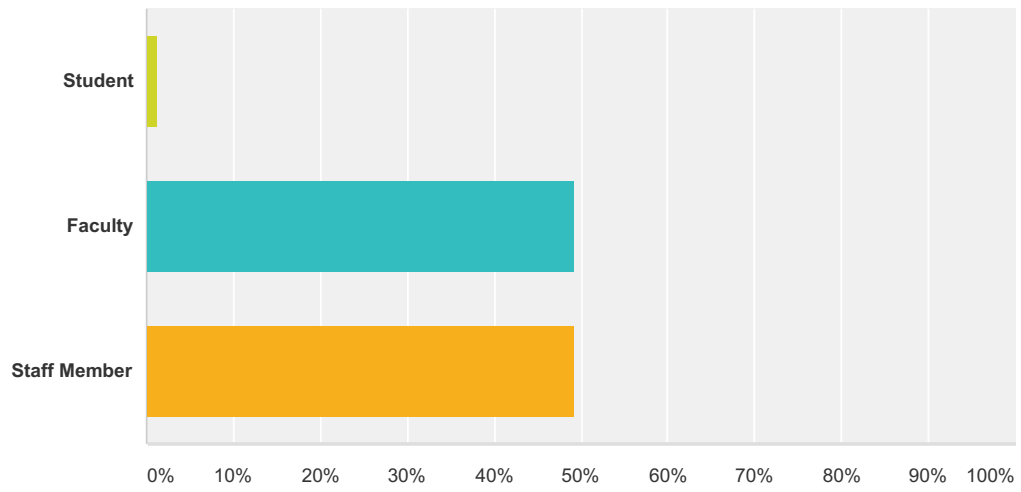
Outreach Materials to Convey the Relevant Message: The message will be conveyed using the CVCC Good Housekeeping/Pollution Prevention and Illicit Discharge Detection and Elimination Program Manuals during annual training of the target audience.

Schedule: Training will be provided to the target audience annually.

Method to Determine Effectiveness: CVCC will measure effectiveness based on the number of recurring self-inspection issues identified during the annual comprehensive campus evaluation (see BMP 3.4 of the CVCC Program Plan). Effectiveness will also be based on the illicit discharges reported or observed that are related to day-to-day staff activities (see BMP 3.2 and 3.3 of the CVCC Program Plan.)

Q1 Are you a Student, Faculty, or Staff Member?

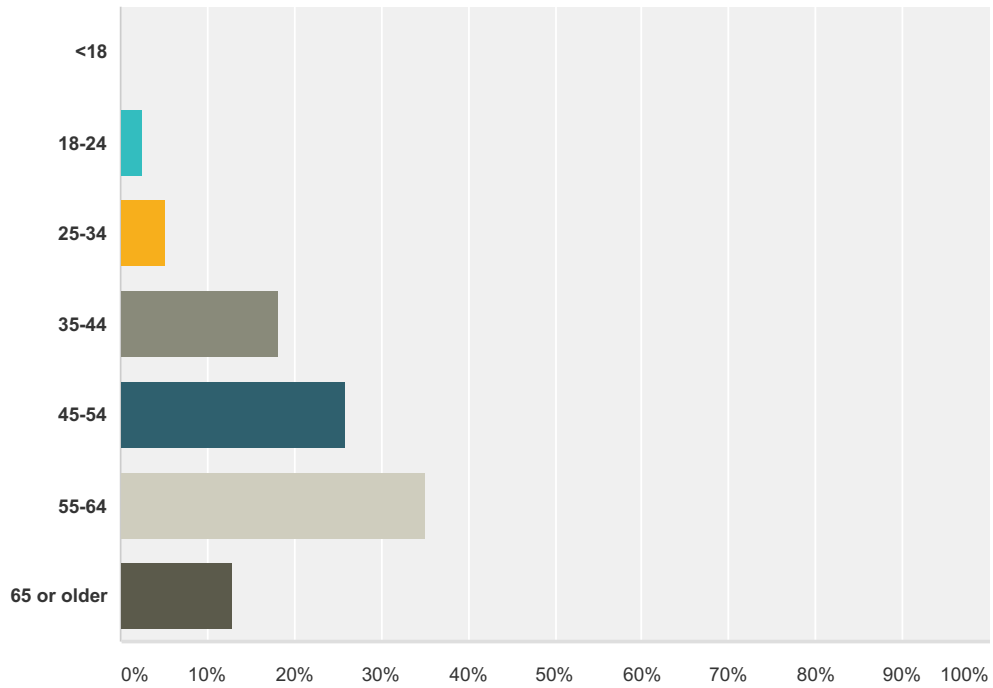
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Answer Choices	Responses
Student	1.30% 1
Faculty	49.35% 38
Staff Member	49.35% 38
Total	77

Q2 What is your age?

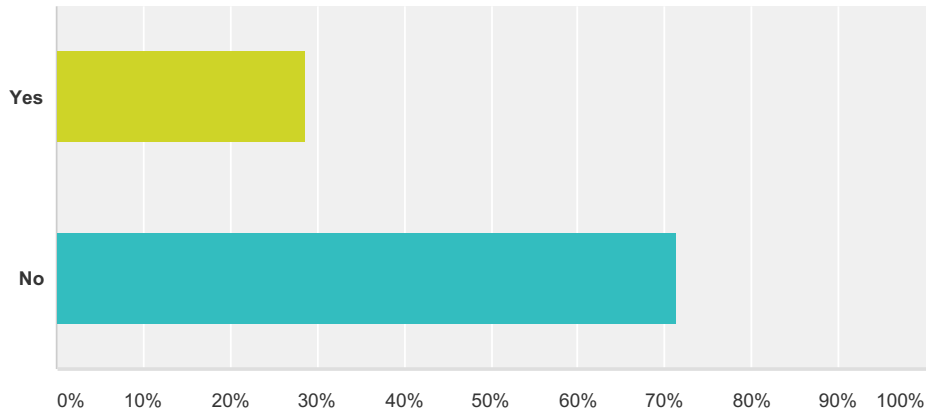
Answered: 77 Skipped: 0



Answer Choices	Responses	Count
<18	0.00%	0
18-24	2.60%	2
25-34	5.19%	4
35-44	18.18%	14
45-54	25.97%	20
55-64	35.06%	27
65 or older	12.99%	10
Total		77

Q3 Are you aware that CVCC has a stormwater program in place to protect surface waters and posts the stormwater Program Plan and Annual Reports online regarding the progress and accomplishments?

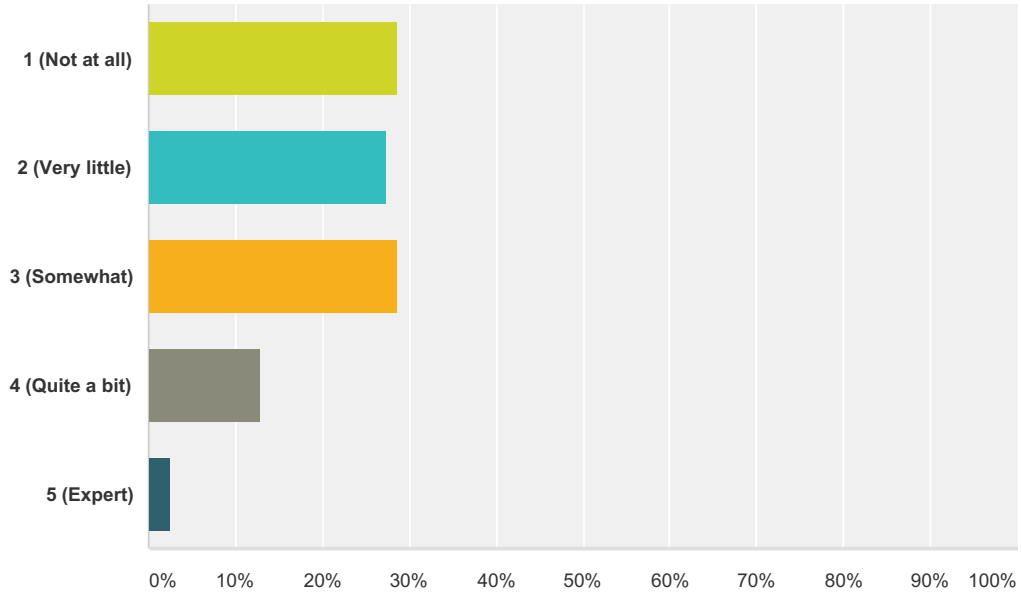
Answered: 77 Skipped: 0



Answer Choices	Responses
Yes	28.57% 22
No	71.43% 55
Total	77

Q4 How much do you feel you know about the steps you can take to reduce stormwater pollution (1 being the least and 5 being the most)?

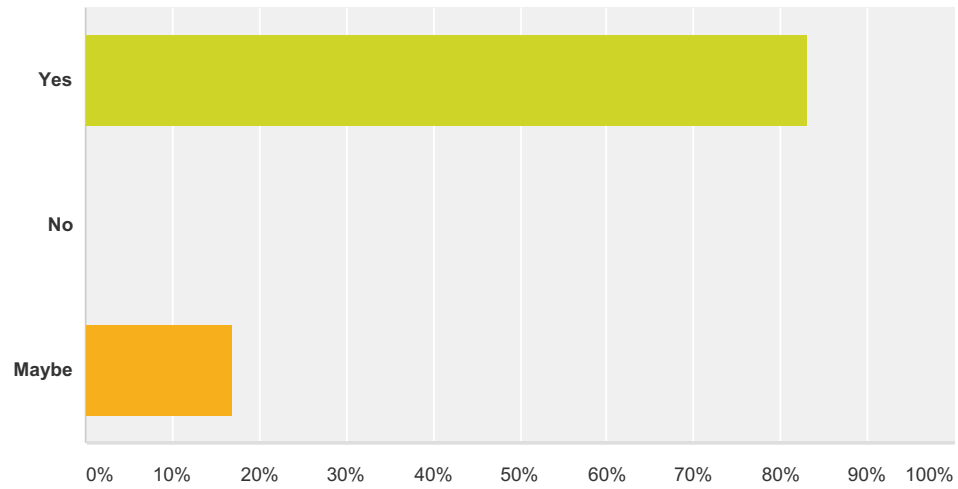
Answered: 77 Skipped: 0



Answer Choices	Responses
1 (Not at all)	28.57% 22
2 (Very little)	27.27% 21
3 (Somewhat)	28.57% 22
4 (Quite a bit)	12.99% 10
5 (Expert)	2.60% 2
Total	77

Q5 Are you interested in improving environmental water quality (Creeks, Lakes, Bays, etc.)?

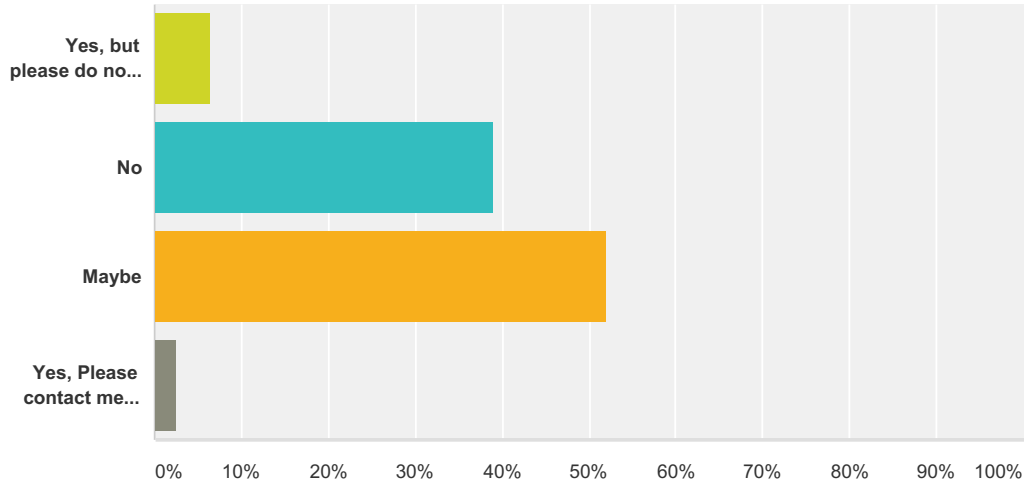
Answered: 77 Skipped: 0



Answer Choices	Responses	Count
Yes	83.12%	64
No	0.00%	0
Maybe	16.88%	13
Total		77

Q6 Are you interested in volunteering with local projects to improve environmental water quality?

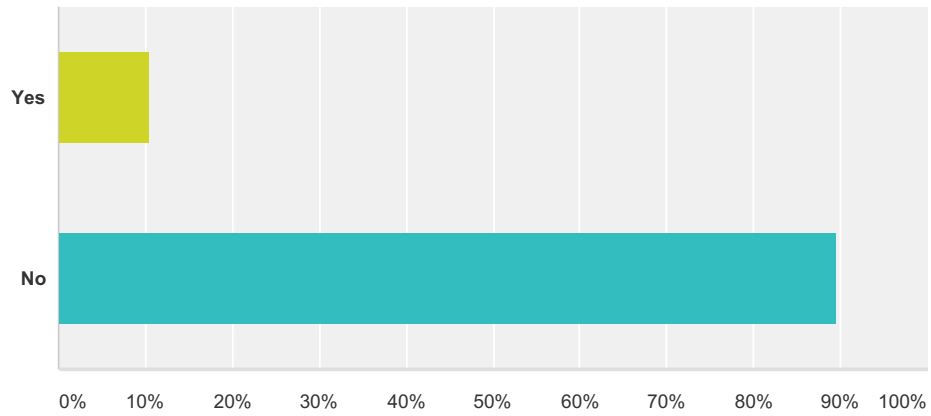
Answered: 77 Skipped: 0



Answer Choices	Responses
Yes, but please do not contact me regarding opportunities.	6.49% 5
No	38.96% 30
Maybe	51.95% 40
Yes, Please contact me about opportunities (Please provide contact information below).	2.60% 2
Total	77

Q7 Are you aware of any CVCC projects to improve environmental water quality?

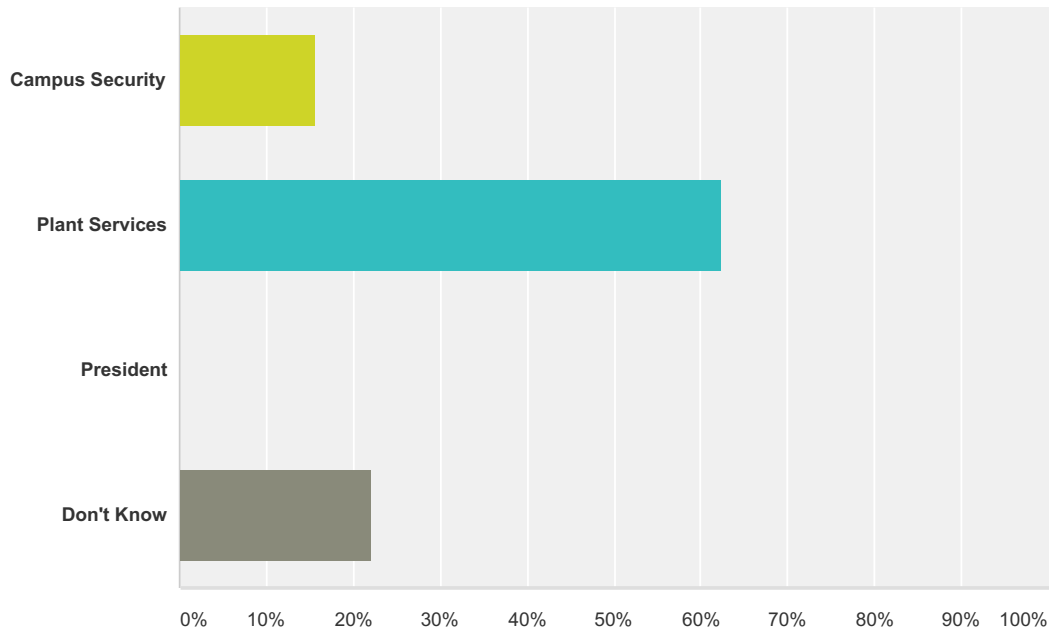
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Answer Choices	Responses	
Yes	10.39%	8
No	89.61%	69
Total		77

Q8 If you observed an issue that is negatively impacting environmental water quality on campus who would you contact?

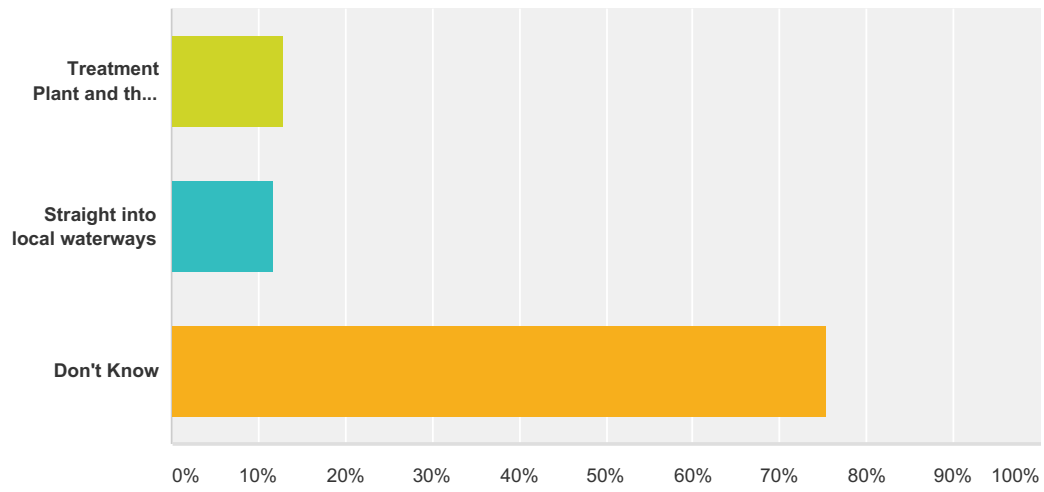
Answered: 77 Skipped: 0



Answer Choices	Responses	
Campus Security	15.58%	12
Plant Services	62.34%	48
President	0.00%	0
Don't Know	22.08%	17
Total		77

Q9 Do you know where stormwater inlets on the CVCC campus drain?

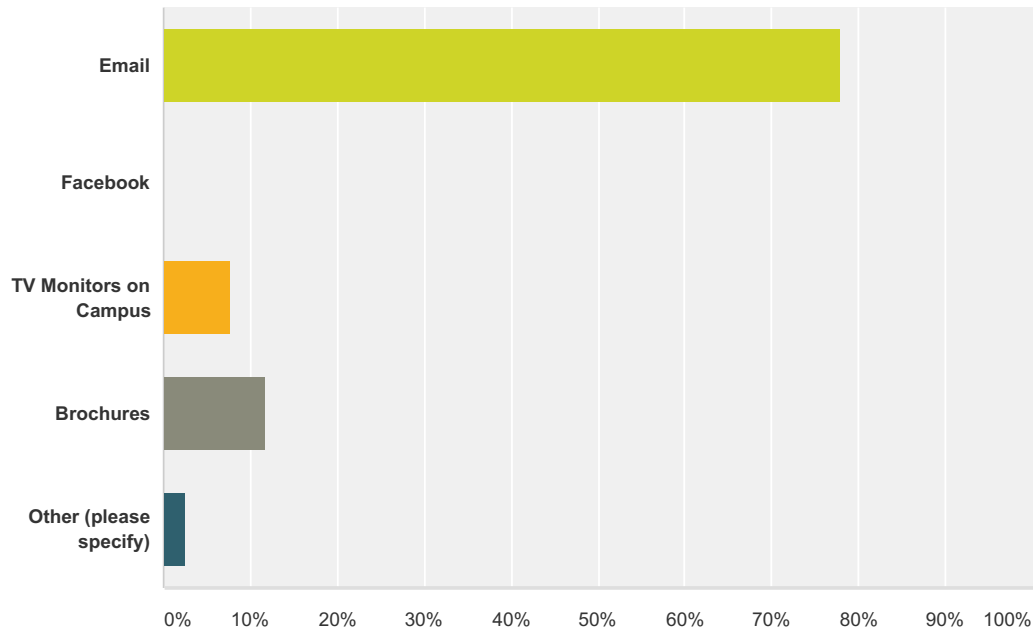
Answered: 77 Skipped: 0



Answer Choices	Responses
Treatment Plant and then into the waterway	12.99% 10
Straight into local waterways	11.69% 9
Don't Know	75.32% 58
Total	77

Q10 Which of the following would be the most effective method to reach you regarding water quality education?

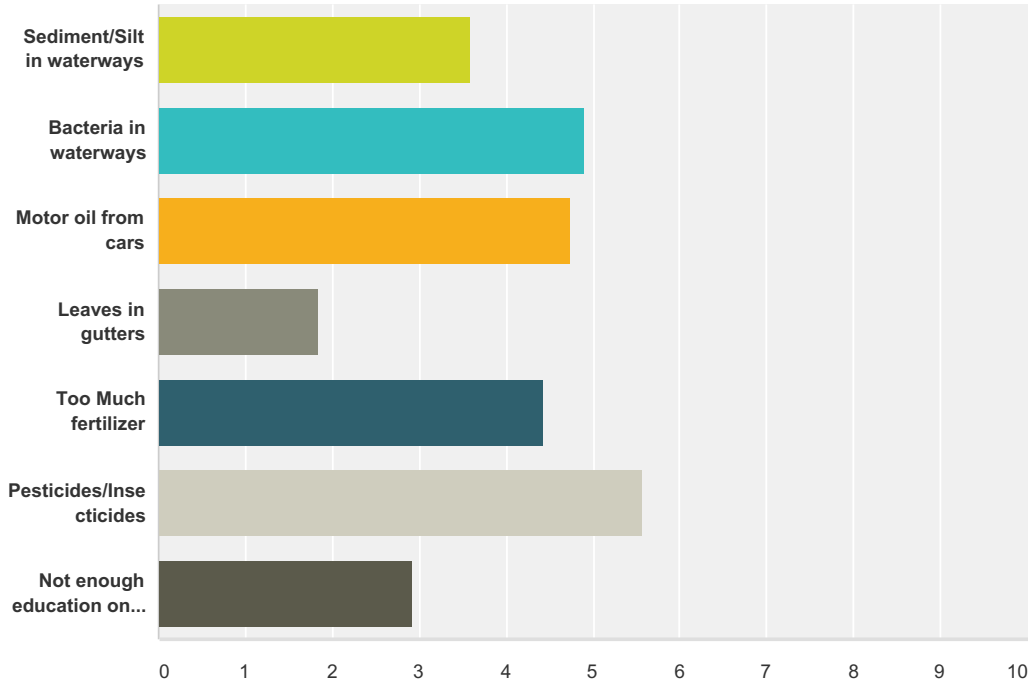
Answered: 77 Skipped: 0



Answer Choices	Responses
Email	77.92% 60
Facebook	0.00% 0
TV Monitors on Campus	7.79% 6
Brochures	11.69% 9
Other (please specify)	2.60% 2
Total	77

Q11 Please rank the following stormwater pollution concerns in order of importance with 1 being the most important and 6 being the least important:

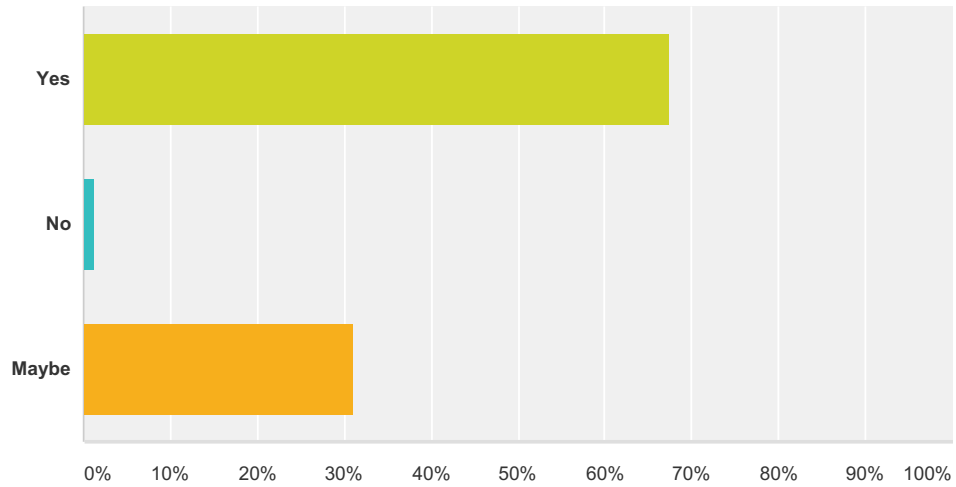
Answered: 77 Skipped: 0



	1	2	3	4	5	6	7	Total	Score
Sediment/Silt in waterways	9.09% 7	7.79% 6	7.79% 6	15.58% 12	33.77% 26	20.78% 16	5.19% 4	77	3.60
Bacteria in waterways	24.68% 19	18.18% 14	18.18% 14	15.58% 12	12.99% 10	6.49% 5	3.90% 3	77	4.91
Motor oil from cars	10.39% 8	24.68% 19	23.38% 18	23.38% 18	7.79% 6	7.79% 6	2.60% 2	77	4.73
Leaves in gutters	0.00% 0	3.90% 3	1.30% 1	2.60% 2	9.09% 7	33.77% 26	49.35% 38	77	1.84
Too Much fertilizer	6.49% 5	19.48% 15	20.78% 16	28.57% 22	15.58% 12	6.49% 5	2.60% 2	77	4.43
Pesticides/Insecticides	31.17% 24	24.68% 19	24.68% 19	10.39% 8	7.79% 6	1.30% 1	0.00% 0	77	5.57
Not enough education on stormwater	18.18% 14	1.30% 1	3.90% 3	3.90% 3	12.99% 10	23.38% 18	36.36% 28	77	2.92

Q12 Are there any legal/disciplinary implications for either directly or indirectly contributing pollutants to surface waters (lakes, streams, river, etc.)?

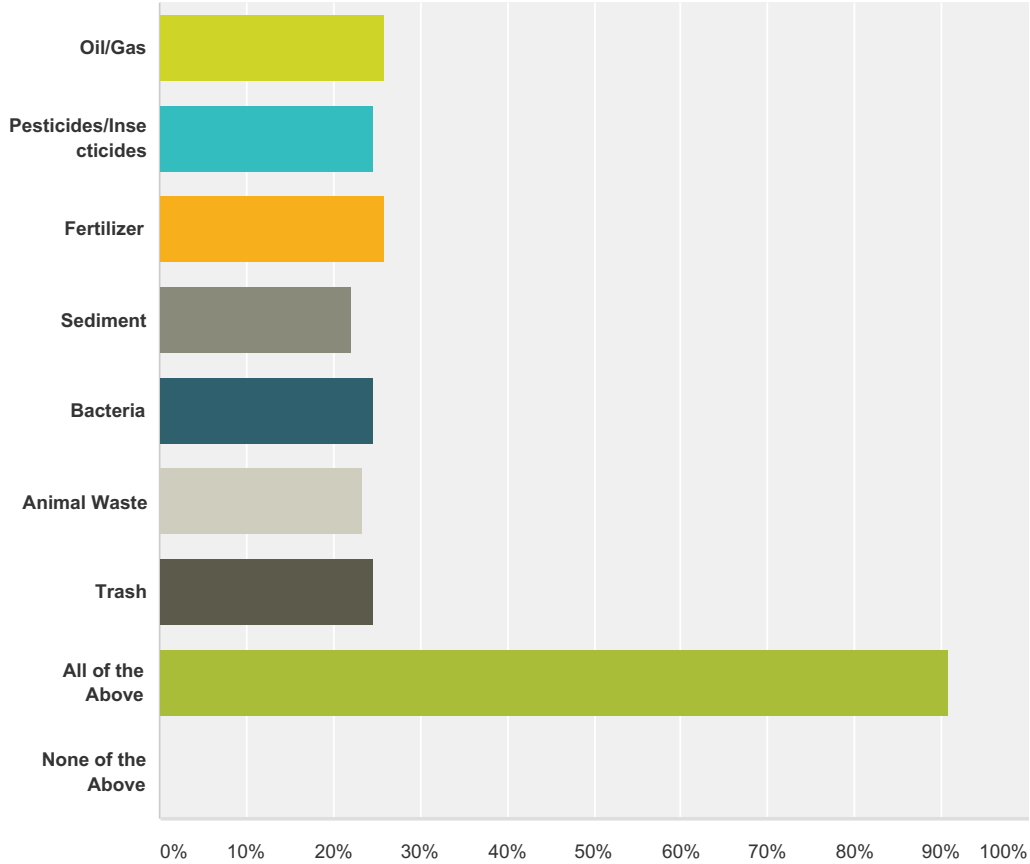
Answered: 77 Skipped: 0



Answer Choices	Responses	
Yes	67.53%	52
No	1.30%	1
Maybe	31.17%	24
Total		77

Q13 Which of the following would you classify as pollutants that can negatively impact surface waters?

Answered: 77 Skipped: 0



Answer Choices	Responses	Count
Oil/Gas	25.97%	20
Pesticides/Insecticides	24.68%	19
Fertilizer	25.97%	20
Sediment	22.08%	17
Bacteria	24.68%	19
Animal Waste	23.38%	18
Trash	24.68%	19
All of the Above	90.91%	70
None of the Above	0.00%	0
Total Respondents: 77		

Q14 Please use the below space to write any other comments or concerns you have about CVCC's stormwater program. Otherwise, please click on the button labeled "Done" below to submit your answers.

Answered: 8 Skipped: 69