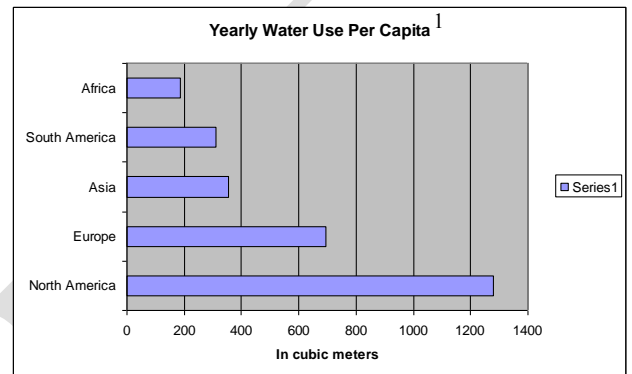


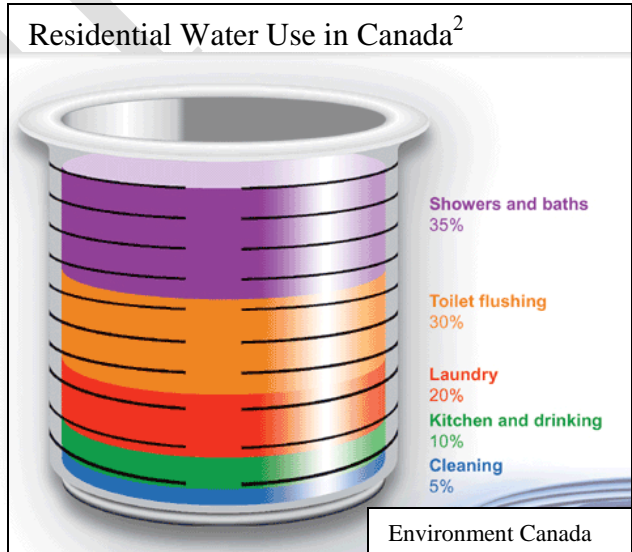
Caring for Our Watersheds Proposal Replacing House Hold Toilet Campaign

I propose to work with my family to replace our old 20l/flush toilet with a new dual (3l or 6l) flush toilet. After I have finished this with my family I am going to write a detailed report about the benefits of changing our toilet and I am going to send this report to all 250 contacts that I have in my Facebook page. I am going to encourage them to do the same and report back to me if they have replaced their old toilet. As people report to me I am going to be able to track the impact that my report had with other people that I know.

People in Canada and our watershed use more water than most other places on the planet. According to Maude Barlow in her book *Blue Gold*, North Americans use 1,280 cubic meters (1,280,000 liters) of water per year, Europeans use 694, Asians use 535 and South Americans use 311 and Africans use 186¹. According to our city engineer we in our town use about 350 liters of water per person per day. North Americans and Canadians can be more efficient with their water and still maintain a high standard of living.



I feel that it is important to lead by example when making environmental changes. Environment Canada on their website states that 30% of the water used in the home is flushed down the toilet². This is troubling because this water is treated twice, once to clean it so it is drinkable and the second time to clean the sewage so that it is safe to return to the watershed. This volume of water is difficult, costly and requires a lot of energy for towns within our watershed to clean. If we reduce the amount of water that our toilets use then we will be reducing the amount of water that we have to treat.



In order to have a water reservoir big enough for our town a dam was built. Talking with our city engineer, he tells me that there are plans to increase the height of this dam to increase the storage capacity of the dam. The extra water storage capacity is a benefit to the city but dams have negative side effects such as increase surface evaporation, reducing flood events which allow nutrients and sediments to flow down stream which help river systems to clean themselves³. Dams create barriers

¹ Maude Barlow and Tony Clarke, 2002, *Blue Gold: The fight to stop the corporate theft of the world's water*, New York, The New Press.

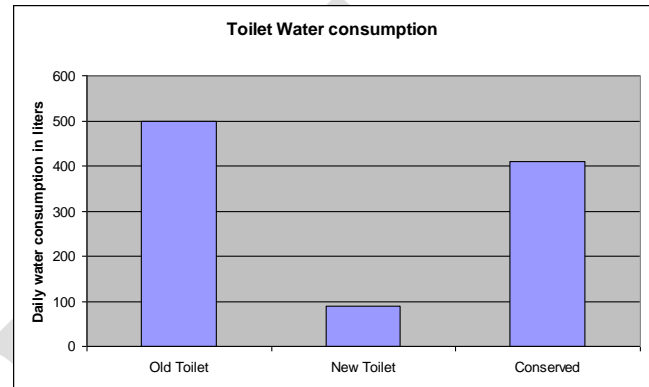
² Environment Canada, Water Use. Referenced from: http://www.ec.gc.ca/Water/en/manage/use/e_use.htm

³ Marq De Villiers, 2000, *Water: The Fate of our Most Precious Resource*, New York, Jacobus Communications Corporations.

for fish that migrate and spawn up and down the river and they also release increase amounts of carbon dioxide and methane from decomposing vegetation from flooded lands⁴. Before we increase the storage capacity of our we should become as conservative as possible with our water so we impact our watershed as little as possible.

There are five people who live in my house and our old toilet flushes 20 L of water per flush. If we all flush the toilet 5 times each day my house will be flushing 500 liters per day ($5 \times 5 \times 20 = 500$). That's 15000 liters of water per month (500×30) and 182500 liters of water per year (500×365). That's a lot of water.

My proposal is to replace this toilet with one that has two flush options one for liquids, 3 liters per flush, and one for solids, 6 liters per flush. If our toilet continues to be flushed 5 times per day by the five of us we will flush 90 liters of water ($(4 \times 3 + 6) \times 5 = 90$), which means that we will conserve 410 liters of water per day $500 - 90 = 410$, 12300 water per month (410×30) and 149650 liters of water per year ($410 \times 365 = 149650$).



This means that we will have reduced our toilet water consumption by 82% or by 82 liters of water per person per day in my household. This is exciting. This is even more exciting when this number is multiplied by other people in our community. If ten households followed the same process this means that 1.5 million liters of water would be conserved each year in our town. If the whole population of my town, which is 16,000, did the same thing then we would reduce our yearly water consumption by 478 million liters. Now that is really exciting. If all of the people in my province were to do the same this would mean a provincial reduction of 108 billion liters of water each year.

This leads me to the second part of my proposal. Once my family has completed our toilet replacement I am going to write a report detailing our toilet replacement and the benefits of reducing water consumption. I am going to post this report on my Facebook page and send it to my 250 contacts. The goal of this is to influence as many people as possible to replace their toilets. I am going to ask them to contact me when they have completed their toilet replacement so that I can track how many people I have influenced.

I have made a budget for changing our family toilet. A new dual flush toilet from Home Hardware, that my family and I have chosen costs \$169.99. Our town has an \$80 toilet rebate which drops the cost to \$89.99. My father and I are going to install the toilet ourselves so there will be cost of our time but no extra money should be spent. My father and I figure that it will take 2-3 hours to replace the toilet. There will be no cost, other than time, for the Facebook portion of my proposal.

⁴ Maude Barlow and Tony Clarke, 2002, Blue Gold: The fight to stop the corporate theft of the world's water, New York, The New Press.

Reducing toilet volume is an important issue as so much of our water, in Canada, is flushed down the toilet. It makes a big difference to the amount of water that we have to treat. This idea has cost savings and is good for the environment.

Content Scoring Guide

Judge's Name: Bob	Contestant's Code: CAB-001-02-326	Presentation Score (45): 40
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INNOVATION							
Minimal		Adequate			Impressive		Value
0	1	2	3	4	5		
<ul style="list-style-type: none"> Identifies a minor local issue with existing techniques in a common application. 		<ul style="list-style-type: none"> Identifies an important local environmental issue. Uses existing techniques in a new application 			<ul style="list-style-type: none"> Identifies a substantial environmental issue: local, national or international. Uses a new approach or an existing technique in a highly creative manner. 		4
ENVIRONMENTAL IMPACT							
0	2	4	6	8	10	Value	
<ul style="list-style-type: none"> Solution is a minor improvement to the environmental issue. 		<ul style="list-style-type: none"> Solution is a moderate improvement to the environmental issue. 		<ul style="list-style-type: none"> Solution is a major improvement to the environmental issue. 		8	
<ul style="list-style-type: none"> Solution has little or no environmental impact and cannot be repeated in other places of the watershed. 		<ul style="list-style-type: none"> Solution has moderate environmental impact and is difficult to repeat in other places of the watershed. 		<ul style="list-style-type: none"> Solution has a large environmental impact and can easily be repeated in other places in the watershed. 			
COMPREHENSIVE SCOPE AND COMMUNICATION							
0	2	4	6	8	10	Value	
<ul style="list-style-type: none"> Common knowledge has been applied. The proposal presents a basic understanding of the problem and its solution. No clear introduction or conclusion No references provided; may have copied a single source Little research 		<ul style="list-style-type: none"> The project has an adequate degree of vision and complexity. Has an introduction, body, and conclusion but flow between ideas is weak 2-3 references provided; ideas from several sources Some research 		<ul style="list-style-type: none"> The project thoroughly reflects a <u>deep understanding</u> of the issue, its solution, and complexity. Introduction, body and conclusion are captivating, flow smoothly and are well-balanced 4-5 <u>references</u> provided; ideas from many sources Extensive <u>research</u> 		10	
BUDGET							
0	1	2	3	4	5	Value	
<ul style="list-style-type: none"> No costs of project have been mentioned or values mentioned appear unrealistic. 		<ul style="list-style-type: none"> Costs of the project have been analyzed. Values appear accurate and this project can be implemented. 		<ul style="list-style-type: none"> A detailed budget has been included. Values appear accurate and all encompassing. This project can easily be implemented 		4	
REALISTIC SOLUTION							
0	2	4	6	8	10	Value	
<ul style="list-style-type: none"> Project may not adhere to existing laws. This project is unlikely to be implemented. No extra steps have been taken to show how it could be implemented. 		<ul style="list-style-type: none"> Project complies with existing laws. This project is likely to happen at the local level. No extra steps have been taken to show how it could be implemented. 		<ul style="list-style-type: none"> Project complies with existing laws and avoids undesirable side effects. This solution needs to happen within the watershed; it is <u>highly practical</u> and may benefit other watersheds. This proposal has <u>taken steps</u> to show how this idea could be implemented. 		10	
VISUALS							
0	1	2	3	4	5	Value	
<ul style="list-style-type: none"> Visuals are incorrect, unattractive or ambiguous. Visuals do not add new information. 		<ul style="list-style-type: none"> Some visuals are used, but are not clearly explained. Visuals support the project. 		<ul style="list-style-type: none"> Visuals are unique, appealing, descriptive, and accurate. Visuals significantly enhance the idea, such as PowerPoint, videos, displays, poems or charts. 		4	

One Thing You Did Well:

This proposal identifies an important issue and gives a very simple solution

The amount of water saved as a result of this proposal has relatively small environmental impact if only implemented by one, but if others get on board it is a potentially large impact.

Very clear and a simple budget, this idea can easily be implemented by others.

Four different experts have been quoted and this proposal shows a clear understanding of the issue

There are no legal issues with this proposal, it is highly practical and easy to implement

Visuals add to the proposal, are attractive and easy to interpret.

One Improvement:

Consider other ways to spread the word of your efforts. How can you increase the reach of this idea so others implement it as well?

Budget could be expanded to include where the funding for the project will come from.

EXAMPLE