

Water Conservation

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Goals and Accomplishments

Our goal is to raise awareness and spread information about water quality, whether it be bottled or tap water, and research water conservation methods at Roosevelt University.

Created a survey to gather data on how the students and staff feel about bottled and tap water.

We tested the water in the Auditorium building, Wabash building, and various bottled water companies.

Compiled the water testing data.

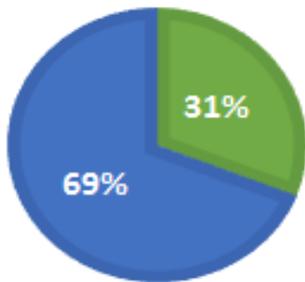
Extensive research on tap water and bottled water, comparing both.

Gathered information on current water-conserving methods at Roosevelt University.

We **RU**



DO YOU PURCHASE BOTTLED WATER FROM THE UNIVERSITY?

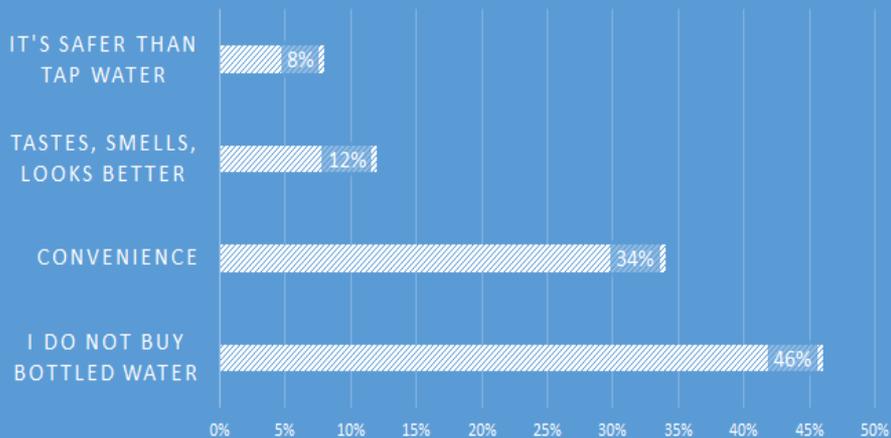


■ Yes, I purchase bottled water ■ No, I do not purchase bottled water

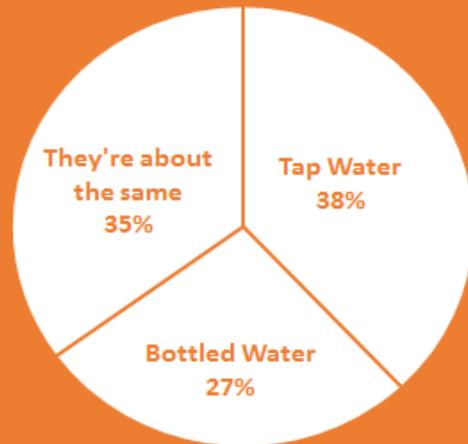
Water Conservation Survey Results

30 participants

WHAT ARE YOUR REASONS FOR PURCHASING BOTTLED WATER FROM THE UNIVERSITY?



WHICH SOURCE DO YOU BELIEVE HAS HIGHER CONTAMINATION LEVELS?



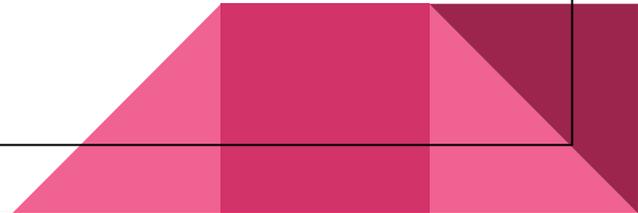
What we tested for

We tested for the pH to see if it was in the safe drinking water range of 6.5-8.5

Tested for nitrates, a nitrate is an inorganic compound that is made up of nitrogen and oxygen.

Looked for any chlorine within the water since we use the process of chlorination to disinfect our drinking water.

Since we have one new building and an old building we tested for copper and heavy metals.



Water testing results

Results collected from Chicago Campus Roosevelt University

Building	Floor	Chlorine	Copper test	Heavy metals test	pH	Nitrates
Auditorium	4	0.05	0	<10	8.1	0
Auditorium	8	0-0.05	0	<10	8.5	0
Auditorium	10	0	0	<10	8.2	0
Wabash	2	0	0	<10	8.5	0-0.2
Wabash	8	0-0.05	0	<10	8.5	0-0.2
Wabash	13	0	0	<10	8.5	0.3

Tap Water vs. Water Bottles



“But no one should think that bottled water is better regulated, better protected or safer than tap,” - Eric Goldstein (NRDC)

Most water bottle companies draw from local water reservoirs (same as tap water).

Some water bottle brands have been found to contain bacterial and chemical contaminants.

The EPA closely regulates tap water, and the FDA regulates bottled water, which finds it difficult to find the resources to be able to test for contaminants on a yearly basis.

Many bottled water companies don't let consumers know when there is a recall on their products due to contaminates.

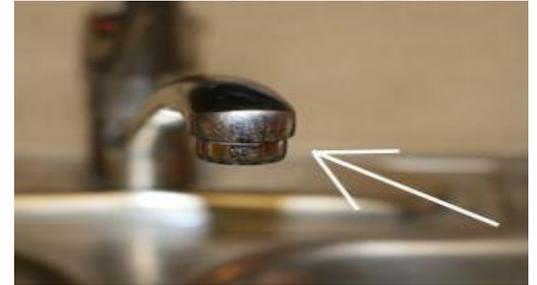
Current Water Conserving Methods at Roosevelt



8,000 square feet of green rooftops

Aerators, low-flow pumping and plumbing fixtures

Rainwater collection tank in the Wabash building



Rainwater Collecting Tank

About the tank:

1,000 gallon tank

Water is slowly released into the Chicago sewer system

Gives sewage processing plants time to catch up during heavy rains



How Roosevelt is charged for water:

City of Chicago: water that enters Roosevelt buildings

Metropolitan Water Reclamation District: water leaving the buildings



Reusing Rainwater

Possible reuse of collected water: laundry, flushing toilets, irrigation (Schaumburg)



Pros:

- Rainwater is reused, reducing water needed from the city
- Lower water bill from both the city and water reclamation district
- AASHE rating improved

Cons:

- Water still requires filtration (filter needed)
- Requires re-piping of plumbing system

Problems and Difficulties Encountered

Filters need to be cleaned regularly to avoid bacteria buildup

Maintenance costs approx. \$1000/6 months.

Buildings cannot adapt to the changes

Auditorium building's pipes cannot be changed

Lack of education

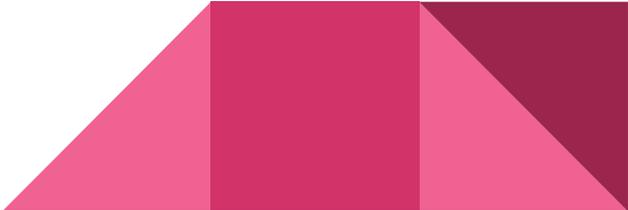
Most people do not know about the water they drink

Do not know about what it takes to get clean water

Money

To change the pipes that already exists to fit the new systems

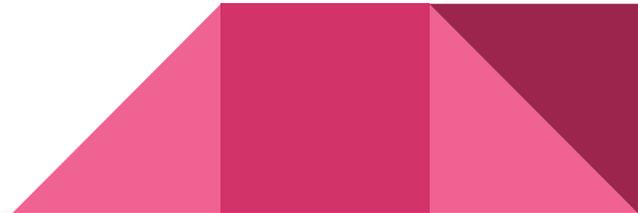
Purchase new filters or water systems (more sustainable systems)



Conclusion

Education benefits people's general knowledge on water conservation.

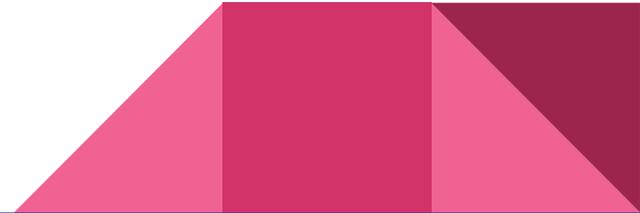
High prices for water conserving fixtures and overall maintenance.



Acknowledgements

Mike Bryson- Professor and Director of Sustainability Studies at Roosevelt University

Jeff Debrizzio- Chief Engineer at Roosevelt University



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