

Splash Spring 2025

Filtration: Clean Water by Design

Icebreaker



What is Environmental Engineering?

Environmental engineers are called upon to understand, arrange and manipulate biological, chemical, ecological, economic, hydrological, physical and social processes to balance our material needs with our impacts on the environment. Such are the challenges of sustainability, while global climate makes these tasks all the more important.



How does water go from stream to bottle?

Chemical

Changes or removes dissolved substances through chemical interactions



Physical

Removes particles and solids by size or trapping them



Disclaimer

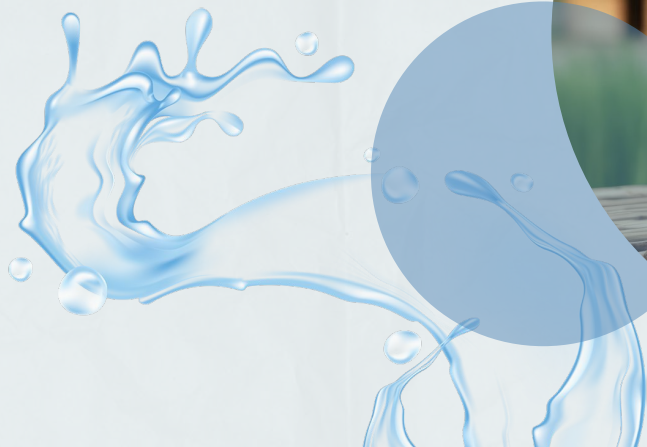


DO NOT DRINK

Materials and Budget

Material	Max Quantity	Unit	Cost per Unit (\$)
Plastic bottle	1 bottle	1 bottle	3
Activated carbon	0.5 cup	$\frac{1}{4}$ cup	1.25
Cotton balls	1 cup	$\frac{1}{2}$ cup	0.9
Sand	1 cup	$\frac{1}{2}$ cup	0.5
Coffee filters	3 filters	1 filter	0.25

Application



Environmental sustainability involves utilizing the world's resources in a way that ensures future generations can also access them.

