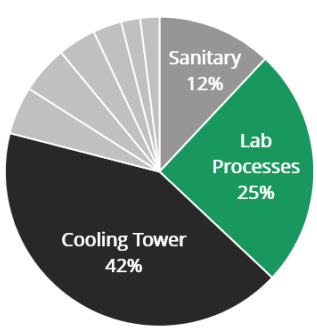
WATER DISCUSSION GUIDE

We know it can be hard to start making concrete and sustainable changes in the lab. Use the tips and discussion questions on this guide to build off the information provided in your feedback report and find ways to decrease your lab's water usage!

STEP #1 - MONITOR

Why?
Laboratories consume around 4 times more water than office spaces.



Tips!
Find a monthly water use value and track the amount of water saved by the lab. Calculate this value using your water bills or look into using a water meter.

Discuss!
What are some benefits of reducing water consumption?

Why are these changes worthwhile for each lab member?

Where do you use water in the lab right now? Create a list of all lab process that use water.

STEP #2 - SMALL CHANGES

Stats!

- Low flow aerators can save up to 70% of water at the tap.
- A leak that drips once per second can waste over 11,300 liters of water/year!
- For every 1 gallon of DI water created, 3 gallons of water are used.

Check to see if your faucets are low flow before buying low flow aerators. On the faucet head, the rated flow of the aerator is imprinted on the side. A low flow faucet will read 1.5 gallons per minute or lower.

Has anyone noticed any leaks in the lab?
How many faucets need aerators?
Are we always using the right quality water?

STEP #3 - AUTOCLAVES AND SINGLE PASS COOLING

How bad is it?
Single pass cooling can use 1,000,000 gallons of water/year if left on. One research university found that autoclaves operating during normal business hours consumed 93,000 gallons of water per day.

Tips!
For alternatives to water cooled condensers, look at recirculating water baths, Findensers, or even a fish pump in an ice bucket! For autoclaves, water mizers are a popular option for retrofitting.

Discuss!
Does our lab use single pass cooling?
How might we eliminate this?
Do we run our autoclaves and glassware washers on full?
Is our autoclave the right size for our lab?

STEP #4 - SHARE!

Why Share?
Sharing success is extremely important to the green labs experience. Collaboration and recognition can propel us further in sustainability.

●●●

What Do I Share?
Process changes, new equipment or water savings are great places to start!

●●●

Who Do I Share With?
Your lab, other organizations or even us! Share your water sustainability initiative and use the hashtag #mygreenlab

What lab procedure is the most water intensive at your lab? How did you change this procedure?

How can you use competition to motivate lab members to follow best practices?