

## Reading

### Middle – High School

Short articles about water quality by US EPA

EPA Standards for Water quality <https://www.epa.gov/standards-water-body-health/what-are-water-quality-standards>

EPA Human Health at the Beach background <https://www.epa.gov/beaches/learn-what-affects-human-health-beach>

EPA Learn: What Affects Human Health at the Beach <https://www.epa.gov/beaches/learn-what-affects-human-health-beach#safety>

EPA What Affects Beach Health <https://www.epa.gov/beaches/learn-what-affects-beach-health>

## Lessons

### Upper Elementary – MS

NEEF Water Quality Backyard Activity Guide: <https://www.neefusa.org/resource/water-quality-backyard-activity-guide>

### Middle School – High School

Watershed Sleuth Challenge – Watershed Basics:

<https://www.neefusa.org/nature/water/lesson-1-watershed-basics>

How to make a Secchi Disk Turbidity Tube

[https://www.teachengineering.org/content/cub\\_/activities/cub\\_waterqtnew/cub\\_waterqtnew\\_lesson01\\_activity1\\_howtomake\\_tube\\_jly\\_tedl.pdf](https://www.teachengineering.org/content/cub_/activities/cub_waterqtnew/cub_waterqtnew_lesson01_activity1_howtomake_tube_jly_tedl.pdf)

### High School

Test and Treat Before You Drink: Teach Engineering Students learn about water quality testing and basic water treatment processes and technology options. Biological, physical and chemical treatment processes are addressed, as well as physical and biological water quality testing, including testing for bacteria such as E. coli.

[https://www.teachengineering.org/lessons/view/cub\\_waterqtnew\\_lesson01](https://www.teachengineering.org/lessons/view/cub_waterqtnew_lesson01)

Save a Life, Clean Some Water: Teach Engineering Student teams practice water quality analysis through turbidity measurement and coliform bacteria counts. Students design prototype small-scale water treatment systems and test the influent and effluent water. (NOTE: *E. coli* petrifilm test and Petrifilm guide needed)

[https://www.teachengineering.org/activities/view/cub\\_waterqtnew\\_lesson01\\_activity1](https://www.teachengineering.org/activities/view/cub_waterqtnew_lesson01_activity1)