

Standards below are based on the
2016 North Carolina Essential Standards 3-5 & 6-8 Science

TVA Science Kids—World Water Monitoring

5th Grade Corresponding Standards

Matter: Properties and Change

5.P.2 Water Cycle

Energy: Conservation and Transfer

5.P.3 Transfer of heat: thermal pollution is part of a discussion of water temperature

Ecosystems

5.L.2.1 Compare characteristics of several common ecosystems including aquatic

5.L.2.2 Organisms within an ecosystem: producers, consumers, biotic, abiotic

5.L.2.3 Interconnected relationships in an ecosystem

TVA Science Kids—World Water Monitoring

6th Grade Corresponding Standards

Energy: Conservation and Transfer

6.P.3 Understand characteristics of energy transfer and interactions of matter and energy: thermal pollution is part of a discussion of water temperature

Earth Systems, Structures and Processes

6.E.2.4 Conclude that the good health of humans requires: monitoring the lithosphere, maintaining soil quality and stewardship

Ecosystems

6.L.2 Understand the flow of energy through ecosystems and the responses of populations to the biotic and abiotic factors in their environment: photosynthesis, food webs and food chains

Extended Resources

Monitorwater.org

- **Map** - reading the map; land features that may affect water quality
- **Lesson Plans** - designed for grades 6-8
- **Books** - ELA component: pdf versions online; could be used before or after the program; vocabulary and questions at the end
- **Video Tutorials/Kit instructions**
- **Cabinet of Curiosities** - interviews with various scientists may inspire possible future careers in STEM

In-person Logistics

- 70 minute session preferred; two 30 minute sessions also possible
- Self-contained classrooms?
- Info needed:
 - Get teacher names and email addresses
 - Dates for each school: Tuesday-Friday scheduling, prefer to do all schools at one time
 - Number of sessions needed for each school
 - Number of students in each class
 - Will send presentation and room setup info the day before the program
- Would selected body of water be recognizable to students?

Virtual Logistics

- 9 videos (5-7 minutes each); can conduct lab as class time allows
- Options for group work or individual work
- Teacher packet
 - Teacher Prep document
 - Test directions document
 - Virtual Lesson Guide
 - Water collection instructions
 - Data sheet
- Info needed:
 - Teacher names and emails
 - Number of classes/number of students
 - Internet connectivity/capabilities
- Teacher feedback form