

## Operation Water Pollution Overview

Operation Water Pollution is designed for use in both Elementary and High School classrooms. This program directly connects with Science and Social Studies curricula and is set up as content-integrated lessons. The series of eleven lessons guides students through an examination of water pollution issues. The students develop definitions of polluted drinking water that serves as the backbone for the other lessons in this program.

Through a variety of activities and cooperative learning strategies, the students explore the causes, effects and sources of water pollution in the world and in North America. Students also use hands-on activities to simulate water pollution and water filtration scenarios. The students discover how water pollution is reversed and what they can do to affect change in their community with regards to water pollution.

Notes to teachers from Tracy Webb, Science Teacher and member of the SDWF Board of Directors:

The following 11 lessons represent a comprehensive unit on water issues. Each lesson generally builds on the previous one, and includes relevant, up-to-date and well-researched fact sheets and background information. However, teachers may use any lesson on its own, or any combination, understanding that they may need to add some of the background information provided in other lessons. Every lesson can be further modified or enriched for the age and abilities of students, from gr. 5 to gr. 12. Lessons may be easily changed to reflect local conditions and situations as well, especially if teachers are/become aware and informed about their own area's water issues.

For the experimental activities, teachers may wish to substitute according to their own available supplies and/or approach to the lesson. Quantities suggested in the lesson may also be adapted as determined by the teacher.

Every lesson includes additional suggested activities and resources, along with references to other sources of information.

Feedback is welcome and encouraged, and if there any questions, please feel free to contact SDWF.

How it works:

Lesson plans, power point presentations and all resources are available online. All material is downloaded by the teacher for review prior to receiving the TDS and pH meters.

The cost of Operation Water Pollution is \$100 and includes both a TDS and pH meter. It should be noted that each meter is reusable and remains viable for approximately two years. Many school kits are available free of charge as a result of different sponsors such as Green Street and TD Friends of Environment, for more information contact [info@safewater.org](mailto:info@safewater.org) or download the lesson plans free of charge at [www.safewater.org](http://www.safewater.org)