**Lesson 7 (2 days) - Water Contamination**

**California Health 7/8 Standards –**

* **1.10N Identify the impact of nutrition on chronic disease**
* **1.3N Examine the health risks related to food/water contamination throughout the world**
* **1.9P Identify ways that environmental factors, including air and water quality, affect our health**
* **1.10P Identify human activities that contribute to environmental challenges (e.g., air, water, and noise pollution)**
* **1.11P Describe global influences on personal and community health.**
* **2.2P Analyze how environmental pollutants, including noise, water and air pollution, affects health.**

**Objective – Students will know the necessity of clean water, and the role they and the community have in helping to keep clean water ways, and how this affects the community’s health.**

**Anticipatory Set –** Students will first see the teacher hold a glass of dirty water (water with chocolate syrup mixed in) and ask if anyone wants to drink the dirty water. Teacher will then drink.

**Activity -**

* Share fact of 1.1 billion people worldwide don’t have access to safe drinking water, many are children.
* Read from The Water Project “Improving Health in Africa Begins with Water” <http://thewaterproject.org/health.asp>
* Students will use the H2O Conserve “Water Footprint Calculator” <http://www.h2oconserve.org/?page_id=503> to view their own water usage.
* View video “Yemen’s Water Woes” <http://pulitzercenter.org/blog/untold-stories/yemens-water-woes-shortage> from the Pulitzer Center.
* Show students the World Life Expectancy and Access to Safe Water Map on <http://www.theglobaleducationproject.org/earth/human-conditions.php> Ask students to compare and contrast the information on the maps by making a PowerPoint or Prezi presentation (make T chart or Venn Diagram if no technology is available).
* Students will read “Water Facts” from Food and Water Watch (see attached), and complete the worksheet with a partner.
* Students will brainstorm as a whole class the reasons for water contamination and how they can assist in keeping our waterways clean.
* Students will view water EPA “Total Maximum Daily Loads” and pathogens in water in the United States <http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/index.cfm> Students will investigate one body of water, and then brainstorm with a peer how that might impact the community around the body of water. Students will then share out whole group.

**Assessment -** Students will use http://www.comiclife.com/ to create a Comic Strip or create a PSA video for teens on the necessity of having clean water, water conservation, and what students can do to help ensure clean water.