**Additional Activities for WATER UNIT**

* **Water Injustices**

 Are poor and minority communities disproportionately exposed to poor quality drinking water? Is it true that class, race, and ethnicity are predictors of drinking water quality? The article: “*The Color of Drinking Water*” (<http://mannyteodoro.com/wp-content/uploads/2014/03/SwitzerTeodoro-JAWWA-2017-Color-of-Drinking-Water.pdf>) reports that: “In communities with higher populations of black and Hispanic individuals, Safe Drinking Water Act (SDWA) health violations are more common

Have students research and develop an answer to: Do we have a right to clean water?

* **Tap vs Bottled water--- pros and cons**
* **Research and debate**

the plastic pollution problem, especially in waters across America. Good information found at: National Geographic’s PLANET or PLASTIC ?

<https://www.nationalgeographic.com/environment/planetorplastic/>

* **Research and debate**

the potential harmful chemical(s) leaching out of plastic drinking bottle .

**Big Issue Topics and Questions to Research in Water Studies**

1. Algae blooms

Should the EPA establish mandatory regulations to curb the public’s exposure to the increasing number of harmful algal blooms (HABs) appearing across the country?

1. Water treatment Facilities

Our water treatment plants in the US are old and most use conventional technologies and equipment that does not address the array of new contaminants of emerging concern (CEC). How do we hold towns accountable for upgrading water treatment facilities to ensure safe drinking water for the public?

1. Drinking water sources- where tap water originally comes from

Public drinking water originally comes from either surface waters (primarily rivers and lakes) OR from groundwater (water beneath the earth’s surface, such as aquifers). These source waters are often declared “impaired”, meaning they are too polluted or otherwise degraded to meet the water quality standards. Who are the big polluters of source waters, and what can be done to get them to “clean up their act”?

1. Contaminants that have been linked to increasing cancer risks in humans

The five most pervasive drinking water contaminants linked to cancer nationwide are: arsenic, chromium-6, nitrate, 1,4-dioxane, and DBPs (disinfection by-products). Research one of these contaminants (map it’s occurrence nationwide, describe what is being done, if anything, to keep the contaminant out of public drinking water supplies). Are we protecting public water adequately?

**Movies**

* The Big Empty- Rural America’s Drinking Water Crisis

<https://www.huffpost.com/entry/drinking-water-pfas-epa-climate_b_5cf9526ce4b043bd4aa0cbf7>

* Dirty Water- Danger from the Tap; Bad water is more widespread than you think.

<https://www.cnn.com/videos/health/2018/11/27/dirty-water-full-documentary-orig.cnn>

1. Strange Days on Planet Earth, part 4- Troubled Waters

<https://www.youtube.com/watch?v=KbMQxOXkv5c>

1. Bottled Water vs Tap Water 20/20 Special Report

<https://www.youtube.com/watch?v=9e5CaIkrqWU>

1. POISONED WATERS: The Startling New Contaminants

<https://www.pbs.org/wgbh/pages/frontline/teach/poisonedwaters/>

1. Erin Brockovich…movie trailer

Erin Brockovich's legal fight against the US West Coast energy corporation Pacific Gas and Electric Company (PG&E) against chromium-6 in drinking water.

<https://www.youtube.com/watch?v=l0ftkL6qhT8>

 in 2016: A national report released Tuesday (Sept. 20, 2016) found Nearly 200 million Americans across all 50 states have been exposed through their tap water to higher-than-recommended levels of chromium-6,

 <https://www.ewg.org/research/chromium-six-found-in-us-tap-water#ref23>

1. Living Downstream-  Living Downstream is a powerful reminder of the intimate connection between the health of our bodies and the health of our air, land, and water.

<http://www.livingdownstream.com/trailer>

1. 10 Must-see water documentaries that provide insight into the future water crisis

<https://www.watercache.com/blog/2011/10/must-see-water-documentaries-provide-insight-into-future-water-crisis>