

Project Green Challenge
Team EcoSmurfs
Jericho High School

October 4th, 2023

Dear Attorney General Letitia,

I hope this letter finds you well. My name is Jun Ru Chen, and as a part of our school's commitment to sustainability, we are learning about various subjects day by day as a part of the Project Green Challenge. Today's subject was about water—a commodity which our water district has had a deferral from the department of health for contamination since at least 2020. 1,4-dioxane has been above New York State's maximum contaminant level at the Jericho Water District from Grumman in the 1950s. I hear that they've been ramping up water treatment technologies at the wells which have been delayed by the pandemic.

Obviously, any consumption of polluted water is grievous for our resident's health and should be expeditiously addressed. Beyond these health interests is the economic pressure on misinformed or cautious residents who are included to buy bottled water—an objectively unsustainable and wasteful use of plastics.

I remember when I was younger and still living in the city; one day down by the pier by owl's head park—a man was selling a huge fish freshly caught from the bay, pitching his haul and haggling with any interested passersby. Thinking back, I don't believe that man was able to sell his catch in the end. Whenever I visit, there are always signs regarding heavy metal pollution, and warnings against even swimming. Nonetheless, I still occasionally see people fishing on piers. I hope the best for them. May their digestive systems be bulletproof lest the medical bills take them out.

Clearly, water security is an important issue to the state, and I hope to specifically bring attention to communities like ours on Long Island who rely on groundwater for their tap.

Arguably, while some of our proud state's most contaminated water districts still meet federal guidelines, regional bodies of water and drinking water still go hand in hand. This summer, the Long Island Marine Monitoring Network reported that our water quality had reached an all time low.

Personally, I've been doing research on macroalgae for food science, and I've been partially inspired by remediation effects locally to purify our waters. I found out about our local environmentalists at Stony Brook university from a New York Times article about the "Kelp Bill" from Gov. Kathy Hochul, and I am enthusiastic about the adoption of more similar bills. I hope that this letter will help bring attention to our groundwater dependent communities, and this research direction of direct remediation which I've been inspired by.

Sincerely,
Jun Ru Chen

Water Struggle



Nitrogen pollution in water causes algae blooms!

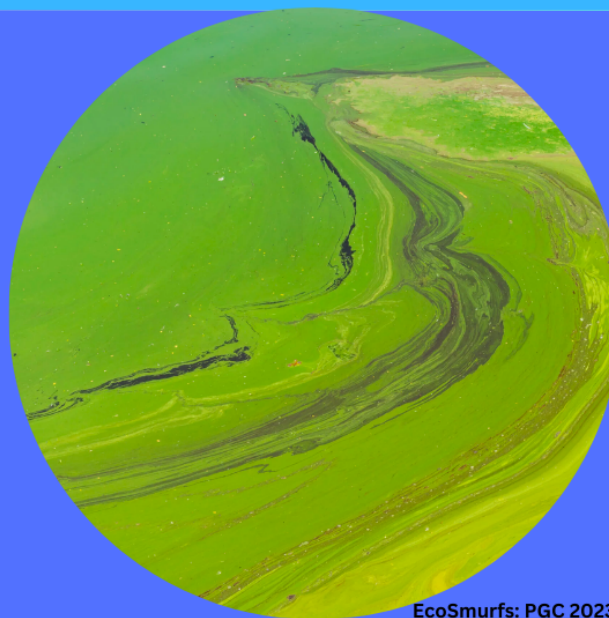
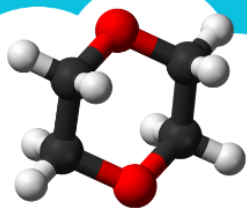
Algae Blooms:

- **Kill Ecosystems**
- **Lack of Oxygen**

**1,4-dioxane
contaminates water:**

Causing:

- **Kidney/Liver
Toxicity**



Tips for Water Quality



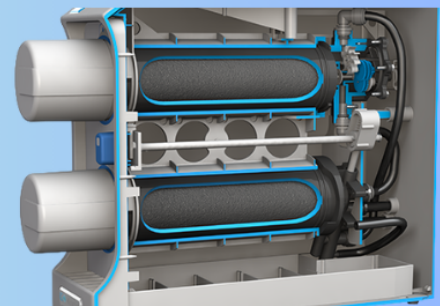
Use Natural Based Fertilizers:

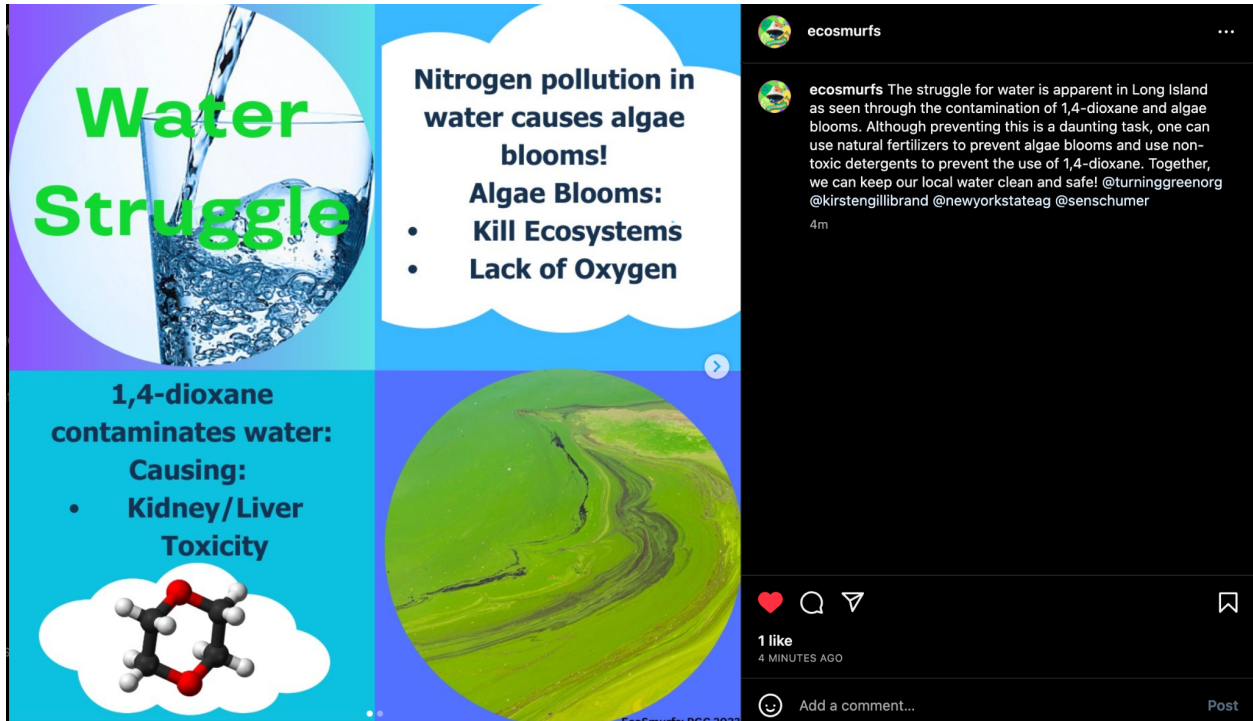
1. Used Coffee Grounds
2. Compost



Preventing 1,4-dioxane contaminants in drinking water

1. Use advanced filters
2. Use non-toxic laundry detergents that don't use these chemicals.





Why does this community have polluted water?

Communities in Long Island, such as Cold Spring Harbor have polluted water due to stagnant bays not being refreshed by the ocean. Moreover, Long Island waters have a harmful amount of 1,4-dioxane.

How is the community affected/challenged/harmed?

Exposure to 1,4-dioxane can cause liver and kidney damage. In acute circumstances, 1,4-dioxane can kill a human. The EPA has also established that 1,4-dioxane is a carcinogen.

What inequalities and environmental injustices are underscored?

Inequalities that may be underscored is the amount of money that is being given to these problems since only 2.25 million dollars of federal funding was given to Long Island for water pollution, but in July of 2023, “Long Island water quality has hit a low point”, which suggests that the money isn’t enough.