Team Name: Next GenEco

Username: Anigram

School: Jericho Senior High School

# LONG ISLAND ONLY HAS ONE MAIN AQUIFER



Over 2.8 million people depend on it every day.



## **Toxic Plume under Bethpage**

Aerospace solvent has been used for decades and that created a toxic groundwater plume that goes on for about 4 miles and can be up to 900 ft deep. This is beneath Bethpage and neighboring towns. This can threaten wells and water that people drink. These wells can support 150 thousand people in Nassau County, Some towns near the plume are, Bethpage, South Farmingoale.



#### Forever Chemicals (PFAS)

PFAS, which are also called forever chemicals have been found in many places in Long island. In 2024, the EPA set the limit for 4 parts per trillion for these chemicals. Even small amounts of PFAS can cause lots of damage. They also accumulate in the bod,



## **Too Much Nitrogen**

Some septic and cesspool leak nitrogen into the water. These can cause algal blooms, which are really bad.

Algal blooms can kill fish and there can be a loss of shelifish habitats.

Suffolk County has more than 360 thousand septic systems

#### **Solutions in Motion**

- New PFAS Standards, such as having utilities installing advanced filtration by 2029.
- Source Control. This ha already been seen when New York banned 14-dioxane in household products.
- Clean Water Plan, such as Sufrolk County replacing septic systems and expanding sewers to cut nitrogen.

## Spread awareness









Long Island's drinking water comes mostly from a single underground source. This source is under pressure from the historic Bethpage solvent plume. PFAS, or forever chemicals, and nitrogen leaking from old septic systems can spark harmful algal blooms. New rules now cap PFAS as low as 4 parts per trillion, NY has cracked down on 1,4-dioxane in products, and Suffolk created long-term funding to swap septic systems and expand sewers. There is progress. Test your water, support septic-to-sewer upgrades, and back local groups restoring bays and defending our aquifer.