

### 2021 Envirothon Special Topic Problem Scenario

The Pawcatuck River water shed is a sole source aquifer which provides water to a large portion of southern Rhode Island, as both private wells and public water supplies

Two ground water reservoirs are part of this aquifer, the Chipuxet and the Queens rivers

Land uses within the ground water recharge and reservoir areas include but are not limited to agriculture, several turf farms forest hills nursery and as well as other farming operations, and the farm incubator school, a brewery, restaurants ,gas station, retail stores, dry cleaner, sand & gravel operation, cement company, ski resort & water park, residential areas, URI campus. Sewer pumping station, Industrial areas, office parks, trailer park, a Conference Center & camp, RI Veterans Cemetery, the RI Fire Academy , Job Corps Training , Exeter highway department , former landfills, Amtrak railroad and National Grid Natural Gas site, nursing home and veterinary office.

Develop a sustainable water resource management plan to insure adequate water supply and water quality for everyone dependent on this water supply and all uses now and for the future While maintaining highest water quality possible, minimizing water use in the ground water reservoir area and providing maximum water supply possible downstream.

