## The Stone Soup Leadership Institute's BETA Program Redwood High School Environmental Science & Tech Program Autumn Peltier – Wiikemkong First Nation Drinking Water Quality

## 1. Introductions/Synopsis

• Read Synopsis of the story

• Watch this video from Autumn explaining her dream and why she took action to make an impact in her community:

https://www.youtube.com/watch?v=PpS2Gxwy8jQ

Potential Video/Full video highlighted in her hero report: <a href="https://www.youtube.com/watch?v=A33XRMLBbOc">https://www.youtube.com/watch?v=A33XRMLBbOc</a>

### 2. Language Arts

• As a group, discuss the importance of accessibility and quality of clean drinking water in your community. Create a chart displaying the adverse effects of not having access to clean water in a community.

### 3. STEM Activities

• See Activity Sheet Attached for Tables

- 1. Discuss how factors 2-5 described in Table 1 affect the vulnerability of water supplies at Points B, C and D in Figure 1. If three towns get their water supplies at Points B, C and D, which supply would be the most vulnerable? The least vulnerable?
- 2. Use Table 3 below to interpret the vulnerability scores you calculated in Table 2. Which town's water supply would be most likely to be contaminated if a larger tanker truck full of a toxic chemical spilled its contents during a traffic accident on the nearest road?
- 3. Compare the vulnerability values you calculated in the four towns in the above map to Points A, B, C and D in Figure 1. Which of these towns is most likely to be located at which of these Points?

## 4. Sustainable Career Pathways

• Sustainability Certificate: Drinking Water Quality Professional Technician Certificate - <u>https://catalog.bristolcc.edu/engineering/drinking-water-quality-professional-technician-certificate</u> Water Quality Association - <u>https://wqa.org/profcert</u>

### • Career Pathways

## I. Drinking Water Professionals

- a. **Water Treatment Operator**: Water Treatment Operator's maintain and operate the pumps and motors that move water through physical, mechanical biological and treatment systems. These tasks include monitoring indicators, reading meters and gauges, and adjusting equipment to ensure the plant is running effectively.
  - i. Water Treatment Operator Average Salary: \$53,000
- b. **Water Engineer**: Water Engineers are required to supply, manage, and maintain both wastewater and clean water services to avert flood damage. Their job duties include preparing environmental documentation and repairing, building and maintaining structures that control water resources.

## ct in her

**5** Minutes

# 10-20 minutes

10 minutes

## 10 minutes



i. Water Engineer Average Salary: **\$108,600** 

#### II. Environmental Lawyer

- **a.** Environmental Lawyers work to represent clients in legal issues such as in clean technology, water law, climate change law and the management of land subject to native land and other public land.
  - i. Environmental Lawyer Average Salary: **\$121,211**

#### 5. Close: Evaluation/Writing

5 minutes

• What inspires you about Autumn's story?

#### **Stone Soup Leadership Institute**

www.stonesoupleadership.org https://sustainwdn.com/redwood-high-school-beta/