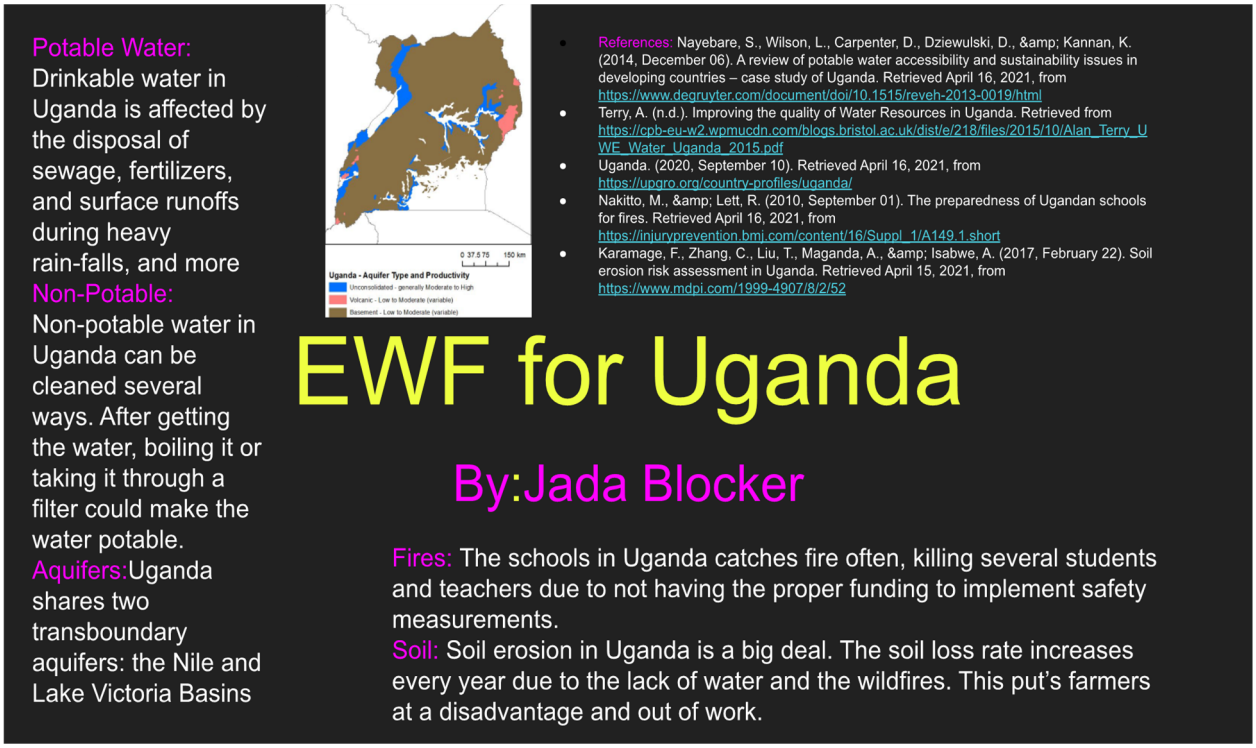
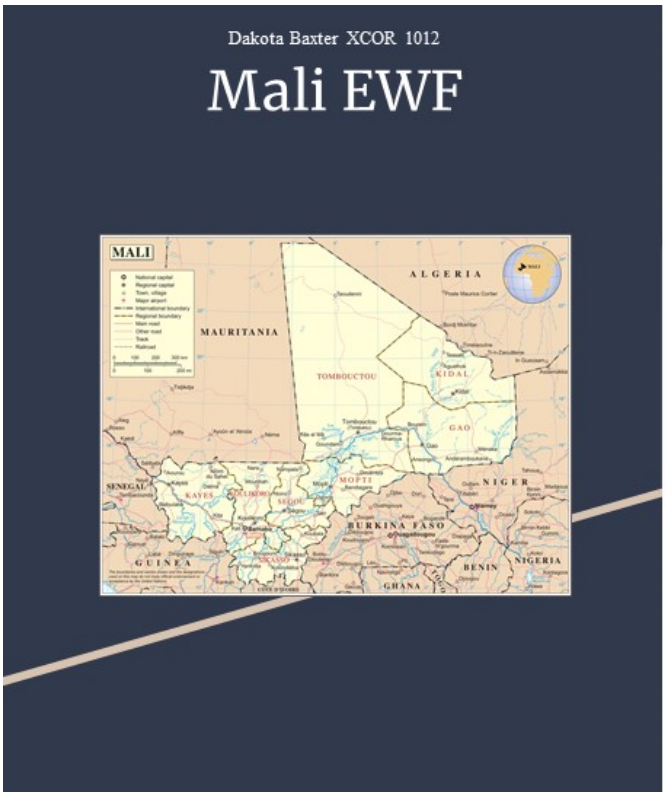
Supplementary Material

First Place: Jada Blocker. She was awarded a USD 100.00 book scholarship from the Center for Sustainable Communities for her PowerPoint on Uganda as it relates to water, soil, and fire issues [23–25]. Most of the rural population ofUganda relies on groundwater, dominantly from shared boreholes equipped with hand pumps [26]. Many boreholes in Uganda tap groundwater from the weathered or fractured basement aquifer. Lakes and rivers tend to dry up fast after rainfall. Thousands of boreholes dug by the government are now nonfunctional. With dry fields, farmers are put out of work with no water or dry soil. In Uganda, surface fires are the most common in natural forests and plantations, causing major investment concerns [27]. Plantation soils are important aspects since soils provide the medium for plant growth and supply plants with nutrients for growth. Not only is the vegetation burnt, but fires interfers with education [28]. Different researchers have hypothesized that if wildfires were preventable, the soils would be more sustainable in Uganda.



Second Place: Jaiya Brown. She was awarded a USD 50.00 book scholarship from the Center for Sustainable Communities for her PowerPoint on Libya as it relates to water, soil, and fire issues [29–32]. Libya is an oil-rich country that borders Niger, Sudan, the Mediterranean Sea, Egypt, Chad, Algeria, Tunisia. Being that most of the country is flat and dry, not much of it is suitable for farming (only 1.03%), an aquifer is essential, and big fires come with no surprise.

Third Place: Dakota Baxter (Mali). She was awarded a USD 25.00 book scholarship from the Center for Sustainable Communities for her PowerPoint on Libya as it relates to water, soil, and fire issues. This powerpoint investigated the conditions and quality of agricultural soil [33] and potable water sources [34,35]; weigh the effectiveness of watersheds, aquifers, and other water storage structures as a non-potable water source; as well as assess the risks of wildfires in the sub-Saharan country of Mali [36]. Several experimental sites in southern Mali were evaluated to address those five aspects and to determine the risks and effects of poor management on human and environmental health. The studies focused on southern Mali, as it is the most population-dense region of Mali.



- Soil
  - Runoff and soil erosion are one of the biggest agricultural problems in the country. [33]
- Water
  - The majority of the population relies on potable groundwater. [34]
  - Many croplands in Mali are rainfed. [35]
- Fire
  - Vegetation patterns can influence the wildfire intensity and frequency. [36]
- Aquifers
  - The use of aquifers and other water management structures aids agriculture. [35]
  - There are multiple aquifers located throughout Mali, and are often shared between other West African countries. [35]