

Alternative Energy Source: Hydroelectric power  
Stakeholder: Environmental Scientist

My name is Rebecca Brown and I am an environmental scientist and researcher at Eastern Oregon State University. I do research on streams and river ecology and conducted a project looking at the downstream effects of dams on rivers. Our study found that dams change the water quality downstream. The temperature and pH is often different downstream and upstream, which is important to biological organisms that live in the water. Dams also trap nutrients and sediments in the reservoirs upstream. These factors are also very important to the organisms living downstream of the dam. Also, dams can trap seeds from plants and change the plants along the riverbanks downstream, which are important food sources to mammals living near the river downstream. Dams generally have a negative impact on biota inhabiting the river. One of the major environmental issues for hydroelectric power production is mortality of fish, which can have serious consequences for fish populations, especially among anadromous species that must travel from rivers to the sea in order to complete their life cycles. However, dams are also very important for flood control, water supply, and hydroelectric power. The continued burning of fossil fuels for energy will lead to an increase in greenhouse gases that cause global warming. This issue can lead to habitat loss, rising sea-level, and changes in precipitation and climate.