From: Garcia, Tiffany < tiffany.garcia@oregonstate.edu>

Sent: Saturday, November 7, 2020 10:11 PM

To: <u>preservethefingerlakes@gmail.com</u>

Cc: townclerk@townoftorrey.com

Subject: Greenage Generation LLC Concern

To whom this should concern,

I've been researching ecological impacts of anthropogenic stressors on freshwater communities for 20 years. My work focuses on the cumulative effects of seemingly minor environmental changes, such as increased competition from an invasive fish, incremental increases in water temperature due to climate change, or altered hydroperiods due to human water use. Under one pressure, local fish species could exhibit resilience with minimal shifts in population growth rates. Under several of these novel pressures, we tend to see precipitous die offs and reduced ecological function.

The heated discharge of fluid into Seneca Lake from the Greenage Generation plant will unquestionably alter the local ecology of the system. The totality of this effect, along both ecological and evolutionary time scales, must be researched before the plant is allowed to operate. In addition, the potential for multiple stressors to synergistically interact must also be looked at. The species native to Seneca Lake, including Lake Trout, are ectothermic and highly sensitive to temperature changes. This ecological pressure combined with the other environmental stressors in the Lake can combine to cause population crashes and community collapse.

I implore you to consider science in your decision. For too long we have ignored the long term impacts of our actions on our environment. Your town has considerable academic, state, and federal experts on whom you can trust to research these questions responsibly and without bias. Use the knowledge gained from these scientists to inform your decision.

In hope, Dr. Tiffany Garcia

Dr. Tiffany Garcia
Professor
Dept Fisheries and Wildlife
Oregon State University