

Cemvita

I support Soap Lake's Tier III(B) Outstanding Resource Water designation.

I am a researcher who uses bioprospection, the exploration of natural organisms for useful resources, to bolster climate change mitigation efforts. Because of my profession, I understand how Soap Lake's unique environment has the capacity to foster life that could not be found elsewhere. From sampling this lake, I confirmed it possessed an uncommon chemical composition for a lake with an average pH of 10 and average salinity of 12.1ppt. In order to survive these conditions, organisms required evolution of equally uncommon physiology, which has been reflected in my experience working with them in a laboratory setting. I have cultivated and isolated microbes capable of growth and carbon fixation in autotrophic conditions using sulfurous compounds as an energy source rather than photosynthesis. Preserving this lake and its biodiversity also preserves the possibility of discovering solutions to current and future problems. The study of this lake's life possesses the potential to make progress climate change mitigation and potentially many more research areas.

I advocate for Soap Lake's conservation because I believe it is a truly special ecosystem that deserves protection.