

## Debra Noah

In July of 2021, as the president of the Soap Lake Chamber of Commerce, I was approached to help coordinate a water sampling venture of Soap Lake, by a Professor from Indiana. At the time I had no idea how renowned he was in his field of expertise but as I welcomed him and had the honor of talking with him about the lake. I realized how extensive his background is and how vital his work has been.

Matthew Sattley is a Professor of Biology Division of Natural Sciences at Indiana Wesleyan University and has a Ph.D. in Molecular Biology, Microbiology, and Biochemistry (MBMB). He specializes in the study of microbial ecology and diversity with a specialization in the culture and characterization of extremophilic, nutrient-cycling bacteria. His fieldwork experience includes three seasons researching permanently frozen lakes in the McMurdo Dry Valleys (Antarctic). He has an interest in meromictic lakes studying the bacteria that only survive in the non-oxygenated layers of water. His interest in Soap Lake is because it is a rare meromictic lake and he is hoping to discover entirely new species. I am including a reference to an article -1-Sulfur-Oxidizing Bacteria in Soap Lake (Washington State), a Meromictic, Haloalkaline Lake with an Unprecedented High Sulfide Content-1-

His conversation with me was eye-opening. I can only begin to tell you some of what he told me about how rare and special our lake is as a saline meromictic lake.

Professor Sattley said Soap Lake water is most like the water he tested under 18 feet of ice in the Antarctic. He said the lake is a rare treasure that should be protected – that scientists have barely even begun to study the lake. Scientists he works with believe that Soap Lake can be a key to discovering new species of bacteria and microorganisms.

He said much more research needs to be done – there is a potential that it will help scientists understand about life on other planets. I am simplifying and paraphrasing because I am not a scientist. The most important thing he stressed is that the lake is a treasure and it needs to be protected.

I am no longer involved with the Chamber of Commerce, but I am a property owner with property about a block from the lake and I visit it every day. I realize the uniqueness of the lake and how important it is for future scientists to study. Now is the time to protect the lake. I believe it is our most valuable resource.