Emulating Nature To Save The Salton Sea Part 2

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Over the years, I have written and presented numerous posters drawing attention to the concept of volcanism, and the enormous emissions of sulfur dioxide (SO2) as being a part of an overall on-going natural acidification process that maintains the pH and mass balance chemistry of our entire planet, and the acidity produced by it is actually Sulfurous (H2SO3) and not Sulfuric (H2SO4).

In 2020, I presented a poster titled Sulfuric vs. Sulfurous: What's the difference? to explain and illustrate in detail: how each acid is made; the differences in their chemical reactions; how both acidifiers are currently being used and their limitations; etc.

In 2022, to elucidate further as to why volcanism, the natural acidification process, and the differences between sulfurous and sulfuric, is relevant, I wrote and presented Emulating Nature to Save the Salton Sea to correlate how applying and integrating the same chemistry nature uses, directly into our wastewater-treatment plants, cooling tower facilities, drinking water processing plants, agricultural irrigation water, reverse osmosis filtration plants, and into the sea itself, we could effectively: acidify/neutralize the alkalinity, lower the pH, and enable those operations to function more efficiently; reduce the overall amount of salts from being imported and added into the system; provide the additional source of new water needed to keep this closed body of water diluted to prevent it from reaching supersaturation and precipitating out of solution. I continue to emphasize (ad nauseam) the importance of this method and the need to replicate it because, instead of thinking that we can devise another technique and out-smart nature, I believe we should simply replicate the efficiency and genius of how nature actually works.

I was heartened and encouraged when several MSSC members, after reviewing it, commented that the general concept in my posters is finally starting to make sense, has merit, and that I should: keep working on it; provide process flow diagrams to illustrate exactly how and what part of the system to emulate/integrate/introduce this natural acidification process; calculate the total reduction of salts and the total amount of new water that would be added into the system, if this process was adopted and implemented.

To follow up on those suggestions, and to stimulate more collaboration on all of this, here is Emulating Nature to Save the Salton Sea Part 2.