

Mono Lake Continued

If we introduce a connection between volume and surface area, we find a long term equilibrium at 842 KAF (according to the MATLAB model).

- This has ecological implications
- The literature primarily uses elevation to express ecological impacts

The following information comes from a book excerpt (the numbers are elevations)

- 6380 – Severe Dust Storms
- 6375 – General Ecosystem Decline
- 6372 – Land Bridges Form
- 6363 – Critical Salinity
- 6352 – Whole Ecosystem Collapse

In the fourth iteration of our model, we will add in the specific gravity of water (the evaporation rate of water depends on what is dissolved in it).

At the current level (in 1981), there is 2228 KAF of water, with 230 million tons of dissolved solids. The mass of fresh water is 1.359 mT/KAF. Specifically,

$$\text{SG} = \frac{2228(1.359) + 230}{2228(1.359)}$$