# Can the Desiccation of Great Salt Lake be Stopped?

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- Great Salt Lake is a terminal lake, with its watershed in the Wasatch and Uinta Mountains of Utah, Wyoming and Idaho. Like all terminal lakes, the water inflows are balanced only by evaporative loss from its surface—when inflows decrease the lake shrinks until evaporation matches that inflow.

- Like most salt lakes world-wide, Great Salt Lake is shrinking. There have been wet and dry cycles that have changed its size, but the overall trend is downward, and the lake has lost over 50% of its volume.
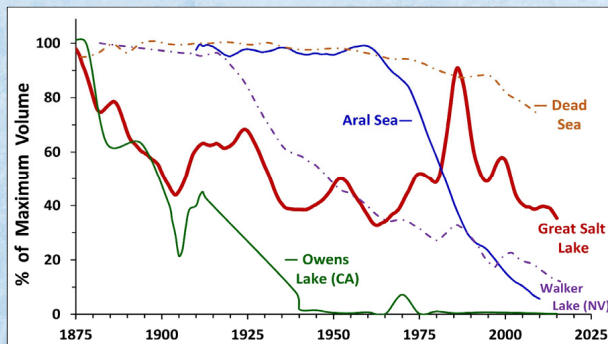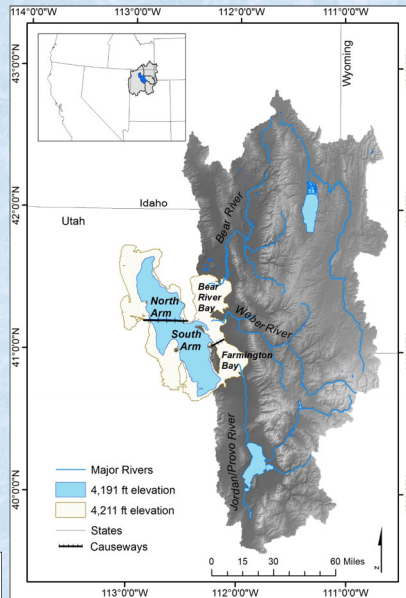
- The shrinking lake has exposed much of lake bed, causing loss of bird habitat and dust storms in Salt Lake City, Ogden and Logan. Salinities have increased in the lake, increasingly stressing the brine shrimp food supply of birds and the $70 million dollar cyst harvesting industry.
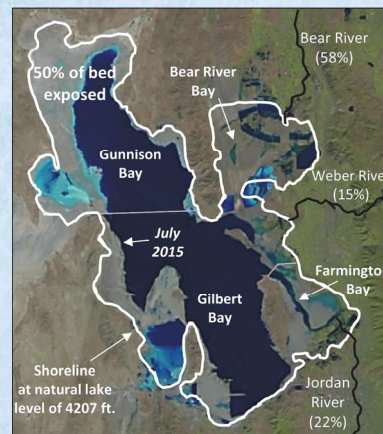

- An analysis of tributary flows out of the mountains above water development demonstrated that natural flows have not changed over the last 160 years (Fig. A). Water use, however, has increased markedly, and now approximately 39% of river inflow is diverted for agriculture and other uses (Fig. B). A model of what the lake elevation would be without water use indicates that the mean natural elevation would be ~4207 ft., or about 11 ft. higher than the current elevation. *
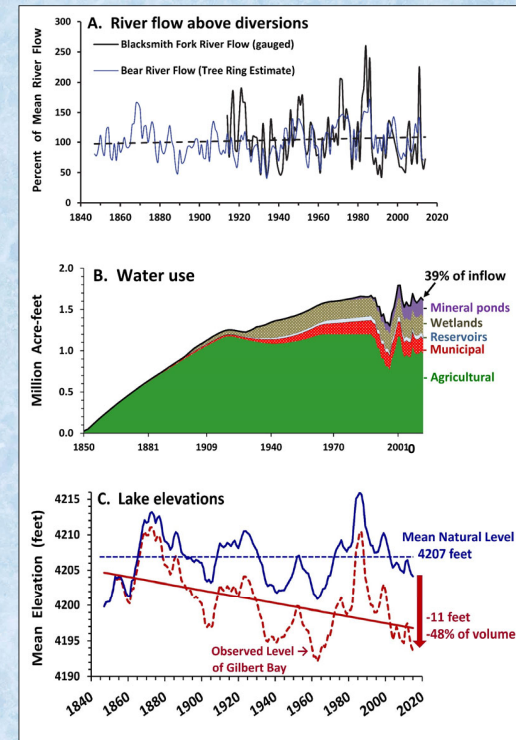
  Because of water development we are drying up Great Salt Lake!

- We can calculate how future water development (or reduced use) will influence lake depth, area, volume and salinity: What sort of lake do we want?
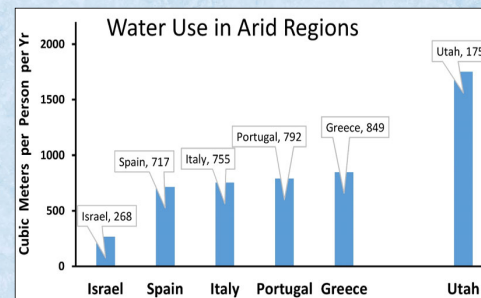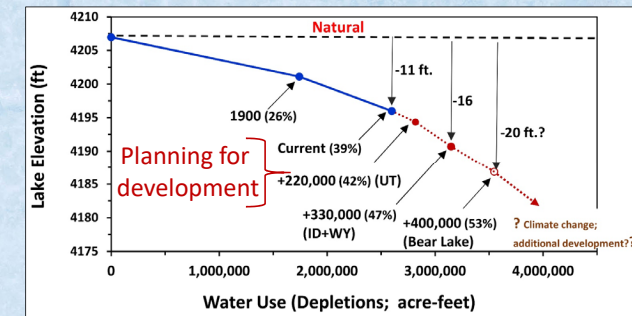
- Utahns use far more water per person than most arid countries. With conservation and changes in outdated western water laws we would have no need to develop water in the basin further, and we could even restore Great Salt Lake to a more functional level. The choice is ours!

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