

❖ Elements of Concern

No matter how much the study it or how much money they spend on engineering, there will be no guarantee that forcing a large quantity of water into and out of Bear Lake will not alter and cause irreparable harm to the physical and biological environment of Bear Lake.

- Re-suspended deposits of fine marl particles that have been settling for thousands of years.
 - Stirred marl could be spread throughout the lake by rotational and wind currents,
 - Change of color would occur
 - Transparency would be dramatically reduced.
 - Food chain damaged
 - Phytoplankton and plants would die due to lack of light.
 - Zooplankton, ostracods and other benthic organisms, which fish rely on, would be unable to feed due to particles in the water or being covered up with sediment
 - “Marl rain” would cover their eggs suffocating them, possibly eliminating the species.
 - Endemic fish species would be endangered
 - Bonneville Cutthroat Trout will decline
- ESA listing of endemic fish
 - Costly to states
 - Limits management options
 - Limits recreation opportunities
 - Limits fishing as a source of food
 - Limits to irrigation use above and below Bear Lake
- 2.6 -3+ *vertical* inches daily fluctuations added to natural ebbing
 - Shoreline Spawning will be disrupted and stressed by artificial fluctuations
 - Vertical inches translate into linear feet in many areas of the lake
 - Disruption and instability of shoreline ice
 - Increased evaporation
- Unnatural, reversing currents
 - Disturbance of natural temperature gradients
 - Disturbance of natural currents
 - Disruptions to Ice-over
 - Change in local climate/weather adding to the number and severity of fog days
 - Possible over oxygenation changing biota
- Dam constructed on fault, 270 foot high, 240 ft. deep when at 19,510 AF capacity
 - Risk of failure from construction and engineering failure
 - Risk of failure from geologic movement
 - Change to valued viewscape
 - Limits to recreation below dam
 - Use of emergency spill way dangerous to life, property and lake environment
- Change of clarity and color
 - Loss of Bear Lake Blue, which attracts people to the valley
 - Loss tourism & recreation revenue
 - Decreased property values
 - Bankrupt and half completed developments
 - Building slump
 - Decline job market
 - Families leave
 - City & County Budget deficits
 - Loss of critical mass for schools, churches and society