

Predicted siltation at Hite, UT Glen Canyon National Recreation Area

This graph is based on the fill rate of the lake from 1965 to 1986. The shape of that curve, roughly a parabola, was scaled to match the known siltation in 1986. This method presumes that the subsurface topography at Hite matches the subsurface topography throughout the Lake and that the rate of siltation is proportional the rate at which the lake filled.

In 1997 this curve was checked against the Hite silt elevation as measured using a depth finder. It seems to be a good match. An exhaustive study was not done.

Based on this curve (or any other), the useful life of Hite becomes a management decision based on the term "useful life". Does Hite become useless when the silt elevation reaches 3650 or 3675 feet?; Does it make sense to extend the useful life of Hite by dredging or by seasonal use?; Will timely low lake levels cause the silt to compact or slough off into lower lake levels?; or will Hite always remain useful for some applications but not for others?

