

Preliminary Notes on the "Trego Lake Sedimentation
Study Engineering Report"

It appears doubtful that tubers and the other recreational activities identified would have any significant impact on sediment load into Trego Lake.

Locating the source of the sediment as suggested on Page 4 is an excellent idea although a more rigorous sampling scheme may be necessary. Specifically some type of bed load measurement should be done. It is possible that the bed load source is downstream of Earl Park (as has been asserted) but the suspended sediment load is from the watershed upstream. The USGS can supply references on the techniques and equipment required to take suspended sediment and bed load sediment measurements.

The assertion that the Big Bend reach traps most of the sediment coming into it seems doubtful. It seems unlikely that the discharge through this reach in spring runoff would not be capable of transporting significant amounts of bed material sediments downstream.

It is doubtful that deposition in the lake is only a recent problem. The photographs seem to indicate that the Delta extends a good ways downstream of Rowan's Resort. The rapid change in water depths at Rowan's Resort may be due to a channel shift or abandonment in favor of a new channel. This type of change is natural to a delta.

Dredging and the establishment of sediment traps have been proposed in the report. It should be understood that these proposals should be seen as a commitment to continual maintenance. Based on Enclosure 24, there is 38,000 cubic yards of sediment to be dredged. At \$5 per cubic yard this comes to \$190,000.

The effect that bank erosion has on sediment transport into Trego Lake should be carefully considered. Often the sand entering the channel from bank erosion is only a very small percentage of the sand already in the bed of the channel. Water flowing over the channel bed transports whatever sediment is there. Were it possible to completely eliminate all sand from entering a reach of river, the river would still transport the existing bed sediments into the lake. It would therefore take a considerable amount of time for the effects of bank erosion protection or the sediment trap (continually emptied) to be seen downstream in the lake.

Topographic maps of the flowage before inundation may be available from the dam owner. An estimate of the rate of bed material accumulation in the flowage may be determined by obtaining new cross sections of the flowage and comparing them

with the pre-inundation elevations. This estimated rate of bed material accumulation can be compared to the proposed dredging volumes to indicate how effective the dredging might be in slowing the growth of the delta.

The dredged sediments may need to be tested for toxic contaminants. Plans should also be made as to where the dredged sediment would be placed.

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