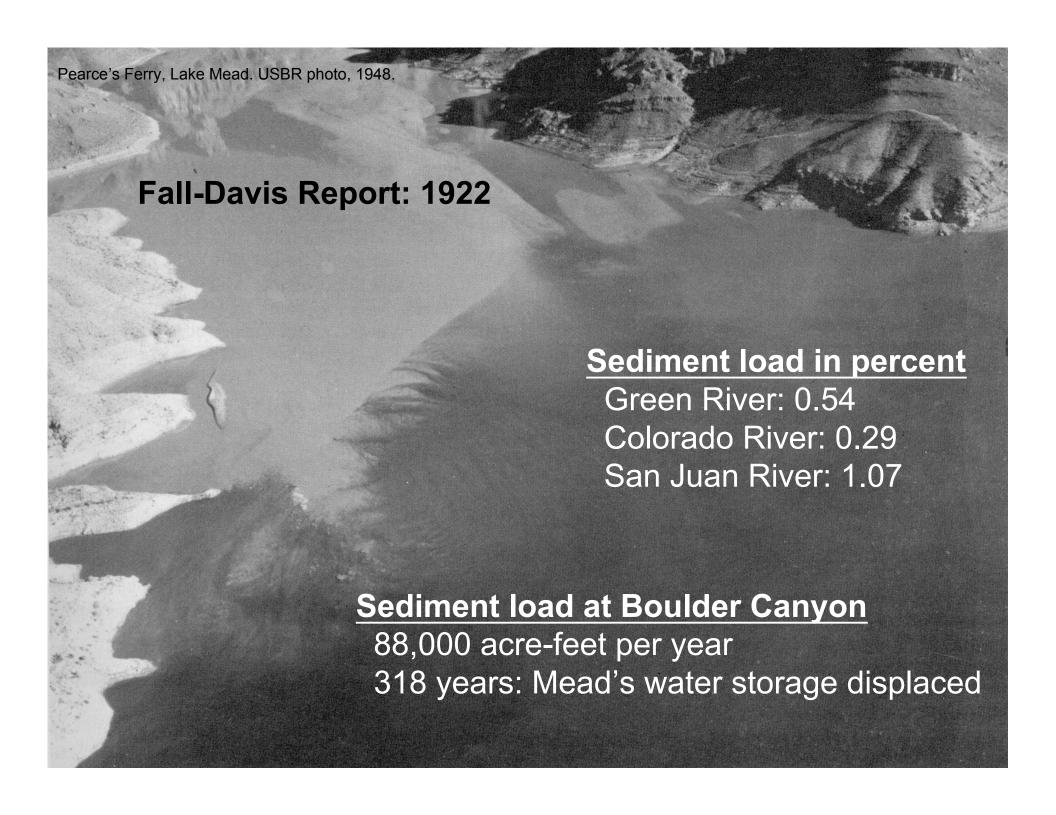


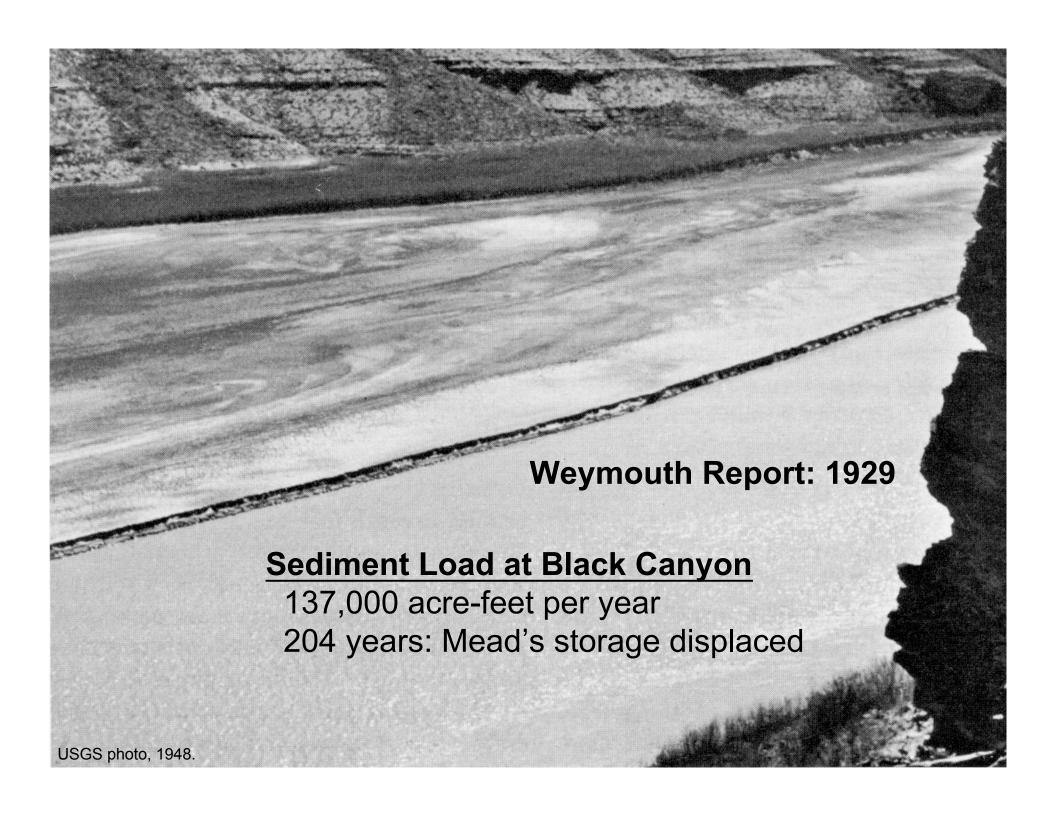
Frederick H. Newell Commissioner of Reclamation 1907-1914

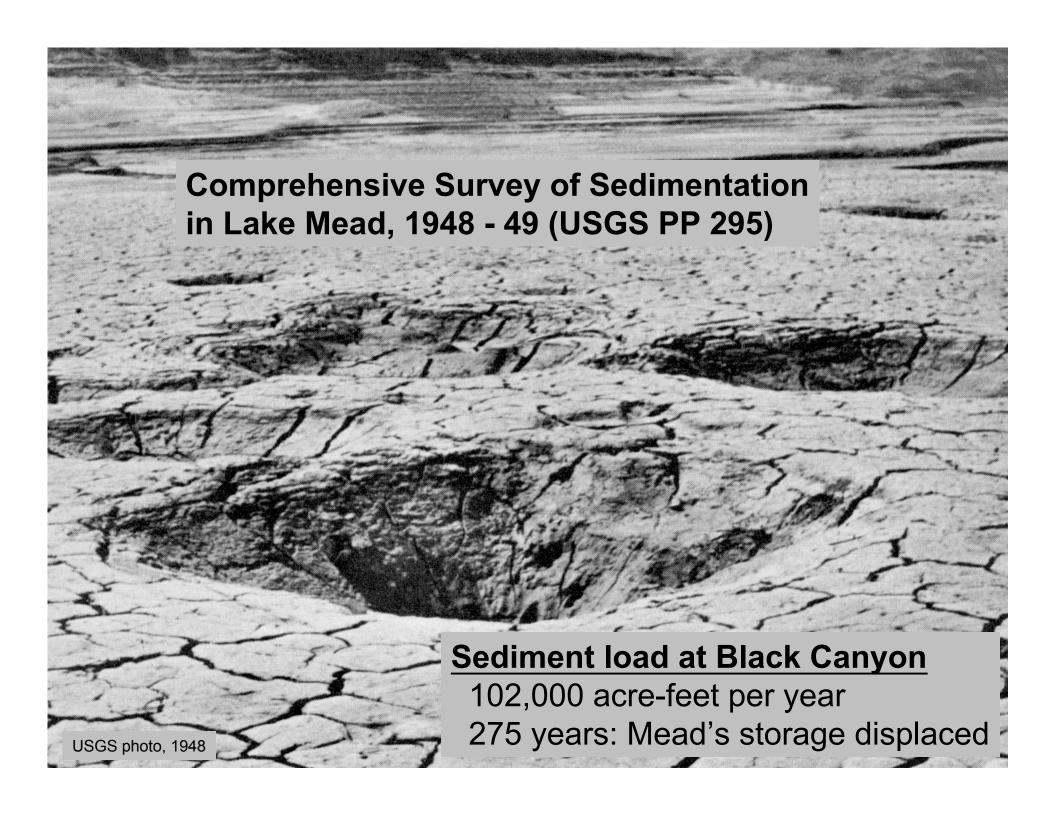
Statement & Question

"Thus, the upper ends of all reservoirs are rapidly filled with silt and it becomes an important question to the projectors of storage works as to how many years will elapse before the value of the reservoir is practically destroyed and whether its use can be restored in part by subsequent removal of some of this material."

Source: US Geological Survey Professional Paper 295







Conclusions: 1948 USGS & BoR survey at Mead

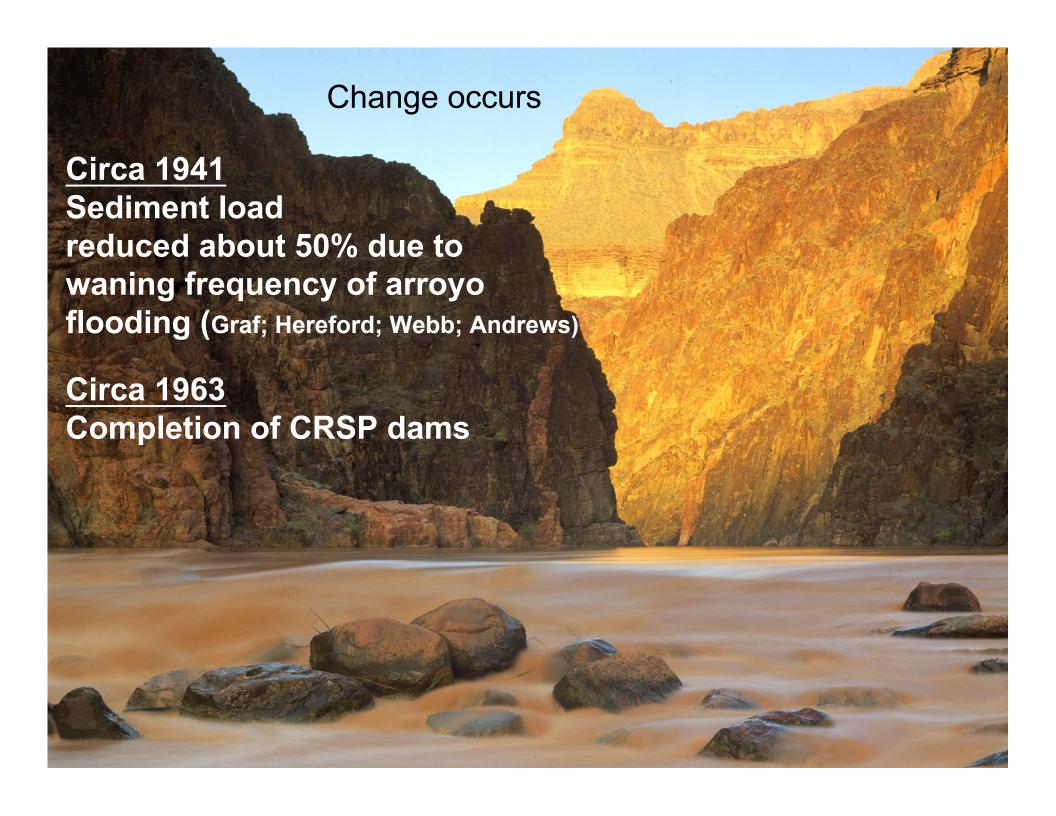
- Water storage compromised when sediment storage is 50%
- Flood control reserve is progressively eliminated
- Eventual bypass of sediment through dam works
- Lake Mojave/Havasu begin to store sediment
- Evaporation and transpiration rates progressively increase
- Building Glen Canyon Dam will delay, but not eliminate, the "day of reckoning"

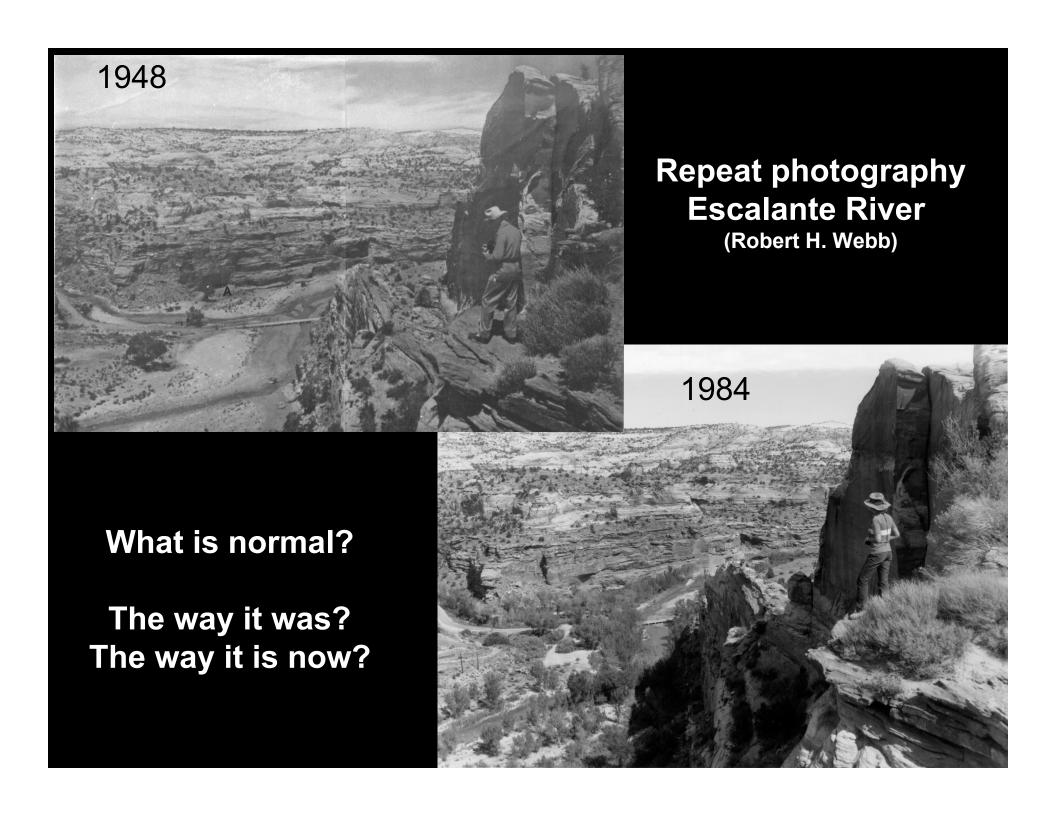
Recommendations

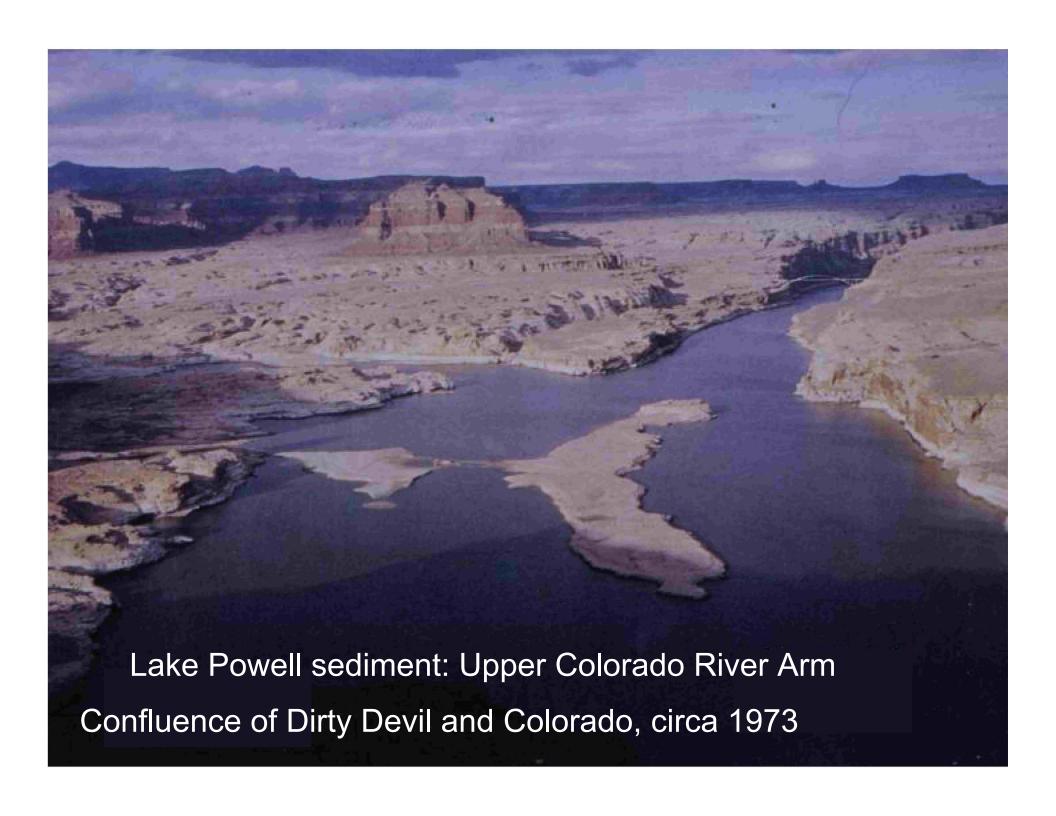
- Increase scientific understanding of sediment transport
- Monitor and research climate change
- Develop a sediment management plan

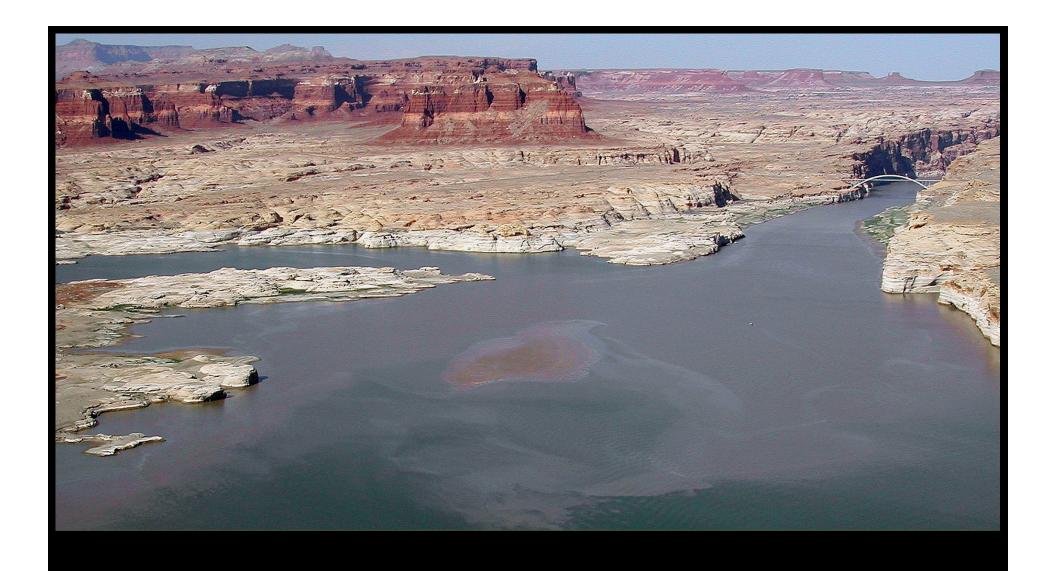
Caution

 Building GC Dam will increase evaporation and salinity and distribute sediment at two localities









Lake Powell: confluence of Dirty Devil and Colorado, 2002



Lake Powell: confluence of Dirty Devil and Colorado, 2004





