

Sediment Ad Hoc group: Questions

1. Will spring Floods result in irreversible scouring in Marble Canyon?
2. Will fall floods do any better?
3. Is 1983 the proper reference for a “good” year – big flood, big beaches, big vegetation scour?
4. Are sand bars reaching an “equilibrium” condition (volume, area)?
5. Sediment transport and storage processes in 1983 event. (What was the source of the sand deposits.)
6. How variable are antecedent sand storage conditions? Are they same year to year?
7. Take a serious look at sediment augmentation in conjunction with the issue of mass balance.
8. How does our new understanding affect the hydrologic triggering criteria?
9. What options exist to conserve sediment from fall events?
10. Need to update conceptual model to better predict flow options for conserving fall sediment input.
11. Need to investigate hydrologic sequences to better understand temporally adjacent releases to a “special flow” (BHBF, HMF, LSSF).
12. Are high flow treatments needed every year?
13. Were the 1993 LCR inputs irrelevant to the 1996 BHBF bar building? 1996 bars were built from eddy storage, but where did that sediment come from?
14. Are there any 1983 deposits above RM40?

Sediment Ad Hoc: what we know:

1. When flows go up, higher elevation, fine-grained sediment is tapped first.
2. Sediment does not accumulate in channel over multiple years under ROD operations.
3. Tributary inputs are transported rapidly through the system.
4. Eddies are the source of bar-building sediment during dam-release “clear-water” floods.
5. High flows (especially HMFs) are affected by antecedent flow conditions.
6. Stability of bars built by high flows depends on post-flood flows.