

# Appendices

**Appendix 1.** Matrix of selected information gleaned from the four breakout sessions as compiled in the second plenary session of the Federal Interagency Sediment Monitoring Instrument and Analysis Research Workshop, September 9-11, 2003, Flagstaff, Arizona. Empty boxes indicate that the topic was not addressed in the breakout or second plenary sessions, or was not applicable to the category. [SMIAR is Sediment Instrument and Analysis Research; FISP is the Federal Interagency Sedimentation Project]

Topic	Breakout Session I, Suspended Sediment	Breakout Session II, Bedload	Breakout Session III		Breakout Session IV	
			Bed Material	Bed Topography	Data Management	Sediment-flux Computations
<b>DATA</b>						
Continuous time-series/greater data amount, density	Needed	Needed	Needed	Needed	Need to store original data	Critically needed
Ancillary information	Needed	Needed	Needed	Needed	Considerable need	Considerable need
Physical calibration samples	Needed	Needed	Needed	Needed	Needed	Critically needed
Accuracy criteria	Have some	Needed	Needed	Needed	Needed (to accept/reject data)	Needed
Uncertainty estimates	Needed; available in some cases	Needed		Needed	Needed; also need storage capabilities	Needed in some cases
Protocols for data collection, computation & storage	Available for traditional technologies	Available for traditional technologies	Available for traditional technologies	Needed	Databases generally insufficient	Needed for computations
Clearinghouse, data standards		Establish clearinghouse, data standards			Establish clearinghouse, data standards	
Scale limitations	Yes	Yes	Yes	Yes		Yes
<b>Traditional Techniques</b>						
Extant	Yes	Not for all conditions	Not for unwadeable gravel bed	For most conditions	Yes	Yes
Accuracy	Relatively accurate	Accuracy uncertain	Mostly acceptable	Mostly acceptable	None available	(Standards for computations)
<b>Surrogate Techniques</b>						
Availability of instruments	Many, commercially available	Few, mostly research, in early development	Some, but not for unwadeable gravel bed	Several, Government or commercially available	Create data gaps/problems; need qualifying data	Need protocols for computations
Quantify accuracy	Some need	Major need	Needed	Some need	Major need	Major need
Applicable environments	Fluvial, coastal zone, estuaries	Fluvial, marine and coastal zones	Freshwater, marine and coastal zones	Freshwater, marine and coastal zones		

