Goal 6. ~~Increase fine sediment storage~~Maintain or attain levels of sediment storage within the main channel and along shorelines to achieve GCDAMP ecosystem goals.

ID#	Perform some action	On some element	On some attribute	At some place	From the current level	To the target level	Comments
MO 21-23 are revised based on a reassessment of column 4 (at some place) to better delineate fine sediment geomorphic environments of the fluvial system. Also, it is recognized that current and target levels will vary according to reach. Reaches are broken into three sedimentological reaches based on inputs from the Paria River and LCR. These reaches, in turn , will be broken into sub-reaches based on the "wide-narrow" classification (Melis, 1996). The subreach boundaries will then be refined through consultation with sediment, fish, riparian, recreation, and cultural workers. It is recommended that each of the MO categories below have current and target levels developed for each of the sub-reaches (total 6 to 10).							
MO 21 is divided into two parts, A and B. A is the main channel below 8k cfs for all fluvial environments throughout the length of the canyon. It represents the environment where channel sediment may be stored for rebuilding of terrestrial sandbars. B is the channel margin environment between 8k and 25k cfs (not including eddies).							
21 A	Maintain or attain	Fine Sediment	Abundance	Main channel below 8k cfs	IN: data may be available from GCMRC	Current volumes or higher (trend).	Metric is volume (m^3) as a rolling average. Target level should consider spawning habitat for trout in Glen Canyon. Current level to be adjusted pending results of further monitoring and research.

			Grain-size		0.3-0.4 mm[12; 31] (check with GCMRC or D. Topping on this)	Current level or finer (trend).	Metric is D50 (median) grain size. Also see Kondolf.[16] Target level should consider spawning habitat for trout in Glen Canyon. Current level to be adjusted pending results of further monitoring and research.
			Distribution		Current level to be obtained from side scan sonar and video (Anima) and/or multi-beam.	Current level or more areally extensive (trend).	Metric is patchiness (m2) of sand on channel bottom Target level should consider spawning habitat for trout in Glen Canyon.
21 B	Maintain or attain	Fine Sediment	Abundance	Channel margins (not eddies)from 8k-25k cfs	329,000 m^3 (35 sites)[12; 31]	Information Need	Metric is area (m^2) and volume (m^3) as a rolling average. Target level should consider spawning habitat for trout in Glen Canyon.
			Grain-size		0.3-0.4 mm[12; 31]	Information Need	Also see Kondolf.[16] Target level should consider spawning habitat for trout in Glen Canyon.

Goal 6. ~~Increase fine sediment storage~~Maintain or attain levels of sediment storage within the main channel and along shorelines to achieve GCDAMP ecosystem goals.

ID#	Perform some action	On some element	On some attribute	At some place	From the current level	To the target level	Comments
			Distribution		Information Need	Information Need	Metric is # sandbars by reach. Target level should consider spawning habitat for trout in Glen Canyon.
MO 22 is revised to include the entire eddy system from channel bottom up to 25k cfs.							
22	Maintain or attain	Fine sediment	Abundance	Eddies up to power plant capacity	289,120 m^3 (35 sites)[12; 31]	Information Need	Metric is area (m^2) and volume (m^3) as a rolling average
			Grain-size		0.15-0.18 mm[12; 31]	Information Need	
			Distribution		Information Need	Information Need	Metric is # sandbars by reach

MO 23 is revised to include all shorelines (eddies and channel margings) between 25k cfs and the highest level ofpotential dam effects on pre-dam sand bars (about 125k cfs or pda terrace of Hereford et. al. 1998). The highest level will be determined through discussions with sedimentological, cultural, recreational, and riparian workers as how best to constrain this boundary and in how many areas it should be monitored.							
23	Maintain or attain	Fine sediment	Abundance	Shorelines between power plant capacity and uppermost effects of a maximum dam release.	0.37m (Glen Canyon) 0.60m (Marble Canyon) 0.80m (Grand Canyon) [12]	Information Need	Metric is area (m^2) and volume (m^3) as a rolling average
			Grain-size		0.15-0.18mm [31]	Information Need	
			Distribution		Information Need	Information Need	Metric is # sandbars by reach
MOx: is there a need for a coarse sediment management objective for recreation purposes? It would include gravel bar habitats in GLCA and debris fan reworking for navigability in GRCA.							
Information Need: consult with various researchers to determine how best to break out sub reaches from the three broader fine sediment reaches as described above. The riparian group suggested developing a table that has various resource concerns on the X axis and various processes on the Y axis. The recreation group suggested developing a talbe that has river miles (-15 to 278) on the X axis and various resouce s on the Y axis (those resource areas impacted by sedimentological processes).							