GEOMORPHIC CHANGE DETECTION

U. WORKSHOP SYNTHESIS





WE CAN NOW TURN THE HOSE OFF





MAIN TAKE HOMES FROM DAY 2

- Budget Segregation Extremely Flexible Way of Getting More Out of GCD
- Be Adaptable when Designing & Implementing Monitoring Campaigns... Hybrid A Reality
- 10% of Effort is Analysis 90% is Data Preparation (e.g. Grid Concurrency; Building Surfaces; Removing Systematic Bias)
- Leave time for interpretation & combine multiple lines of evidence!

DoD = DEM of Difference =



WORKSHOP BIG PICTURE PLAN

- A. DAY 1 All About Distinguishing Signal From Noise
- B. Day 2 Interpreting the Signal & Cool Applications





ARE WE THERE YET?

$J \neq$ Glenn Canyon Dam **G**(You should understand: GCD = Geomorphic **Change Detection** GCD techniques and how they are applied to restoration monitoring 2. How to account for unreliability uncertainties DoD ≠ in DEMs 3. How to interpret DoDs DoD = DEM of Difference =









WORKSHOP LEARNING OUTCOMES

- A comprehensive overview of the theory underpinning geomorphic change detection
- Instill background necessary to design effective repeat
- topographic monitoring campaigns and distinguish geomorphic changes from noise (with particular focus on restoration applications)
- Methods for interpreting and segregating morphological sediment budgets quantitatively in terms of both geomorphic processes and changes in physical habitat
- Hands-on instruction on use of the <u>GCD software</u> through group-led and self-paced exercises
- An opportunity to interact with experts on geomorphic monitoring and the software developers of GCD to help you make better use of your own data