



# Update on Core Monitoring Plan



Prepared for the Adaptive  
Management Work Group by GCMRC  
October 2004

# History

- Concept discussed - October 2003-March 2004
- Core Monitoring Ad Hoc formed by TWG - March 30, 2004
- Core Monitoring Team 1<sup>st</sup> meeting Flagstaff - April 9, 2004
- Position statement to AMWG and TWG - April
- Core Monitoring Team 2<sup>nd</sup> meeting, Phoenix - May 4, 2004
- Second update memo to AMWG and TWG - May

# History (cont.)

- Science Advisors review first draft - June, 2004
- GCMRC revises based on comments from SAB
- Second draft presented to AMWG/TWG - Aug, 2004
- Core Monitoring Team 3<sup>rd</sup> meeting – Sep, 2004
- GCMRC revises plan to address team comments
- Third draft presented to AMWG – Oct, 2004 (on time)

# Process established April 9

- Collaborative - This is a fully cooperative venture involving GCMRC, TWG ad hoc members, with review by SAB
- Decision points 
- Memos

# Definitions and Assumptions



# Core



- 1, the central or innermost part of anything:  
2, the most important part as of a matter, discussion, etc.; essence; pith

*No ornaments or frills!*

# Core monitoring



- Core monitoring is consistent, long-term, repeated measurements using scientifically accepted protocols to measure status and trends of key resources to answer specific management questions. Core monitoring is implemented on a fixed schedule regardless of budget or other circumstances (e.g., water year, experimental flows, temperature control, stocking strategy, non-native control, etc.) affecting target resources.

# Assumptions



- Use available technology, as appropriate
- Minimalist framework
- Meet the needs of stakeholders and answers their specific management questions
- Strive for automated techniques that are less invasive and more efficient
- The budget needs to support the plan (e.g., 40-60% of our budget for core?)
- Build for consistency
- Build for longevity
- Flexibility to incorporate new technologies
- The plan will be reviewed and accepted by SAB/TWG/AMWG, as appropriate
- The results of monitoring will be regularly reported



# Resource categories



- A. Sediment
- B. Wildlife/Vegetation
- C. Fish
- D. Food base
- E1. Cultural Resources
- Traditional cultural properties
- E2. Register eligible historic properties
- F. Hydrology
- G. Water Quality
- H. Recreation
- I. Threatened and endangered species
- J. Power
- K. Economics
- L. Non-native species

# Relevant questions



- What and why do managers and others need to know?
- Where do they want to know it?
- How frequently do they need to know?
- What are the general methods to obtain this information?
- What is the level of precision/accuracy needed
- How will the monitoring data be presented and is it answering the managers questions (what are the metrics of success?)

# Table of contents



- History
- Mission/Goals
- Definitions
- Assumptions
- Resources
- Questions
- Reporting process
- Feedback loop
- Roles and responsibilities (compliance support)
- Relationship to other components of amp
- Methods used
- Timeline and deliverables
- Development, decision, prioritization process
- Budget
- Scheduling/Implementation
- Flexibility/consistency (PEP)
- Accuracy and precision
- Data management
- Inter-relationships/integration/core metric
- Logistics, permitting, compliance
- Relationship to score report

# Position statement



# Comments received

- Change plan to separate well-defined monitoring efforts from those requiring R&D
- Annual compliance monitoring
- Improve monitoring in Glen Canyon and below Diamond Creek
- Develop food base monitoring quickly
- Monitor contaminants

# Comments received (cont.)

- “the ‘core’ of your plan and your approach seem sound”
- Strengthen QW and fish sampling
- Collaborate w/ other agencies to reduce costs

# Format of plan has changed in response to comments

- **Current core monitoring capabilities**
  - Lake Powell
  - Dam releases
  - Power and revenue
  - Stage and discharge
  - QW
  - Fisheries resources (Lees Ferry Trout, HBC)
- **Future core monitoring programs (R&D)**
  - all other elements



# What's next?

- Next CMT meeting is Nov 16
- Consolidated comments to CMT
- AMWG will have a final draft to review Jan, 2005

