



# General Core Monitoring Plan for the GCD-AMP

Adaptive Management Work Group Meeting  
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# Background

## Four Step Core Monitoring Process (as described in the 2007-2011 MRP)

- 1 – General Core Monitoring Plan
- 2 – Information Needs Workshops
- 3 – Protocol Evaluation Panel Reviews
- 4 – Detailed Core Monitoring Plans for each Resource Area

# General Core Monitoring Plan Purpose

## Programmatic Assessment of GCD-AMP core monitoring activities

- Identifies Goals, Objectives, Scope, Schedule and Funding for each core monitoring project
- Identifies general strategies for an integrated ecological monitoring approach
- Specifies data management, reporting and institutional arrangements

# General Principles for Ecological Monitoring Design

- Determine What, Where, When, and How
- Establish Data Management procedures
- Establish Reporting Procedures
- Document Monitoring Protocols
- Implement and Institutionalize Monitoring

# General Core Monitoring Plan

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# Chapter 4. General Long-Term Core Monitoring Proposals

- 4.1 Overview
- 4.2 Core Monitoring Proposals by GCD AMP Goal
  - Goal 1 Aquatic Food Base
  - Goal 2 Native and Nonnative Fishes
  - Goal 3 Extirpated Species (not addressed)
  - Goal 4. Lees Ferry Trout
  - Goal 5. Kanab Ambersnail
  - Goal 6. Riparian Vegetation and Springs
  - Goal 7 Water Quality Monitoring
  - Goal 8. Sediment
  - Goal 9. Recreation
  - Goal 10. Power Generation
  - Goal 11. Cultural Resources
- 4.3 Core Monitoring Proposals for Remote Sensing and Habitat Mapping

# Outline

## Core Monitoring Proposals (by resource goal)

- Introduction
- Core Monitoring Information Needs
- Geographic Scope
- Summary of previous work
- Integration with other related monitoring efforts
- Development/implementation schedule
- Data Management and Reporting Plan
- Estimated Budget

# Example Summary Table

Goal	Focus/Topic	Geo. Scope	Parameters	Frequency	Ann. Budget
<b>1. Aquatic Foodbase</b>					
1.a Aquatic Food Base	Total organic carbon budget	Glen Canyon Dam to Pearce Ferry	Primary production; tributary inputs	Annually	\$150,000
<b>2. Native Fishes</b>					
2.a Lower 1200 m LCR	Maintain reproduction, evaluate recruitment	lower 1200 m LCR	Population status, trends, and condition factors		\$40,000
2.b Lower 15 km LCR	Evaluate survival and recruitment	lower 15 km LCR	Population status, trends, and condition factors		\$375,000
2.c Mainstem native fishes	Evaluate survival and recruitment	GCD to DC	Population status, trends, and condition for multiple size classes	3 times annually	\$400,000

# Chapter 5. Data Management

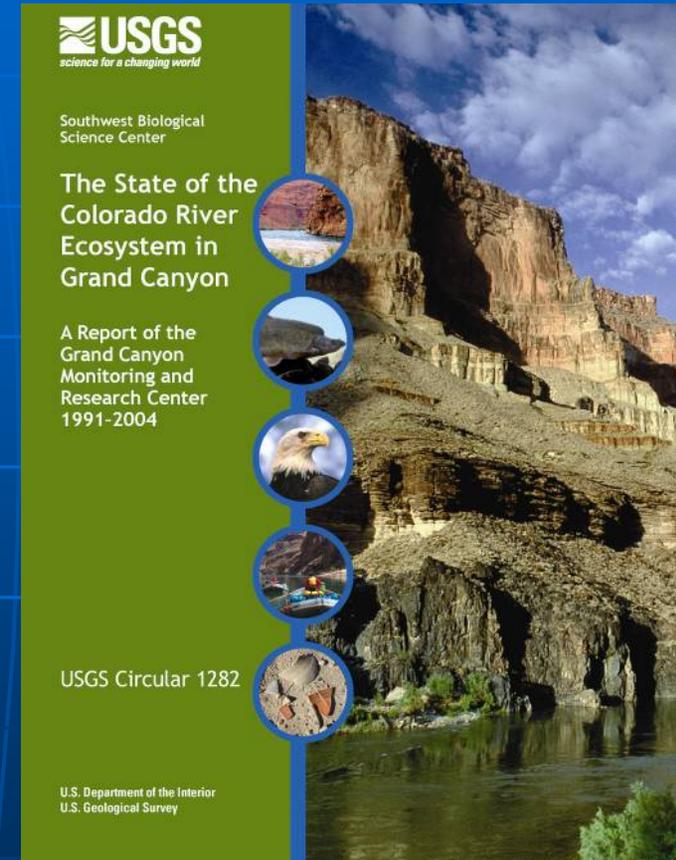
- 5.1 Overview
- 5.2 Goals and Objectives
- 5.3 Roles and Responsibilities
- 5.4 Infrastructure/Architecture
- 5.5 Project Work Flow
- 5.6 Data Acquisition and Processing
- 5.7 Quality Assurance/Quality Control
- 5.8 Data Documentation
- 5.9 Data Dissemination [incl. sensitive data]
- 5.10 Data Maintenance, Storage and Archiving

# Chapter 6. Data Analysis and Reporting

## 6.1 Overview

## 6.2. Communications and Reporting

- Project reporting schedule – (varies by resource area)
- State of Colorado River Ecosystem Report (every 5 years)
- Knowledge Assessments (every 5-years)
- Biennial Science & Management Symposia
- GCMRC web access to data
- USGS Technical Reports & Journal Literature



# Chapter 7. Administration and Implementation of the Core Monitoring Program

- 7.1 Administrative Structure
- 7.2 Monitoring Staff
- 7.3 Program Integration and Partnerships

[NPS Monitoring Program, BOR, FWS, Universities, others?]

# Chapter 8. Budget and Implementation Schedule

- Estimated costs by resource area
- Schedule for completing process for each resource area
  - Information needs workshops
  - PEP reviews
  - Detailed Core Monitoring Plans



## Next Steps

- Draft Plan to TWG – Fall 2008
- Presentation to AMWG– Winter 2008
- AMWG Recommendation– Spring 2009