

Draft outline
2003 State of the Colorado River Ecosystem Report

I. Executive Summary

II. Law, Policy and Administration

- 'Law of the River' & History of the GCD project
 - 1956 CRSPA
 - 1968 CRBPA
 - Coordinated Long-Range Operating Criteria
- 1992 GCPA
- 1996 GCD EIS & ROD
 - GCDAMP
 - AMWG
 - TWG
 - GCMRC
 - IRP
- Other Federal Compliance Laws and Responsibilities
 - ESA
 - 1994 Biological opinion
 - Section 7 consultations
 - NHPA
 - Trust responsibilities

III. Above Glen Canyon Dam (including Lake Powell, water releases and power)

Colorado River Basin Climate and Hydrology

- Past Lake Powell inflows
- Future projected Lake Powell inflows

Lake Powell Limnology

- Reservoir Characteristics
- Thermal Characteristics
- Water Quality

GCD Operations

- Past Releases
- Projected Future Releases

Power

- Hydropower Production
- Impacts to Western
- CRSPA Repayment schedule
- Wholesale rate
- Retail rate
- Impacts to non-profit power distributors

IV. Aquatic Ecosystems Resources

Physical Habitats

- Downstream release characteristics of water

- Tailwater program
- Thermal program
- Water Chemistry (Multi parameter continuous samplers)
- Unregulated tributary inflows

Sediment Resources

- Fine-sediment overview
 - Sand mass balance
 - Sandbar monitoring
- Bed-grain size data
 - Main channel
 - Eddies
- Coarse sediment tributary inputs
 - Debris Fans and Rapids
- Channel Mapping

Food Base

- Vegetation
- Invertebrates
- Trophic linkages

Fish

- Native Fish
 - Humpback Chub
 - Flannelmouth Sucker
 - Razorback Sucker
 - Bluehead Sucker
 - Speckled Dace
- Non-native Cold-water species
 - Rainbow Trout
 - Lee's Ferry
 - Downstream
 - Brown Trout
- Non-native Warm water species

Cultural

- Historic properties (i.e. Spencer's steamboat)
- TCPs
- Other cultural resources of traditional concern

Recreation

- Lee's Ferry Trout Fishing
 - Creel data
- Day rafting
- White water boating
 - Safety
- Recreation Economics

V. Terrestrial Ecosystem Resources

Physical Habitats

- Higher elevations sediment

- Coarse sediment tributary inputs
 - Debris Fans
- Springs
 - Associated vegetation and fauna

Food Base

- Riparian Nutrient Dynamics
- Invertebrates

Vegetation

- Hydro-riparian (Marsh) zones
- Lower riparian zone
- Upper riparian zone

Wildlife

- Endangered and other Special Status Species
 - Bald Eagle
 - Peregrine falcon
 - KAS
 - SWWFC
- Non-endangered Arizona State Species of Concern
 - Niobrara Ambersnail
 - Northern Leopard Frog
 - Belted Kingfisher
 - Osprey

Cultural resources

- Archeological Sites
- Traditional Cultural Properties
- Other Cultural Resources of Traditional Concern
 - Ethnobotanical resources

Recreational resources

- Beaches

VI. Information Technology (provided as a source for future inquiries)

- Data base management system
- Remote Sensing and Survey
- GIS
- GCMRC library

VII. Appendices

- Glossary of terms
- Operating Criteria for GCD in accordance with the 1992 GCPA
- Charter of the GCD AMWG,
 - Vision and Mission Statement,
 - Principles and Goals