THE COLORADO RIVER

Human Development and Competing Environmental Needs
Human Development of the Colorado River

- Water supply for more than 30 million people
- Water for 3.7 million acres of irrigated agriculture
- Hydroelectric power produced for major cities throughout the southwestern U.S.
Colorado River Compact Allocations

Upper Basin – 7.5 MAF

Lower Basin - 7.5 MAF

CA – 4.4 MAF

AZ – 2.8 MAF

NV – 0.3 MAF

MX – 1.5 MAF
Environmental Issues

• Over-allocation
• Channel Forming Processes
  – Backwaters
  – Renewed Riparian Habitat
• Salinity
• Competition and Predation by Non-native Species
Environmental Issues

• Declining populations of native plants and animals
  – Threatened and Endangered Species
    • Southwestern willow flycatcher
    • Yuma clapper rail
    • Colorado pikeminnow
    • Humpback chub
    • Bonytail chub
    • Razorback sucker
Environmental Restoration

Factors Driving Restoration Efforts:

– Compliance
  • NEPA
  • Endangered Species Act
– Economic Development
– Recreation/Tourism
Environmental Restoration Efforts

- Upper Colorado River Endangered Fish Recovery Program
- Lower Colorado River Multi-Species Conservation Program
- Salton Sea
- Mexican Delta
San Juan Basin
Recovery Implementation Program

Upper Colorado River
Endangered Fish
Recovery Program
Program Participants/Funding Entities

- Upper Colorado River Program

- CREDA -Colorado Water Congress
- Land & Water Fund of the Rockies
- State of Colorado -State of Utah
- State of Wyoming -National Park Service
- The Nature Conservancy -U.S. Bureau of Reclamation
- U.S. Fish & Wildlife Service -Utah Water Users Association
- WAPA -Wyoming Water Association
Program Participants/Funding Entities

- San Juan River Basin Recovery Implementation Program
  
  - Jicarilla Apache Nation
  - Southern Ute Indian Tribe
  - State of Colorado
  - U.S. Bureau of Indian Affairs
  - U.S. Bureau of Land Management
  - U.S. Fish & Wildlife Service
  - Navajo Nation
  - Ute Mountain Ute Tribe
  - State of New Mexico
  - U.S. Bureau of Reclamation
  - Water development interests
Upper Colorado River
Endangered Fish Recovery Program
Lower Colorado River Multi-Species Conservation Program
MSCP
Salton Sea Restoration
Salton Sea
Mexican Delta
Mexican Delta

PROJECT FOR THE PERMANENT & DEFINITIVE SOLUTION TO THE INTERNATIONAL PROBLEM OF THE SALINITY OF THE COLORADO RIVER
Conclusion

• NEPA and the ESA
• Feasibility
• Cost/Benefit
Conclusion

• All restoration programs need WATER and MONEY
• Today restoration must compete with water and power consumers
• Time – Limits options