

To: AMWG Members
From: Bruce Moore, Bureau of Reclamation
Subject: Program Formulation Process

At the AMWG meeting on September 10 and 11, Reclamation was requested to provide the members a description of the program formulation process they go through to get funding approved for the Glen Canyon environmental work. Attached is a chart showing the chronology of the process for FY 1999 and FY 2000. As discussed at the meeting, the FY 1999 budget is in the final stages of completion. We have some time to make impacts to the internal portions of the budget but the total funds available are set. The Technical Work Group (TWG) and the Grand Canyon Monitoring and Research Center (CENTER) are working hard on the internal portions to come to final program costs.

For FY 2000, Reclamation is in the process of preparing the budgets. The attached calender shows the Preliminary FY 2000 BOR Work Program due to the Colorado River Energy Distributors (CREDA) by mid April and the Commissioner's final budget to the Assistant Secretary for Water and Science by mid May. This means the TWG and AMWG need to have the total amount somewhat firm to allow Reclamation to move the budget process forward. The details of the FY 2000 budget can be worked on until sometime in the winter of 1998.

Reclamation will be prepared to answer any questions at the meetings in January.

BUREAU OF RECLAMATION (BOR)

FY 1999 & FY 2000 PROGRAM FORMULATION CALENDAR

1997

September	FY 1999 Budget to OMB
Early October	Commissioner's FY 2000 Program Formulation Guidance to Regions.
October 20	Final FY 1999 Revenue Work Program due to CREDA.
Late November	FY 1999 OMB Passback
Late November - Early December	OMB Appeal period on FY 1999
Early-December	DOI transmits Secretary's FY 1999 appeals to OMB

1998

Late January - Early February	Colorado River Storage Project (CRSP) Revenue Budget Meeting for FY 2000.
Late January - Early February	President submits FY 1999 Budget to Congress
February 3	FY 1999 Budget Justification to Congress
February/ March	Answer questions, if any, posed by CREDA associated with the Final FY 1999 Revenue Work Program.
February/March	FY 1999 House Appropriation Hearing
March/April	Potential FY 1999 Senate Hearing
March/April	FY 2000 BOR Budget Review Committee (BRC) Process
April 15	Preliminary FY 2000 Revenue Work Program due to CREDA.
May/June	FY 1999 House Action on Energy and Water Development Appropriation.

Mid May	Final decisions on FY 2000 Budget made by Commissioner.
Late May	FY 2000 Draft Budget Proposal submitted to AS-WS
June/July	Departmental Review of FY 2000 Budget Proposal.
June/July	Answer questions, if any, posed by CREDA associated with the Preliminary FY 2000 Revenue Work Program.
June/July	FY 1999 Senate Action on Energy and Water Development Appropriation.
July/August	FY 1999 House/Senate Markups of Energy and Water Development Appropriations.
Early September	FY 2000 Budget Estimates to OMB.
September 30	FY 1999 Appropriations finalized.

ACRONYMS

BOR - Bureau of Reclamation
OMB - Office Management & Budget
CREDA - Colorado River Energy Distributors Association
AS-WS - Assistant Secretary Water and Science
BRC - Budget Review Committee

WORK PROPOSED FOR FY 1998:

Water and Energy Management and Development - Continue 5-year review of the Coordinated Long-Range Operating Criteria of the Colorado River, and the determination of reservoir releases to allow the delivery of water. Energy retrofit activities include the installation of energy efficient lighting, heating, and facilities. Provide engineering and miscellaneous support. \$1,382,000

Begin compliance with P.L. 104-127 authorizing cost sharing in lieu of repayment for the Salinity Program which is 4.5 percent of the total Colorado River Basin Salinity Program. \$849,000

Land Management and Development - Continuation of land resources management activities and general liaison activities with land managing entities, Native Americans, other cooperating agencies, the public, and special interest groups. \$495,000

Fish and Wildlife Management and Development - Continue work on three environmental impact statements for three Initial Units: Flaming Gorge, Wayne N. Aspinall, and Navajo. \$1,861,000

Support is also provided for the endangered fish studies which are part of the RIP for the Colorado River. \$2,295,000

Grand Canyon Monitoring and Research Center (GCMRC) - The Senate Committee Report 104-320 accompanying the FY 1997 Energy and Water Development bill required that costs associated with monitoring and research activities and the role of Glen Canyon Environmental Studies (GCES) in the future monitoring and research be submitted in Reclamation's budget justification documents. A very important part of the Adaptive Management Program outlined in the Environmental Impact Statement on the Operations of Glen Canyon Dam filed with EPA March 1995 is the establishment of a monitoring and research center. The GCMRC, which replaced the GCES, will formulate and implement long-term monitoring and research programs approved by the Secretary. The following is the estimated work program for 1998:

	<u>Estimated Cost</u>	
GCMRC	\$ 1,128,000	(Including approx. 15 to 20 % overhead)
Independent Review Panel	84,000	
UC Region Support	256,000	(Including approx. 52 % overhead)
Denver Office Support	296,000	(Including approx. 48 % overhead)
Adaptive Mgmt Work Grp	312,000	
Technical Work Group	98,000	
Data Base Mgmt 1/	945,000	
Biological 2/	1,600,000	
Physical 3/	1,245,000	
Cultural 4/	<u>929,000</u>	
Total		\$ 6,893,000

The following is the detailed work plan for FY 98 for the GCMRC:

INFORMATION MANAGEMENT AND TECHNOLOGY 1/

- *Integration report on riparian and aquatic biology
- *Completion of GIS maps
- *Bathymetry data collection for management needs

BIOLOGICAL 2/

AQUATIC SYSTEM MONITORING AND RESEARCH

- *Native and non-native fish monitoring
- *Drift studies to monitor food base assessment
- *Monitoring assessment of trout populations
- *Monitoring of algae and freshwater shrimp populations
- *Kanab Ambersnail monitoring
- *Development of T&E species information
- *Defining dam-induced changes in food base and changes due to ecological procession
- *Benthic and draft analysis for food base assessments

RIPARIAN RESOURCE MONITORING AND RESEARCH

- *Avifauna monitoring including endangered species
- *Riparian monitoring use sampling plan
- *Monitoring of the southwestern willow flycatcher
- *Kanab ambersnail monitoring

PHYSICAL SYSTEM MONITORING AND RESEARCH 3/

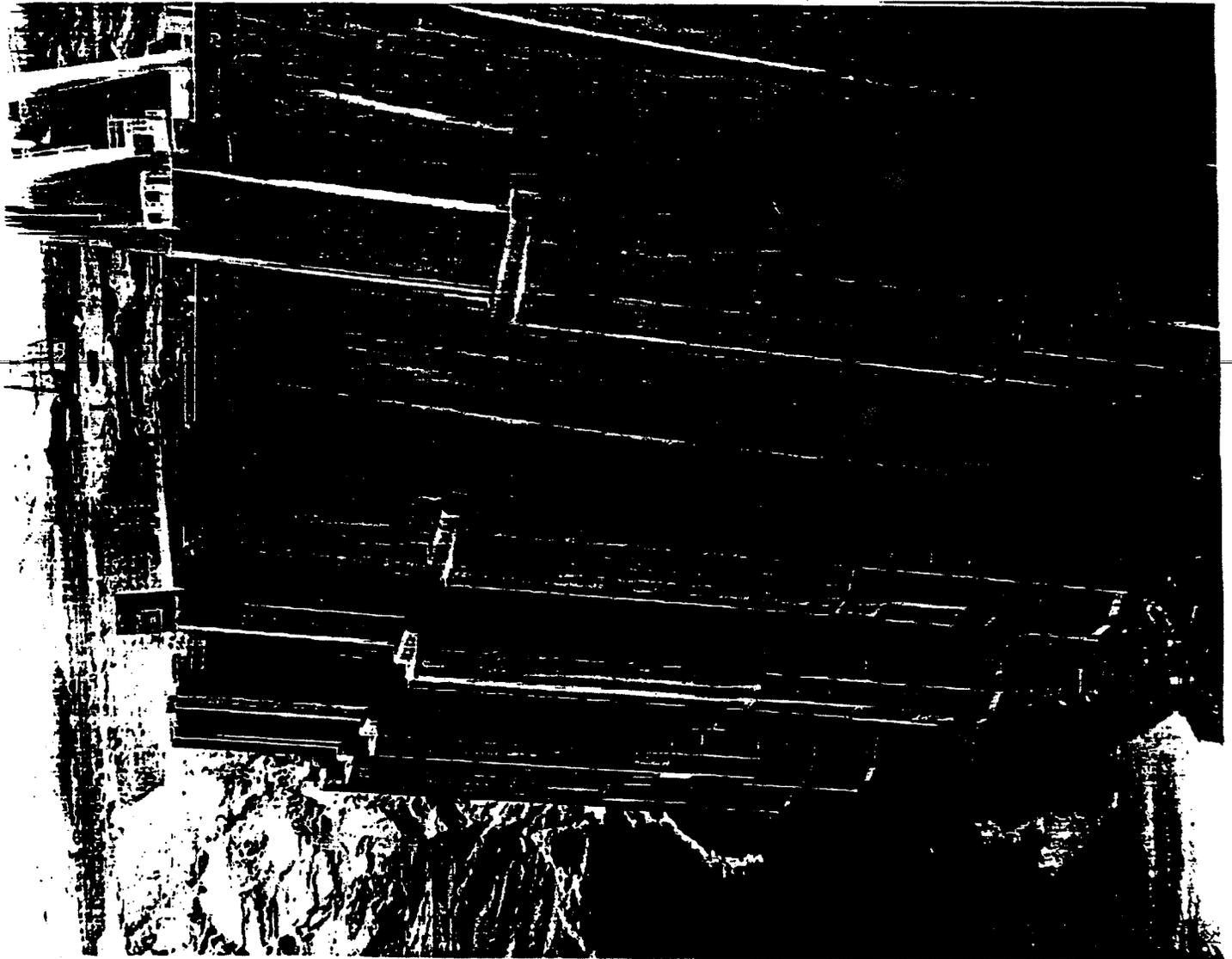
- *Conduct aerial photography of the Grand Canyon
- *Quantify the number of beaches, backwaters, and marsh habitat
- *Insert the stereo imagery and map image processing into a geographic information system
- *Monitor the distribution and volume of sediment in the Grand Canyon
- *Monitor the changes in beaches
- *Assessing the critical habitat areas resulting from the beach building flow
- *Evaluate changes in marshes and backwaters from the beach building flow
- *Evaluate water chemistry

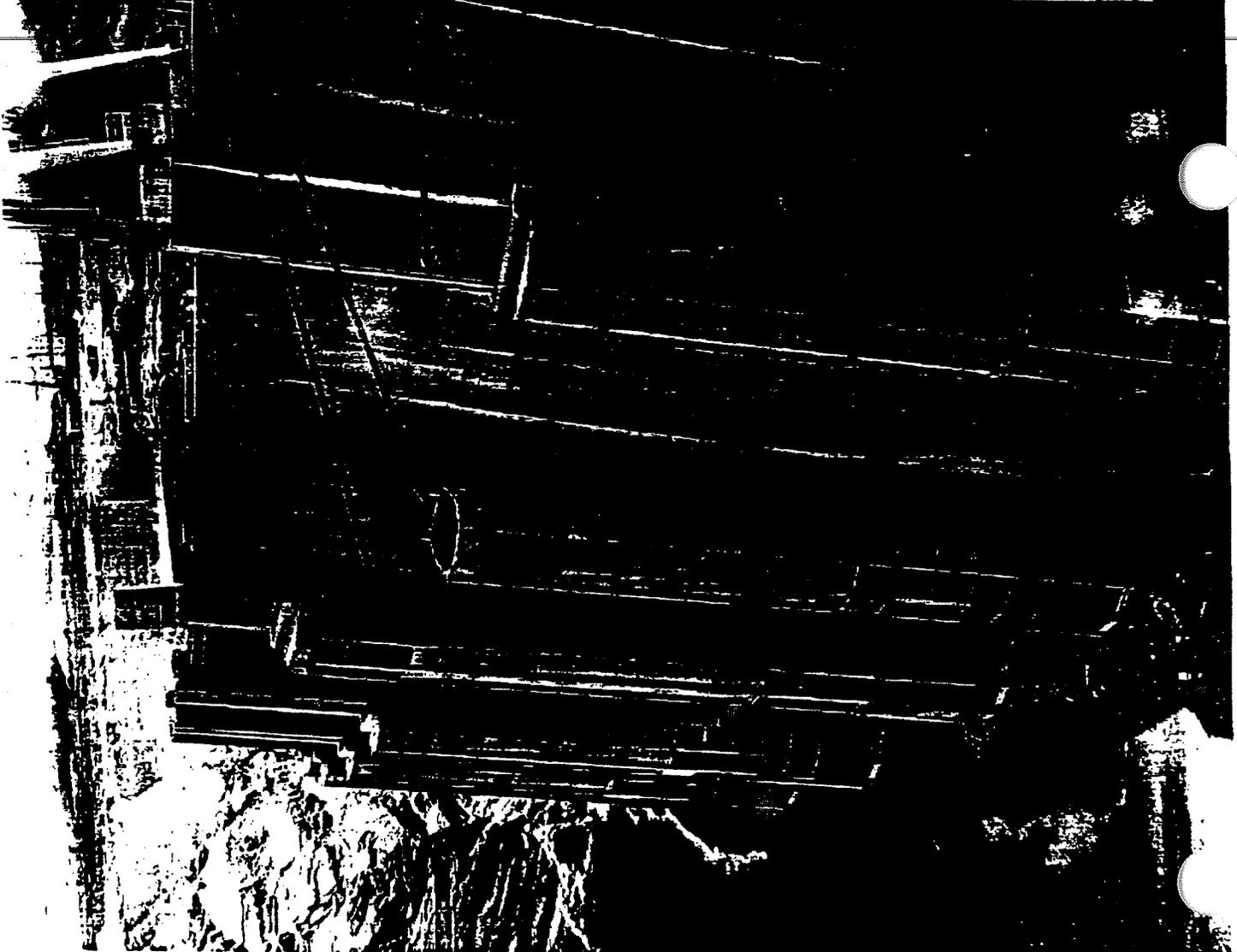
CULTURAL MONITORING AND RESEARCH 4/

- *Continue cultural resource monitoring
- *Monitor all cultural resource areas identified in the Historic Preservation Plan of 1997
- *Continue monitoring prescribed in the Programmatic Agreement
- *Develop information technologies plan for tribal nation lands
- *Develop multi-resource mapping procedure for cultural resources on tribal lands

LAKE POWELL MONITORING AND RESEARCH

No funds are currently programmed for monitoring or research in Lake Powell in FY 98. An assessment of future monitoring and research efforts in Lake Powell will be completed by August 1, 1997.

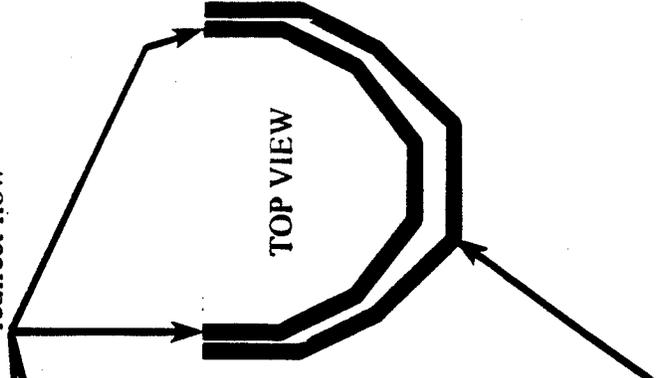




Existing Crane to install and operate half-pipe gate

Remove top and install trashrack.

Existing Guide Rails to be used to hold half-pipe gate in front of the penstock to redirect flow



Existing Trashrack Structure

Existing Penstock Trashracks and Intakes

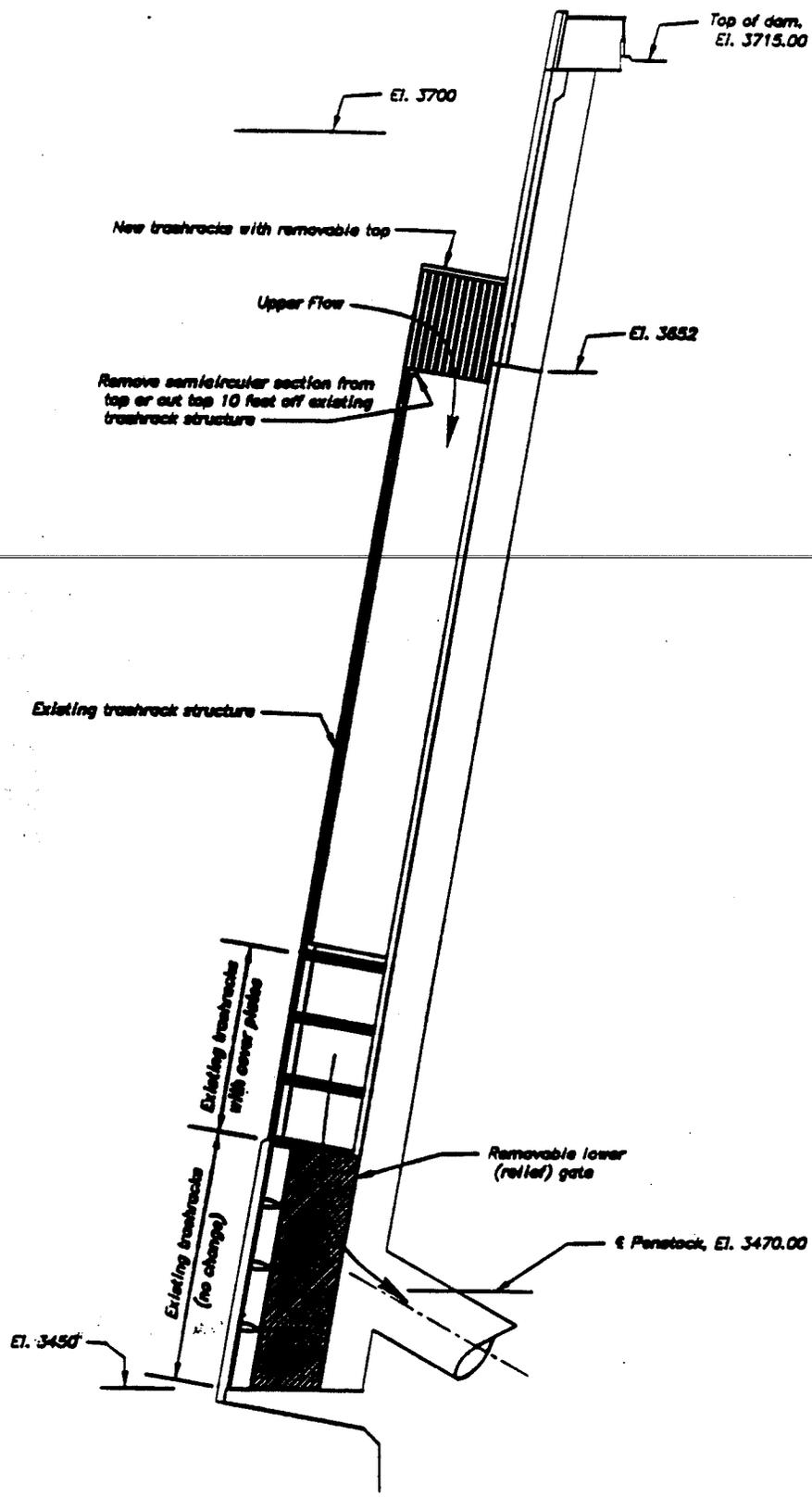


TABLE 1

MONTH	PERCENT OF TIME RESERVOIR EXCEEDS EL. 3690 (PRESENT CONDITIONS)	PERCENT OF TIME RESERVOIR EXCEEDS EL. 3690 (FUTURE CONDITIONS)
April	3	5
May	25	23
June	60	40
July	58	40
August	55	35
September	52	35

TABLE 3

MONTH 1992	RELEASE TEMPERATURES (°F) (Reservoir Water Surface EL 3690)								PERCENT OF TIME RESERVOIR EXCEEDS EL. 3690	
	Existing Intake El. 3470	Crest at El. 3650	Crest at El. 3640	Crest at El. 3630	8 Unit Mod	4 Unit Mod El. 3650	4 Unit Mod El. 3640	4 Unit Mod El. 3630	Present	Future
April	44.1	51.3	50.3	49.5	50.8	47.7	47.2	46.8	3	5
May	44.0	55.7	54.1	52.1	54.9	49.8	49.1	48.1	25	23
June	44.1	63.8	60.9	58.2	62.3	54.0	52.5	51.2	60	40
July	44.2	67.5	66.1	64.0	66.8	55.8	55.1	54.1	58	40

TABLE 4

MONTH 1992	RELEASE TEMPERATURES (°F) (Reservoir Water Surface EL 3680)							PERCENT OF TIME RESERVOIR EXCEEDS EL. 3680	
	Existing Intake El. 3470	Crest at El. 3650	Crest at El. 3640	Crest at El. 3630	8 Unit Mod	4 Unit Mod El. 3640	4 Unit Mod El. 3630	Present	Future
April	44.1	N/A	51.3	50.3	50.8	47.7	47.2	42	25
May	44.0	N/A	55.7	54.1	54.9	49.8	49.1	65	40
June	44.1	N/A	63.8	60.9	62.3	54.0	52.5	82	49
July	44.2	N/A	67.5	66.1	66.8	55.8	55.1	80	47

