

# LONG RANGE EXPERIMENTAL PROGRAM

Strategies for Sequencing and  
Implementation

## *AMWG Motion Passed April 24, 2002*

- GCDAMP adopt an experimental framework that includes Scenarios 1 through 4 and possibly other scenarios to benefit resources of concern with a twice a year evaluation of data by AMWG
- Implement Scenarios 1,3,or 4, as appropriate in WY2002-2003. Scenario 1 will be implemented in first year fall tributary inputs occur. Scenario 2 will be implemented in the next year that fall tributary inputs occur.

# *AMWG Motion...Continued*

- Initiate all needed activities(consultation[include HBC], compliance, development of a science plan, public outreach, development of a captive breeding population of Grand Canyon Humpback Chub.)
- Direct the GCMRC in consultation with the TWG and SAs ***develop an experimental plan for long-term implementation. (April , 2002)***

# *Rationale for Long Term Program*

- Active Adaptive Management Paradigm
- Thoughtful Development of Treatments
- Adequate Science Planning
- Compliance/ Permitting Work
- SA & Peer Review
- Budget & Fiscal Planning
- Avoid 'Crisis' Planning of 2002

# *Why Now??*



Depending on your interpretation of  
the current EA and FONSI we are  
somewhere between 15 and 18  
months from returning to ROD flows

**Table 2.4. Experimental Design, Long-Term Sequence of Treatments**

<b>Water Year</b>	<b>Fluctuating Flows (Jan Š Mar)</b>	<b>Mechanical Removal (Aug Š Dec)</b>	<b>Stable Fall Flows (Aug Š Dec)</b>	<b>TCD (Future)</b>	<b>BHBF (Jan Š Jul)</b>
<b>WY2002-03</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>No</b>	<b>?</b>
<b>WY2003-04</b>	<b>Yes</b>	<b>Yes</b>	<b>No</b>	<b>No</b>	<b>?</b>
<b>WY2004-05</b>	<b>No</b>	<b>Yes</b>	<b>Yes</b>	<b>No</b>	<b>?</b>
<b>WY2005-06</b>	<b>No</b>	<b>Yes</b>	<b>No</b>	<b>No</b>	<b>?</b>
<b>WY2006-07</b>	<b>No</b>	<b>No</b>	<b>Yes</b>	<b>No</b>	<b>?</b>
<b>WY2007-08</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>?</b>
<b>WY2008-09</b>	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>No</b>	<b>?</b>
<b>WY2009-10</b>	<b>Yes</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>?</b>
<b>WY2010-11</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>?</b>
<b>WY2011-12</b>	<b>Yes</b>	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>?</b>
<b>WY2012-13</b>	<b>No</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>?</b>
<b>WY2013-14</b>	<b>No</b>	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>?</b>
<b>WY2014-15</b>	<b>No</b>	<b>No</b>	<b>Yes</b>	<b>Yes</b>	<b>?</b>
<b>WY2015-16</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>Yes</b>	<b>?</b>
<b>WY2016-17</b>	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>Yes</b>	<b>?</b>
<b>WY2017-18</b>	<b>Yes</b>	<b>No</b>	<b>No</b>	<b>Yes</b>	<b>?</b>

# Generalized Design of Blocked Treatments

Water Year	Sediment Treatment	Fisheries Treatment	TCD Treatment	Techno-Fixes
1	X	X	-	?
2	X	X	-	?
3	-	X	-	?
4	X	X	-	?
5	X	-	X	?
6	-	-	X	?
?	?	?	?	?
?	?	?	?	?
?	?	?	?	?

## *How to do it???*



- Muddle through
- Use Strategic Planning & Target Setting
- Passive Adaptive Management
  - Small scale opportunistic research & monitoring
- Active Adaptive Management
  - Deliberate Management Policy Experimentation
  - Multi-attribute Stakeholder Based Process

## *Advantages of Policy Experimentation Using Multi-Attribute Approach*

- Full Stakeholder Participation/Interaction
- Utilizes Scientific Information to Inform
- Effective and Well Documented Decision Process in Other Segments of Society
- Provides Thorough But Anonymous Documentation of Process

# *MULTI-ATTRIBUTE.....*



- BASED ON EVALUATION CRITERIA
- ALLOWS SIMULTANEOUS CONSIDERATION OF PROBABLE CONSEQUENCES FROM PROPOSED MANAGEMENT ACTIONS ON ALL RESOURCES BY ALL STAKEHOLDERS