

Resource Targeted Condition- Dependent Strategy

a proposed alternative for the LTEMP EIS

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General Info

- * Submitted by the Basin States
- * Developed with substantial input from scientists with expertise in key Grand Canyon resource areas

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Experimental Design

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Goals and Foundations

- * Focus in recovery of the humpback chub and then, without harming recovery, address other important resource issues
- * Use experimental design to evaluate the effectiveness of treatments
- * Uses a condition-dependent framework, with decision trees, to evaluate treatments and move to management actions



Science Approach

- * Uses a 2x2 factorial science design with flow treatments and HFEs, considers warming
- * Scientific efforts based on condition of key resources
- * Follows Adaptive Management strategy
- * Clearly outlines success criteria
- * Uses limited short-term scientific experiments to assess the efficacy of specific action within the Colorado River ecosystem

Base Flow Regime

- * Similar to MLFF
- * Increase in hourly down-ramp
- * Modifications to maximum daily change
- * Targeted lower monthly volumes in August, September and October
- * Curtailment of load following if sediment input



Flow Actions and Experiments

- * LCR Trout Abundance – HBC Juvenile Survival
- * Trout management flows
- * Store-and-release Fall HFEs
- * Rapid-Response Fall HFEs
- * Store-and-release Spring HFEs
- * Aquatic Food Base Experiments
- * Naturally-warmed releases
- * Condition-dependent Steady Flow Experiment



Non-flow Actions and Experiments

- * Lees Ferry Mechanical Trout Management
- * Removal of Trout from Bright Angel Creek
- * Translocate HBC to Tributaries – Establish Robust Aggregations
- * Humpback Chub Refuge System
- * Riparian Vegetation Control
- * Control of Nonnative Warmwater Fish
- * Turbidity Experiment to Control Trout



Conditions of Alternative

- * Alternative represents a compilation of flow and non-flow experiments and treatments integrated with a base dam operation built on past success.
- * Elements of this alternative are related and interdependent and removing or replacing one or more of these elements without full consideration of the entire alternative and experimental design would likely diminish its management and experimental value

Questions

