Glen Canyon Dam LTEMP EIS Update

Reclamation Leadership Team Stakeholders Meeting

October 15, 2014

USGS science for a changing world

Argonne NATIONAL LABORATORY

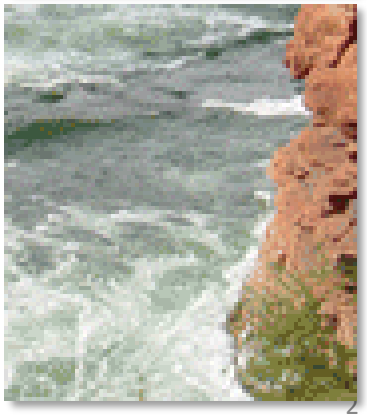
NATIONAL PARK SERVICE

U.S. DEPARTMENT OF THE INTERIOR BUREAU OF RECLAMATION

Why a New Plan?

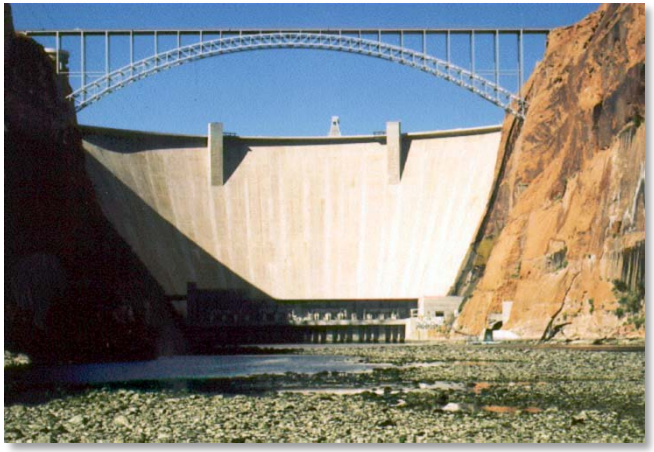
- To utilize the 18 years of scientific information gathered since the last EIS on Glen Canyon Dam operations

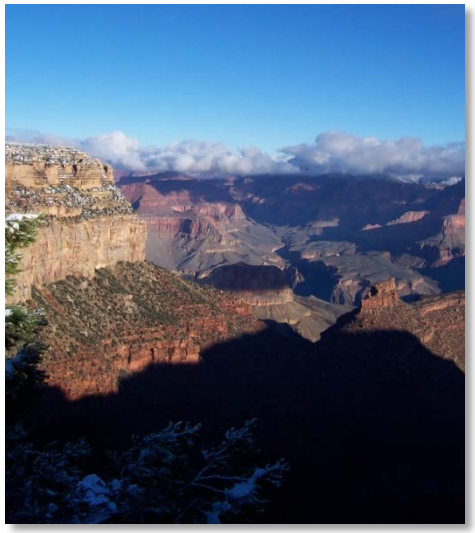
- To comply with ongoing requirements and to protect natural and cultural resources in compliance with the Grand Canyon Protection Act



Joint Lead Process

- Bureau of Reclamation operates Glen Canyon Dam
- National Park Service manages Grand Canyon National Park and Glen Canyon and Lake Mead National Recreation Areas
- Argonne National Laboratory staff will prepare EIS





Cooperating Agencies

- Arizona Game and Fish Department
- Bureau of Indian Affairs
- Colorado River Commission of Nevada
- The Hopi Tribe
- The Hualapai Tribe
- The Havasupai Tribe
- Kaibab Band of Paiute Indians
- The Navajo Nation
- The Pueblo of Zuni
- Salt River Project
- U.S. Fish and Wildlife Service
- Upper Colorado River Commission
- Utah Associated Municipal Power Systems
- Western Area Power Administration

Scope

Generally, the scope of the LTEMP EIS project involves consideration of actions that could change flows from Glen Canyon Dam & a set of non-flow actions, all designed to further the purposes of the Grand Canyon Protection Act.

All alternatives will comply with 2007 Interim Guidelines for annual volumes.

This process is not considering major infrastructure changes to the dam.

All of the action alternatives include high flow releases up to a maximum of 45,000 cfs, but variation of frequency, duration and constraints.

Variation among the alternatives with approaches to fish management as some alternatives have mechanical removal, some have trout management flows (TMFs) and mechanical removal and one alternative (SASF) has neither.

Alternatives Carried Forward for Analysis in EIS

1. No-Action Alternative
2. Balanced Resource Alternative
3. Condition-Dependent Adaptive Strategy
4. Resource Targeted Condition-Dependent Alternative
5. Seasonally Adjusted Steady Flows
6. Year-Round Steady Flows
7. Hybrid Alternative

Hybrid Alternative

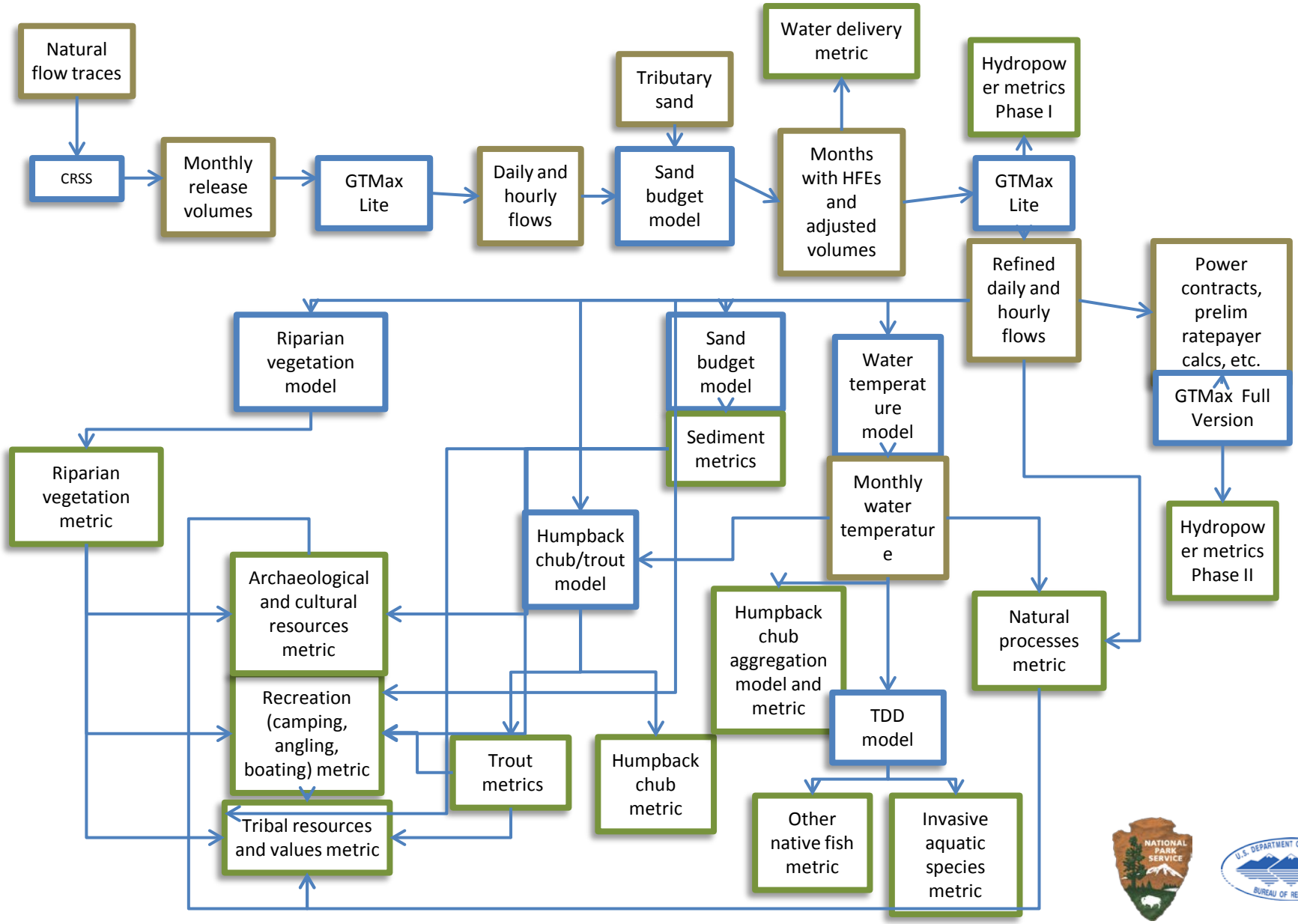
This is a newly developed alternative for LTEMP, which we hope will be able to receive consensus support. This alternative, however, is still under development and analysis. We have briefed cooperating agencies and other stakeholders, including tribes, but it has not yet been the subject of formal government-to-government consultation.

Characteristics of the Hybrid Alternative

Component	Hybrid Alternative	Other Alternatives
Monthly volumes	Lower volume Aug-Oct, relatively even rest of year following CROD	Same as RTCD. More even monthly distribution of flows than all but YRSF.
Daily fluctuations	10 x kaf in June-Aug 9 x kaf in other months Maximum daily range 8,000 cfs	Fluctuation comparable to No-Action. Less than Balanced Resource and RTCD. More than others.
Proactive spring HFEs	Yes, not in first 2 years, but then possible in the rest of the 20 years	Yes in CDAS and YRSF. No in others.
Spring HFEs	Yes, not in first 2 years, but then possible in the rest of the 20 years	Same as CDAS, SASF, and YRSF. More than No-Action, Balanced Resource, and RTCD.
Fall HFEs	Yes, possible in all 20 years	Same as CDAS, RTCD, SASF, and YRSF. More than No-Action and Balanced Resource.
Extended duration fall HFE	Yes, up to 250 hr but implemented in phases	Yes in CDAS and YRSF. No in others.
Load-following curtailment	Test before and after fall HFEs	Yes in CDAS (spring and fall) and RTCD (before fall only). No in others.
Trout management flows	Test and implement if successful	Test and implement if successful in most. Test only in No-Action. No in SASF.
Low summer flows	Test possible in years 11-20	Same as RTCD. Test possible in all 20 years in CDAS. No test in others.
Mechanical removal of trout	Yes	Yes in all but SASF.

Preliminary Results—Do Not Cite or Distribute

LTEMP Modeling Diagram



Current Schedule

Task	Date
Internal Administrative Draft EIS	October-November 2014
Complete Hydropower Analysis	Mid-November 2014
CA Draft Distributed	December 2014
Public Draft	Late January-early February 2015

LTEMP Website

For more information, visit the project website:

http://ltempeis.anl.gov

Anyone may sign up for the mailing list