

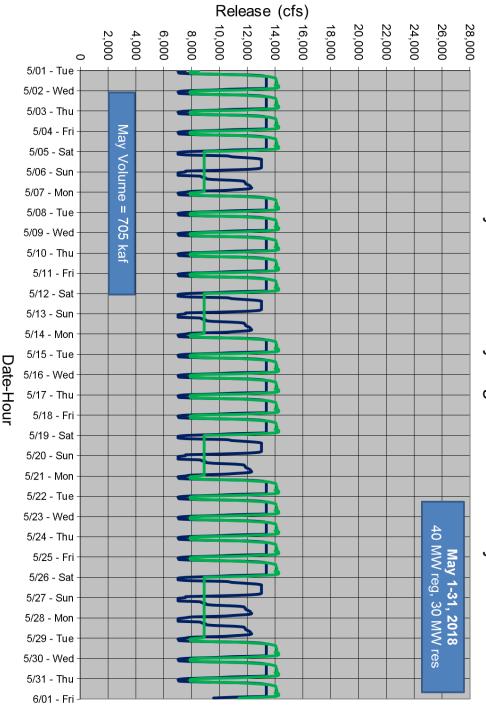
Possible Experimental Actions to be Implemented in CY 2019

Technical Work Group Meeting June 25-26, 2018

Scott VanderKooi
Southwest Biological Science Center
Grand Canyon Monitoring and
Research Center

(a.k.a. Bug Flows): May – August 2019 **Macroinvertebrate Production Flows**







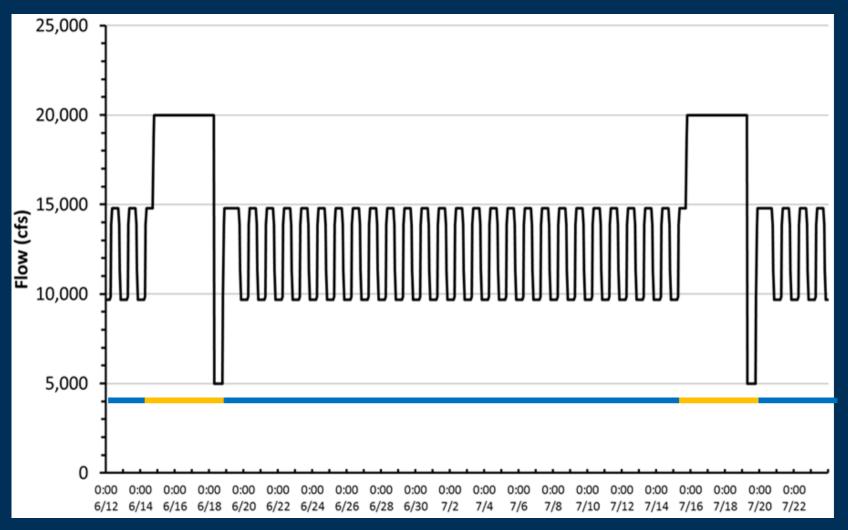
Scheduled Hourly Releases

Bug Flow Experiment Releases

Actual Hourly Releases

..... Lees Ferry Flow

Trout Management Flows (TMF): May – August 2019





Trout Management Flow Design Elements

- 1. Literature review
- 2. Analysis of Glen Canyon bathymetry, stage-discharge relations, and predictions of depth and velocity
- **3.** Mesocosm experiments determine TMF characteristics
- 4. Field experiments rate and extent of colonization
- 5. Addition of trout recruitment and dynamics trip in July
- 6. Economic and sediment loss evaluations





Possible Fall HFEs for 2019

- Fall HFEs
 - Sediment-triggered HFE up to 96 hours
 - Extended-duration HFE up to 192 hours (up to 250 hours if not first test)
- HFE window beginning October 1
 - Accounting period: July 1 to November 30
 - Monitor sand input from Paria River to Marble Canyon
 - Need adequate sediment mass balance in Marble Canyon at beginning of HFE window



LTEMP Process for Experiments

- LTEMP ROD outlines a specific process for planning for and implementing experiments
 - GCDAMP Annual Reporting meeting
 - TWG meeting to discuss possible upcoming experiments
 - Tribal consultation
 - Work with implementation / planning group to develop a consensus recommendation to DOI
 - DOI decision and possible implementation



