

Agenda



- 9:00 – 10:30 AM HAT 1 (Project Operations)
- 10:45 – 12:00 PM HAT 5 (Recreation) and HAT 4 (Project Lands)
- 12:00 PM Lunch (Provided by Alabama Power)
- **1:00 – 2:30 PM HAT 3 (Fish and Wildlife)**
- 2:45 – 3:45 PM HAT 2 (Water Quality and Use)





HAT 3

Fish and Wildlife

- **Threatened and Endangered Species Study Plan**
- **Tallapoosa River Fisheries Study Plan – UPDATED FROM JUNE 1 PAD**
- **Tallapoosa River Instream Flow Study Plan - NEW**



Safety Moment



In case of an emergency.....

- Designee will contact 911
- Exit locations
- Designated meeting area
- Location of AED



Role of Harris Action Teams



- Provides opportunity to participate in resource-specific teams
 - Get involved with issues important to you
 - Meet other stakeholders & understand their interests in the resources at Harris
- Provide technical expertise
- Review and comment on study plans, study reports
- You may be involved in more than 1 HAT



Threatened & Endangered Species – HAT 3



Goal

Determine if listed species occur within the Project Boundary/Project Area and effects of project operations on those species

Geographic Scope

Harris Project Boundary (including Skyline); Tallapoosa River from Harris Dam to Horseshoe Bend

Methods

- Compile list of species and critical habitats
- Review species occurrence and habitat data
- Desktop assessment of potential for occurrence
- Perform field surveys (if necessary)

Threatened & Endangered Species – HAT 3



TASK	2019				2020				2021			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Compile list of species and critical habitats		■										
Review species occurrence and habitat data			■	■								
Desktop assessment of potential for occurrence				■	■							
Initial Study Report						■						
Field Surveys (if necessary)							■	■	■			
Develop PM&E Measures							■	■	■	■		
Final Study Report										■		

Tallapoosa River Fisheries Study – HAT 3



Background

- Green Plan pulses implemented in 2005
- 2005 – 2017 Studies
- Water temperatures may be limiting some species

Goal

Determine how project operations may be affecting the downstream fish community

Geographic Scope

Tallapoosa River from Harris Dam to Horseshoe Bend

Investigators

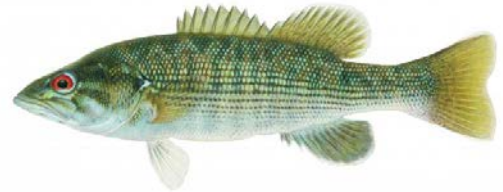
Drs. DeVries and Wright, Auburn University

Target Species

Tallapoosa Bass (*Micropterus tallapoosae*)

Channel Catfish (*Ictalurus punctatus*)

Redbreast Sunfish (*Lepomis auritus*)

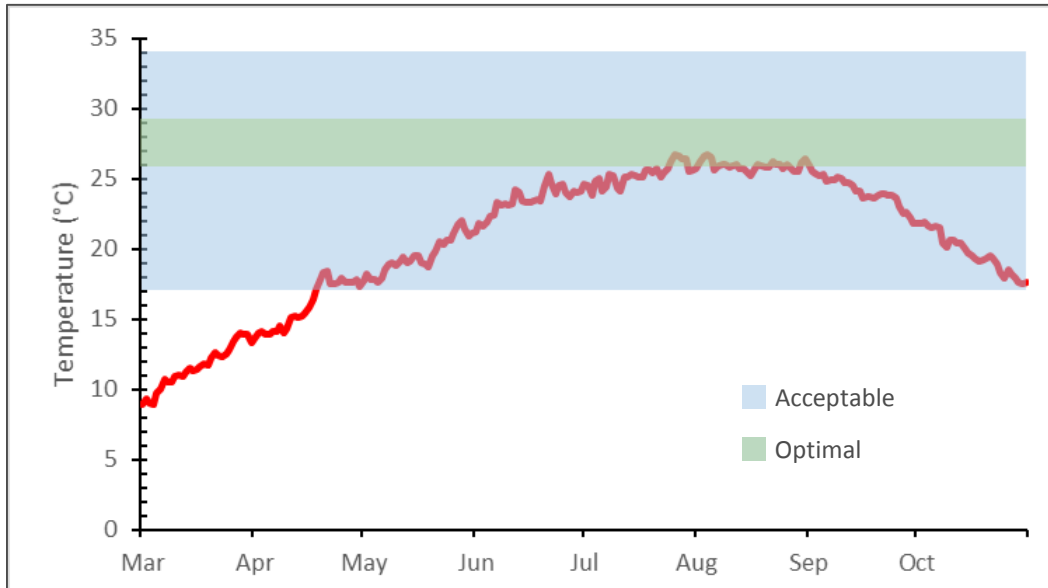


Tallapoosa River Fisheries Study – HAT 3



Methods

1. Analysis of temperature requirements



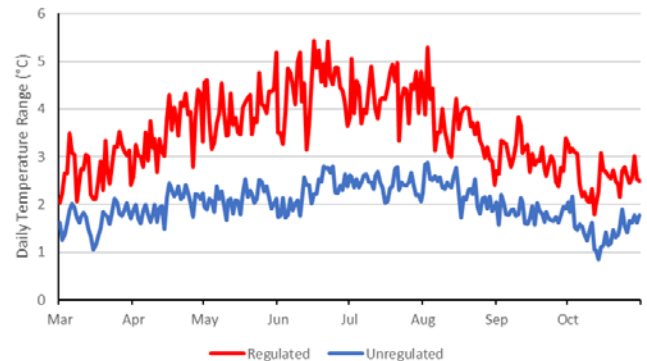
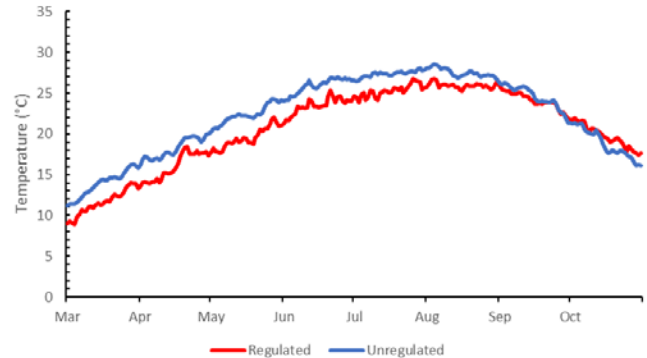
Example of Adult Fish Growth

Tallapoosa River Fisheries Study – HAT 3



Methods

1. Analysis of temperature requirements
2. Analysis of water temperature data



Example of water temperature output

Tallapoosa River Fisheries Study – HAT 3

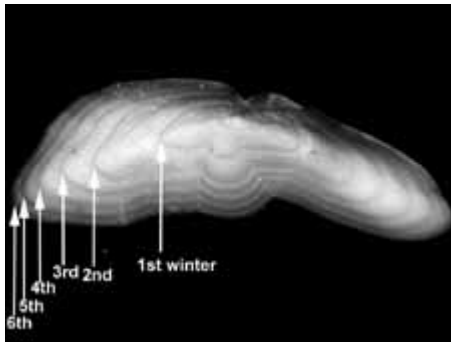


Methods

1. Analysis of temperature requirements
2. Analysis of water temperature data
3. Fish community surveys
 1. Electrofishing
 2. EMG tagging
 3. Age & growth analysis
 4. Diet analysis



Electrofishing



Fish Otolith for Age Analysis



EMG Tagging

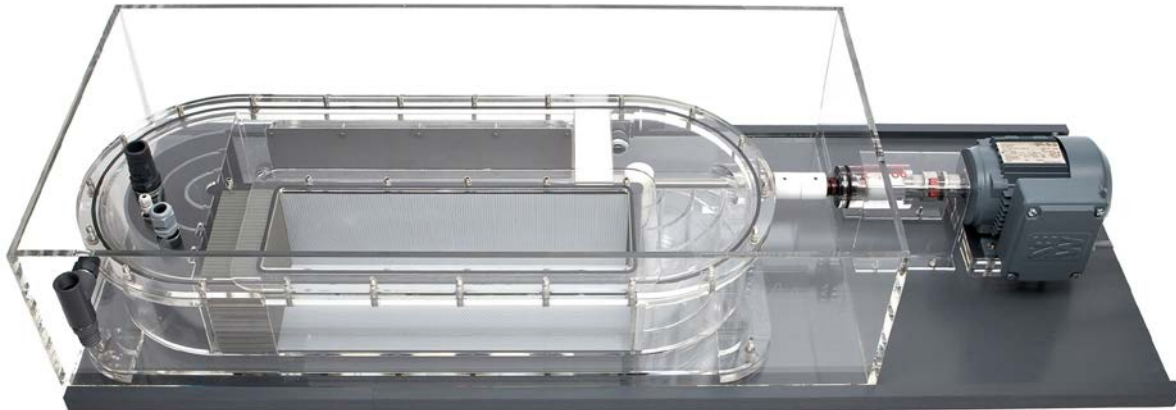
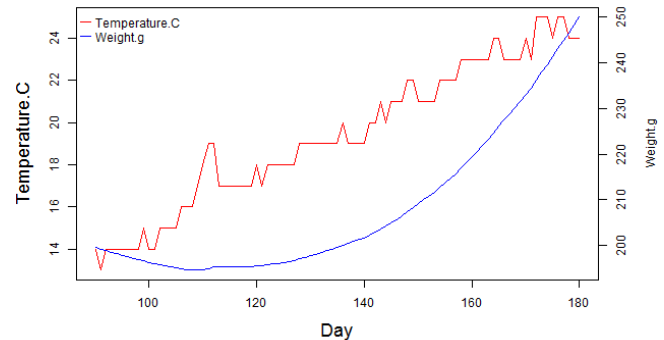
Tallapoosa River Fisheries Study – HAT 3



Methods

1. Analysis of temperature requirements
2. Analysis of water temperature data
3. Fish community surveys
 1. Electrofishing
 2. EMG tagging
 3. Age & growth analysis
 4. Diet analysis
4. Laboratory testing and bioenergetics modeling

Sample Bioenergetics Model Output



Example of a Swimming Respirometer

Tallapoosa River Fisheries Study – HAT 3



TASK	2018				2019				2020				2021			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Analysis of temperature requirements			■	■												
Analysis of water temperature data			■	■												
HAT Review of temperature requirements & data					■											
Fish community surveys			■	■	■	■	■	■	■	■						
Laboratory testing and bioenergetics modeling						■	■	■	■	■	■					
Initial Study Report										■						
Develop PM&E Measures										■	■	■	■	■	■	
Final Study Report															■	

Tallapoosa River Instream Flow Study – HAT 3



Background

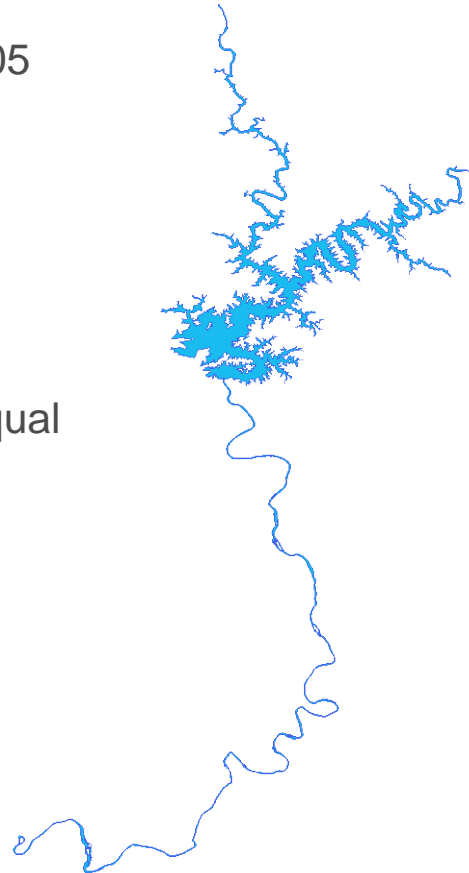
- Green Plan pulses implemented in 2005
- 2005 – 2017 studies of fish, but no existing info on habitat

Goal

Determine the amount of wetted habitat available due to Green Plan operations versus a continuous minimum flow of equal volume

Geographic Scope

Tallapoosa River from Harris Dam to Horseshoe Bend

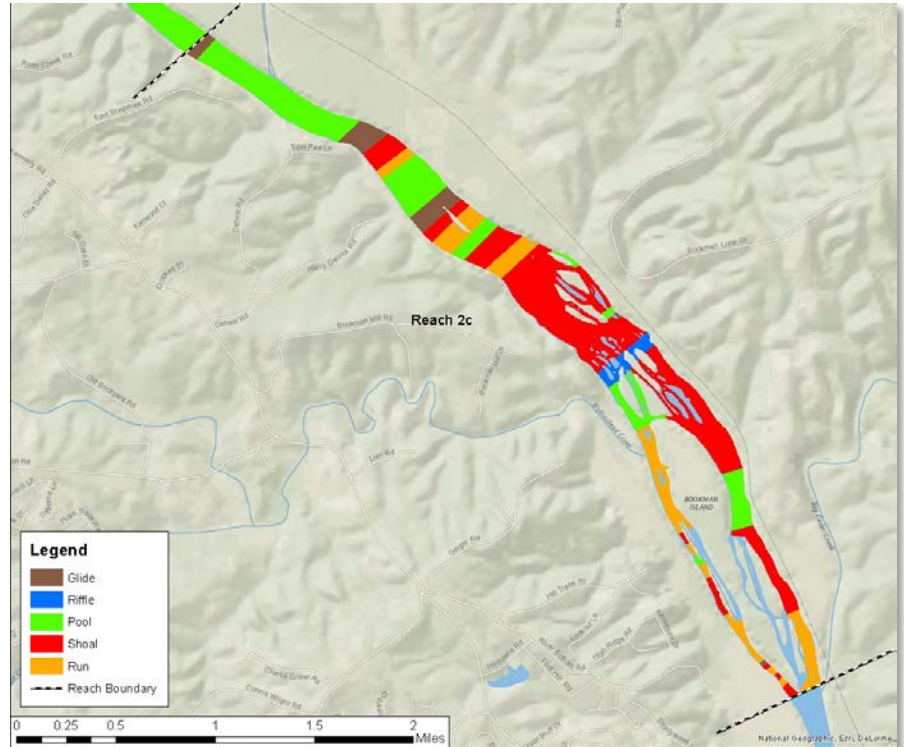


Tallapoosa River Instream Flow Study – HAT 3



Methods

1. Mesohabitat analysis



Example of mesohabitat analysis – Broad River, SC

Tallapoosa River Instream Flow Study – HAT 3



Methods

1. Mesohabitat analysis
2. Field surveys and water level data collection



Example of river surveys



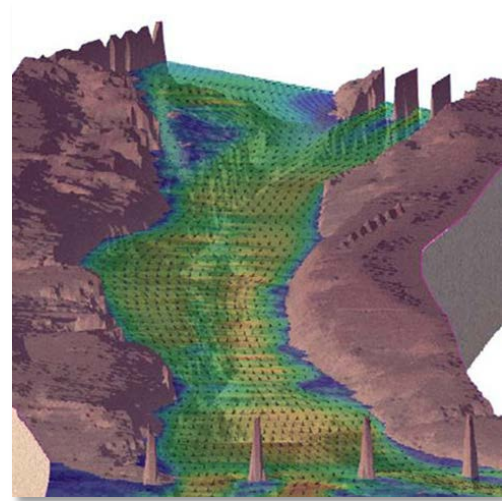
Example Water Level Logger

Tallapoosa River Instream Flow Study – HAT 3

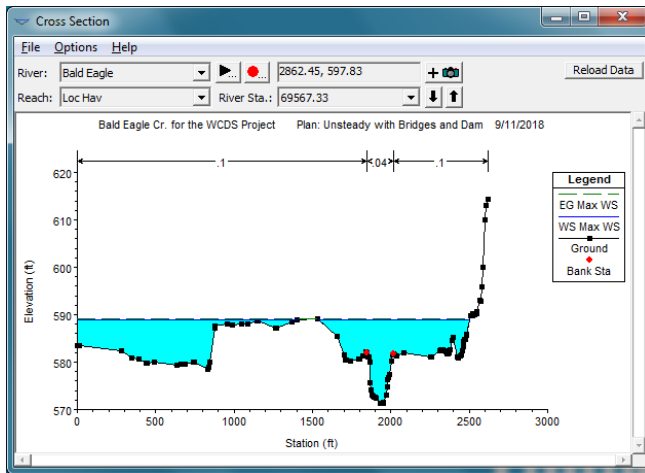


Methods

1. Mesohabitat analysis
2. Field surveys and water level data collection
3. Hydraulic modeling



Sample hydraulic model outputs



Tallapoosa River Instream Flow Study – HAT 3



TASK	2018				2019				2020				2021			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Mesohabitat analysis						■	■									
Field surveys and water level data collection						■	■	■	■	■	■	■				
Hydraulic modeling									■	■	■	■	■			
Initial Study Report										■						
Develop PM&E Measures										■	■	■	■	■		
Final Study Report														■		

Next Steps



October 1, 2018: Stakeholders file written comments on PAD, SD1 and any study requests (or comments on studies) with FERC

October 5-20: Alabama Power addresses comments on study plans

October 20-30: Potential HAT meetings (via conference call) to resolve comments

November 13, 2018: Alabama Power files study plans

December 13, 2018: Study Plan Meeting

