

Appendix F
HEC-ResSim Technical Modeling Workshop
Announcement and Agenda

September 30 to October 2, 2008

To All,

The U.S. Army Corps of Engineers, Mobile District, in partnership with the Hydrologic Engineering Center (HEC) is developing ResSim Models for the Alabama-Coosa-Tallapoosa (ACT) and the Apalachicola-Chattahoochee-Flint (ACF) River Basins. These models will support the ACT and ACF Water Control Manual updates. Previous HEC-5 models for the basins have been converted to the HEC-ResSim modeling software. Additionally, models representing the current operations are under development. The migration of HEC-5 modeling to HEC-ResSim represents the modernization of reservoir modeling tools and methods. In the spirit of transparency and cooperation, the Mobile District will demonstrate the new models to interested stakeholders by hosting a technical modeling workshop. The HEC-ResSim models and data will also be available to those who are interested.

The workshop is scheduled for September 30 - October 2 at the Jim Woodruff Dam Resource Manager's office, located at 2382 Booster Club Road, Chattahoochee, Florida 32324.

All Stakeholders are invited to participate virtually in the opening session of the workshop (8a – 11a, Eastern) which includes the Introduction, Background and Overview of the ResSim models. This session will be available to all stakeholders through WebEx and teleconference lines. More information will be made available on the logistics of participating virtually at a later date. If you are interested in participating in the opening session of the workshop, please let me know so that we can make appropriate arrangements.

Due to space constraints, attendance is limited to 20-25 people. The invited participants will consist of attendees from previous technical modeling meetings, including representatives from State & Federal agencies, private dam owners (cooperator) and a limited number of stakeholders. The group should include a mixture of engineers, managers, and other professionals, with the understanding that this will be a technical session demonstrating the new HEC-ResSim modeling tools.

The workshop will be conducted 8am – 5 pm EDT; Tuesday, Wednesday, and Thursday. This allows for weekday travel on Monday and Friday for distant participants.

Based on the limited seating, the following have been allotted space to participate:

Cooperator, State and Federal Agencies (Limited to 2 seats each)

- Alabama Office of Water Resources
- Northwest Florida Water Management District

- Georgia Environmental Protection Division
- Alabama Power Company
- Georgia Power Company
- US Fish and Wildlife Service
- Southeast Power Administration
- US Environmental Protection Agency

Non-Government Stakeholders (limited to 1 seat)

- Atlanta Regional Commission
- Lake Lanier Association
- Middle Chattahoochee Coalition
- Lake Watch of Lake Martin
- Tri Rivers Waterway Development Assoc

Attendees are required to bring their own laptop computers and be prepared to install the HEC-ResSim software and copies of reservoir models. The computers should be less than three years old, have 20 GB of free disk space, and have Windows XP or Vista with at least 2GB of memory (although XP computers might perform adequately with only 1GB of memory).

Each invited entity listed above should submit individual names to James Hathorn by calling 251-690-2735 or e-mail to james.e.hathorn.jr@usace.army.mil not later than September 19, 2008. Additional information regarding the facility, lodging, restaurants and attire will be provided to participants as the names are submitted.

Details for the virtual session will be provided in a follow-up announcement.

AGENDA

ALABAMA-COOSA-TALLAPOOSA (ACT) RIVER BASIN

AND

APALACHICOLA-FLINT-CHATTAHOOCHEE (ACF) RIVER BASIN

HEC-ResSim WORKSHOP

Tuesday - 30 September 08 (Also available virtually)

- **Introduction:**
 - Welcome the group members, establish the District's priorities, define the purpose of the workshop, and explain what the evolution in the District's modeling tools means to the stakeholders.
- **Background:**
 - A discussion of the history of reservoir model development for the ACT and ACF basins, and transition to HEC-ResSim software.
- **Introduction to ResSim:**
 - Evolution from HEC5 to ResSim, successful application for other studies, what makes HEC-ResSim unique, HEC technical support and product development.
- **Overview of ResSim Program part 1:**
 - Explain program modules, physical constraints, rules, how ResSim "thinks",

(End of Virtual Availability)

- **Lunch**

Overview of ResSim Program part 2:

- Discuss types of results, system operations, and scripting.
- .
 - **Installfest:**
 - Group install HEC-ResSim on their computers, and load the sample models for the ACT and ACF watersheds.
 - **Field Trip:**
 - Tour of Jim Woodruff Lock and Dam

Wednesday - 1 October 08

Apalachicola-Chattahoochee-Flint: Mobile and HEC lead the group through the most significant features of the ACF model, explaining the physical assumptions used representing the system, the comparison to HEC5 models for certain definitions, “flow-through” reservoirs, the interactions among projects, the power operations, the implementation of “basin inflow” rules and scripts, the features and relevance of HEC-DSS to HEC-ResSim, customized ACF user plots and tables, etc.

Thursday - 2 October 08

Alabama-Coosa-Tallapoosa: Mobile and HEC lead the group through the most significant features of the ACT model, explaining the physical assumptions used representing the system, the comparison to HEC5 models for certain definitions (particularly Carter, Carter’s Pumpback, Martin brothers, the diverted outlet at Jordan Bouldin, the combined Jordan-Bouldin-Thurlow (JBT) Goal, the interactions among projects, the power operations, the parallel operations, the pumpback operations, the features and relevance of HEC-DSS to HEC-ResSim, customized ACT user plots and tables, etc.

ACT and ACF HEC-ResSim Workshop Participants

30 Sep - 2 Oct 2008

Jim Woodruff Lock & Dam

Chattahoochee, FL

Name	Office	Phone #	Email
Christy Nix	Alabama Power	205-257-4437	cmnix@southernco.com
Stacey Graham	Tri Rivers	205-257-6736	sgraham@southernco.com
Scott Fant	Alabama Power	205-257-6750	sfant@southernco.com
Laurie De Rosa	Columbus Water Works, MWV (HydroQual)	201-529-5151 x7199	lderosa@hydroqual.com
Jonathan Musser	U.S.G.S.	770-209-3029	jwmusser@usgs.gov
Buddy Bilbrey	Troy University	334-808-6205	jbilbrey@troy.edu
Doug Otto	Corps of Engineers	251-690-2709	douglas.c.otto@usace.army.mil
Pete Taylor	Corps of Engineers	251-690-2513	peter.f.taylor@usace.army.mil
Joan Klipsch	Corps of Engineers/HEC	530-756-1104	joan.d.klipsch@usace.army.mil
Richard Hayes	David Ford Consulting Engineers/HEC	530-758-2375	randkhayes@sbcglobal.net
James Hathorn	Corps of Engineers	251-690-2735	james.e.hathorn.jr@usace.army.mil
Matt McPherson	Corps of Engineers/HEC	530-756-1104	matthew.m.mcpherson@usace.army.mil
Jonas White	Corps of Engineers	251-690-2243	jonas.white@usace.army.mil
Marilyn Hurst	Corps of Engineers/HEC	530-756-1104	marilyn.b.hurst@usace.army.mil
Stephen Blanton	ENTRIX	503-312-9839	sblanton@entrix.com
Paul Leonard	ENTRIX	404-229-1831	pleonard@entrix.com
Dow Johnston	State of AL/OWR	334-242-4989	dow.johnston@adeca.alabama.gov
Wei Zeng	Georgia EPD	404-463-2883	wei_zeng@dnr.state.ga.us
Steve Leitman	USFWS	850-627-3527	leitman@tds.net
Tom Littlepage	Alabama Office of Water Resources	334-242-5697	tom.littlepage@adeca.alabama.gov
Owen McKeon	Arcadis	770-431-8666 x534	owen.mckeon@arcadis-us.com
Feng Jiang	Georgia EPD	404-463-6198	feng_jiang@dnr.state.ga.us
Inchul Kim	Georgia EPD	404-463-2088	inchul_kim@dnr.state.ga.us
Andy Ashely	Corps of Engineers	251-690-3385	jonathan.g.ashley2@usace.army.mil
Courtenay O'Mara	Georgia Power	404-506-7219	cromara@southernco.com
Fred Cox	Georgia Power	404-506-7275	flcox@southernco.com
Yi Zhang	Georgia EPD	404-657-8807	yi_zhang@dnr.state.ga.us
Jerrick Saquibal	NWFWMD	850-539-5999	jerrick.saquibal@nwfwmd.state.fl.us
Carlos Colon	NWFWMD	850-539-5999	carlos.colon@nwfwmd.state.fl.us
George McMahon	Arcadis	770-431-8666	gcmcmahon@arcadis-us.com
Eric Prowell	U.S.F.W.S.	706-613-9493	eric_prowell@fws.gov
Jerry Ziewitz	U.S.F.W.S.	850-769-0552	jerry_ziewitz@fws.gov
Douglas Spencer	SEPA	706-213-3855	douglass@sepa.doe.gov
David Elliott	C. H. Guernsey	404-626-4212	david.elliott@chguernsey.com
Memphis Vaughan	Corps of Engineers	229-662-2001	memphis.vaughan.jr@usace.army.mil

May 3 to 5, 2011

The U.S. Corps of Engineers, Mobile District (COE), invites the public to participate in a Reservoir Simulation (ResSim) Overview for the Apalachicola-Chattahoochee-Flint (ACF) and Alabama-Coosa-Tallapoosa (ACT) Basins on 3-5 May 2011 in the Mobile area. The COE modeling team will present the ResSim Baseline (Existing Conditions) model for the ACT and ACF Basins, demonstrate the model, and discuss assumptions.

The overview is intended for individuals experienced in developing ResSim models. There is no charge for participation. Due to facility size limitations, participation is limited to a maximum of 70 participants and 4 participants from any single organization. Please register using the following link:

Registration Information:

Name
Affiliation
Address
Telephone
E-mail Address

Response:

Your registration has been received. The ResSim Overview is scheduled:

May 3-5, 2011
8:30 a.m. until 4:30 p.m.
Building XXX
Five Rivers Delta Center
30945 Five Rivers Boulevard
Spanish Fort, Alabama 36527
Telephone: 251-625-0814
Website: www.outdooralabama.com/outdoor-adventures/5rivers/

Participants will need to provide a laptop computer for their own use.

HOME | NEWSROOM | HISTORY | WHO WE ARE | CONTACT US | SEARCH

The U.S. Corps of Engineers, Mobile District invites the public to participate in a Reservoir Simulation (ResSim) Overview for the Apalachicola-Chattahoochee-Flint (ACF) and Alabama-Coosa-Tallapoosa (ACT) Basins on 3-5 May 2011 in Spanish Fort, Alabama (see directions below). USACE's modeling team will present the ResSim Baseline (Existing Conditions) model for the ACF and ACT Basins, demonstrate the model, and discuss assumptions.

The overview is intended for individuals experienced in developing ResSim models. There is no charge for participation. Due to facility size limitations, participation is limited to a maximum of 70 participants and 4 participants from any single organization. [Statement of Purpose](#) USACE RSC 2011-CESAM-001

Please register using the following form.

Name:	<input type="text"/>
eMail Address:	<input type="text"/>
<input type="button" value="Submit"/>	<input type="button" value="Reset"/>

DIRECTIONS TO MEETING SITE:

FROM PENSACOLA:

I10 West, take Exit 35 (Daphne-Fairhope, US 98)
 From the exit go straight through the traffic signal at the intersection with US 98.
 Merge onto US 90/98, also called Battleship Parkway.
 Cross over Blakeley River Bridge, continue for approximately 1/4 mile.
 Turn right onto 5 Rivers Blvd, directly across from Meaher State Park.
 Follow the road and signs into the property.

FROM MOBILE/MISSISSIPPI

I10 East through the George Wallace Tunnel.
 Take the immediate exit after the Tunnel, Exit 27 onto Battleship Parkway (US 90E).
 Go approximately 1/2 mile past the Blue Gill Restaurant and turn left onto Five Rivers Blvd, which is directly across the road from Meaher State Park.
 Follow the road and signs into the property.

FROM BIRMINGHAM/NORTH ALABAMA

I65 South to Exit 31 (HWY 225)
 Follow Hwy 225 to Hwy 31 in Spanish Fort
 Turn Right onto HWY 31/90/98 and go to mile marker 42
 Turn Right onto 5 Rivers Blvd, which is directly across the road from Meaher State Park.
 Follow the road and signs into the property.

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[Information Quality Act](#)

DRAFT AGENDA

ACT ACF RESSIM BASELINE MODEL OVERVIEW 03-05 MAY, 2011 MOBILE, AL

Monday, 02 May

Travel as needed

Tuesday, 03 May

- 0830 BEGIN WORKSHOP
- 0830-0845 Welcome, site orientation and introductions (Taylor)
- 0845-0900 Review agenda, Roles of Participants and Presenters (Taylor)
- 0845-0900 ACT/ACF Basin Manual Update Status (Taylor/Stout/White)
- 0900-1030 Background: (Hathorn)
2008 Workshop
Purpose of Baseline Model
Modeling Team
Critical Yield Analysis
HEC-5Q modeling effort
- 1030-1045 BREAK
- 1045-1200 Unimpaired Flow: (Hathorn)
Status
Assumptions
Diversions
Stated Concerns
- 1200-1300 LUNCH (Pizza pre-order in morning)
- 1300-1500 Unimpaired Flow discussion continued (Hathorn)
Diversions
- 1300-1500 ResSim Software (Klipsch)
Revisions
64-bit version
Future Release
- 1500-1515 BREAK
- 1515-1700 Installation of Software and Watersheds (SAM and HEC)

Wednesday, 04 May

0830-0900 Review and discussion of previous day's issues
0900-1000 ACF Model: Reservoir network data (SAM and HEC)
1000-1015 BREAK
1015-1130 ACF Model: Operations data (SAM and HEC)
1130-1300 LUNCH (Group lunch, local restaurant)
1300-1400 ACF Model: Operations data continue (SAM and HEC)
1400-1500 ACF Model: Routing (SAM and HEC)
1500-1515 BREAK
1515-1615 ACF Model: Output and specialized scripts (HEC)
1615-1700 ACF Model: Preliminary Results (SAM and HEC)

Thursday, 05 May

0830-0900 Review and discussion of previous day's issues
0900-1000 ACT Model: Reservoir network data (SAM and HEC)
1000-1015 BREAK
1015-1130 ACT Model: Operations data (SAM and HEC)
1130-1300 LUNCH (Sub sandwiches on site, pre order in morning)
1300-1400 ACT Model: Operations data continue (SAM and HEC)
1400-1500 ACT Model: Routing (SAM and HEC)
1500-1515 BREAK
1515-1615 ACT Model: Output and specialized scripts (HEC)
1615-1700 ACT Model: Preliminary Results (SAM and HEC)
1700-1715 Closing Remarks
1715 END OVERVIEW

Friday, 06 May

Travel as needed

SIGN IN SHEET

RESSIM OVERVIEW

3-5 MAY 2011

1. Roger Burke Tetra Tech Inc.	16. Morton Reed Columbus Water Works
2. Bob Allen COE	17. Dennis W. Barnett Tetra Tech, Inc.
3. ANDY ASHLEY C.E	18. Steve Lertman
4. David Elliott CH Guernsey + Company	19. Melinda Dirdal Schnabel Engineering
5. Wei Zeng Georgia EPD	20. Stacey Graham Alabama Power
6. Feng Jiang Georgia EPD	21. Fred Cox Southern Company Generation
7. Yi Zhang GA EPD	22. GEORGE MEMPHON ARCADIS US
8. Hailian Liang GA EPD	23. Scott Chodkiewicz USACE
9. Jeffrey Regan GA EPD	24. Christy Nix APC
10. Jerrick Sagrival NWFWRD	25. Ashley Melicar APC
11. Frank Stephens ACFS & Gwinnett County	26. Maurice James Water Resumes Consulting LLC
12. Jonathan Musser USGS	27. Jeremy R. Wyss Tetra Tech
13. Dow Johnston AL OWR	28. Carlos Colon Northwest FL Water Management District
14. TREV GLENN ALA	29. Joan Klipsch USACE - IWR - HEC
15. BRIAN ATKINS ALA. OFFICE OF WATER RESOURCES	30. Jones White USACE
31. Tom Littlepage AL OFC of Water Resources	48. Megan Rivera HydroLogics

SIGN IN SHEET

RESSIM OVERVIEW
3-5 MAY 2011

32. Dæen Randall Hydrologics	49.
33. <i>Don Ross</i>	50.
34. Martin Kistenmacher	51.
35. AKIS GEORGAKAKOS	52.
36. Feng Zhang	53.
37. James Mathis	54.
38. Bailey Crane	55.
39. Renee MURCH, INTERA	56.
40. Patrick Tara, INTERA	57.
41. Guillermo Martinez, INTERA	58.
42. Courtenay O'Mara Southern Company Generation	59.
43.	60.
44.	61.
45.	62.
46.	63.
47.	64.