

## Issue Action Group: E10 Project Releases

### Meeting Notes & Summary: APC Corporate Headquarters January 29, 2002

Finalized 03-13-02

Warrior and Coosa Relicensing Projects Combined

---

#### Meeting Attendees:

##### **IAG Members:**

Stan Cook	ADCNR
Carl Couret	USFWS
Jim Crew	APC
Jim McHugh	ADCNR
Henry Mealing	Kleinschmidt
Jerry Moss	ADCNR
Malcom Pierson	APC
Kelly Schaeffer	Kleinschmidt
Andy Sheppard	APC
Bill Sim	APC

##### **Other Attendees:**

Mike Akridge	James Austin
John Ammons	John Eisenbarth
Keith Floyd	Stephen Gidiere
Ron McKittrick	Jim Moore
Dan Murchison	Jason Moak
Nick Nichols	Christy Nix
John Peconom	Alan Peeples
Tom Sherburne	Michael Sznajderman

#### Action Items

- Prepare and distribute meeting notes and summary to team members.  
Jim Crew Due - February 26, 2002
- Weiss Bypass operations research: flows and gate maneuverability.  
Jim Crew & Andy Sheppard Due - February 26, 2002
- Locate USGS gauge on Terrapin Creek.  
Jim Crew Due - February 26, 2002
- Better Define Strawman Study Plan.  
IAG Members Due - March 13, 2002
- Gather APC information on Smith cold water v. warm water fishery.  
Jim Crew Due - March 13, 2002
- Review and comment on meeting notes and summary.  
IAG Team Members Due - March 13, 2002

#### Meeting Notes

*These notes summarize the major items discussed during the meeting and are not intended to serve as a transcript or analysis of the meeting.*

**Welcome and Review of Last IAG Meeting** - Jim Crew thanked the team members and others in attendance for their continued participation in this IAG's efforts. Before moving on with the agenda, the IAG approved the meeting notes and summary from its last meeting held in November 2001.

## Issue Action Group: E10 Project Releases

### **Meeting Notes & Summary: APC Corporate Headquarters January 29, 2002**

Finalized 03-13-02

**Review of “Strawman”-** At the beginning of the meeting Henry Mealing distributed a “draft Weiss Bypass Strawman.” The “Strawman” is basically a study plan that the IAG will use to study potential project releases in the Weiss bypass, and was written based on requests and comments from IAG members. The study plan includes information from studies previously conducted by Erwin and Stewig on the Weiss Bypass. The study plan also includes information gathered by other IAGs. Since Weiss Lake is at the top of the APC Coosa River system, The IAG agreed to look at it first and proceed downstream in geographical order.

To ensure that everyone was working from the same base knowledge, the IAG reviewed the history and operations of the Weiss Bypass before discussing individual sections of the study plan.

- Back flow effects in the lower bypass - back flows can reach as far upstream as Terrapin Creek,
- Releases from Terrapin Creek - how much, is there a gage located on the Creek?
- Leakage from the dam - quantify,
- The top of the bypass reach is (scoured) lake like while the lower bypass is (silted) more riverine.

#### *Weiss Bypass Flows*

As part of the study plan discussion, the IAG also discussed available flow information. ADCNR informed the IAG that they didn't have any flow information for the Weiss Bypass. Andy Sheppard (APC) was tasked to look into the feasibility of controlling flow into Weiss Bypass through the spillway trash gates as well as gather information on historical flows and existing flows in the system. Carl Couret (USFWS) pointed out that there may be additional TE&S species within the Weiss bypass reach for a total of three TE&S species.

Henry assured the group flow information and data collection will include all IAG members. He also noted that we would coordinate with the Weiss Recreation IAG efforts. The purpose of coordinating with the recreation IAG is to avoid duplication of study efforts in the bypass reach.

#### *Terrapin Creek*

Flows from Terrapin Creek help sustain TE&S species in the bypass reach; however, the exact amount of flow coming from Terrapin Creek and its resulting benefits to the bypass are unknown. APC agreed to find the USGS gauge on Terrapin Creek and report back to the IAG the results of his efforts.

#### *Flow Studies*

The study plan discussions continued onto - how, and when flow studies should be conducted. Some of the issues raised in this discussion include:

- Timing of the studies and availability of water
- Transect and study site decision process
- Water quality issues associated with increased flows into the bypass
- The use of a Delphi approach.

These issues and status of action items from this meeting will be discussed in more detail at the March IAG meeting.

### **Conclusion and Next Meeting**

The next meeting of the E10 IAG will be held on either March 12th or 13th, 2002. APC will send meeting materials (an agenda and work products as well as meeting logistics) to IAG members in advance of the next meeting.

IAG documents and materials are posted on the Internet at [www.southerncompany.com/alpower/hydro](http://www.southerncompany.com/alpower/hydro).

**Issue Action Group: E10 Project Releases**

**Meeting Summary: Sheraton Perimeter Park South Hotel March 13, 2002**

Finalized 05-22-02

**Warrior and Coosa Relicensing Projects Combined**

---

**Meeting Attendees**

**IAG Members:**

Dan Catchings	ADCNR
Stan Cook	ADCNR
Carl Couret	USFWS
Jim Crew	APC
Henry Mealing	Kleinschmidt
Jerry Moss	ADCNR
Malcom Pierson	APC
Andy Sheppard	APC
Bill Sim	APC
Beth Wentzel	Alabama Rivers Alliance

**Other Attendees:**

Mike Akridge	John Ammons
Mike Eubanks	Keith Floyd
Stephen Gidiere	Tom Groce
Ron McKitrick	Jason Moak
David Moore	Jim Moore
Dan Murchison	John Peconom
Alan Peeples	Bert Thaxton
Danny Tignor	Stephanie White

**Action Items**

- Post finalized work plan and January meeting notes on APC's hydro relicensing web page.  
Jason Moak Due - March 22, 2002
- Prepare and distribute meeting notes and summary to IAG members.  
John Peconom & Jim Crew Due - March 29, 2002
- ADCNR & USFWS management goal statements for Weiss Bypass reach.  
Stan Cook & Carl Couret Due - March 29, 2002
- Weiss Bypass transect - field evaluation  
Couret, Catchings, Pierson, Sim, and Mealing Due - April 2 & 3, 2002
- Conference Call to discuss Weiss bypass transects, calibration flows, and data collection.  
IAG Team Members Due - April 17 or 18, 2002

## Issue Action Group: E10 Project Releases

### **Meeting Summary: Sheraton Perimeter Park South Hotel March 13, 2002**

Finalized 05-22-02

- Continue to develop model and prepare outputs for IAG review.  
Andy Shepherd Due – May 21 or 22, 2002

### **Meeting Notes**

*These notes summarize the major items discussed during the meeting and are not intended to be a transcript or analysis of the meeting.*

**Introductions** – Jim Crew and Henry Mealing welcomed the group and thanked them for their ongoing participation in this process. After distributing the agenda, Henry informed the group that a computer with Internet access was available for a tutorial on the APC relicensing web site. Henry noted that the IAG's name had been corrected from "Downstream Flows" to "Project Releases" in order to maintain consistency with materials produced during the initial meetings of the relicensing process.

The January meeting minutes were approved and will be posted to APC's hydro relicensing web site.

### **Weiss Bypass Flow Study Plan**

Andy Sheppard presented several items that were identified at the January meeting.

APC proposed to use the USACOE HEC-RAS model for analyzing flows in the Weiss Bypass. Andy presented a graphic demonstrating output from the flow model based on ten bypass transects collected 50 years ago. A preliminary analysis of this "old data" indicates that water surface elevations within the bypass reach increase approximately one foot per 100 cfs. Andy noted that this is a very rough estimate based on a 50-yr old un-calibrated model.

To update the HEC-RAS model, APC has recently re-surveyed the old transects and added five additional transects to the HEC-RAS model (total of 15 transects). Transect elevation profiles that extend up into the floodplain of the bypass were collected during the survey. APC plans to collect water surface elevation (at a defined measured flow) for calibration of the model. Water velocity profile data will also be collected at particular transects during the calibration tests. IAG members will provide input on flows and transects for calibration measurements after field review of the transect locations (scheduled for 1<sup>st</sup> week of April).

### *Biological Considerations*

IAG members expressed some concern that transects may not be located in the most appropriate areas of the bypass reach since the older transects were originally based on hydraulic control points. There was extensive discussion on whether or not these transects would accurately represent the range of physical habitats available in the bypass. Malcolm Pierson noted that the transects appeared to match up well with recent biological data collection sites and that these transects should be representative of the habitat available. The IAG agreed that habitat information is a crucial part of the bypass flow evaluations and requested that transects be representative of the range of available habitat in the bypass. IAG members (Malcolm, Carl,

## Issue Action Group: E10 Project Releases

### **Meeting Summary: Sheraton Perimeter Park South Hotel March 13, 2002**

Finalized 05-22-02

Dan, Bill, and Henry) will review these transects to ensure that they are properly placed to collect accurate information.

#### *Historical Flows*

Using pre-project USGS gauge data, APC prepared a partial profile of historic flows through the Weiss Bypass and in Terrapin Creek.

Dan Catchings also provided a handout summarizing Coosa River flows at the Leesburg gauge from 1928 to 1958.

The Mike Eubanks noted that the USACOE has a report showing pre and post-project flow data (unimpaired flow data set). Andy will coordinate with the Corps to examine and potentially include this data in this IAG's efforts.

#### *Flushing Flows*

Andy Sheppard noted that, on average, the Weiss spillway is operated 1-2 times a year for about a 3-day duration due to flood events. As a result of these spillway operations, the bypass receives periodic "flushing flows" of several thousand cfs annually.

#### *Water Quality*

The water quality of proposed bypass flows will need to be examined to ensure that it will not create adverse impacts. The USFWS agreed to provide temperature goals for the bypass. Bill Sim will pull together the water quality information that APC has for the Weiss bypass.

#### *Endangered Species*

The protection and enhancement of existing threatened and endangered populations of mussel species present in the Weiss bypass will be a major factor in the flow evaluation. Any increase in flows should improve and expand physical habitat and enhance existing mussel populations.

#### *Terrapin Creek*

The IAG noted that any changes to the minimum flow in the Weiss bypass might result in changes to the fishery in Terrapin Creek. This should be considered when making observations and recommendations.

#### *Field Calibrations*

After field review of the transects, APC will commence with calibration tests. The trash sluice gate is predicted to release a maximum flow of 1200 cfs but must be field calibrated over a range of flows. The HEC-RAS model must be calibrated by collecting water surface elevations at known flows. Once calibrated, the Model will be able to generate wetted perimeter information for flows up to and exceeding 1200 cfs. APC initially recommended calibration flows of 100 cfs and 500 cfs for the trash gate and the Model. The ADCNR and USFWS recommended the inclusion of a higher calibration flow of 1000 cfs. Other group members suggested that three calibration flows might further increase the accuracy of the model. No final decision was agreed upon.

## **Issue Action Group: E10 Project Releases**

### **Meeting Summary: Sheraton Perimeter Park South Hotel March 13, 2002**

Finalized 05-22-02

Additional information will also need to be collected at some point in the process: substrate information and velocity profiles. However, it may not be necessary to collect these pieces of information at all the transects since some transects may share many of the same characteristics. Several IAG members expressed an interest in observing the calibration flows and the subsequent data collection. Selection of final transects, data collection, and flow calibration will be coordinated with IAG members.

IAG members expressed several views related to flows in the bypass reach including:

- Concerns over bypass “back flow” during generation
- Increased sediment deposition in the bypass with flow changes
- Any additional flows into the bypass should improve the existing baseline conditions
- Environmental, Economic, and Hydraulic information should be used to make decisions

ADCNR and USFWS noted that flows as high as 20 to 25% of the pre-project condition should be investigated to improve habitat in the Weiss Bypass. ADCNR would also like to collect habitat information when the model flows are calibrated. Additionally, ADCNR requested that the model include habitat projections.

#### *Management Goals*

The IAG asked the ADCNR and USFWS to describe their general management goals for the Weiss Bypass. Both agencies will develop these statements for the May meetings.

#### **Next Steps**

- Finish setting up the HEC-RAS model
- Field review of transects
- Calibrate the HEC-RAS model
- Review model output
- Select “observation flows”
- IAG members observe flows and collect flow and habitat data.
- Discuss observations, data collected, model outputs, and make decisions (recommendations and/or additional analysis).

#### **Conclusion**

The next meeting of the E10 IAG will be held on either May 20th or 21st, 2002. APC will send meeting materials including an agenda and work products as well as meeting logistics to IAG members in advance of the next meeting.

IAG documents and materials are posted on the Internet at [www.southerncompany.com/alpower/hydro](http://www.southerncompany.com/alpower/hydro).

**Issue Action Group: E10 Project Releases**

**Meeting Summary: Lay Lake 4H Center May 22, 2002**

Draft 06-05-02

Warrior and Coosa Relicensing Projects Combined

---

**Meeting Attendees**

**IAG Members:**

Jim Crew	APC (Chairperson)	Kelly Schaeffer	Kleinschmidt (Facilitator)
Dan Catchings	ADCNR	Stan Cook	ADCNR
Carl Couret	USFWS	Dow Johnston	ADECA OWR
Henry Mealing	Kleinschmidt	Jerry Moss	ADCNR
Malcom Pierson	APC	Bill Sim	APC
Andy Sheppard	APC		

**Other Attendees:**

Mike Akridge	Bob Allen	Cammie Ashmore
David Brock	Elrand Denson	Mike Eubanks
Keith Floyd	Jeff Garner	Steve Kartalia
Amy McDonald	Jim McHugh	Diana McLemore
Ashley McVicar	Jason Moak	John Peconom
Alan Peeples	Jason Redmond	Isabella Trussell

**Action Items**

- Post finalized March 13, 2002 meeting notes on APC's hydro relicensing web page.  
Jason Moak Due - June 7, 2002
- Prepare and distribute meeting summary for IAG members.  
John Peconom & Jim Crew Due - June 7, 2002
- Add Jeff Garner's (ADCNR) contact information to the stakeholder database.  
Jim Crew Due - June 7, 2002
- Schedule June sub-group IAG meeting and distribute agenda.  
Jim Crew Due - June 12, 2002
- USFWS to provide written description of management goals for the Weiss Bypass area.  
Carl Couret Due - June 14, 2002
- Calibrate HEC-RAS model – steady state.  
Ashley McVicar Due - June 21, 2002
- Calibrate HEC-RAS model – unsteady state  
Ashley McVicar Due - July, 2002

## Issue Action Group: E10 Project Releases

### Meeting Summary: Lay Lake 4H Center May 22, 2002

Draft 06-05-02

- Begin preparing model outputs.  
Ashley McVicar & Bill Dykes Due - July 1, 2002

### Observations & Agreements

1. The current Weiss Bypass study transects are representative of habitat types available in the bypass except for T5 and T9 (which are hydraulic control transects).
2. The IAG agreed that calibration flows of 50 and 800-cfs would be appropriate to calibrate the HEC-RAS model.
3. APC will use data collected from the calibration flows to calibrate its HEC-RAS model by the end of June so other flows can be modeled within the Weiss Bypass Reach.
4. After calibration of the steady state HEC-RAS model, a sub-IAG (APC, ADCNR, USFWS, and Kleinschmidt) will meet to discuss the results, determine potential flows to run through the calibrated model.
5. The sub-IAG will also develop objectives associated with ADCNR's Draft Management Goal statement for the Weiss Bypass.

### Meeting Notes

*These notes summarize the major items discussed during the meeting and are not intended to be a verbatim transcript or analysis of the meeting.*

### **Introductions & Old Business**

Jim Crew and Kelly Schaeffer welcomed all those in attendance and thanked them for their continued participation in this relicensing process.

Kelly confirmed that IAG members have successfully been able to view agendas, notes and other documents sent via email and that this practice would continue unless a participant specifically requested an alternative means of correspondence.

The IAG approved the previous meeting notes, dated March 13, 2002. Kelly then introduced the goals for this meeting:

- Agreement that all habitat types are represented by the existing 15 Weiss Bypass transects
- Agreement on HEC-RAS calibration flows of 50 & 800-cfs
- Discuss agency management goals
- Select "habitat transects" for observation flows.
- Discuss observation flow collections – timing, logistics, etc.

**Meeting Summary: Lay Lake 4H Center May 22, 2002**

Draft 06-05-02

**Field Trip Report**

The Weiss Bypass Reach field trip notes from April 25, 2002 were distributed to IAG members for review and are attached to this document as a reference tool. Henry, Bill, Dan, Carl, and Malcolm described the field observations for May 13, 2002 and May 20, 2002 during the meeting.

*Study Transects*

The IAG briefly discussed the location of transects within the Weiss Bypass (15) and Terrapin Creek (4). The IAG agreed (based on observations by APC, Kleinschmidt, ADCNR and the USFWS) that the existing transects represent all of the various habitat types available in the bypass, with the exception of T5 and T9 (which are hydraulic control transects).

Fish surveys have been performed at various transect locations throughout the bypass. Previous mussel surveys have identified the presence of mussels in the vicinity and downstream of Terrapin Creek (transects T6, T7, T8, and T9). The reports of these surveys were previously distributed to the IAG and a list of collected aquatic species in the bypass is listed in the Weiss Bypass Flow Study Plan.

*Calibration Flows*

To calibrate the Weiss Bypass HEC-RAS model, flows of 51-cfs (low flow – May 13<sup>th</sup>) and 809-cfs (high flow – May 20<sup>th</sup>) were released through the bypass. During both test events, flows were released via the 16-ft trashgate beginning on Saturday afternoon and continuing through Monday afternoon. On each Monday, calibration measurements and observations were made. Since this was a steady state calibration, no generation at Weiss Dam was performed during testing. Water surface elevations were measured by APC survey crews at each transect, and USGS field crews measured the stream flow at T1, T7, and T12. General field observations were performed by APC, ADCNR, USFWS, and Kleinschmidt and included the collection of depths, velocities, dissolved oxygen (DO), and general substrate types at selected sites in the bypass. Water quality information from both flows will be included in the upcoming water quality report being prepared by APC.

There were several notable observations made during the two sampling events.

- The entire length of the bypass was boatable at both the low and high flows.
- The primary substrate type from the spillway down to T11 is gravel.
- The current frequency, level, and duration of flood events are apparently doing a good job of flushing silt from the upper reaches of the bypass.
- Transects T5 and T9 are hydraulic control points, not habitat transects.
- The area with greatest potential for habitat improvement through increased flows is located upstream of Terrapin Creek (T1 to T6).

## Issue Action Group: E10 Project Releases

### Meeting Summary: Lay Lake 4H Center May 22, 2002

Draft 06-05-02

- Transects #1, #2 or #3, #4, #6, #7 and #8 were suggested as potential habitat observation transects.
- There are several water withdrawal sites (for agricultural use) located along the bypass, but no active pumping was observed during either field event.

#### Flow Observations

Bill Sim presented several MS PowerPoint slides, pictures, videos and MS Excel spreadsheets summarizing observations in the Weiss Bypass during both low and high flows. This information will be consolidated and presented as appropriate in the Weiss Bypass Flow Report. On May 13, 2002 the trash gate was raised three inches and a measured flow of 51-cfs was released into the Weiss Bypass. USGS measurements calculated a combined flow (Terrapin Creek and Weiss Bypass) of 347-cfs at T7. USGS flow measurement at T12 was 155-cfs, which is a loss of almost 200-cfs in flow. Several explanations were proposed to account for the flow reduction:

- strong winds blowing up the river may have reduced the accuracy of flow measurements
- there may be some ground water recharge occurring in the lower section of the bypass

A DO measurement below 4.0 mg/l was also observed on the upper transects during the low flow. This may be attributed to persistent stratification at low flows and/or the natural morning DO sag.

On May 19, 2002 the trash gate was raised three feet and a measured flow of 809-cfs was released into the Weiss Bypass. USGS measurements calculated a combined flow (Terrapin Creek and Weiss Bypass) of 1030-cfs at T7. USGS flow measurements at T12 was 943-cfs, which is a loss of almost 90-cfs in flow. As with the low flow the same reasons for this difference were proposed. However, it was noted that the discrepancy (10%) noted during the “high flow” release is within the USGS acceptable margin of measurement error.

No DO measurements below 4.0 mg/l were measured during the high flow event.

#### **HEC-RAS Model**

The Weiss Bypass Reach HEC-RAS model is currently being calibrated from data collected at low and high flows. When calibrated, the HEC-RAS model will provide water surface elevation, water depth, average velocity (both center and side velocities), and wetted perimeter at each transect for each flow of interest. ADCNR noted that in order to meet their goals, biological factors will need to be considered and that this model may be limited in its application for biological analyses. The group agreed that combined with fieldwork at key transects, the model should provide the necessary information to assist the IAG with discussions and decisions for flow release options for the Weiss Bypass.

## **Issue Action Group: E10 Project Releases**

### **Meeting Summary: Lay Lake 4H Center May 22, 2002**

Draft 06-05-02

#### **ADCNR's Draft Weiss Bypass Reach Management Goal**

As requested at the last IAG meeting, Stan Cook provided a draft statement of the ADCNR general management goals for the Weiss Bypass area. A copy of the draft management goal is attached to these meeting notes. Stan reviewed the goal statement, which stimulated a lot of discussion. The main points of this discussion included:

- Seasonality of flows in the bypass
- Adaptive management
- Using Terrapin Creek as a reference for flow patterns
- Building in Flood and drought contingencies to the plan
- Building a plan that mimics a natural river system

Stan told the group that this was a working draft and that the objectives necessary to measure its success have not yet been defined and may be very complex. He suggested that a team (sub-IAG group) of multi-disciplinary professionals working together could better define the management goal objectives. The IAG agreed that a sub-IAG group should work on the objectives beginning with a meeting in June 2002. Suggested members of the sub-group are representatives of ADCNR, USFWS, APC, and Kleinschmidt.

#### **Conclusion**

The next meeting of the E10 IAG will be announced via e-mail and is planned for mid-July. The IAG sub-group will plan on meeting in late June after the HEC-RAS model steady state calibrations are complete. APC will send meeting materials including an agenda and work products as well as meeting logistics to IAG members in advance of the next meeting.

IAG documents and materials are posted on the Internet at [www.southerncompany.com/alpower/hydro](http://www.southerncompany.com/alpower/hydro).

**Issue Action Group: E10 Project Releases**

**Meeting Summary: Lay Lake 4H Center September 17, 2002**

Final 11-14-02

Warrior and Coosa Relicensing Projects Combined

---

**Meeting Attendees**

**IAG Members:**

Dan Catchings	ADCNR
Stan Cook	ADCNR
Carl Couret	USFWS
Jim Crew	APC (IAG Chairperson)
Keith Floyd	ADCNR
John Hornsby	ADCNR
Henry Mealing	Kleinschmidt
Jerry Moss	ADCNR
Kelly Schaeffer	Kleinschmidt (IAG Facilitator)
Andy Sheppard	APC
Bill Sim	APC

**Other Attendees:**

Mike Akridge	John Eisenbarth
Tom Groce	Viki Jenkins
Jim Lochamy	Amy McDonald
Diana McLemore	Ashley McVicar
Jason Moak	John Peconom
Alan Peeples	Jason Redmond
John Shuman	Isabella Trussell
Stephanie White	

**Action Items**

- Post finalized May 22, 2002 meeting notes on APC's hydro relicensing web page.  
Jason Moak Due – September 20, 2002
- Prepare and distribute meeting summary for IAG members.  
Jim Crew Due – September 25, 2002
- Complete peer review and calibration of the HEC-RAS model.  
Ashley McVicar Due – September 27, 2002
- Create Smith Working Group Phase I Study Plan based on meeting summary.  
Jim Crew & Henry Mealing Due – September 27, 2002

## Issue Action Group: E10 Project Releases

### **Meeting Summary: Lay Lake 4H Center September 17, 2002**

Final 11-14-02

- Follow-up on the Birmingham Water Board's dredging permits.  
John Hornsby Due – October 4, 2002
- Malcolm Pierson and Jeff Garner to meet and discuss Smith project issues.  
Jim Crew & Stan Cook Due – October 7, 2002
- Smith Working Group Meeting – T&E recovery potential – Smith Powerhouse  
Smith Working Group Members October 7, 2002 @ 7:00 PM
- Smith Working Group Meeting – Smith Tailrace Field Survey  
Smith Working Group Members October 8, 2002 @ 9:00 AM
- Develop unsteady-state model.  
Ashley McVicar Due – October 25, 2002

### Agreements & Resolutions

- 1) The IAG agreed to form a Smith Working Group to discuss project tail water issues and form recommendations for the E10.

### Meeting Notes

*These notes summarize the major items discussed during the meeting and are not intended to be a verbatim transcript or analysis of the meeting.*

The E10 IAG members approved the May 22, 2002 meeting summary with no changes.

### **Weiss Bypass Working Group**

The E10 IAG formed the Weiss Bypass Working Group (WBWG) at the May 22, 2002 meeting. Henry provided a summary of the WBWG accomplishments over the past three months.

#### *Working Group Meetings*

The WBWG had two formal meetings - July 16, 2002 and August 29, 2002. Working Group meeting notes were provided at the meeting and are available on APC's hydro relicensing web site.

#### *HEC-RAS Model*

APC collected field data to develop and calibrate a HEC-RAS model for the Weiss Bypass. The model has two versions – steady state and unsteady state. The steady state model is currently

**Meeting Summary: Lay Lake 4H Center September 17, 2002**

Final 11-14-02

undergoing a peer review by Bob Allen of USACOE and Dow Johnston of ADECA. When completed, this model can provide information on wetted widths, depths and velocities created by various flows released into the Weiss Bypass. The unsteady state model will predict the influence of “bypass backflows” during generation periods at Weiss Dam.

*Fish & Mussel Habitat Information*

Working Group members have collected habitat and reproductive data for the fish and mussel species currently known to inhabit the Weiss Bypass. This information includes general habitat preferences (flow, temperature, depth, substrate), spawning times and requirements; depth preferences; and mussel host information for each of the identified fish and mussel species. This data will provide a basis for formulating flow recommendations for the Weiss Bypass.

APC, with input from ADCNR, has identified Pat O’Neil (Alabama Geological Survey) as a riverine expert resource for the Working Group. Working Group members will meet with Pat and bring him up to speed on the Groups’ progress and work products. Pat will periodically review information for the Working Group and provide comments based on his professional experience.

*Annual Variations in Bypass Flows*

The Working Group is developing a method to mimic a natural flow regime in the Weiss Bypass. The method will allow APC to pass flows into the bypass that resemble natural variations (*i.e.*, high spring flows, lower flows in the summer and fall, and flood and drought periods). This method will help address resource agency goals. Working Group members have discussed “benchmark” flow gages, decision making processes, flow magnitude and flexible compliance requirements.

Stan introduced the concept of “minimum-flow credits”. This item was placed in the “parking lot” to discuss at future Working Group meetings.

*Environmental Assessment*

The WBWG’s goal is to produce study information that can be used to prepare the Environmental Assessment and to produce recommendation(s) for the preferred alternative. IAG members agreed that they would like to try and resolve as many issues as possible, including Weiss Bypass issues, at the local level rather than by FERC in Washington D.C.

*Next Steps*

The WBWG will meet again following the peer review of the HEC-RAS steady state model. Ashley McVicar will begin work on the unsteady state model and provide that information to the Working Group.

**Issue Action Group: E10 Project Releases**

**Meeting Summary: Lay Lake 4H Center September 17, 2002**

Final 11-14-02

**Smith Tailrace**

The goal of the Smith discussion was to outline the issues and processes for addressing issues in the project tailrace and to establish a Smith Working Group.

*Project Issues*

IAG members spent some time identifying relevant issues that will need to be addressed in future discussions. These issues included:

- Cold water vs. warm water tailrace fishery
- Advantages of both cold and warm water fisheries
  - Angler benefits
  - Benefits to the local economy
  - Other recreation benefits
- Impacts to Gorgas Steam Plant
  - Cost of building cooling towers
- Potential habitat for aquatic threatened and endangered species recovery
- Dredging of channel by Birmingham Water Board
  - Accuracy of Corps permits
- Value of existing trout fishery
- Need to gather additional information (APC/ADECA 1993 survey data & John Eisenbarth information)
- Fish stocking that is required to maintain the existing trout fishery
- Enhancement of the existing trout fishery

Additionally, ADCNR and the USWFS both emphasized the necessity of sound reasoning for maintaining the cold water fishery below the Smith Dam. Particularly, ADCNR is looking for economic data that will help justify their existing trout stocking program.

*Smith Working Group*

IAG members indicated a desire to address issues at the Smith Tailrace using a process similar to the one currently used for the Weiss Bypass. This process involves a smaller group of resource-focused professionals meeting on a more frequent basis to discuss issues and form recommendations for consideration by the E10 IAG.

Based on the meeting discussions, IAG members agreed that the Smith Working Group should begin with the following steps:

- Step 1 – Consolidate existing fishery data (cold and warm water) and present to working group members for discussion
- Step 2 – Attempt to reach consensus on a cold or warm water fishery
- Step 3 – Discuss a fishery enhancement package

**Issue Action Group: E10 Project Releases**

**Meeting Summary: Lay Lake 4H Center September 17, 2002**

Final 11-14-02

*Working Group Membership*

Members of the E10 IAG that volunteered to serve on the Smith Working Group include:

Stan Cook (ADCNR)	Carl Couret (USFWS)
Jim Crew (APC)	John Eisenbarth (TU)
Keith Floyd (ADCNR)	Andy Sheppard (APC)
Bill Sim (APC)	

Other IAG members also volunteered to serve as Working Group resources, these include:

Jeff Garner (ADCNR)	John Hornsby (ADCNR)
Henry Mealing (Kleinschmidt)	Malcolm Pierson (APC)
Stephanie White (APC)	USACOE

*Smith Working Group Meeting*

The Working Group requested that Jeff Garner and Malcolm Pierson perform a cursory analysis of potential habitats available for recovery of T&E species. The Working Group will meet at the Smith Powerhouse Conference Room at 7:00 PM on October 7, 2002 to discuss Jeff and Malcolm's findings. The Working Group will meet at John Eisenbarth's boat launch at 9:00 AM on October 8, 2002 to tour the Smith tailwater. Additional details will be supplied to Working Group members prior to the October meetings.

**Conclusion**

The next meeting of the E10 IAG will be announced via e-mail. APC will send meeting materials including an agenda and work products as well as meeting logistics to IAG members in advance of the next meeting.

IAG documents and materials are posted on the Internet at [www.southerncompany.com/alpower/hydro](http://www.southerncompany.com/alpower/hydro).