MEETING NOTES

SOUTH CAROLINA ELECTRIC & GAS COMPANY
SALUDA HYDRO PROJECT RELICENSING
Instream Flow/Aquatic Habitat Technical Working Committee
Lower Saluda River Flow Demonstration
May 1 & 2, 2008

Final CSB 06/16/2008

These notes serve as a summary of the major points presented during the meeting and are not intended to be a transcript or analysis of the meeting.

MAY 1, 2008

Attendees

Ron Ahle, SCDNR
Gerrit Jobsis, American Rivers
Shane Boring, Kleinschmidt Associates
Jeni Hand, Kleinschmidt Associates
Gerrit Jobsis, American Rivers
Mark Giffin, SCDHEC
Scott Harder, SCDNR
Mark Cantrell, USFWS
Dick Christie, SCDNR
Alan Stuart, Kleinschmidt Associates
Brandon Kulik, Kleinschmidt Associates
Mike Waddell, Trout Unlimited
Amanda Hill, USFWS
Bill Argentieri, SCE&G
Milton Quattlebaum, SCANA Services

The group met at Saluda Shoals Park. Shane Boring opened the session at 9:00 AM, noting that the purpose of the two-day flow demonstration was to allow Technical Working Committee (TWC) members to observe the recommended flows developed by the TWC as a result of the Instream Flow Incremental Methodology (IFIM) Study. Brandon Kulik noted that the flow demonstration would also give the TWC an opportunity to field verify the Physical Habitat Simulation (PHABSIM) modeling results upon which the flow recommendations were based. Brandon provided attendees with copies of the hydraulic modeling results for 700 and 1,000 cfs (depth and velocity), and applicable habitat suitability criteria for selected transects to allow for comparison to actual field conditions.

It was noted that today's session would focus on the 700 cfs flow and tomorrow on the 1,000 cfs flow. Bill Argentieri noted that a demonstration flow release of 733 cfs from the powerhouse had been initiated at approximately 2:00 AM and should be stable throughout the day. The group then visited the Corley Island, Oh Brother/Ocean Blvd. complex, Millrace Rapids, and Shandon Rapids study sites; observations from each are summarized below.

Corley Island

Brandon Kulik, Mark Cantrell, and Gerrit Jobsis collected depth and velocity measurements at multiple locations along Corley Island in both the Saluda main channel and in the side channel (vicinity of transects 10 -14). Depth measurements were found to be highly consistent with depth predicted by the hydraulic model. Velocity estimates from the model were also found to be close (generally within 0.2 – 0.3 feet/second of those observed in the field). Attendees indicated that the 700 cfs flow appeared to be an adequate base flow for the Corley Island study site.

Oh Brother/Ocean Blvd.

The group observed the test flow and collected depth and velocity data at approximate transect locations on both the Oh Brother and Ocean Blvd sides of the river (vicinity of transects 4 – 9). Similar to the Corley Island sites, depths were found to be close to the model results. Modeled velocities were also similar to field measurements (generally within 0.3 to 0.4 feet/second of modeled velocities). Attendees generally agreed that 700 cfs looked very favorable as a base flow; the group observed anglers catching trout and successfully wading the area.

Shandon Rapids/Riverbanks Zoo

To close out the day's session, the group observed the 700 cfs flow in the vicinity of Riverbanks Zoo and Shandon Rapids (Transects 1 and 2). Attendees indicated that the flow looked very favorable as a base flow for achieving the habitat goals for this section of the river.

Before adjourning for the day, the group quickly convened to recap their opinions regarding the 700 cfs flow. Attendees noted that the hydraulic modeling results appeared to match field conditions quite well and that the 700 cfs flow appeared to provide a considerable improvement in terms of habitat quality over the 500 cfs typically provided and observed in the past. Amanda Hill noted specifically that the flow appeared very promising in terms of providing additional wetted width. Ron Ahle added that the flow in general looked good as a base flow, and was of the opinion that a bit more water in the Oh Brother/Ocean Blvd area would further improve wetted width and depth over the gravel at the lower reaches of the site and in the braided channels that bisect the island. Brandon noted that, while increased flow could potentially increase coverage over the gravel bar, it would likely also result in increased velocities, adding that some of the velocities in the area were near 5.0 ft/sec in mid-channel areas were above or nearing suitability limits of most target species. Therefore increased wetted area may be offset by declining velocity suitability at higher flows. Mike Waddell thought that 700 cfs was a good flow and wadable at all locations. In closing, the group agreed that, pending results from the operations model regarding water availability, 700 cfs appeared to be an acceptable minimum flow.

Noting the group's satisfaction with the 700 cfs flow, Bill A. then enquired as to whether the 1,000 cfs flow demonstration (scheduled for the following day) was needed. Ron Ahle, and others indicated that they would like to see the 1,000 cfs flow, particularly at Oh Brother/Ocean Blvd. After additional discussion, the group decided that it was only necessary to observe the 1,000 cfs flow at Oh Brother/Ocean Blvd. Attendees agreed to meet at 9:00 AM the following morning; the day's session adjourned at approximately 4:30 PM.

MAY 2, 2008

Attendees

Ron Ahle, SCDNR
Alan Stuart, Kleinschmidt Associates
Shane Boring, Kleinschmidt Associates
Mike Waddell, Trout Unlimited
Mark Giffin, SCDHEC
Scott Harder, SCDNR
David Martin, SCDHEC
Dick Christie, SCDNR
Mark Cantrell, USFWS
Brandon Kulik, Kleinschmidt Associates
Amanda Hill, USFWS
Bill Argentieri, SCE&G
Milton Quattlebaum, SCANA Services

The session convened at the Trout Unlimited access at Oh Brother/Ocean Blvd at approximately 9:00 AM to observe the 1,000 cfs flow release. Similarly to the 700 cfs flow, spot checks of depth and velocity at approximate transect locations were found to be consistent with the hydraulic modeling results. Depth had increased by about 0.2-0.3 ft and velocities were generally a little higher than the previous day. Wading conditions in the lower reach of Oh Brother Rapids had become more challenging, and required use of a wading staff, but were considered to be manageable at least by experienced anglers. Mike Waddell added that 1000 cfs may be nearing the wadable limit for some older and/or less experienced fishermen. Several attendees pointed out a slight increase in mid-channel gravel bar inundation at the lower end of Oh Brother (Transect 4), but added that it added only negligible additional habitat since depth over the newly wetted gravel was only 2 – 3 in.

Following the field inspection, the group convened briefly to re-cap impressions of both days of demonstration flows. Agency and NGO staff in attendance expressed their satisfaction with the flows and recommended moving forward with 700 cfs as the recommended base flow. Alan Stuart noted that the feasibility of recommending 700 cfs as the minimum flow would depend on result of the operations model (i.e. water availability), but added that preliminary results suggest that 700 cfs will likely not be a problem during normal water years. Alan added that there is considerable interest in the operations model results by a wide range of stakeholder groups, and as such, a meeting of all of the Resource Conservation Groups (RCGs) has been scheduled for May 22 at Saluda Shoals Park.