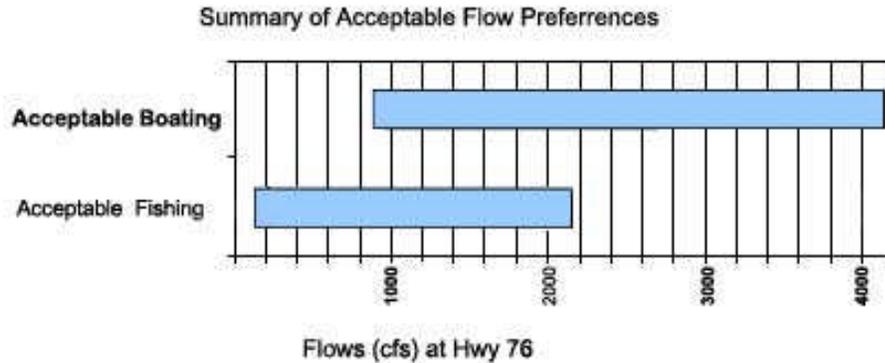


Concerns regarding the Chattooga River *Expert Panel Field Assessment*

The expert panel study report noted, “**It is clear that acceptable ranges for the two groups [anglers and boaters] overlap.**”¹ This conclusion is indisputable because boaters and anglers were utilizing the Chattooga on the same day of study and at the same flow levels.



One month later the same report authors noted that “**optimal flow preferences...suggests that fishing and whitewater boating can have different “prime seasons” and niches in the hydrograph.**”² Then leaped to their desired conclusion that “**For the Upper Chattooga, the unregulated nature of the river may provide a situation where natural processes and responsiveness to rain events naturally isolate flow preferences of anglers and boaters.**”³ How could a publicly funded report of the collected data make such a claim? Mark Twain warned that “There are liars, there are damn liars and there are statisticians”; A review of the data collection study reports is enlightening.

I. Optimal Preferences versus Acceptable Ranges: The expert panels selected seven individuals and asked them to select what would be acceptable flow ranges and what would be optimal flow ranges for each activity. The acceptable range of water flows predict “when” anglers visit the river otherwise know as behavior criteria. Optimal flow levels determine visitors’ favorite conditions. Optimal ranges might be useful in determining preferred water releases from dams but are irrelevant in evaluating human behavior on natural streams like the Upper Chattooga. To determine visitor behavior the question is simple “what is the acceptable range of flows” for each visitor type.

My favorite ice-cream flavor is *Rum Raisin*; however, I would not pass-up *Rocky Road* if I wanted ice cream. Chattooga anglers behave much the same way and fish at all acceptable water levels. Optimal flows may be 2.0 foot for fishing, but anglers reported fishing the Upper Chattooga from one foot up to 3.0 feet on the 76 gauge.

II. Misuse of a Statistic: The expert panel study report focuses on the median of the optimal flows levels versus the full range of flows from the study panels. Given such a small sample size this is a complete misuse of a basic statistic. The “statistical” assessment used in the Expert panel report uses a single data point (median) to forecast a population’s behavior. By discarding data and using the median, the *Expert Panel Field Assessment* further shrinks the reported range of flow preferences, from a data range that was already truncated from “acceptable” to only “optimal”. The report then

¹ Page 42 of the *Chattooga River Expert Panel Field Assessment Report 2/2007*

² Pg 30. *Chattooga Phase I Data Collection Literature Review Report 3/2007*

³ Pg 40 *Chattooga, Literature Review Report 3/2007*

Concerns regarding the Chattooga River *Expert Panel Field Assessment*

uses these new numbers to incorrectly forecast visitor behavior. Narrowing of flow preferences by discarding data from a sample size of six panelists increases likelihood of statistical error by 500% (known as degrees of freedom) and is completely inappropriate for predicting visitor preferences for specific recreational opportunities.

The Average Camper Who Doesn't Exist (Shafer 1969) described how providing a single, uniform type of recreational opportunity based on averages will leave many visitors, quite possibly even the majority, less than satisfied with their experience. However, by offering a range of possibilities, more visitors' preferences can be met. Capturing the full range of acceptable visitor opportunities is the standard for land management and is the correct method of evaluating visitor capacity on the Chattooga Wild & Scenic River for the next thirty years.

III: Inadequate sample size. The USFS were provided historical records of Chattooga fishing use by Trout Unlimited in GA and by The Whiteside Cove Association in NC. The *Expert Panel Assessment* authors disregard factual data in place of anecdotal/qualitative data from a few angling panelist over a single weekend, at well above average water flows during the coldest month of January. AW also disagreed with sample sizes and warned the USFS about drawing conclusions from such limited data in an August 2006 letter.

IV: Garbage In Garbage out. The design of the panel questionnaire also reveals the biased built into the study. Anglers were asked to rate the river based on equipment type (spin cast, fly and bait) under wading-type fishing, even though bank fishing is very popular. Boaters were asked to estimate preferred flows under three classifications based exclusively on water levels. ("Big" water, standard trips and technical "low water" trips). For uniformity boaters should have been asked to review the Chattooga for various equipment types (kayak, raft and canoe) or Anglers should have been asked to rate the river based on fishing trips associated with higher and lower flow levels.

Anglers were only given six questions. While the Boater questionnaire had nineteen, 19.

Many Questions suggested by Whittaker's flow study manual were completely avoided. see A-1

V: "kayaker defined study zones" Streams' physical variations make it impossible to evaluate "optimal flow levels" for angling without being site specific. Anglers select discrete sites along the river corridor based in part on the ease-of-access associated with topography. Mr. Whitaker published "*anglers tend to need very little wadable area when they fish and seem amenable to moving up or down the river to find a good spot*"⁴. The Chattooga's North Fork ranges from 50' wide shoals to 4' wide gorges, from steep bedrock channels, to boulders fields, to a low gradient rippling creek. The variety of physical geography insures that at almost all flow levels the Upper Chattooga contains a suitable spot for angling.

Conversely, kayakers are required to traverse the entire stream between access points and use every site along that route. Therefore, study zones based exclusively on boat access are highly prejudicial.

⁴ pg 70 Whittaker, D. , B. Shelby, W. Jackson, and R. Beschta. 1993. Instream flows for recreation: a handbook on concepts and research methods. U.S. Department of Interior, National Park Service, Anchorage, AK

Concerns regarding the Chattooga River *Expert Panel Field Assessment*

The expert panel study report ignores that historical angling records prove visitors enjoy angling on the Chattooga at most any water level⁵ and asked angler panelist to “average” water flow preferences over each boater-defined segment. Once at the Chattooga, water levels may alter location preferences or equipment selection, but it rarely results in the end of a fishing trip. The published *Expert Panel Field Assessment* reported on the few gorges that were unsafe to fish during the high water versus the many areas anglers successfully fished during the fishing trials.

VI: The gauge shuffle.

The study used both height and cfs flow levels based on the established USGS gauge to review angler flow preferences. These numbers were never combined.

However, for the boaters the Study avoided established gauge measurements and published “estimated” flow levels; the BF gauge does not measure volume, therefore volumes used were based on estimated correlation with the 76 gauge. These estimates were further “tweaked” to account for “time lags” using no scientific basis whatsoever and very few height gauge readings. All volume estimates are based on data from the 76 gauge therefore all participants preferences can be uniformly compared to the same gauge using either height or volume.

Two months after publication of the study, USFS Planner John Cleeves “*acknowledged that more analysis is needed to correlate the two gauges. The Burrells Ford gauge has only been operational for six months, he said, and forest service hydrologists are still figuring out the relationship between flows there and Hwy. 76. "It's not a clean conversion from one gauge to the other," Cleeves said. "My understanding is when it's not a storm event, you can do it. But when there's a storm event [like the one during the study], the Hwy. 76 gauge is reflecting more than what's coming down from Burrells Ford.*”⁶

If time lag was a factor for day II during the study, It must have been a factor on day I of the study. Using a “time lag” for estimating flow during the first day of study would have increased the estimated water levels. The arbitrary use of a “time lag” gauge correction is completely inconsistent within the study report, completely uncorrelated and highly suspect.

The compounding of “water levels estimates” with “speculative desired flows” shows very clearly that the report authors were not being scientific about their data gathering or publishing.

VII: Non-random selection of non- independent participants

The selection of only expert American Whitewater boaters is clearly not random. My nomination form was rejected for participation based on skill level. Since AW selected the consultant ...

American Whitewater’s highly publicized viewpoints, appeals and lawsuits are well documented in AW’s bimonthly journal and on their website. As members of this lobby organization, the AW boating panel was exposed to these lengthy opinions; this is especially true of expert panel member Don Kinker who has written much of the AW egocentric literature. This preconditioning of every panel member and the Lack of non-AW participants shows the few collected opinions were not independent, therefore statistically biased.

⁵ TU and WCA fishing logs over the past few decades indicate fish during most water levels above 3’ levels on the 76 gauge.

⁶ *Chattooga study biased, opponents say, Crossroads Chronicle*, Wednesday, Apr 18, 2007, N. Axtell, Staff Writer

Concerns regarding the Chattooga River *Expert Panel Field Assessment*

VIII: Complete emphasis on Water flow levels as a determinant of visitor behavior.

Water level is just one of the many variables associated with visitor behavior, not the exclusive decision criteria. For anglers, the physical topography and turbidity are important while to swimmers the water and air temperature, velocity and pool depth are important. Additionally wildlife-viewers select migratory or nesting period to visit the Chattooga at riparian sites based on the presence of wildlife, that presence resulting from the lack of humans. Waterfall hikers visit the river while the water is higher but also consider the season, like the clear views offered by winter. The arbitrary selection of water volume –primarily a boating parameter-- as an exclusive study variable is completely inequitable to the majority of Chattooga visitors.

To fulfill the requirements of a visitor capacity analysis, the LAC must determine if boating diminishes the many other Outstanding and Remarkable Values associated with designation. This can only be accomplished through a comprehensive study of every recreational and resource values and must consider opportunities available on the entire river corridor.

The continued focus on one section of the entire Wild and Scenic River sets an ugly precedent for a trail-by-trail review nation wide; with every possible recreation type – like ATVs-- demanding equity on every inch forest land. Uniformity does not result in equitable management of public resources.

IX: The Expert Panels ignored most visitor types

The expert panels focused exclusively on boating and angling, two of the five protected recreational Outstanding and Remarkable Values.

The USFS data collected by the USFS notes that most other visitors preferred a boat-free Chattooga. It cannot possibly determine levels of boating impact when most visitor types were ignored during data collection. Whittaker's own flow manual dedicates a few pages to swimmability at various flows.⁷ The same holds true for birders, waterfall viewers etc⁸ The USFS are responsible for a thorough analysis of the “affected parties” and “current visitors”; ignoring these other visitors during the expert study does not absolve the USFS of responsibility for protecting the visitor experience associated with these protected recreational values. The Consultants are steering the USFS into a “Find any Significant Impact” by ignoring critical information and avoiding rigorous exploration of publicly collected concerns; this will not suffice under NEPA guidelines or inevitably in the judiciary.

X: Publication of “speculative” boatability as data is unscientific.

The assessment published the opinions of a few American Whitewater members to predict flow ranges for paddling. The Burrells Ford gauge referenced was only operational for a few months and water levels were within the purported boatable range for only six days prior to the publication of the report; no valid opinions could not have been assessed without review of the reported flow levels. The estimated flow ranges are completely speculative and is clearly not gathered “scientifically”.

Confluence Research Consultants -the hired consultants- warns about the limitations of a single flow review in their publication cited as the source for this Flow Study methodology. They wrote:

⁷ pg 71 Whittaker, et al Instream flows for recreation: a handbook on concepts and research methods. 1993

⁸ pg 72, Whittaker, et al Instream flows for recreation: a handbook on concepts and research methods. 1993

Concerns regarding the Chattooga River *Expert Panel Field Assessment*

*"On-water boating feasibility assessments at a single flow may demonstrate whether boating is possible, but they are unlikely to provide precise estimates of flow ranges for boating."*⁹ Yet these same consultants published numerous ranges of acceptable flows that happened outside the study period with no historical reference. These flow levels are completely speculative and highly prejudicial given that the boating panel was selected exclusively from AW's membership.

XI: The study was heavily skewed toward AW's demands.

The Appeal Decision's Visitor Capacity Analysis has been reduced to AW's recommended "Flow Analysis" conducted by AW's recommended consultant (Whittaker/Selby AKA Confluence Research and Consultants) with participants selected exclusively from the AW constituency. Additionally, all consultant publications *Expert Panel Field Assessment Report 2/2007*, *Literature Review Report 3/2007* and *Implementation Plan 10/2006*- cite AW and CRC consultants as their primary source for information.

The USFS ignored the reviewing officer's decision and placated the rumbling American Whitewater by conducted the narrow-focused study they demanded.

American whitewater first requested Confluence Research and Consultants (CRC) in a July of 2003¹⁰. Mr. Whittaker and Shelby also appeared on American Whitewater's list of suggested experts in their 2004 Appeal.¹¹ AW notes their suggested experts "have shown boaters have no quantifiable impacts"; since every action has an equal and opposite reaction an inability to measure that reaction shows a lack of ability, or desire, to measure that impact.

American Whitewater has recommended CRC consultants on at least eight different FERC flow studies. AW would only continue recommending a consultant that favors their interests of boating.

Although the concerns found within the *Expert Panel Field Assessment* are significant they are in no way comprehensive. The USFS needs to move forward objectively to complete the Limits of Acceptable Change analysis while conducting more thorough fact-finding missed during the outsourcing of data collection to these non-objective consultants. The results of the Expert panels are clear; there will be other visitors using the corridor during boatable conditions; The USFS need to focus attention on the desired conditions of these current visitors.

I look forward to review the balance of these Study Reports and will continue protecting the Character of the Upper Chattooga for future generations.

Please feel free to contact me with any questions.

Sincerely,
Mike Bamford

⁹ *[Flows and recreation; a guide to studies for river professionals.* Doug Whittaker, et, al 2005. published by the Hydropower Reform Coalition]

¹⁰ Memo from AW to Sumter National Forest; Content Analysis Team 7/2/2003 pg 11

¹¹ 2004 American Whitewater Appeal of the Sumter RRLMP pages 3-10 and 3-17.

March 22, 2007

Marisue Hilliard
Forest Supervisor, Nantahala Forest Service
160A Zillicoa Street
Asheville, NC 28801

Dear Ms Hilliard

It has been over one year since we met to discuss our private property concerns on the upper Chattooga Wild and Scenic River (WSR).

As we explained, our 1.7 miles of private property should have been removed from the Chattooga analysis and the USFS should explain to the public that WSR designation does not create public access over private property. Our twelve unanswered letters¹ to the USFS have adequately explained our position on this private property matter. The USFS has refused to answer the landowners questions, to explain its position or to grant a requested meeting with the Sumter FS so that the USFS can explain the legality of their actions.

Section 2354.51 of the USFS manual advises land managers to "Work with private landowners to minimize incompatible use and to prevent other potential problems." The Wild and Scenic River guidelines also advise managers to "mitigate in cooperation with landowners". Finally, the 2005 USFS Appeal Decision regarding the Chattooga required the Forest Service to "involve affected parties". That would most certainly include the owners of the land within the corridor, particularly where the USFS Decision For Appeal incorrectly labeled our private property as "public lands".

The landowners offered and granted access to the USFS in the early stages of the analysis. Jeff Owneby of the Nantahala F.S. was the only member of the USFS to accept the offer and visited the property at normal water levels in October of 2005. The consensus was that the river is non-navigable. That consensus only reaffirmed that the Corps of Engineers non-navigability determination and the published NC Attorney General's non-navigability opinion² are both correct.

At the 2005 Clayton Public Meeting, USFS personnel including Steve Hendricks, Mr. Owenby and Mr. Cleeves met with the landowners and myself to review the situation. Mr. Hendricks told the landowners that "since the river was a WSR, the USFS has the right to use all private property within the corridor"; this was a complete misrepresentation of the facts and Mr. Hendricks continued to misrepresent Wild and Scenic River law to the landowners throughout the conversation.

¹ 10/17/05 Bamford to Cleeves, 11/9/05 Stevens to Cleeves, et al , 12/19/05 Stevens to Cleeves et al, 1/5/06 Kimzey to Tilden, 1/6/06 Bamford to Cleeves, 1/9/06 Rust to Cleeves, 2/4/06 Stevens to Cleeves, et al 4/12/06 Kimzey to Hilliard & Thomas, 10/31/06 Bamford to Cleeves, 10/31/06 Bamford to Owenby, 3/15/07 Bamford to Cleeves

² Federal Register Vol 14 No 58 1976 pg 11853 NC Attorney General's opinion that Chattooga's streambed is the property of riparian land owner.

The landowners rightfully became skeptical about the USFS intentions and insisted all future visits include a liability waiver. The USFS representatives refused to sign the waiver and no access has been granted to the USFS. The refusal of the USFS to work, or speak, with the landowners has only increased the skepticism of the landowners regarding the USFS.

In early January of 2006 Mr. Robles from the Sumter F.S. took images of our property without the landowner permission. These images were circulated through the USFS via email (obtained by us under an FOIA request). The exact images were also made available to the public.

In our meeting with you over one year ago, we explained why the private lands above Greens Creek should not be part of the public analysis. We explained, “the Wild and Scenic Rivers Act does not open private lands to public recreation.”³ Although the Forest Service posted on its Internet site that such land is privately owned, the Forest Service did not make clear that under North Carolina law, the landowners also own the streambed of this non-navigable water. You advised that you would update us as to the status of our request for more information, after a review with the Sumter FS . We have not heard from the Nantahala Forest Service, nor from the Sumter Forest Service, regarding this matter.

We appreciate your time and look forward to a quick resolution to this important matter.

Sincerely,

A handwritten signature in black ink that reads "Michael Bamford". The signature is written in a cursive, flowing style.

Michael Bamford
River Director, Whiteside Cove Association.

CC: Phillip Rust, Richard Rust, Henry Rust, James Kimzey, Alan Jenkins , Wyatt Stevens, Jerome Thomas, Charles Myers , Dale N. Bosworth

³ “Some management principles obviously apply only to Federal lands within the river area. For instance, the Wild and Scenic Rivers Act does not open private lands to public recreation. Management principles may apply to private lands only to the extent required by other laws such as local zoning and air and water pollution regulations.”



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***American Whitewater's Comments and Suggested Revisions Regarding the Draft
Upper Chattooga River Phase I Data Collection Expert Panel Field Assessment
Report, dated February 2007, and first made available to the public on April 2, 2007***

Respectfully Submitted on April 6, 2007

American Whitewater (AW) would first like to commend and thank the United States Department of Agriculture/United States Forest Service ("Forest Service") for conducting an initial on-river floating study of a significant portion of the Headwaters of the Chattooga River. In connection with the Draft *Upper Chattooga River Phase I Data Collection Expert Panel Field Assessment Report* (Expert Report), both the Forest Service and its consultants have obtained many initial and important floating and angling related data points to inform future management of the Chattooga Headwaters. As the expert boater panel can now attest from personal experience, floating the Chattooga Headwaters is a rare and unparalleled wilderness floating experience, especially when viewed as an integral part of fifty-two continuous miles of pristine and free-flowing Southeastern whitewater.

On April 2, 2007, the Forest Service posted a draft of the Expert Report on its website. AW's staff and volunteers have reviewed that draft and have found certain significant technical errors and deficiencies that AW hopes the Forest Service – in conjunction with its consultants – will correct prior to finalizing the Expert Report or making any management decisions based upon the Expert Report. Below, please find AW's suggested revisions to the draft. Our comments are based on our experience with dozens of other similar studies and the ongoing LAC process, as well as on our membership's significant familiarity with the corridor of the upper Chattooga River. Thank you for considering these comments, and please do not hesitate to contact AW regarding anything contained herein.

Comments and Suggested Revisions Based On Technical Errors and Deficiencies

Report Section 2.0: This section lists the bordering National Forests but makes no mention of the private lands bordering the river. This section should describe the entire Wild and Scenic Corridor, including the Forest Service land at and above the Grimshawes Bridge, the public river downstream, and any private lands that are adjacent to the river and within the Wild and Scenic Corridor.

Report Section 2.1: Footnote 2 states that the upper 1.7 miles of the river were not analyzed. In fact, at least the upper 2.0 miles was not paddled, however Figure 2.2 appears to indicate that more than 2.0 miles was not paddled, and elsewhere in the document the section not paddled is estimated at 3 miles. The distances paddled and not paddled should be noted in section 2.1 and used consistently throughout the document.

It should be explained that a significant portion of the Wild and Scenic Chattooga River was not studied by the Forest Service, its consultants, or the expert panels of anglers and boaters. This upper reach is a federally designated Wild and Scenic river and we know virtually nothing about the state of the reach's Outstanding Remarkable Values, except that the Recreation ORV has been completely eliminated by the Forest Service's failure to clarify and enforce public access provisions. The reasons for excluding this reach from the User Capacity Analysis and the expert panel data collection should be explained in the context of the Wild and Scenic Rivers Act and the AW appeal decision, and documented. See related comments throughout.

Report Section 2.1.1: This section is deficient in that it does not note that the Forest Service owns the boating put in¹ at Grimeshawes Bridge, and in that it does not share the rationale for excluding this portion of the river from the study. Exclusion of roughly the upper half of the Chattooga Cliffs reach results in a significant data gap and should be justified and accounted for throughout the Expert Report.

Report Section 2.1.4: Section IV of the Chattooga is roughly described but the reach length is not noted, nor is suitability for rafting, commercial use, access, management, larger size than the headwaters, and more regular flows. Section IV is described as currently receiving "heavy private and commercial boating use..." This is an unsupported capacity judgment and should be struck from the Expert Report. Furthermore, Section IV was not studied as part of the expert panel data collection and therefore should not be referenced in this report at all. Section IV receives little or no additional reference as a proxy river in the report, and is therefore not relevant. We recommend removing this section entirely.

Figure 3.1: Please note whether this data is 15 minute, hourly, daily, etc.

Report Section 5.1.1: In this section and the sections that follow, it is impossible to determine the extent of the river that was fished by anglers. Did they fish 1% or 90% of

¹ Grimshawes Bridge is clearly labeled and referred to as the boating put in for the Chattooga Headwaters throughout the original Wild and Scenic Study documents, as well as in modern guidebooks and websites.

the river? Did they view and decide not to fish certain reaches of the river? This section needs a map (and numeric data) showing the locations fished, viewed but not fished, and not visited. In addition this map and analysis should include the distances hiked on formal trails and distances hiked on user created or informal trails.

Secondly, this section begins a discussion of spin and bait fishing found throughout the Expert Report. Since no participants actually engaged in these activities we question the validity of these data. At the very least, it should be noted that any references to spin and bait fishing is based on unverified, extrapolated information. Discussion is likely acceptable, but extrapolating the numeric suitability of a wide range of flows for an activity that was not carried out is not defensible. The limitations of these data should be clearly noted, or the data should be removed from the report.

Report Section 5.1.2: No panelist fished the Chattooga Cliffs reach, even though they were asked to do so. This decision is a data point - backed by an angler panelist's hiking report - suggesting that the reach or flow conditions were undesirable, however this is where the discussion of angling on the Cliffs reach should end. However, the Report goes on to predict specific suitable flows and to discuss the merits of the reach even though only a small part of the reach was viewed by only a single panelist who chose to not fish. This should be corrected throughout the document.

Report Tables 5.2: This table should not include the Chattooga Cliffs reach because the reach was not fished and most of it was not visited as part of the data collection. Spin fishing and bait fishing should be excluded, or at least footnoted and/or otherwise highlighted to indicate that this activity was not engaged in as part of the data collection and is based on unverified, extrapolated information.

Report Section 6.1.2: There is an error in the following sentence: "The boatability was rated overall 6.5, the whitewater challenge 5.5, and the overall rating was 5.2 on a scale of 1 being totally unacceptable to 7 being totally acceptable." Based on Table 6.1, the overall rating was actually 6.2, not 5.2 as stated in section 6.1.2.

Report Section 6.2.1: This section and sections that follow erroneously infer that the only Forest Service or public access for the reach is downstream of the private lands. This is absolutely false and *must* be corrected. Grimshawes Bridge is clearly noted as the "start of the rafting water" and as a boat launch in the Wild and Scenic study documents and paddlers would *very* likely prefer to put in at Grimshawes Bridge – on Forest Service land or in the road right-of-way – rather than hike 1.7 miles with their boats. This is a *fact* that is ignored throughout the report. The 1.7 mile hike was required by the Forest Service as an artificial limitation on the study, but has nothing to do with past, desired, intended, or potential recreational use patterns. This must be reflected in the report. See comments to Report Section 2.1.

Report Section 6.2.2: The access section notes: "The decision to put-in at this location was based on the restriction of access at the upper stretches due to private property." This statement is erroneous. There is no restriction on access to the upper stretches due

to private property. As we have explained and documented in prior written correspondence, the Forest Service has the authority to allow floating on a Wild and Scenic River regardless of ownership, and furthermore the state of North Carolina has a formal Attorney General's opinion stating that the public has the right to paddle any river capable of being paddled. This factual error in the Expert Report must be corrected. The Forest Service should manage and allow public access at or near Grimshawes Bridge, but if the Agency fails to do so, access will be allowed under North Carolina state law. The reality of future use will likely be based on paddlers using Grimshawes Bridge, and the Expert Report should predict and discuss this.

The Forest Service's position on the private property issue, and the basis for that decision, should be made public and defended immediately. The lack of a clear position by the Forest Service is already causing bias in the LAC process as evidenced by the draft Expert Report. *See also*, comments to Report Section 2.1.

Report Section 7.1.2: The Report states a disadvantage as follows: "Accessibility - difficult put-in at the confluence of Norton Mill Creek and the Chattooga River, about 3 miles downstream from Grimshawes Bridge; access via 1.7 miles portage on an abandoned logging road;" This is only true of the study, but not of the river itself. As previously noted, Grimshawes Bridge is the appropriate put in for this reach. Altering past, intended, documented, and preferred recreational use patterns during the study has weakened the results. This must be noted and addressed in all sections. See comments to Section 2.1.

Report Section 7.1.3: These data are highly confusing without converting the experiences of paddlers and anglers to the same gages. Even our staff and volunteers who are very familiar with the river, the Expert Study, and surrounding issues were confused by the lack of correlation between the gages. The final draft of the Expert Report should have correlated gages.

Report Section 7.2.2: Again, there are no access restrictions on the upper Chattooga except those put in place by the Forest Service. Any statement to the contrary should be removed. See comments to Expert Report Section 2.1.

Omission: The surveys filled out by anglers and boaters should be scanned and included in an appendix with the Expert Report. This is standard protocol.

Thank you again for considering these comments. Please do not hesitate to contact me or any of the staff at AW.

Sincerely,



Kevin Colburn



Kevin Colburn
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American Whitewater’s Comments on the “Chattooga River History Project Literature Review and Interview Summary”

Respectfully Submitted on April 17, 2007

American Whitewater staff and volunteers have reviewed the Chattooga River History Project Literature Review and Interview Summary and have found several significant errors and weaknesses. We offer these comments to the USFS with the expectation that the Report will be corrected, with the goal of making a stronger and more accurate report. In these comments we will refer to specific sections of the Report, point out the errors contained in those sections, and request changes. The History Report may in fact tell the story of the original decision to ban paddling, however that decision and its rationales have already been discredited by the USFS’s highest office. The History Report offers no new factual information, and if anything simply clarifies that the original decision was an unjustifiable mistake.

Specific Errors and Omissions

Report Section 1.1: The statement: “the Forest Service (USFS) agreed to reassess that decision as part of broader examination of visitor capacity issues on the Upper Chattooga River” is not appropriate or sufficient to describe the results of the AW appeal. The reviewing officer specifically found that the existing record was insufficient to justify limiting any use, let alone a total ban on paddling¹. Ms. Manning also stated that safety² and solitude³, which are discussed throughout the History Report, are not adequate justifications for a boating ban. This is a critical point to make in the introduction of the History Report because much of the content of the Report was already reviewed and found inadequate. Even in the interviews, no new historical information was presented, and the justification for the boating ban remains inadequate. The History Report is deficient and misleading without the context of the AW appeal decision.

¹ “I find the Regional Forester does not provide an adequate basis for continuing the ban on boating above Highway 28.” “No capacity analysis is provided to support restrictions or a ban on recreation use or any type of recreation user.” AW Appeal ROD.

² “In addition, there is no basis in law, regulation or policy to exclude a type of wilderness-conforming recreation use due to concerns relative to safety, and search and rescue.” AW Appeal ROD.

³ “While there are multiple references in the record to resource impacts and decreasing solitude, these concerns apply to all users and do not provide the basis for excluding boaters without any limits on other users.” AW Appeal ROD.

Report Section 1.2.1: We question the sources and validity of the following statement: “In addition, conflicts between boaters and anglers apparently began to develop about this time. Forest Service law enforcement responded to several verbal and physical confrontations (USDA Forest Service 2006), probably on the lower river (although documents do not specify their location or the number of specific incidents).” Presumably the citation “USDA Forest Service 2006” refers to the affidavits listed Table 1.1. We would point out that these affidavits are *not* USDA Forest Service sources. The affidavits were solicited by opponents of the boating ban who unsuccessfully sought Amicus status in the lawsuit between the USFS and American Whitewater. Amicus status was not granted and therefore the affidavits were not accepted by the court, and thus have no status beyond personal opinions. Citing these documents at all given their clear advocacy intent is questionable, but citing them as USDA Forest Service sources is wholly unacceptable.

Equally importantly, Jim Barrett states in his interview: “Before the closure no significant conflicts, the river was low and that made for good fly fishing,” and Max Gates states in his interview that conflicts occurred but not specifically between anglers and boaters. He did not claim to have actually witnessed or responded to conflicts directly. Nowhere in the History Report is there actual evidence of conflicts, just vague hearsay that some conflicts happened between some people somewhere on the river. The History Report concludes that conflicts happened and were increasing, yet no evidence of this exists, and no indication of the number, severity, participants, location, or cause of these conflicts is shared.

Report Section 1.2.2: We have serious problems with the following sentence: “Responses from other anglers may have included aggressive displays of frustration over these changes, and may have included shouting, raft-slashing, rock throwing, fistfights, and gunplay (Adams 2002).” First and foremost, the USFS History Report should not be based on a document titled “History of the Boating Ban *from the Angler’s Perspective*” written by the primary opponent to boating on the Upper Chattooga. This is a position document and should not be cited, or should be cited in context. Secondly, the language used that displays *may have* included the listed actions is not worth citing since actions *may have* included virtually anything. The History Report should focus on what definitely happened, not what may have happened.

Report Section 1.2.3: Craig et al. 1979 should not be used as a reference on the basis of the boating ban, since the document was written several years after the ban.

Report Section 1.3: The following paragraph must be removed entirely:

“The solution above Highway 28 presented itself in two parts. First, closing the section of the river that was most dangerous helped with safety concerns. Second, it fostered a higher quality fishing experience and provided users with an experience of solitude on portions of the river not especially suited for floating.”

This statement is erroneous and inappropriate for many reasons. First, stating that there is a solution above Highway 28 infers that there was a problem there. Nothing in the History Report even suggests a problem above Highway 28 prior to the ban: no conflicts, no paddling deaths, low use, no capacity problems. Second, there has never been a paddling death on the Upper Chattooga so claiming it is the most dangerous section is false. Third, banning paddling on a section with low use and no accidents may have helped with safety *concerns* – but did nothing to improve actual river safety or to decrease deaths on the river as is inferred. Fourth, there is a stated assumption that a prohibition on paddling provides a high quality angling experience while there is no evidence that a high quality angling experience on the upper Chattooga cannot be attained while boating is allowed. Fifth, there is a stated assumption that anglers would not have experienced solitude on the Upper Chattooga without the boating ban which is unjustified and unlikely. Lastly, there is a stated assumption that the upper portions of the river were not especially suited for floating. This is patently untrue, since the Upper Chattooga was - and remains - a unique and treasured wilderness river paddling experience for experienced canoeists and kayakers.

The conclusions state that the basis for the boating ban was for safety, solitude for anglers, and conflicts. This may be the best story there is, but that is all it is, a story. The actual record - even enhanced by interviews that the Report states may have “uncertain motivations” - does not support these conclusions or justify the decision. There were no accidents on the Upper Chattooga, there was very low floating use on the Upper Chattooga, and there is no evidence of conflicts on the Upper Chattooga. The boating ban on the Upper Chattooga may have been a response to accidents, increased use, and possible conflicts on the Lower River as the report suggests. However, there is no hard evidence of conflicts involving paddlers, and the AW appeal decision has clarified that safety and solitude did not justify banning boating.

Importantly, no factual information was included in the History Report that was not part of the record considered during the AW appeal. The interviews are anecdotal, potentially biased, and generally in agreement with existing record and understanding of the basis for the ban. Thus, since the History Report was generated in response to the AW appeal, the History Report should conclude that the original ban was not justified based on the AW appeal decision.

Thank you for considering these comments,

A handwritten signature in black ink, appearing to read 'K. Colburn', written in a cursive style.

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American Whitewater's Comments on the USFS Report titled "Capacities on other Wild and Scenic Rivers: seven case studies"

Respectfully Submitted on May 7, 2007

American Whitewater has reviewed the report titled: "Capacities on other Wild and Scenic Rivers: seven case studies."

The case studies in the Report were purportedly selected from hundreds of Wild and Scenic River reaches because of their "similarities to issues on the Upper Chattooga." While there are some similarities and some differences between these case studies and the upper Chattooga, it is important to remember that the purpose of the upper Chattooga capacity analysis is to determine *if* there are *any* issues on the Chattooga that warrant management, and if so what they are. The assumption going into the analysis should be that there are no issues – past, present, or likely once use is restored – relating to whitewater boating on the Upper Chattooga. What should be assumed is that there may be some resource and/or recreational impacts associated with past, present, or potential management that may require a change in management direction. With several exceptions, these case studies confirm that non-commercial, day-use, whitewater boating is seldom singled out for any management action or limits, and when it is, those limits are based on sound data and equitably applied to other users as well. The exceptions, the Upper Rogue, N Umpqua, and Kern "Forks", are simply anomalies. Each is very different from the upper Chattooga, and each has significant problems that may render the boating limitations illegal or inconsistent with the WSRA or other regulatory guidance. Our interests rest in finding solutions on the upper Chattooga which are consistent with river management on a national scale.

Given that very few WSRs in this country have limitations on primitive day-use non-commercial floating, the selected rivers surveyed in the Report does not paint an accurate picture of national river management because it surveys nearly as many rivers with limits as it does rivers without limits. In fact, limitations are so rare, that a more appropriate study might attempt to discover why a handful of rivers (three or less) have parted from the overwhelming WSR management standard which is to *not* limit (much less ban) this form of primitive floating.

Notwithstanding that the Report is unrepresentative of national WSR management, the report is informative on a number of issues. We respectfully offer certain specific comments to the Report which we set forth below. In these comments

we will point out some similarities and differences between the selected reaches and the upper Chattooga that are not readily apparent in the Report. We will also address the impacts and context of the management actions carried out on each river. We respectfully request that you revise the Report where applicable to reflect the comments in this letter.

Report Omission

The Report is deficient in that it does not contain one or more case studies addressing recreational and ecological management of Wild and Scenic Rivers as they pass through private lands. This is a critical issue on the Chattooga in need of guidance, and we ask that the Report be revised to include this topic. A significant portion of the Chattooga Cliffs Section of the Chattooga Wild and Scenic River flows through private lands. The river at its uppermost access point is posted with menacing No Trespassing signs. Other WSRs are typically posted with large “Welcome” signs. The USFS has totally eliminated recreation (a designated ORV) from this section of the river, has not managed the other ORVs, and has not entered or studied this section of river as part of the user capacity analysis. We have brought this issue up repeatedly, and yet there are no case studies in the Report addressing private lands as they affect the right to float and the rights of the USFS to manage for all ORVs. Are there other examples of where the USFS and the public have essentially been locked out of a designated Wild and Scenic River by private landowners? Alternately, are there examples of situations where the USFS has resolved such issues in a manner that has resulted in active management and protection of the ORVs? Who manages floating on Wild and Scenic Rivers as the flow through private lands: the federal managing agency or the private landowner as limited by state navigability laws?

Comments Regarding the Report’s Introduction

The preliminary conclusions bulleted in the Introduction fail to mention or comply with overarching guidance from the Wilderness Act, the Wild and Scenic Rivers Act and Forest Service Policy guidance documents – which all provide specific direction on how capacity related issues should be addressed. It is clear that several of the case studies which exhibit extreme use limitations are the rare cases in which these policy mandates were pushed to - or beyond - the limits of the regulations and were not challenged administratively or legally.

This section needs to more realistically depict the regulatory and legal arena in which capacity decisions are made – if it is to reach any conclusions at all. First, the Forest Service manual states that indirect limits to use should be exhausted before *any* direct limits are imposed. The Forest Service manual further provides that, in the drastic situations where data support use limitations, such limitations must be implemented in the least intrusive and most equitable way. Second, visitor freedom in Wilderness Areas should be maximized, and only limited when necessary following a specific process. Finally, important recreational values (such as boating on the Upper Chattooga) that lead

to2007.05.07 AW Case Study Comments Final WSR designation must be protected and/or enhanced on Wild and Scenic Rivers.

This section of the Report simply does not paint a complete picture of the decision space that managers operate in, the best management practices that make sense on rivers, or the appropriate processes managers use to gradually limit uses and manage specific impacts.

Comments Regarding Kern River

On all six of the SF Kern segments, and Segment 2 of the NF Kern, use is low due to rare optimal flows, logs, and perhaps other alternatives. Thus, to the extent the Kern is analogous to the upper Chattooga, it is the SF Kern and Segment 2 of the NF Kern that are most similar to the upper Chattooga (especially in light of how those segments are unique compared to the Kern river as a whole). Importantly, these analogous sections of the Kern have no limits on boating (at least none discussed in the Report).

Also, while the Report references certain “conflicts,”¹ on the four upper sections of the NF Kern, it is important to note that the FS does not limit private, noncommercial boating on those sections either.

The Forks section of the Kern, where boating limits are in place, is not analogous to the upper Chattooga. The Forks section is a remote multi-day paddling resource that requires camping – making it very different from the Upper Chattooga which is made up of three relatively short day trips.

Moreover, the boating “limits” on the Forks section relate to camping, not boating. The Forks of the Kern has a limit of 15 people per day. This limit is based on perceived camping capacity – not conflicts. The report also fails to mention that this limit has been highly contentious and does not meet the interests of the paddling community – since many have no desire to camp, but rather seek to float the entire reach in a single day. While American Whitewater disagrees with current limits placed on the Forks section for reasons outside the scope of the Report, those limits do not inform management of the upper Chattooga for the reasons stated above, namely that camping is not a logical limitation on use of the upper Chattooga.

¹ Any such conflicts are most likely attributable to commercial rafting use, which is not present on the Upper Chattooga. Thus any purported connection between “conflicts” on the Kern and “conflicts” on the upper Chattooga are unfounded. In addition, the only “conflicts” on the upper Chattooga are merely anecdotal and not supported by any record. The four reaches of the Upper NF Kern referred to as Segment 4 notes some “conflicts” including noise, crowding, and parking. These “conflicts” are symmetrical with the exception of noise which may be asymmetrical, however there is no indication of the severity of these interactions or capacity issues. We object to the Report stating that boating has caused conflicts including “competition for limited space on land and the river, and congested parking” since these are caused equally by all users. We also question the term “conflict” used in this context, since the severity of the interactions is not adequately described to justify calling them conflicts.

We do not approve of the following statement: “Establishing a numeric limit for the number of people who may launch in the Wilderness and Forks Run has significantly contributed to protecting the wilderness experience and biophysical resources.” Any limit on any use will reduce biophysical impacts and enhance the wilderness experience for whoever is allowed access – this is not unique to paddling. The Wilderness Act supports non-mechanized recreational use, and specifically paddling. Managers must strike a balance for visitors and the land based on the Wilderness Act and the WSRA. Limiting a low impact use to 15 people per day based on the faulty assumption that their use will require camping, while some other uses are essentially unlimited is not a success or good management that should become a model.

The concept of a formal “quiet zone” is likely not applicable to private boaters, however the concept of noise sensitivity may be a good educational topic for all backcountry users on the Upper Chattooga. Likewise, USFS educational efforts regarding recognizing and respecting private property may also be applicable on the upper Chattooga.

Comments Regarding Metolius River

This river has significant year-long overlapping angling and boating use which is not present on the upper Chattooga. Regardless, there are no problems or limitations on either use by the USFS. This may serve as a good example of a river with more recreational overlap than the Chattooga would have, yet still has no conflicts in an unlimited management setting.

Comments Regarding North Umpqua River

The N Umpqua is a very different river from the Upper Chattooga. First, it is roadside, providing angling and other access along its entire length, which is not discussed in the Report. Second, it is an extremely popular salmon and steelhead fishing destination – likely far exceeding the Chattooga in every measure of visitation. The terms often applied to the river are “combat fishing” or “shoulder to shoulder fishing.” The angling density is so great on the N Umpqua reaches that whitewater paddlers have been displaced – not the other way around. Absent (or with) a specific comparison of angling visitation, density, and capacity data for the two rivers, management actions on the N Umpqua and the Upper Chattooga should not be compared. They are not comparable resources.

Another major difference is that the N Umpqua is one of the few rivers boatable during times of regional low flows – which coincide with the intense peak fall angling season. The Upper Chattooga on the other hand is only boatable during high flows when angling use is likely to be lowest. Thus, the potential for conflict is far greater on the N Umpqua. The 30 year old voluntary closure on the N Umpqua has essentially acted as a warning to paddlers to expect extremely high angling use on a specific reach during a specific time window. This warning is educational and the knowledge of the angling use

encourages paddlers to seek alternatives. The closure aspect of the management may be less important in reducing conflict as its educational component.

The *voluntary* boating closures on the N Umpqua are unique in our experience. Our regional staff feels that the voluntary closures are generally followed by the paddling community, mostly because the angling use is so intense that paddling the river is not preferable to alternatives. Essentially, unlimited angling has displaced paddlers. Furthermore, there is no reference to real conflicts on the N Umpqua in the Report. The voluntary closures were not challenged administratively or legally by the paddling community to our knowledge and it is uncertain if they would pass either level of scrutiny.

Comments Regarding Pecos River

Boating on the Pecos River has not caused conflicts. The river receives low paddling use and relatively high levels of other uses. This is similar to the Upper Chattooga in that paddling use is likely to make up a miniscule portion of total use and therefore not the most critical use to target in management actions.

Comments Regarding Snake River

Hells Canyon is about as different from the Upper Chattooga as a river could be. It is a dam controlled, massive, multi-day, commercially rafted, desert river that is boatable every day of the year and has jet-boats speeding through the rapids. The Upper Chattooga differs in that paddling use will generally be day-use, use will not include commercial rafting, and flows rarely support paddling. Demand for the Upper Chattooga will be miniscule compared to demand for Hells Canyon for obvious reasons. Importantly, other uses on the Snake River are regulated based upon whether they will adversely impact primitive floating, which is recognized as an outstandingly remarkable recreation value of the river. With regard to the Snake River, the Forest Service has argued in federal court that high levels of *motorized* boating use should be allowed because it would not interfere with the important recreational value of hand-powered floating. Other potential uses of the upper Chattooga should similarly be measured against their potential impact on primitive floating, yet that impact is difficult to measure at this time given that all primitive floating is currently prohibited.

Comments Regarding Upper Rogue River

Perhaps the most important distinction between the upper Rogue and the upper Chattooga is that primitive floating recreation is not an Outstanding Remarkable Value on the Rogue under the Wild and Scenic Rivers Act. This differs from the Chattooga which was designated with a Recreation ORV based largely on the upper Chattooga's documented value as a whitewater boating destination. The USFS is obligated to protect and enhance paddling on the Upper Chattooga under the statute. On the Upper Rogue however, they must simply allow paddling use to occur so long as it does not impact the Rogue's ORVs. This is not mentioned in the Report.

Second, the Upper Rogue is not considered to be a whitewater resource at all. Essentially the USFS banned a use that did not even exist. This differs markedly from the upper Chattooga which has been congressionally recognized as a high quality whitewater paddling resource. The recent paddling descent of the Upper Chattooga corroborated these findings. Banning enjoyment of a high quality recreational use is very different than banning a use on a river for which there is virtually no demand.

Third, we would also like to address the management of wood in rivers in the context of both the upper Rogue and the upper Chattooga. Wood is one issue discussed in the Report relating to whitewater boating on the Rogue. Wood is a natural component of stream ecosystems, and is a natural part of the paddling experience. Paddlers that prefer remote, narrow, and/or steep sections of whitewater are highly skilled at assessing wood pieces and then either going over, under, or around them. When passage is impossible, portage is often accomplished in the river bed or on rocky shores. It is not considered an acceptable practice for paddlers to disturb the natural ecosystem by removing wood to facilitate passage. Banning paddling to protect logs though would be like banning hunting or hiking to prevent killing of non-game species. All that is needed to prevent log removal is a prohibition of log removal – and accompanying education. Obviously this issue becomes more complex on rivers that attract rafting use or high levels of unskilled users – but on Class IV and V kayaking streams the issue is simple.

Finally, the ban on paddling the Upper Rogue would never pass administrative or legal review and therefore it is not a good example. USFS policy is very clear that floating use should be allowed and not limited unless there is a defined conflict with other resource values at which time use should be limited equitably and first indirectly. Safety is also not an adequate reason for banning paddling, and as stated earlier neither is the mere possibility of unregulated removal of wood. There was no use, no capacity problems, no conflicts, etc. Simply put, this ban has no basis (which is where its similarity to the upper Chattooga ends).

Comments Regarding Wilson Creek

Wilson Creek is a relatively good case study to apply to the Chattooga. It is a modern plan from the same state as much of the Upper Chattooga. The plan recognizes and protects recreational enjoyment, while improving the quality of the recreational experiences for all users and protecting the river. The lower reaches are roadside which obviously differs from Chattooga, but the upper reaches and tributaries including Upper Wilson Creek, the Gragg Prong, North Harper Creek, and Lost Cove Creek are all nice class IV or V steep creeks in remote settings. There are no limits on paddling.

American Whitewater's Conclusions

These case studies exhibit a range of good management to marginal or bad management yet are all presented as good management. They are presented as having similarities to issues on the Chattooga but we are unaware of any real issues involving

paddlers on the Chattooga. Regardless, there are at least as many differences as similarities between the Chattooga and the rivers in the case studies. With that being said, there are definitely lessons to be learned from these case studies. Limiting non-commercial, day-use, low-use, severely flow limited whitewater boating is *extremely* rare on Wild and Scenic Rivers. The rare examples of this management presented in the case studies each represent questionable decision making. The Kern has a strict and unjustifiable limit based on false assumptions, the Rogue has a senseless ban on a mostly unrunnable section of river for reasons that would fail any scrutiny, and the N. Umpqua has a closure that is merely voluntary. We disagree with any assertion that these closures represent good or defensible river management. We also feel strongly that they have critical differences from the Chattooga that render them poor examples of potential solutions on the Chattooga. Other case studies however that are more similar to the Chattooga show that non-commercial, day-use, low-use, severely flow limited whitewater boating is wholly compatible with other uses and resource protection.

The Report is deficient in that it does not contain one or more case studies addressing recreational and ecological management of Wild and Scenic Rivers as they pass through private lands. This is a critical issue on the Chattooga in need of guidance, and we ask that the Report be revised to include this topic.

Thank you for considering these comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Kevin Colburn". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

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**American Whitewater's Comments on the Chattooga
*Literature Review Report***

Respectfully Submitted May 7, 2007

The Literature Review Report lacks key concepts in the literature, which we have tried to include in these comments. Many of these comments and citations were included in greater detail in our appeal of the Sumter National Forest Land and Resource Management Plan, so their omission in this Report is surprising. Much of the discussion in the Report is accurate and well written and the problems in the report generally stem from omissions rather than errors. We hope these comments can lead to a more robust Final Literature Review Report. Perhaps the most critical failure of the Report comes in the management component. Management actions are listed without any context from the literature – rather than as solutions for specific types of problems in specific settings. A list of actions is meaningless without the context of why, when, and how the actions would be applied. While it may be beyond the scope of the Literature Review, management ideas and actions should also be discussed within the bounds of the regulatory framework found in the Wilderness Act, Wild and Scenic Rivers Act, Forest Service Manual, Forest Service Handbook, and other sources. Management ideas outside of the regulatory arena are just ideas, which may or may not be appropriate or legal.

We have organized our comments based on the organization of the Report, using the same bold titles and numbering, for your convenience.

AW Comments On: 2.1.1 & 2.2.1 Influences of Type of Recreational Use

This section is incomplete because it does not specifically discuss the concept of recreational specialization. This is extremely relevant because the level of specialization and skill required to paddle the Headwaters is quite high. Recreation specialization is characterized by a range of elements related to individual attributes of participation and setting preferences. Recreation specialization research examines widely ranging topics including, locus of control,¹ privacy orientation,² specialization, experience, social group

¹ Knopf, R.C., Peterson, G.L., Leatherberry, E.C. 1983. *Motives for Recreational Floating: Relative Consistency Across Settings*. Leisure Sciences. 5: 231-255.

² Knopf, R.C. 1987. *Human Behavior, Cognition and Affect in the Natural Environment*. In Handbook of Environmental Psychology. Stokols, D. and Altman, I. New York: Wiley.

McIntyre, N. 1989. *The Personal Meaning of Participation: Enduring Environment*. Journal of Leisure Research. 21: 167-179.

structure,³ recreation setting preferences, natural setting preferences, equipment,⁴ risk,⁵ and safety.⁶ Studies show that one's level of specialization is positively related to one's sense of place.⁷ Solitude, scenery, small group definition, and sense of place are important to every specialized group.⁸ A review of studies in recreation specialization reveals that both boating and angling take place in the context of limited resources. Both user groups must contend with environmental degradation, and the intensification of legal concerns regarding use of private lands.⁹

Based on the literature, highly specialized paddlers should be seen as a group with strong commitments to environmental stewardship, strong connection to place, high appreciation of wilderness and solitude, and as having a relatively minor environmental impact.

The discussion of interpersonal conflict and social values conflict in the report is generally good. Interpersonal conflict can be defined as the presence of an individual or group interfering with the goals of another individual or group. "Social value conflict can arise between groups who do not share the same norms¹⁰ and/or values,¹¹ independent of the physical presence or contact between the groups."¹²

The alleged conflict on the Headwaters is a social values conflict if any at all. For example, an angler representative made the following comment in support of keeping boaters out of the Headwaters: "Obviously they [boaters] just don't understand

³ Roggenbuck, E.J., Williams, D.R., Bange, S.P., et al. 1991. *River Float Trip Encounter Norms: Questioning the Use of the Social Norms Concept*. Journal of Leisure Research. 23: 133-153.

Schuett, M.A. 1995. *Predictors of Social Group Participation in Whitewater Kayaking*. Journal of Park and Recreation Administration. 13: 42-54.

⁴ Block, P.H., Black, W.C., Lichtenstein, D. 1989. *Involvement with the Equipment Component of Sport: Links to Recreational Commitment*. Leisure Sciences. 11: 187-200.

⁵ Slovic, P. 1964. *Perception of Risk*. Psychological Bulletin. 61: 220-223.

Slovic, P. 1987. *Perception of Risk*. Science. 236: 280-285.

⁶ Mackay, S. 1988. *Risk Recreation in Wilderness Areas: Problems and Alternatives*. Western Wildlands. 33-38.

McEwan, D.N. 1983. *Being High on Public Land: Rock Climbing and Liability*. Parks and Recreation. 18: 4650

⁷ Ewert, Alan., Hollenhorst, S. 1994. *Individual and Setting Attributes of the Adventure Recreation Experience*. Leisure Sciences 16: 177-191.

Bixler, R., Backlund, E. 2002. *Chattooga National Wild and Scenic River Trout Angler Substitution Study*. Clemson University, Dept of Parks, Recreation and Tourism Management.

Bixler, R., Backlund, E. 2002. *Activity of Resource Substitutes: Paddlers Using the Chattooga River*. Clemson University, Dept of Parks, Recreation and Tourism Management.

⁸ Ewert, Alan., Hollenhorst, S. 1994. *Individual and Setting Attributes of the Adventure Recreation Experience*. Leisure Sciences 16: 177-191.

⁹ Lee, R.D. *Recreational Use Statutes and Private Property in the 1990's*. 1995; *Journal of Park and Recreation Administration*. 13: 71-83

¹⁰ Ruddell, E.J., Gramann, J.H. 1994. *Goal orientation, norms, and noise induced conflict among recreation area users*. Leisure Sciences. 16: 93-104.

¹¹ Sarembe, J., Gill, A. 1991. *Value conflicts in mountain park settings*. Annals of Tourism Research. 18: 155-172.

¹² Vaske, J.J., Donnely, M.P., Wittman, K., and Laidlaw, S. (1995). *Interpersonal Versus Social-Values Conflict*. Leisure Sciences, 17, 205-222.

backcountry anglers...and our low tolerance for encounters with others with different beliefs."¹³ Researchers describe social values conflicts as follows:

“if people do not observe an event, but believe a problem situation exists, the type of conflict must stem from a conflict in social values.”¹⁴

Obviously there has not been interpersonal conflict between boaters and anglers (or other users) on the Chattooga Headwaters since there are no boaters allowed on the Chattooga Headwaters. Furthermore there are no studies documenting interpersonal conflicts between boaters and other dispersed recreationists on any of the hundreds of rivers in the region that anglers and paddlers share. Rather the alleged conflict must be based on the perception of a problem rather than on any actual event. Specifically the conflict on the Chattooga is a social values conflict created by the Sumter National Forest, which gave one group exclusive access to the river while discriminatorily banning another. This decision to favor one user group is apparently based on stereotypes of paddlers, and is not based on any studies. Studies show that if an activity is stereotyped, it may result in intolerance, regardless of situational factors.¹⁵

The Literature Review Report does not directly address the concept of stereotyping which is certainly an issue on the Chattooga. It also does not address the role that managers can play in creating or exacerbating conflicts through artificially removing some recreational users to benefit others. We have witnessed significant social values conflicts primarily in situations where a use is artificially removed and then proposed to be allowed once again. On rivers where uses exist with equal footing throughout time conflicts are far more rare – and more likely based on goal interference than on social values.

AW Comments On: 2.1.2, 2.2.2, 2.1.3 & 2.2.3 Recreational Use Encounters and Crowding & Encounter Norms

Several studies have shown that an individual's cognitive belief that a particular backcountry situation is a problem may not correspond with that individual's experience.¹⁶ In other words, while some users may expect the presence of paddlers to impact their experience, those impacts may not actually occur. This phenomenon is

¹³ Comment to Draft Sumter EIS.

¹⁴ Id.

¹⁵ Ivy, M.I., Stewart, W.P., and Lue, C. (1992). *Exploring the Role of Tolerance in Recreational Conflict*. Journal of Leisure Research. 24. 348-360.

¹⁶ Patterson, M.E., and Hammitt, W.E. (1990). *Backcountry Encounter Norms, Actual Reported Encounters, and Their Relationship to Wilderness Solitude*. Journal of Leisure Research. Vol. 22. No. 3. 259-275.

Ditton, R.B., Fedler, A.J., and Graefe, A.R. (1983). *Factors Contributing to Perceptions of Recreational Crowding*. Leisure Sciences. Vol. 5, No. 4. 273-288.

Hendricks, W.W. (1995). *A Resurgence in Recreation Conflict Research: Introduction to the Special Issue*. Leisure Sciences. 17. 157-158.

Owens, P.L. (1985). *Conflict as a social interaction process in environmental and behavior research: The example of leisure and recreation research*. Journal of Environmental Psychology. Vol. 5. 241-259.

critical to predicting the response of other users when paddling is restored to the Upper Chattooga. The results suggest that while some stakeholders claim zero tolerance, the impacts of paddling on their experiences may not be as severe as they anticipate.

We are curious if there are studies that have looked at the distribution of encounter tolerance levels among populations of recreationists. For example, it would seem significant if 5% of a population had a zero tolerance yet the rest of the population was tolerant of a significant number of encounters each day. This type of analysis has direct management implications regarding the target population for management. We are also curious if studies have discussed groups of recreationists exaggerating their own sensitivity for strategic gain in management decisions. It seems that all a group would have to do to justify a monopoly in some or all time and space on public lands would be to present a unified fabricated story of zero tolerance against other recreationists (based on the literature only – not including regulatory guidance to the contrary). Are their examples of this in the literature?

AW Comments On: 2.1.4 Influence of Use Experience and Place Attachment

Kinney explores several topics relating to place and specialization among Class V kayakers.¹⁷ His thesis certainly merits discussion and a citation in the Literature Review.

AW Comments On: 2.2.4: Perceptions of Wilderness and Solitude Experiences

The discussion of solitude is incomplete. We suggest the addition of several sources and concepts. Patterson and Hammitt conclude that encounters between recreationists have a minimal impact, if any, on the solitude experienced by those recreationists.¹⁸ Their conclusion is based on the fact that “solitude has a broader meaning than simply visitor encounters and perceived crowding.”¹⁹ Their research concludes that “solitude refers to remoteness, primitiveness, nonconfinement, cognitive freedom, and autonomy. In fact, many of these other aspects of solitude appear to be more important than being alone.”²⁰

The concept of cognitive freedom is recognized in USFS policy that stresses maximizing visitor freedom in the Wilderness. The boating ban is the opposite of this recommendation and concept of solitude.

¹⁷ Kinney, T.K. 1997. *Class V Whitewater Paddlers in American Culture: Linking Anthropology, Recreation Specialization, and Tourism to Examine Play*. Unpublished Graduate Thesis. Northern Arizona University.

¹⁸ Patterson, M.E., and Hammitt, W.E. (1990). Backcountry Encounter Norms, Actual Reported Encounters, and Their Relationship to Wilderness Solitude. *Journal of Leisure Research*. Vol. 22. No. 3. 259-275.

¹⁹ “Solitude need not be the opposite of social crowding” (Hammitt, 1983).

²⁰ Hammitt, W.E. (1983). *Toward and Ecological Approach to perceived crowding in outdoor recreation*. *Leisure Sciences*. 5. 309-320.

Hammitt, W.E. (1982). *Cognitive Dimensions of Wilderness Solitude*. *Environment and Behavior*. 14. 478-493.

Hammitt, W.E., Brown, G.F. (1984). *Functions of privacy in wilderness environments*. *Leisure Sciences*. 6. 151-165.

In the Record of Decision regarding our appeal of the forest plan, the reviewing officer stated that: “While there are multiple references in the record to resource impacts and decreasing solitude, these concerns apply to all users and do not provide the basis for excluding boaters without any limits on other users.” Ewert and Hollenhorst confirm that solitude is important to every specialized group.²¹ Solitude should be discussed in the context of being equally important to groups of similar levels of specialization, and differing based on expectations which are in turn based on a number of factors including location and past management.

AW Comments On: 2.3.1 Influences of Type of Recreational Use (Chattooga Specific)

Paddlers on the Upper Chattooga should be considered highly specialized recreationists and discussed in that context.²² See our comments on recreation specialization elsewhere in this document.

AW Comments On: 2.3.2 Recreational Use Encounters (Chattooga Specific)

The only point that we would like to make regarding this section is that there are no data that include paddlers as part of the mix of users on the Upper Chattooga. This should be mentioned in the Report as a data gap.

AW Comments On: 2.3.3 Influence of Use Experience and Place Attachment (Chattooga Specific)

Chattooga River paddlers exhibited a stronger sense of place than Chattooga River anglers in every category of the studies cited. In fact, one finding of the Bixler study characterized Chattooga River angler’s motivation for fishing on the Chattooga in the following manner: “For a significant portion of the respondents, trout fishing may be a means of expressing their [socio-economic] status,” not finding a sense of place.²³ This is a significant finding that is not referenced in the Report.

We would like to point out that paddlers have had almost no ability to develop Place Attachment on the Upper Chattooga due to the artificial ban on their preferred activity. Place bonding occurs most strongly through engaging in a preferred activity, especially for highly specialized recreationists. Comparisons of Place Attachment between paddlers and other permitted users must be tempered by this factor. What can be said is that USFS management has eviscerated paddlers’ place attachment on the Upper Chattooga for over a generation. Allowing paddling in the future may or may not

²¹ Ewert, Alan., Hollenhorst, S. 1994. *Individual and Setting Attributes of the Adventure Recreation Experience*. Leisure Sciences 16: 177-191.

²² Kinney, T.K. 1997. *Class V Whitewater Paddlers in American Culture: Linking Anthropology, Recreation Specialization, and Tourism to Examine Play*. Unpublished Graduate Thesis. Northern Arizona University.

²³ Bixler, R., Backlund, E. 2002. *Chattooga National Wild and Scenic River Trout Angler Substitution Study*. Clemson University, Dept of Parks, Recreation and Tourism Management.

occasionally decrease other users' connection with the place, but it would absolutely and vastly increase paddlers' connection with the place. Allowing all uses would rebalance an unequitable impact on place relationships on the Chattooga. This concept should be pointed out in the Report.

AW Comments On: 2.4.1 Identification and Selection of Indicators

If the limits of acceptable change methodology is to be applied equitably, the USFS must acknowledge the baseline for any changes must include paddling on the Upper Chattooga (without artificial limits). With that baseline, uses may be limited following protocol. There exists no reason for the current boating ban, and the ban should therefore not be considered part of the baseline. Part of this correction for past management must include acknowledgement that the perspective and stated tolerance levels of existing users are artificially skewed and that some resetting of expectations is totally appropriate. Paddlers' use preferences must also be considered.

AW Comments On: 2.4.2 Use Limits & 2.4.3 Other Factors (including Zoning)

The following statement is erroneous: "Vaske et al (2006) states that zoning incompatible users to different locations can be an effective method of managing conflict that stems from interpersonal conflict. Furthermore, when the source of conflict is a difference in values, education may be required." Vaske did not state that education may be required *in addition to* zoning as the wording "furthermore" infers. They are in fact two different solutions for two different types of conflicts. From Vaske et al:

Understanding these sources of conflict (interpersonal conflict versus conflicts in social values) is important for natural resource managers because the solution to the conflict depends on the cause of the problem. Zoning, for example, may reduce conflicts stemming from interpersonal conflict because the user groups are physically separated. On the other hand, zoning is likely to be ineffective when conflicting values are involved (Ivy, *et al.*, 1992²⁴, Owens, 1985²⁵). Because social interaction is not necessary for this type of conflict to occur, physically separating users will have little influence. In these situations, education may be more effective.²⁶

Vaske asserts that "the potential for interpersonal conflict increases with increased visitation. On the other hand, for individuals who fundamentally disagree with an

²⁴ Ivy, M.I., Stewart, W.P., and Lue, C. (1992). *Exploring the Role of Tolerance in Recreational Conflict*. Journal of Leisure Research. 24. 348-360.

²⁵ Owens, P.L. (1985). *Conflict as a social interaction process in environmental and behavior research: The example of leisure and recreation research*. Journal of Environmental Psychology. Vol. 5. 241-259.

²⁶ Vaske, J.J., Donnely, M.P., Wittman, K., and Laidlaw, S. (1995). *Interpersonal Versus Social-Values Conflict*. Leisure Sciences, 17, 205-222.

activity..., these conflicts in values should not vary with visitation.”²⁷ In other words, allowing boating on the Headwaters would not exacerbate the alleged social values conflict that may be present. He concludes that “when the source of conflict is differences in values, however, zoning is not likely to be very effective.” “In this situation educational efforts...may be more effective.”²⁸

Recreational specialization research shows that zoning will do nothing to eliminate the perceived conflict on the Chattooga River, and will instead exacerbate conflict. This research also shows that education, not zoning, is the best means of reducing conflict.

Even if a conflict between boaters and other users did exist, education—not zoning—would be the best (and only) way to resolve that conflict.²⁹ Dyke and Rule found that people are less likely to experience anger if they are aware of the roots of the behavior that would have otherwise angered or frustrated them.³⁰ Ramthun accordingly suggests that “interpretive efforts that help users to understand the behaviors, motivations, and land use needs of other user groups may reduce perceptions of conflict.”³¹ Examples of this type of education on the Chattooga would include educating anglers on paddlers’ river stewardship efforts, the compatibility of paddling use, concern with safety, and paddlers’ enjoyment of solitude. Ramthun also states that “while it is obviously necessary to establish some behavioral protocols, it may be equally necessary to promote understanding and acceptance for the needs and motives of different user groups. If these educational efforts emphasize that different user groups have many similarities, especially regarding relationship to setting, perhaps fewer biased evaluations will occur.”³²

Ramthun concludes his study as follows:

An emphasis on understanding and acceptance, if successful, would help to redefine the social situation in outdoor recreation settings. At present, other user groups are often viewed by recreationists as a source of interference and competition. By emphasizing tolerance in our interpretive efforts, we may encourage the people in different user groups to see each other simply as fellow travelers in the outdoors.”³³

²⁷ Vaske, J.J., Donnely, M.P., Wittman, K., and Laidlaw, S. (1995). *Interpersonal Versus Social-Values Conflict*. *Leisure Sciences*, 17, 205-222.

²⁸ Id.

²⁹ Vaske et al’s recommendation that education be utilized to resolve social values conflict like those on the Chattooga is critical to the resolution of this issue and is well supported by other literature.

³⁰ Dyck and Rule, 1978 as cited in Ramthun, R. 1995. *Factors in User Group Conflict Between Hikers and Mountain Bikers*. 159-169.

³¹ Ramthun, R. 1995. *Factors in User Group Conflict Between Hikers and Mountain Bikers*. 159-169.

³² Id.

³³ Ramthun, R. 1995. *Factors in User Group Conflict Between Hikers and Mountain Bikers*. 159-169.

This conclusion is consistent with the literature and USFS policy and shows that education, not zoning, is the most appropriate means of resolving any alleged user conflicts on the Chattooga.

AW Comments On: 2.5 Key Findings and Management Considerations

The management considerations present a list of management options – yet fails to mention that these options exist in a procedural framework clearly defined by the regulatory arena that decisions take place in. These menu items may all exist in the literature, but in a regulatory context - or in their context in the literature - many of them are totally inappropriate in many situations. Without context, this section is meaningless.

AW Comments On: 3.1.2 Flow-Recreation Issues in the Chattooga Corridor

This section is missing the only robust methodology capable of gathering the kind and quality of data sufficient for decision making on the Chattooga. This methodology has been reiterated by American Whitewater numerous times in comments. It simply entails permitting some large number of people to paddle the river should they choose to do so, and surveying those paddlers via a mail or online survey tool. This methodology allows paddlers to opportunistically paddle the river during stochastic high flow periods, gathers a large sample size of real users at the conditions they seek, and costs virtually nothing to implement. Studies such as these have been carried out on West Rosebud Creek (MT), the Cheoah River (NC), the Crooked River (OR), the Sultan River (WA), and many others. The lack of this obvious and ideal methodology in the Report is a glaring omission.

Expert panels are often capable of gathering data sufficient for management decisions as stated in the Report. Single flow assessments however are rarely if ever sufficient to base long term management decisions on. Typically, single flow assessments are used to determine if a multiple flow assessment is justified based on reach quality, or needed based on the certainty of responses. Time and time again during flow studies the estimates made during single flow assessments are either found to be wrong or are significantly refined through a multiple flow assessment. The limitations of a single flow assessment should be explained in detail.

AW Comments On: 4.0 RECREATIONAL USE EFFECTS ON TRAIL AND SITE RESOURCES

We would like to see more discussion of the benefits of trail use, or at least an acknowledgement of it. Most of the great conservationists of our time, and most of the voters that have supported great conservation initiatives developed a personal relationship with the natural world on a trail of one kind or another (including water trails, i.e., rivers). Outdoor recreation is one of the primary drivers of resource protection and trails are the gateway to outdoor recreation experiences including hiking, climbing, paddling, fishing, hunting, and camping. In an era when an increasingly smaller percentage of people are visiting national parks and other public lands, it would serve us all well to acknowledge

that people are welcome to responsibly enjoy public lands – not discouraged from doing so.

AW Comments On: 5.1.2 Potential Influences of Recreation Activity Type and Behavior

There are several omissions in this section. First, there is no discussion of hunting yet hunting is discussed in some detail in other places in the document. Second, the section regarding fishing is incomplete. The Report states that stocking impacts are being debated. In fact, while there is always debate in science, there is a great deal of scientific consensus that stocking has numerous definable and predictable impacts. Please see the following references as a starting point regarding the accepted impacts of fish stocking and other angling related actions:

- Trout stocking impacts amphibians³⁴⁻³⁵
- Trout stocking impacts entire freshwater food webs³⁶⁻³⁷⁻³⁸
- Trout stocking causes loss of genetic diversity and population changes³⁹⁻⁴⁰
- Trout stocking displaces native trout⁴¹⁻⁴²

³⁴ Pilliod, David S.; Peterson, Charles R. 2000. Evaluating effects of fish stocking on amphibian populations in wilderness lakes. *In*: Cole, David N.; McCool, Stephen F.; Borrie, William T.; O'Loughlin, Jennifer, comps. *Wilderness Science in a Time of Change Conference—Volume 5: Wilderness Ecosystems, Threats, and Management*; 1999 May 23-27; Missoula, MT. Proceedings RMRS-P-15-VOL-5. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station: 328-335. Leopold Publication Number 406.

³⁵ Pilliod, David S.; Peterson, Charles R. 2001. Local and landscape effects of introduced trout on amphibians in historically fishless watersheds. *Ecosystems*. 4(4): 322-333. Leopold Publication Number 446.

³⁶ Yang, Y.F. et al. (2005) Effects of fish stocking on the zooplankton community structure in a shallow lake in China. *Fish. Manage. Ecol.* 12, 81–89

³⁷ Lisa A. Eby, W. John Roach, Larry B. Crowder and Jack A. Stanford. 2006. Effects of stocking up freshwater food webs. *TRENDS in Ecology and Evolution* Vol.21 No.10.

³⁸ Scavia, D. et al. (1986) Influence of salmonine predation and weather on long-term water quality trends in Lake Michigan. *Can. J. Fish. Aquat. Sci.* 43, 435–443

³⁹ Simon, K.S. and Townsend, C.R. (2003) Impacts of freshwater invaders at different levels of ecological organisation, with emphasis on salmonids and ecosystem consequences. *Freshw. Biol.* 48, 982–994.

⁴⁰ Dunham, J.B. et al. (2004) Assessing the consequences of nonnative trout in headwater ecosystems in Western North America. *Fisheries* 29, 18–24

⁴¹ Nakano, S. et al. (1998) Competitive interactions for foraging microhabitat among introduced brook charr, (*Salvelinus fontinalis*) native bull charr (*S. confluentus*) and westslope cutthroat trout (*Oncorhynchus clarki lewisi*) in a Montana stream. *Environ. Biol. Fishes* 52, 245–355

⁴² Gunckel, S.L. et al. (2002) Effect of bull trout and brook trout interactions on foraging habitat, feeding behavior growth. *Trans. Am. Fish. Soc.* 131, 1119–1130

- Trout stocking can reduce or eliminate other species⁴³
- Trout stocking can impact macroinvertebrates^{44_45_46}
- Trout stocking can impact riparian plants and animals^{47_48_49_50}
- Lead tackle impacts aquatic and terrestrial animals^{51_52_53_54}
- Monofilament line can impact aquatic and terrestrial animals⁵⁵
- Lost fishing hooks can impact aquatic and terrestrial animals as well as other recreationists⁵⁶.
- Fishing can result in direct mortality to fish, both intentionally as take, and unintentionally⁵⁷.

⁴³ Simon, K.S. and Townsend, C.R. (2003) Impacts of freshwater invaders at different levels of ecological organisation, with emphasis on salmonids and ecosystem consequences. *Freshw. Biol.* 48, 982–994

⁴⁴ Gliwicz, Z.M. and Rowan, M.G. (1984) Survival of *Cyclops abyssorum taticus* (Copepoda, Crustacea) in alpine lakes stocked with planktivorous fish. *Limnol. Oceanogr.* 29, 1290–1299

⁴⁵ Nakano, S. and Murakami, M. (2001) Reciprocal subsidies: Dynamic interdependence between terrestrial and aquatic food webs. *Proc. Natl. Acad. Sci. U. S. A.* 98, 166–170

⁴⁶ 37 Baxter, C.V. et al. (2005) Tangled webs: reciprocal flows of invertebrate prey link streams and riparian zones. *Freshw. Biol.* 50, 201–220

⁴⁷ Nakano, S. and Murakami, M. (2001) Reciprocal subsidies: Dynamic interdependence between terrestrial and aquatic food webs. *Proc. Natl. Acad. Sci. U. S. A.* 98, 166–170

⁴⁸ 37 Baxter, C.V. et al. (2005) Tangled webs: reciprocal flows of invertebrate prey link streams and riparian zones. *Freshw. Biol.* 50, 201–220

⁴⁹ Baxter, C.V. et al. (2004) Fish invasion restructures stream and forest food webs by interrupting reciprocal prey subsidies. *Ecology* 85, 2656–2663

⁵⁰ Knight, T.M. et al. (2005) Trophic cascades across ecosystems. *Nature* 437, 880–883

⁵¹ Eisler, Ronald, U.S. Fish and Wildlife Service. "Lead Hazards to Fish, Wildlife, and Invertebrates: A Synoptic Review." Biological Report 85(1.14), *Contaminant Hazard Reviews*, April 1988.

⁵² Scheuhammer, A.M., Money, S.L., Kirk, D.A., Donaldson, G. "Lead fishing sinkers and jigs in Canada: Review of their use patterns and toxic impacts on wildlife." Occasional Paper Number 108, Canadian Wildlife Service, March 2003.

⁵³ Sidor, Inga F., Pokras, Mark A., Major, Andrew R., Poppenga, Robert H., Taylor, Kate M. Miconia, Rose M. "Mortality of Common Loons in New England, 1987 to 2000." *Journal of Wildlife Diseases*, Vol. 39, No. 2, pp. 306-315.

⁵⁴ Scheuhammer, A.M., Norris, S.L. "A review of environmental impacts of lead shotshell ammunition and lead fishing weights in Canada." Occasional Paper Number 88, Canadian Wildlife Service, August 1995.

⁵⁵ This is a common issue discussed in the grey literature, and the Report authors should research this in the peer reviewed literature.

⁵⁶ This is a common issue discussed in the grey literature, and the Report authors should research this in the peer reviewed literature.

- Wading may impact macroinvertebrates⁵⁸
- Trout stocking artificially increases angler interest in the stocked streams.

American Whitewater's Conclusions

We hope that the USFS finds these comments useful, and can enhance their literature review with the sources and information we have shared.

Thank you for considering these comments,



Kevin Colburn

⁵⁷ Aaron Bartholomew and James A. Bohnsack. 2005. A Review of Catch-and-Release Angling Mortality with Implications for No-take Reserves. *Reviews in Fish Biology and Fisheries*. Volume 15, Numbers 1-2 / February, 2005. 129-154

⁵⁸ Kick-netting is a widely used method for causing unintentional drift in stream macroinvertebrates for the purpose of sampling, inferring that walking and shuffling feet on the stream bottom for any purpose would have the same effect. To learn more about the methodologies, see Cummins, K.W and R.W. Merritt. 1996. *Aquatic Insects of North America*. Third edition. Kendall Hunt Publishing.



The Highlands Biological Station

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An Affirmative Action/Equal Opportunity Institution

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5 February 2007

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Warren Wilson College
Western Carolina University

Dr. Jerome Thomas
Forest Supervisor, Francis Marion & Sumter National Forests
USDA Forest Service
4931 Broad River Road
Columbia, SC 29212

Dear Dr. Thomas,

I am writing in regard to the issue of opening the upper Chattooga River to boating. I am a biologist with a specialty in insect ecology and behavior. I have been on the faculty at Western Carolina University in Cullowhee, NC, for nearly 10 years, and I am now H. F. and Katherine P. Robinson Professor of Biology there. I am also in my second year as Executive Director of the Highlands Biological Station in Highlands, NC. I have authored well over two dozen research papers and book chapters, as well as a recent book on insect social behavior published by Harvard University Press. My teaching experience includes genetics, entomology, biogeography, environmental biology, evolution, and conservation biology. As a relative newcomer to Highlands last year I was unfamiliar with the upper Chattooga area, and with the issues and arguments surrounding the potential opening of that stretch of river to boating traffic. I have followed the discussion in the newspapers, and over the past several months I have sought to educate myself on the ecology of the upper Chattooga watershed environment in order to come to an informed position on the potential impact that boating may have on the river and surrounding forest. I would like to register my thoughts and conclusions with you regarding this important matter.

I will share my main point up front: I have come to the conclusion that the upper Chattooga watershed area is a unique biological and cultural resource that is likely to suffer irreparable degradation through the human impacts associated with boating. That the area in question is a valuable biological resource is beyond question, as a rare example of a wild high-gradient river coursing through a sizable tract of intact eastern deciduous forest. Its wilderness designation also makes the upper Chattooga a valuable cultural resource, an equally rare example of a vast and relatively unimpacted forest that now represents an island in a landscape in various stages of impact and

Rec'd B/2-9-07

degradation. As cultural resource, such wilderness areas give people the opportunity to realize profound solitude and contemplation.

Biologically speaking, the landscape of the upper Chattooga provides an astoundingly diverse mosaic of habitat types, from cove and upland forest to rock outcrop and spray cliff communities. The rugged and wet conditions such as those that prevail in this area provide a haven for an assemblage of plant and animal species, including rarities like tropical-affinity ferns. Our area in general, but especially large intact tracts such as the Chattooga watershed area, boasts peak or near-peak world biodiversity for many taxonomic groups. Most notably, the area is world-renowned for its salamander diversity, and that of its flowering plants.

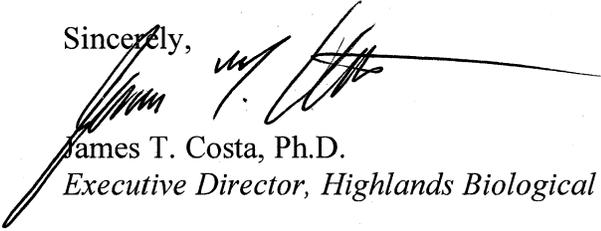
Opening this area to boat traffic and, more importantly, the attendant human activity in shuttling boaters, portaging, and picnicking, will have the inevitable consequence of introducing significant biological threats to the integrity of the forest. This will occur through both direct degradation by establishing high-use trails (and the elevated incidence of litter and refuse associated with such trails), and the unintentional introduction of pest species that will secure a foot-hold in the forest. Aggressive exotic pest plants like Japanese knotweed, plantain, privet and others tend to be dispersed along disturbance areas (e.g., trails) by human vehicular and foot traffic. Elevated human traffic in the upper Chattooga will almost certainly introduce such pests, ultimately creating "edge effects" via degradation that eats into the adjacent forest. At present the upper Chattooga watershed area can be seen as an ecological core area that acts as a refuge and source population. The fragmentation and edge effects stemming from intensive visitation and use will erode this core area.

A parallel degradation occurs with respect to the cultural value of the upper Chattooga watershed. This Wild and Scenic River area holds immense value for what it symbolizes and what it can offer low-impact visitors. The Wilderness Act of 1964 gained wide support because citizens and government leaders recognized that "wildness" and solitude were becoming scarce commodities. The spiritual and aesthetic benefits to be gained from such restricted-access areas like the upper Chattooga are incalculable; opening this stretch of river to intensive boating use immediately undermines its value as place of solitude and contemplation. I have boated on other rivers in our area, and while the outfitters I boated with were conscientious about such matters as litter, the noise and well-worn portage trails made it clear this was no wilderness experience. Must we leave our footprint absolutely everywhere? I believe that the intent of the Wilderness Act and the Wild and Scenic River program is to save us from ourselves as much as to preserve the biological integrity of our environment.

We are fortunate to have an abundance of rugged and exciting river stretches in our area, nearly all of which are open to boating. It is far from unreasonable to ask that this now-pristine and biologically significant area remain closed to boating traffic and the attendant impacts associated with boating. At a time when the natural landscape of the southern Appalachians is experiencing accelerated fragmentation through development and recreational pursuits, it is only sensible to safeguard the integrity of the few genuinely large and intact tracts of land remaining; the biological and cultural value of such tracts as the upper Chattooga watershed demands that we act responsibly for ourselves and future generations – once degraded, the recovery of the forest and the river is an exceedingly slow process.

Please don't hesitate to contact me if I can provide any further information, perhaps especially regarding my professional assessment of the biological conservation value of the upper Chattooga watershed area. Thank you for your consideration.

Sincerely,



James T. Costa, Ph.D.

Executive Director, Highlands Biological Station

Friends of the Upper Chattooga

2368 Pinnacle Drive
Clayton, Georgia 30525

March 26, 2007

Jerome Thomas, Supervisor
Sumter National Forest
USDA Forest Service
ATTN: JOHN CLEEVES
4931 Broad River Road
Columbia, South Carolina 29212-3530

Dear John: Here's that list of names, which you agreed in our telephone conversation last week to forward to the National Resources Leadership Institute at North Carolina State University. I imagine there might some slight overlap with the list the USDA Forest Service already has provided the NRLI – but I also think there will be some names that will be new to them.

Thank you for agreeing to get this done collaboratively.

Sincerely,

Joseph Gatins

For Friends of the Upper Chattooga

(Friends of the Upper Chattooga include many of the premier conservation and recreation groups in the three affected states: Georgia Wildlife Federation, Chattooga Conservancy, Georgia ForestWatch, North Carolina Wildlife Federation, South Carolina Wildlife Federation, Wilderness Watch, Jackson-Macon Conservation Alliance, the Georgia Council of Trout Unlimited, the South Carolina Council of Trout Unlimited, the North Carolina Council of Trout Unlimited, the Atlanta Fly Fishing Club, and the Whiteside Cove Association.)

The list:

- Dr. James T. Costa, executive director of Highlands Biological Station and the H.F. and Katherine P. Robinson Professor of Biology at Western Carolina University. 828.526.2602. costa@email.wcu.edu
- Buzz Williams, executive director, Chattooga Conservancy. 706.782.6097. info@chattoogariver.org
- Doug Adams, angler, 706.746-2158. edadams1@alltel.net
- James M. Whitehurst, Chairman - The Over The Hill Hiking Club, Highlands, NC 828.526.8134. jmwhitehurst@aol.com
- Brock Hutchins, President - Highlands Plateau Audubon Society, PO Box 833, Highlands, NC
- Robin Otter. Retired federal employee, native of Horse Cove area.
- Ellie Hogan. Hiker/swimmer. Highlands, NC.
- Tom McInnis, angler. 864 654-4003 tomcatmc@bellsouth.net
- Joe Gatins, hiker. Satolah, Georgia. 706.782.9944. jgatins@alltel.net
- Art Shick, angler. fishmor@aol.com
- Jeff Durniak, Georgia DNR. Jeff_Durniak@mail.dnr.state.ga.us

- David Van Lear, retired Clemson University professor. Vanlear1940@bellsouth.net
- Charlie Breithaupt, angler. 706.782.6954. Knc615@windstream.net
- Jimmy Harris. Member of angler panel. abl@alltel.net
- David Cannon. Member of the angler panel. Cannon@gon.com
- Mike Harvell. Member of the angler panel. mike.harvell@fluor.com
- Alex Watson. Member of the angler panel. corbin12@bellsouth.net
- John Benbow. North Carolina Wildlife Federation. fishonJMB@aol.com
- David Bates. Executive Director, Jackson-Macon Conservation Alliance. 828. jmca@dnet.net
- Robert Gould. Retired forester. rgould@sc.rr.com
- Bill Rethorst. Photographer. Highlands, NC.
- Ron Leslie, member of angler panel. Satolah, GA. 706.782.9579. rlleslie@hotmail.com
- Edwin Dale. Retired USFS staff. Mail2edale@aol.com
- Butch Clay, teacher. Mountain Rest, SC. 864.638.7885. clay_butch@bellsouth.net
- Wayne Jenkins, executive director, Georgia ForestWatch. 706.635.8733
- Mike Bamford, swimmer. Cashers, NC Mbamford123@comcast.net
- Stanley Owens. Coon hunter. Satolah, GA. 706.782.3056.
- Wyatt Stevens. Angler. Wstevens@roberts-stevens.com
-

Friends of the Upper Chattooga

2368 Pinnacle Drive
Clayton, Georgia 30525

April 20, 2007

Supervisor Jerome Thomas
Sumter National Forest
USDA Forest Service
ATTN: John Cleeves
4391 Broad River Road
Columbia, South Carolina 29212-3530

Dear John:

The undersigned Friends of the Upper Chattooga ask that the following attachment be made part of the administrative record in the Upper Chattooga River Visitor Use Capacity Analysis, solely as a matter of general information for the USDA Forest Service.

Please call if there are questions.

Sincerely,

Joseph Gatins
Co-district leader, Georgia ForestWatch

Doug Adams,
Newsletter Editor, Rabun Chapter, Trout Unlimited
By JG, with express permission

Charlie Breithaupt,
Chairman, Georgia Council of Trout Unlimited
By JG, with express permission

Tom McInnis,
Chairman, South Carolina Council of Trout Unlimited
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Rusty Berrier,
North Carolina Council of Trout Unlimited
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Buzz Williams,
Executive Director, Chattooga Conservancy
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David Bates,
Executive Director, Jackson-Macon Conservation Alliance
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Wyatt Stevens,
Director, Whiteside Cove Association
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George Nickas
Wilderness Watch
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John Benbow,
President, North Carolina Wildlife Federation
By JG, with express permission

Jerry McCollum
Georgia Wildlife Federation
By JG, with express permission

Attachment:

POINT> and <COUNTERPOINT

Frequently Asked Questions Regarding the Chattooga Headwaters

A boater posted a link on the Sumter National Forest Bulletin Board to "Frequently Asked Questions." To read all 17 boater questions and answers, visit:

http://www.americanwhitewater.org/content/Wiki/aw:chattooga_faq As "foot travel only" stakeholders, we believe readers also should have the "counterpoint" answers provided below.

Do kayaks, canoes and rafts belong in Wilderness areas?

Boater's Point: Yes. The Wilderness Act explicitly states that non-motorized boats are wilderness compliant uses. The Wilderness Act is clear that Wilderness areas are to be managed to allow and encourage backcountry recreation on foot, in boats, and on horseback. As Aldo Leopold wrote in "Wilderness" from A Sand County Almanac in 1949, "Wilderness Areas are first of all a series of sanctuaries for the primitive arts of wilderness travel, especially canoeing and packing." The right to paddle down Wilderness rivers is at the very core of the Wilderness Act and the concept of Wilderness.

Counterpoint: We agree that the Wilderness Act of 1964 recognizes that non-motorized boating is a wilderness compliant use. However, each Wilderness area is managed differently to protect its unique wilderness character. There is nothing in the Wilderness Act that says all compliant uses must be permitted in all Wilderness areas. To allow otherwise would set a precedent that would open all Wilderness lands to all activities and thus destroy everything embedded in the concept of Wilderness and the Act that led to its establishment. The Wilderness Act speaks to administration for "*future generations the benefits of an enduring resource of wilderness*", "*unimpaired for future use as wilderness*", "*preservation of wilderness character*", and "*solitude*", - it does NOT say "*unlimited use*" for recreation.

Howard Zahniser of The Wilderness Society and primary author of the 1964 Wilderness Act, as well as its chief advocate, made it clear on many occasions that recreation is not the purpose of the Act, that it is an allowable use provided that the area's wilderness character is not impaired. But as he stated and we know today, some areas might be closed entirely to recreation in order to protect wildlife. Certainly as an area can be closed to all recreational use, it can be closed to a single type of recreation use. The following is a quote from Zahniser's testimony before Congress: "*Recreational needs for wilderness are indeed pressing. They are provided for in the policy and program that the Wilderness Act will establish. At the same time wilderness may fittingly be preserved on areas where recreation would be damaging to other interests--such as wildlife preservation. On these areas recreation, or other conflicting uses, would be excluded. The lands would be devoted to the peculiar use for which they have been established--but so administered for this purpose as to preserve its wilderness.*" (Hearings before the Subcommittee on Public Lands of the Committee on Interior and Insular Affairs, House of Representatives, Eighty-seventh Congress, Second Session, May 7-11, 1962)

The Ellicott Rock Area provides an example of the importance of balancing competing uses. In 1975, Ellicott Rock Scenic Area was re-designated as the Ellicott Rock Wilderness (ERW). Like a magnet, the new Wilderness label soon made ERW the most visited Wilderness in the entire Forest Service system (measured as visitors/acre/year). However, only 13% of those visitors were anglers (from page 29, "Ellicott Rock Wilderness Management Plan", prepared 1982). The Management Emphasis for ERW: "*The emphasis is to allow ecological and biological processes to progress naturally with little to no human influence or intervention, except the minimum impacts made by those who seek the wilderness as a special place that offers opportunities to experience solitude.*" (Quote from page 3-1 of the Sumter Forest Plan) Obviously, LWD (large woody debris) in the river should not be manipulated, especially to

facilitate visitor recreation. And trout have never been stocked in the ERW. The management must not in any way degrade the wilderness character of the ERW, including its biophysical or social / experiential values.

The Ellicott Wilderness was designated *"in order to assure that an increasing population, accompanied by expanding settlement and growing mechanization, does not occupy and modify all areas within the United States and its possessions, leaving no lands designated for preservation and protection in their natural condition"* 16 U.S.C. § 1131(a). The Ellicott Rock Wilderness congressional designation (Public Law 93-622) described the need to protect Eastern wilderness as "urgent" due to overuse. Congress also noted that areas of wilderness are *"increasingly threatened by pressures of growing and more mobile populations ... and uses inconsistent with the protection, maintenance, and enhancement of the areas wilderness character."* The intent of designation was clearly to protect wilderness areas from overuse not for unlimited recreation.

The ERW management plan does not allow recreational gold panning, horses, or floating (all are Wilderness compliant uses). With the ERW already experiencing impaired wildness and solitude, the Limits of Acceptable Change (LAC) must be established before there is any consideration for adding another user group. For more on LAC, <http://www.fs.fed.us/r8/fms/forest/projects/steps.shtml>

To review the Wilderness Act, visit:
<http://www.wilderness.net/index.cfm?fuse=NWPS&sec=legisAct&error=404>

Is the boating ban illegal?

Boater's Point: Yes, the US Forest Service is breaking the law. The office of the Chief of the USFS determined that the ban was totally unjustified and thus violated the Wilderness Act and the Wild and Scenic Rivers Act. We agree. The Chief's office then decided to allow the illegal ban to be continued for 2-5 years. This decision to allow an admittedly illegal action to continue is what paddlers are challenging in court because it is arbitrary and capricious. The greater legal issues remain: primarily that the USFS has been breaking the law for thirty years by banning a use they are mandated to protect and enhance under both the Wild and Scenic Rivers Act and the Wilderness Act.

Counterpoint: No, the USFS is not breaking the law. Rather the USFS is complying with the decision of the Reviewing Officer of the Office of the Chief of the USFS. Although the Reviewing Officer reversed the Regional Forester's decision to continue the no-boating zone above Highway 28, the appeal decision confirmed that the zoning should remain in place while additional studies are performed because the Forest Service cannot alter such restrictions without proving conclusively that the resource or visitor experience will not be impaired. Such studies, in the end, could continue to support the present zoning. AW has raised this issue with the Chief of the USFS and he responded to AW, consistent with the decision of the Reviewing Office, in a letter dated 5/12/06, *"Associate Deputy Chief Manning provided interim management direction instructing the Regional Forester to manage boating above Highway 28 by applying the management direction from the 1985 Forest Plan, which includes direction maintaining the boating closure that had been established previously. In your letter, you state your belief that it is wrong for the Regional Forester to "interpret and implement [the appeal] Decision in a way that maintains the pre-Decision status quo". However, the Regional Forester is required to follow the interim management direction provided in the appeal decision until such time as a new decision can be reached. The interim management direction is fully consistent with the National Forest Management Act and the regulations governing appeals of land and resource management plans."* Six days later the boaters filed a lawsuit in federal court demanding immediate and unrestricted access to the foot travel only zone. After hearing arguments from both sides, the Judge dismissed their lawsuit.

Further, the Chief's position is supported fully by the Wild and Scenic Rivers Act (W&SRA), which directs the Agency (in this case the USFS) to protect and enhance the Outstandingly Remarkable Values (ORVs) that caused the river to be included in the W&SRA in the first place. For the Chattooga, the ORVs include geology, biology, scenery, recreation, and history. *"The recreational values of the river and corridor are outstanding along its 57-mile course. The river offers a wide variety of activities in a high-quality setting. Activities range from swimming to hiking and horseback riding with spectacular scenery, to excellent trout fishing and nationally recognized white-water rafting opportunities. Other activities include backpacking, photography, and nature study. Most of these activities take place in largely unmodified natural surroundings, with many opportunities for remoteness and solitude."* (Quote

from page 3-52 of the Sumter Forest Plan) Protecting the aesthetic, scenic, historic, archaeological, and scientific features is to be done in the context of administering the ORVs. [Definition: aesthetic - Features or qualities that are pleasurable (as contrasted with the utilitarian features of a resource) such as opportunities for remoteness and solitude.] There is absolutely nothing in the Wilderness Act and/or the W&SRA that says all compliant uses must be permitted in all sections of the river.

To review the Wild & Scenic River Act, visit <http://www.nps.gov/rivers/wsract.html>

Shouldn't there be some place for people to go and not see boaters?

Boater's Point: There are many places one can go and not see boaters since boaters are rarely present on any headwater streams. The small percentage of headwater streams which are desirable for boaters are only floatable occasionally, after strong rains. On those few days, paddlers may or may not actually choose to paddle a specific river, and even then will only pass an area once for a brief period of the day. In short, backcountry enthusiasts have ample opportunities to experience headwater streams without paddlers present: on streams not preferred by paddlers, on all streams at flows too low and too high for paddling, and on all streams when paddlers are simply not present.

Counterpoint: Yes, there should be sections of public streams set aside for "foot travel only" visitors, just like some Forest Service areas prohibit mountain bikes and ATVs. The prohibition on boating in order to preserve the unique qualities of the wilderness is essential and has been recognized as standard management policy with regard to other unique wilderness areas. For example, Yellowstone National Park continues to not allow whitewater boating, a decision reached after extensive analysis of the impacts of boating on the park resource. The Park Service stated after its analysis, "*Whitewater boating would conflict with other established park uses that require the atmosphere of peace and tranquility...*" Whitewater boating on the Chattooga Wild and Scenic River above Highway 28 similarly compels a decision that the peace and tranquility must be maintained.

Some boaters assert that floating on the Chattooga's North Fork will be rare occasions, explaining that below Bull Pen Bridge, the Chattooga is floatable only when the Highway 76 gauge reads 2.0 feet. What is not highlighted is that, based on historical data, the gauge reads above 2.0 feet on average 81-days / year. Further, in a recent 3-year period (2003-2005) there were 476 days (average 158-days / year) above 2.0 feet. In 2003, the Forest Service analysis predicted that on a typical floatable day there would be approximately 26 crafts (some days more, some days less) going past every backcountry visitor between the bridges. All of this information contradicts the boater's position that paddling on the headwaters will be only an "occasional" event. As a result, it may be predicted that, if the ban is lifted, on those numerous floatable days, the walk-in backcountry visitors will encounter a boat passing through every few minutes, repeatedly invading their personal envelopes of solitude, disrupting the anglers' activities, and spooking the trout. This will result in the type of recreational conflicts that the original zoning on the river was designed and implemented to avoid.

Studies have shown that zoning of the type that has been in place on the Chattooga River for the past 30 years prevents this type of recreational conflict. For example, the USDA Forest Service has found: "*... conflicts between different forms of recreation use have arisen with increasing frequency in recent years. The root cause for rising conflicts is simply the increase in demand for most forms of outdoor recreation.*" "*Streams and whitewater—Water attracts a wide variety of visitors, including swimmers, viewers of fish, anglers, and users of muscle- and motor-powered watercraft. The possibilities of conflict are obvious. For the most part, all the uses just listed are incompatible with one another.*" "*Land managers, therefore, are being forced to examine more closely the question of access and who gets what, when, and where.*" "*Recreation goals are based on social (such as family affiliation), psychological (such as solitude), and physical (such as exercise) motives.*" "*Conflict resolution may involve both zoning and education. When the source of conflict is goal interference, it is more appropriate to consider zoning by time, space, or activity. Zoning can ensure that different types of users are physically separated.*" See, The Southern Forest Resource Assessment; Southern Research Station, USDA Forest Service, dated Oct. 2002; report 4.5 titled Potential Conflicts Between Different Forms of Recreation. For the complete report, click on: <http://www.srs.fs.usda.gov/sustain/draft/socio6/socio6-09.htmir>

History also supports continued protection of the Backcountry ORVs of the North Fork as a means to avoid recreational conflicts. Prior to 1968 (the year the Chattooga was recommended for Wild and

Scenic River status) a visitor could hike to any section of the 57 miles of the Chattooga River and have a remote backcountry solitude experience. There were only 100 private floats on the entire Chattooga in 1968; in 1974 (just 6 years later) the number of private floats had increased to over 22,000. Visit, <http://www.fs.fed.us/r8/fms/forest/recreation/riveruse.html> The present zoning was implemented in 1976 on the North Fork (above the Highway 28 Bridge) to protect the outstanding remarkable values (ORVs) of recreation that include wildness, remoteness, and solitude in a "foot travel only" backcountry setting. For the last 30 years the zoning has protected and preserved the ORVs of this area. Now the boaters are demanding "unlimited use" (any time, any number of boats, any water level) of these last few miles of the last truly wild river in the East. For the benefit of present and future generations (and to avoid recreational conflicts) the Chattooga's North Fork must continue to be managed with lower degrees of intensity to protect and enhance the ORVs of the backcountry.

Why are paddlers requesting "unlimited use" of the upper Chattooga?

Boater's point: Paddlers are requesting equal access and treatment. Currently hikers, anglers, swimmers, campers, and other wilderness compliant uses are all "unlimited." We are also requesting standard management for similar streams. We agree with the Chief of the USFS that currently there is no basis for limiting uses in this area. The default policy for the USFS is to allow unlimited Wilderness compliant uses unless data suggests that use should be limited (at which time it must be limited equitably). No such data exists on the Chattooga. Paddlers support use limits on many other rivers where data suggests limits are necessary, and limits are equitable and reasonable. Likewise, upon completion of the user capacity analysis, if it is sound, paddlers will support use limitations on the Chattooga if the data indicates limitations are needed to protect the river corridor and limits are equitably imposed.

Counterpoint: The boaters do not recognize that not all uses are created equal, regardless of whether empirical data from the area exists. By its very nature, boating is very different than hiking, angling, swimming and camping. Boaters are transported in vehicles that travel relatively fast. Experienced whitewater boaters can access areas that are difficult and time consuming to reach on foot. Even without user limits, far fewer hikers and anglers reach portions of these backcountry rivers than boaters. This is why boaters on most Wild and Scenic Rivers are more regulated on their numbers than other recreational groups within the same watershed. We also draw readers' attention to the following:

POTENTIAL GROWTH OF "CREEKING": Headwater boating (creeking) is a relatively new whitewater sport. It is made possible by the application of new hi-tech materials to creative new boat designs. It is part of the explosion in popularity of "extreme" sports. In October of 1999, American Whitewater (AW) told the Forest Service that boaters should be allowed to run the North Fork of the Upper Chattooga when the Highway 76 gauge reads above 2.6 feet; in 2002 they lowered it to 2.0 feet. Future equipment improvement may make it possible to boat Chattooga's North Fork at much lower stage levels, so now AW is demanding "unlimited use." In 1999, AW estimated the North Fork is "... unlikely to receive more than a couple hundred boating visitors per year." Just 4 years later the Forest Service estimates over 10 times that number for the DRAFT analysis for management plan Alternative E (2,120 floats / average year). Then in 2004 the Forest Service stated, "Also, as mentioned earlier, not all boaters will conform to the water level assumptions in this analysis. Some may attempt to float the river at lower levels (this is particularly true below the Burrell's Ford Bridge). Additionally improved technology and equipment in the future may facilitate low water boating, and could thereby increase the number of undesired encounters and the potential for conflict." (Page H-16 of Sumter NF Plan). What will be the increase in "creeking" in another 20 years? Just look at the present concerns in the Lower Chattooga River where the "unlimited use" and growth of whitewater floating activities has impacted all visitors, has displaced most non-boaters, has resulted in recreational conflicts (anglers vs. boaters, private boaters vs. commercial boaters, and boaters vs. horseback riders) in addition to decreased opportunities for the ORVs of remoteness and solitude. AW admitted in its appeal that "most boaters could not run the headwaters" at the time of designation, but the boaters today are urging unlimited access.

NON-EXPERIENCED FLOATERS: Non-experienced floaters present an additional concern supporting the present zoning of the North Fork. If the boaters were to gain "unlimited use" of the North Fork, both the 'experienced' and 'non-experienced' floaters with their approved crafts and safety equipment could put-in at Burrell's Ford at any water level. During low water levels the view from the

bridges at Burrell's Ford and Highway 28 is deceptively placid to the 'non-experienced' (a.k.a. Bubba) boater. Some will probably be anglers with their open cockpit kayaks, canoes, and pontoon float tubes. Is it possible to place restrictions on the level of experience required for boaters on the North Fork? If so, what government agency would be willing to assume the responsibility of judging the qualifications of persons participating in sports such as whitewater boating? It may be expected that no government agency would be willing or have the resources to conduct such evaluation, with the inevitable result that non-experienced boaters will try to float the North Fork, resulting in unnecessary rescues and injuries. The present North Fork zoning solves that dilemma.

FEDERAL AGENCY PRECEDENT: All of this for “*a couple hundred boating visitors per year*”? Yeah, right! Just exactly *why* are the boating organizations requesting “unlimited use” in the North Fork? Is it possible that the reason AW is putting so much effort and resources into this issue is for the legal precedent “unlimited use” will establish with a federal agency? Does AW intend to use overturning the zoning of the Chattooga’s North Fork for the legal precedent needed to mount a federal court challenge in their 20-year struggle with the US Department of Interior concerning Yellowstone National Park’s whitewater boating ban.

Is the Chattooga’s North Fork just the boater’s steppingstone to reach the big prize, Yellowstone?

Will opening the upper Chattooga to paddling allow tubers to navigate the Chattooga?

Boater’s point: Not necessarily. Paddlers are requesting access for whitewater boating, which requires specific craft designed for the activity. Paddlers have never requested that craft not designed for whitewater be allowed on the Chattooga. Furthermore, the reaches are likely not desirable for floating in tubes.

Counterpoint: Although the boaters are not requesting access for tubing, tubing and similar activities are inevitable if the Chattooga’s North Fork is opened to unlimited floating. Occasionally tubers are already “poaching” backcountry float trips from Lick Log Creek to Highway 28. Should boaters gain unrestricted access, both the 'experienced' and 'less skilled' floaters with their “specific crafts” could put-in at Burrell's Ford at any water level. During low water levels the view from the bridges at Burrell's Ford and Highway 28 is deceptively placid to the 'less skilled' (a.k.a. Bubba) boaters. Some will probably be anglers with their open cockpit kayaks, canoes, personal pontoons, and float tubes. Is it possible to place restrictions on the level of experience required for boaters on the North Fork? If so, what government agency would be willing to assume the responsibility of judging the qualifications of persons participating in sports such as whitewater boating? It may be expected that no government agency would be willing or have the resources to conduct such evaluation, with the inevitable result that non-experienced boaters will try to float the North Fork, resulting in unnecessary rescues and injuries. The present North Fork zoning solves that dilemma.

Will opening the upper Chattooga to paddling allow commercial use?

Boater’s point: No. Paddlers are requesting access for non-commercial use only. Commercial permits for use of public lands and waters are an entirely different matter. More importantly, the upper Chattooga will not support commercial use due to its flashy hydrology, stream size, and difficulty. Commercial outfitters have openly stated that they have no interest in rafting on these sections. There are thousands of whitewater streams on USFS lands, all of which are open to boating except the Chattooga, but commercial boating occurs on only a small fraction of those streams, when permission is granted.

Counterpoint: Yes, opening the upper Chattooga to paddling will open this area to commercial use. Although we agree that commercial guided rafting will not be authorized, there will be no limitation on the use of “taxies” and rental boats, which are certainly “commercial” uses. American Whitewater agrees these are commercial uses when they wrote a letter about lower Chattooga boating to the USFS dated 6/10/02, explicitly acknowledging that commercial users are less skilled than non-commercial users. The following are excerpts from that letter, “*Other commercial users - the shuttle clients and/or rental customers of any other special use permit holder such as a shuttle permit or any entity that advertises to rent equipment on the Chattooga River. In general this group of users are less skilled, less aware of their impacts on the river, and are more prone to needing public search and rescue services.*” “*Shuttle permits are generally issued to the companies that also rent inflatable kayaks or other river craft and*

commercially promote and encourage river use.” “There are no restrictions on the number of craft a company can rent.”

<http://www.americanwhitewater.org/resources/repository/Final%20AW%20comments%20re%20Amendment%2014%20EA%20June%2010%202002.pdf>

If the Agency were to grant the “unlimited use” that the private boaters are requesting, shuttle services and rental inflatable kayaks (a.k.a. duckies) would be permissible. Private boaters may use either “rental” or “owned” cars or boats. The Forest Service can’t discriminate if a private boater uses rental equipment. For safety considerations, would guided duckies be permitted next? Then maybe “creeking” clinics? That would be kind of like “the camel’s nose under the tent.” The present zoning prevents this.

Did paddlers request the user capacity analysis?

Boater’s point: No. Paddlers appealed the illegal boating ban, and on appeal the Chief of the USFS’s office discovered that the Sumter National Forest had never conducted a user capacity analysis, which is a standard management tool on Wild and Scenic Rivers. The Chief asked that a user capacity analysis be carried out so that responsible management could begin on the Chattooga. While paddlers did not request a user capacity analysis, we are glad that our efforts will bring more responsible management to the Chattooga River.

Counterpoint: The North Fork’s “foot travel only” stakeholders support conducting a capacity analysis and are pleased that the end result will establish Limits of Acceptable Change (LAC) for the Wild and Scenic River (WSR) corridor above Highway 28. We believe the LAC will help protect the backcountry’s wildness, remoteness, and solitude for future generations.

For more info on LAC, visit <http://www.fs.fed.us/r8/fms/forest/projects/steps.shtml>

We also believe the West Fork backcountry upstream of the Overflow Road Bridge (FSR 86) also has Outstandingly Remarkable Values (ORVs) that caused that river to be included in the WSR Act as a “Wild” section and the Agency has the responsibility to protect those values, too. For the first time, the 2004 Sumter Forest Plan made it legal for boating on this section. We believe the Forest Service must now establish the LAC needed to protect and preserve the natural environmental and natural processes from human influences. This means stopping the practice of allowing the removal of LWD (large woody debris) that blocks the passage of boats. Also, the proposed 3-mile WSR Overflow Creek extension (one mile into NC) must now be managed “as if they were already designated.” as called for in the Chattahoochee Forest Plan.

Note: The Forest Service streams are managed in a manner that emphasizes and recruits LWD. The desired condition is approximately 200 pieces of LWD per stream mile (Sumter Forest Plan, page 3-41). Visit <http://www.fs.fed.us/r8/fms/forest/projects/plan.pdf> (page 86 of 208)

For more info about the importance of LWD, visit http://www.americanwhitewater.org/content/Wiki/stewardship:woody_debris

Is the river currently “zoned” so that boaters have two thirds of the river and other users have one third?

Boater’s point: Absolutely not. Anglers, hikers, swimmers, and other backcountry users can access and enjoy the entire Wild and Scenic Chattooga River. Only boaters are restricted. An unjustified ban on boating is not zoning – it is illegal and discriminatory management.

Counterpoint: Zoning of conflicting uses is good stewardship, not discrimination. Stewardship includes the protection of the aesthetic values of natural resources such as remoteness and wildness, the proper regard for the rights of others to solitude, and the responsibility of preserving those values intact for future generations. Two-thirds of the Chattooga is zoned to allow boating, including the West Fork, which contains almost half of the headwaters; and the North Fork is zoned for foot travel only (no horses, no boats, no bicycles) which provides the opportunities for remoteness and solitude. The W&SRA says all of these values, “ - - shall be protected for the benefit and enjoyment of present and future generations.” It is the use of watercrafts (rafts, kayaks, canoes, duckies, etc) and other transportation vehicles that are zoned away from the North Fork. Floaters and riders can still hike into the North Fork’s backcountry just like everyone else. Hikers, swimmers, and anglers that want to observe boaters can visit the river below Highway 28. There is absolutely nothing in the Wild & Scenic

River Act that says all compliant uses must be permitted in all sections of the river. To review the Wild & Scenic River Act, visit <http://www.nps.gov/rivers/wsract.html>

Is it true that the upper Chattooga is the only river in the entire Forest Service system that is banned to boating?

Boater's point: Yes.

Counterpoint: Not true. The Forest Service filed a brief in the AW lawsuit dated 7-7-06 that stated, *“Three sections of the Upper Rogue WSR, totaling about 21 miles, are closed to private whitewater boating and the entire length of the river is closed to commercial whitewater boating. Although administered by the National Park Service, whitewater boating is also prohibited in rivers present in Yellowstone National Park.”*

Zoning to ensure that different types of users are physically separated was implemented on the Wild and Scenic North Umpqua River, in Oregon's Umpqua Nation Forest. The river has seasonal restrictions to prevent boating on certain stretches of river from the end of June until the first of November because of high potential for conflicts between anglers and boaters. The Umpqua NF posted on their website, *“A 5-mile section upstream of Bogus Creek Campground is closed to boating between July 15 and October 31 to minimize conflicts with anglers. Also, between July 1 and the end of October, boating is restricted before 10 a.m. and after 6 p.m. to lessen conflicts with anglers.”* Visit, <http://www.fs.fed.us/r6/umpqua/recreation/watersports/rafting.shtml>

A portion of the Wild and Scenic North Umpqua River is managed by the BLM. The following excerpt is quoted from The News-Review of Douglas County, OR, *“With a dripping mountain snow pack in the spring, the North Umpqua River becomes swollen with jade-green, rushing water. Kayakers flock to it from April to June to ride its rapids and fast-moving current and navigate boulders and columnar basalt chutes. The North Umpqua is also a Mecca for fly fishermen. A 31-mile stretch becomes closed during the summer to all other water activity except fly-fishing.”* Visit, <http://www.newsreview.info/article/20060519/DISCOVER22/105180146/-1/DISCOVER>

Can “unlimited use” be expected to have ecological impacts on the Chattooga?

Boater's point: No. Unlimited use by noncommercial paddlers is occurring on almost every floatable river in the entire USFS system – and on every river in the region. Paddling is a very low impact activity, and the small amount of use the upper Chattooga is expected to receive will have negligible impacts. There are no other similar headwater streams in the region with any limits on use by non-commercial boating because use numbers are low enough to have negligible impacts. There is no reason to expect the Chattooga will be any different.

Counterpoint: Yes. The combination boater publicity about Chattooga's North Fork (upstream of the Highway 28 Bridger) and a wet summer as we had in 2003 and 2005, “unlimited use” access would mean unprecedented numbers of boaters. The ecological effects on wildlife displacement as a result of increases in human activities are well documented. An excerpt from an authoritative guide to managing the ecological impacts of recreational activities (Wildland Recreation: Ecology and Management by Hammitt & Cole) states *“These studies show that human disturbance result in changes in wildlife physiology, behavior, reproduction, population levels, and species composition, and diversity.”* To read more of this text, visit

<http://books.google.com/books?id=6u4ESjX9daMC&pg=PA68&lpg=PA68&dq=%22knight+and+gutzwiller+1995%22&source=web&ots=Hd8oz9iQtQ&sig=e7HWquD6Za8wjfhTeKhaZFm7lxM>

We believe a few conscientious whitewater boaters will have little physical impact on the environment. A limited numbers of conscientious boaters that avoid low-water boating, have the knowledge to avoid trampling sensitive areas, and curtail wildlife disturbances will cause minimum impact to the Chattooga ecosystem. However, for decades a few insensitive boaters have made a practice of removing the large woody debris (LWD) that hinders their passage in headwater streams, such as the Chattooga's West Fork headwaters. LWD has incredible ecological importance in river systems. The Forest Service streams are managed in a manner that emphasizes and recruits LWD. The desired condition is approximately 200 pieces of LWD per stream mile (Sumter Forest Plan, page 3-41). Visit <http://www.fs.fed.us/r8/fms/forest/projects/plan.pdf> (page 86 of 208)

“Unlimited use” incorporates all boaters and that includes the less-skilled low-water boaters (a.k.a. Bubba boaters). Historically when less-skilled boaters have attempted to float the North Fork’s Rock Gorge section, it resulted in serious degradation to the physical environment of the backcountry, including littering, impact to spray-zone flora, and search & rescue ingress/egress.

“Unlimited use” will create social conflicts with the walk-in backcountry visitors through invasion of solitude issues and direct interference with anglers. The source of the conflict is goal interference, therefore zoning is proper management. Zoning can ensure that different types of users are physically separated. For more on recreation conflict management, visit:

<http://www.srs.fs.usda.gov/sustain/draft/socio6/socio6-09.htm>

For more info about the importance of LWD, visit

http://www.americanwhitewater.org/content/Wiki/stewardship:woody_debris

Do kayaks, canoes and rafts belong on Wild and Scenic Rivers like the Chattooga?

Boater’s point: Absolutely. The Wild and Scenic Rivers Act specifically requires agencies to protect and enhance recreational uses recognized as valuable during the designation process. Paddling was formally recognized by congress as a public value associated with the upper Chattooga. The USFS, in recommending the river for designation claimed boating was the best way to view the river, and proposed boat launch sites at all bridges over the upper Chattooga, and specific portage trails around major rapids.

Counterpoint: We agree that the Wild & Scenic River Act (W&SRA) recognizes that non-motorized boating is a compliant use. However, there is absolutely nothing in the W&SRA that says all compliant uses must be permitted in all sections of the river. To the contrary, the W&SRA directs the Agency (in this case the USFS) to protect and enhance the Outstandingly Remarkable Values (ORVs) that caused the river to be included in the W&SRA in the first place. For the Chattooga, the ORVs include geology, biology, scenery, recreation, and history. *“The recreational values of the river and corridor are outstanding along its 57-mile course. The river offers a wide variety of activities in a high-quality setting. Activities range from swimming to hiking and horseback riding with spectacular scenery, to excellent trout fishing and nationally recognized white-water rafting opportunities. Other activities include backpacking, photography, and nature study. Most of these activities take place in largely unmodified natural surroundings, with many opportunities for remoteness and solitude.”* (Quote from page 3-52 of the Sumter 2004 Forest Plan.) Protecting the aesthetic, scenic, historic, archaeological, and scientific features is to be done in the context of administering the ORVs. [Definition: aesthetic - Features or qualities that are pleasurable (as contrasted with the utilitarian features of a resource) such as opportunities for remoteness and solitude.] Two-thirds of the Chattooga is zoned for boating, including the West Fork, which contains almost half of the headwaters; and the North Fork is zoned for foot travel only (no horses, no boats, no bicycles) which provides the opportunities for remoteness and solitude. The W&SRA says these values, “ - - shall be protected for the benefit and enjoyment of present and future generations.” The present zoning does exactly that. To review the Wild & Scenic River Act, visit <http://www.nps.gov/rivers/wsra.html>

Plastic and rubber boats are modern inventions, are they primitive enough to be used in Wilderness?

Boater’s point: Yes, the Wilderness Act does not prevent use of modern non-mechanized recreational equipment in Wilderness areas. Modern synthetic boats, paddles, boots, fishing poles, fishing line, clothing, backpacks, guns, bullets, saddles, tents, and other recreational equipment are used in designated Wilderness Areas across the country.

Counterpoint: We agree that the Wilderness Act does not prevent the use of modern, non-mechanized recreational equipment in Wilderness areas. However, we disagree that vehicles such as boats should be considered in the same category as fishing and hiking equipment. There is clearly a difference between equipment that merely made activities more comfortable while not changing the general character of the activity and equipment that fundamentally altered the activity itself. Gortex boots and graphite fishing rods did not alter a person’s ability to hike or fish the backcountry. Nor did they increase the number of participants or make access into remote areas easier; rather they made the activities more comfortable, less wet, and easier to store our gear. In comparison, modern boating

equipment opens up areas of the wilderness that could not have been accessed through boating in past years to multitudes of new floaters. Only 20 years ago, the Green River Narrows (NC) was considered unboatable. Kayakers using modern hi-tech boats first successfully ran the Green Narrows in 1988 and since then, it has become the most popular Class V creek in the Eastern United States.

The Wilderness Act drafters were aware that “growing mechanization” (or technology advancement) may increase usage and negatively impacts the wilderness. They intended to protect the designated Wilderness areas from the increased demand associated with easier access from technology. It is the growing mechanization of manufacturing processes that has created hi-tech plastics, improved production methods, and cutting edge designs that now enable the modern kayaks to float the small headwater streams and in lower water levels.

There is nothing in the Wilderness Act that says all compliant uses must be permitted in all Wilderness areas. To allow otherwise would set a precedent that would open all Wilderness lands to all activities and thus destroy everything embedded in the concept of Wilderness and the Act that led to its establishment. The Wilderness Act speaks to administration for "*future generations the benefits of an enduring resource of wilderness*", "*unimpaired for future use as wilderness*", "*preservation of wilderness character*", and "*solitude*", - it does NOT say "*unlimited use*" for recreation. To review the Wilderness Act, visit: <http://www.wilderness.net/index.cfm?fuse=NWPS&sec=legisAct&error=404>

Assembled on April 17, 2007 by Doug Adams – a member of Friends of the Upper Chattooga.



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March 12, 2007

U.S. Fish and Wildlife Service
Northeast Regional Office
ATTN: Ms. Mary Parkin
300 Westgate Center Drive
Hadley, Massachusetts 01035
617.876.6173

Re: 5-year ESA review of eastern Cougar (*Felis concolor cougar*)

Dear Mary Parkin,

This is to alert the U.S. Fish and Wildlife Service to a well-documented, recent encounter on federal government property with a big cat, possibly an eastern Cougar, so as to continue its listing as a federally endangered species in Georgia, South Carolina and North Carolina.

This also is to urge you and the USDA Forest Service (on whose land this encounter took place,) to undertake the appropriate law enforcement, protection and recovery actions required under 36 CRR 219.19 and 219.20 to integrate management, protection and conservation of this species in this area.

Georgia ForestWatch also specifically asks for such review and investigation before the U.S. Forest Service undertakes any management changes that may be contemplated for the affected areas of the Wild and Scenic Chattooga River Corridor and nearby forestlands. (Forest Service officials currently are engaged in a visitor capacity use analysis of this stretch of river, which could significantly increase human visitor pressure on this most wild section of backcountry.

The encounter, as related in several attached news articles, occurred in late January of this year when a Forest Service technician assigned to the Tallulah Ranger District, Clayton, Georgia, Terrance Fletcher, was chased into the Chattooga River by a seven-foot-long panther. Fletcher and a fellow technician were in an inventoried roadless area within the Wild and Scenic Chattooga River Corridor, conducting biophysical surveys as part of a possible expansion of whitewater recreation sports in this area. This wild area, a favorite of naturalists, photographers, hikers, backcountry anglers and hunters, currently is zoned only for travel on foot, in order to protect its solitude and other outstandingly remarkable values.

The incident was reported to Fletcher's supervisor and from there to other area Forest Service officials as well as wildlife experts with the Georgia and South Carolina department of Natural Resources and reduced to writing by Fletcher, in connection with injuries sustained during the incident. (Contact Tallulah Ranger David W. Jensen, 706.782.3320, for further details.) To my knowledge, however, no further efforts were made by Forest Service personnel or state wildlife

agency officials to evaluate or confirm the sighting.

The sighting, and news of your five-year review also has sparked a variety of anecdotal evidence of possible cougar sightings in this area (see attached news articles.)

The Fletcher encounter and the citizen reports, at a minimum, would thus urge that the USFWS undertake appropriate steps to document the existence (or non-existence) of the eastern Cougar in these parts by qualified professionals, delineate the range of its critical habitat and to take appropriate steps to ensure that all state and federal agencies in this area do nothing to jeopardize the continue existence of this species or its critical habitat.

Just how much is at issue in this instance is ably and dispassionately delineated in a recent paper authored by Dr. James T. Costa, director of the well-regarded Highlands Biological Station, a year-round inter-institutional biological field station of the University of North Carolina system (also attached.)

Georgia ForestWatch is not-for-profit conservation organization dedicated to preserving, protecting and restoring the mountains, rivers and forests of north Georgia.

Please feel free to contact me if there are any questions, at these coordinates: 2489 Glade Road, Clayton, Georgia, 30525. Tel: 706.782.9944.

Sincerely,



Joseph Gatins
Tallulah District Leader
Georgia ForestWatch

CC: USDA Forest Service



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March 12, 2007

Mr. John Cleaves, Project Coordinator
Upper Chattooga Visitor Use Capacity Analysis
USDA Forest Service
Sumter National Forest
4931 Broad River Road
Columbia, South Carolina 29212

Dear John:

I would appreciate your making the attached letter from Georgia ForestWatch and supplemental material part of the official comment file as regards the bio-physical review of the Upper Chattooga, and direct its attention to appropriate Forest Service staffers and partner agencies.

Please call me at 706.782.9944 or at 2489 Glade Road, Clayton, Georgia, 30525, if there are any questions

Regards,

Joseph Gatins
District Leader
Georgia ForestWatch

CC: Ranger David W. Jensen

Friends of the Upper Chattooga

2368 Pinnacle Drive
Clayton, Georgia 30525

April 30, 2007

Supervisor Jerome Thomas
Sumter National Forest
USDA Forest Service
ATTN: John Cleeves
4391 Broad River Road
Columbia, South Carolina 29212-3530

Dear John:

The undersigned Friends of the Upper Chattooga request that the questions and comments in this letter be addressed during the USDA Forest Service's Upper Chattooga River Visitor Use Capacity Analysis and that it be made part of the administrative record for this study.

This is to get the Forest Service to more closely analyze and address two factors that do not, to date, appear to have received adequate attention:

1. The issue of tributaries to the Wild and Scenic Chattooga River (including the North Fork and West Fork), and whether boating is contemplated on these headwaters reaches.
2. The issue of preserving large woody debris on the Chattooga River and all its tributaries

Tributaries:

It is generally well known that some boaters are prone to run some tributaries of the Wild and Scenic River at times of high water. From what the Forest Service has told us, this apparently is legal with some tributaries under the current Land and Resource Management Plans for the Sumter, Chattahoochee and Nantahala National Forests. But it makes little sense to permit this activity when some of the main forks of the Chattooga are zoned to prohibit boating (as is the case today) or might be so zoned after the study is over.

One such possibility, for example, would be to see boating on the East Fork of the Chattooga, which dumps into the North Fork, where boating is not currently permitted.

At a minimum, the Friends request that this issue be studied and analyzed as part of the Visitor Use Capacity Analysis. The list of tributaries should include, but is not limited to:

- **In North Carolina:** Green Creek, Norton Mill Creek, Cane Creek, Holly Branch, both Fowler Creeks, Scotman's Creek, Bryson Branch, Clear Creek, Overflow Creek (both east and west reaches,)
- **In Georgia:** Harden Creek, Granddaddy Creek, Hedden Creek, Ridley Branch, Reed Creek, Mose Branch, Big Creek, Little Creek, Ross Field Branch, Double Bridge Branch, Talley Mill Creek, Law Ground Creek, Millstone Branch, Stooping White Oak Branch, Burrell Branch, Billingsley Creek, Holcomb

Creek, Bradley Branch, Long Branch, Tottery Pole Creek, Laurel Creek, Page Branch.

- **In South Carolina:** Bad Creek, East Fork Chattooga River, Indian Camp Branch, Pigpen Branch, King Creek, Lick Log Creek.
- **In all three states:** Any unnamed tributaries.

Large Woody Debris:

As the USDA Forest Service well recognizes, the occurrence of large woody debris in trout streams, whether man-made or caused by nature, provides a crucial ingredient in the aquatic food chain and crucial habitat for many species of fish, including wild and native trout. Just how important these dead and downed trees is evidenced in the Andrew Pickens Ranger District's recent (March 29, 2007) proposal to fell up to 125 trees in Crane Creek specifically to enhance habitat of native brook trout.

The rationale for this proposal is instructive: "The creation of pools and increase of large woody debris would improve instream cover and overwintering habitat for brook trout increasing stream depth. This would maximize the available habitat to brook trout within the stream. The addition of large woody debris would also increase populations of aquatic insects, the primary food source for brook trout." (Scoping letter from Ranger Michael B. Crane.)

Why then does the USDA Forest Service permit boaters to remove large wood debris from the lower part of the Wild and Scenic Chattooga River, and why has it previously countenanced the illegal removal of such debris from the West Fork, and Holcomb and Overflow creeks?

Rather, the Friends urge the USDA Forest Service to institute and regulate and enforce an absolute ban on such removal from all Chattooga forks and tributaries above the Route 28 bridge, as it instituted and enforced during the recently completed boater trials – such ban to remain in effect for the duration of the visitor capacity analysis, and forever more on this part of the Chattooga watershed.

We also request that the biophysical survey being conducted as part of the visitor analysis be expanded to include identification and location of currently existing large woody debris on all sections of the Upper Chattooga that will be considered for boating in the study.

We note, too, that the incidence of large woody debris on this river and all its tributaries is expected to increase considerably in coming years as the many native hemlocks located in this watershed succumb and fall to the deadly Hemlock Woolly Adelgid infestation.

Finally, we offer the following scientific references for further background on the value of large woody debris:

- Hedman, Van Lear and Swank. *In-stream large woody debris loading and riparian forest seral stage associations in the southern Appalachian Mountains*. Canadian Forest Resources **26**: 1218-1227 (1996.)
- Klapproth and Johnson. *Understanding the Science Behind Riparian Forest Buffers: Effects on Plant and Animal Communities*. Publication No. 420-152. Posted October, 2000.
- Flebbe. *Trout use of woody debris and habitat in Wine Spring Creek, North Carolina*. USDA Forest Service, Southern Research Station. Forest Ecology and Management **114** (1999) 367-376.

- Dollof and Warren. *Fish Relationships with Large Wood in Small Streams*. USDA Forest Service, Southern Research presented at the American Fisheries Society Symposium 37:179-193. 2003.

Thank you for your time and attention to these issues. Please call if there are questions.
Sincerely,

Joseph Gatins
Joseph Gatins
Co-district leader, Georgia ForestWatch

Doug Adams
Doug Adams,
Newsletter Editor, Rabun Chapter, Trout Unlimited
By JG, with express permission JG-4/30/07

Charlie Breithaupt
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Rusty Berrier
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Buzz Williams
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David Bates
David Bates,
Executive Director, Jackson-Macon Conservation Alliance
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Wyatt Stevens
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George Nickas
George Nickas
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John Benbow
John Benbow,
President, North Carolina Wildlife Federation
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Jerry McCollum
Jerry McCollum
Georgia Wildlife Federation
By JG, with express permission JG-4/30/07

Managing for the View of The Wild & Scenic Chattooga

Scenery was a primary Outstanding and Remarkable Value associated with the designation of the Chattooga Wild and Scenic Riverⁱ and indeed, the viewing and photography of waterfalls and the river itself are popular activities for Upper Chattooga visitors.ⁱⁱ

Here is how the Sumter National Forest has described the Chattooga scenic values ...

*“Scenery- The scenery along the Chattooga River is exceptional. The scenery plays an important role of the Wild and Scenic River experience. The river is deeply entrenched between high ridges for large stretches of its length. Steep forest slopes on either side of the river give a feeling of seclusion. The seasons change the landscape from varying soft greens of spring and summer to the autumn patchwork of red yellow and orange. The winter finds the leaves stripped away...”*ⁱⁱⁱ



Photo by William Clay

The scenery for which the Chattooga was designated did not include fleets of bright colored kayaks roaring down the watercourse. Any “feeling of seclusion” offered by the scenic topography would cease to exist for foot-travelers if herds of boats are encountered at every site along the river.

The USFS also published this statement: *“Scenery is a major determinant of the quality of the visitor experience. Studies since designation have shown that visitors are pleased with the scenery on the river In addition, the lack of man-made features adds to the enjoyment of the experience..”*^{iv}

Any Upper Chattooga “scenery studies” since designation were conducted in the absence of boats, and would obviously no longer be applicable in the presence of high-tech creek boats. Therefore, any alteration to this “major determinant of the quality of the visitor experience” – that is, permitting colorful boats – would legally require assessment of current visitor’s visual expectations¹.

The Sumter Forest Service noted, *“the addition of boating in this section would most likely result in a high likelihood of impacting the solitude experience of other dispersed recreation user groups. These impacts could be significant since opportunities to experience solitude have become increasingly difficult along the river, even without the introduction of a new user group.”*^v



Image by Becky Johnson, Smokey Mountain News

Collected opinions from current visitors match the Forest Service concerns; most visitors to the Upper Chattooga voiced their desired condition of no boats and few encounters². The Sumter National Forest noted its’ scenic concern in their 2004 FEIS *“ There may be additional visual impacts ... since there is a new user group [boaters] in the mix.”*^{vi}. Many whitewater kayakers admit that their boats detract from the scenery. John Lane- who has been published by American Whitewater- wrote that *“The gaudy colors and shapes of most kayaks (my boat is bright blue) add a high-tech, purely recreational element to floating.”*^{vii}

¹ 36CFR219.21, 3(f) “Planning for the visual resource requires evaluation of the public's visual expectation”.

² Non-boating Chattooga visitors desired “few encounters” with “no boats” during USFS scoping meeting, Dec.2005 see xi

Managing for the View of The Wild & Scenic Chattooga

Research shows that unsightly intrusions in natural settings do impact visitor experience;^{viii} these national opinions validate the similar values collected from Chattooga visitors.

Current management policy satisfies most visitors by offering an array of visual experiences. The Lower Chattooga offers whitewater boating for floaters and spectators, while the headwaters provides a less-cluttered river in a natural setting. This policy has demonstratively worked well for thirty years with high visitor satisfaction reported on both the Upper and Lower reaches of the Chattooga.

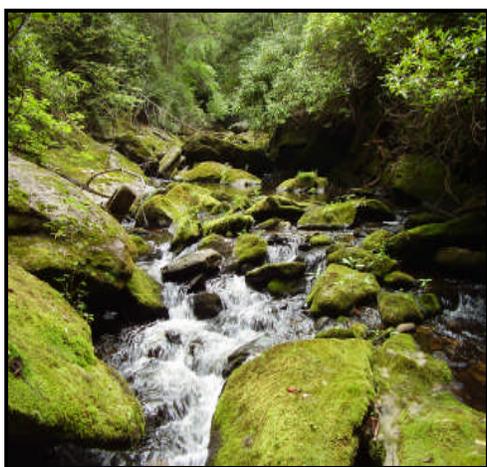


Photo by Butch Clay

High water flows bring out both the paddlers and scenery-viewers, and this brings about an asymmetric conflict between the two groups. The Chattahoochee-Oconee National Forests recommends: "***The best time to view waterfalls is after it has rained, since water levels will be at their peak.***"^{ix} Additionally, consultant Doug Whitaker's flow preferences manual advises that high water improves the aesthetics of the stream "for flow enhanced activities (such as hiking, birdwatching, and sightseeing)". He notes: "*Higher flows producing visibly moving water with accompanying sounds appear to be the most preferred situation.*"^x The preferences of paddlers for high-flows are documented in the 2004 Sumter FEIS and throughout AW's 2004 appeal to the USFS. It is clear that both boaters and waterfall viewers desire to visit the river simultaneously.

Conflict exists because waterfall-viewers and paddlers seek different aesthetic experiences. For on-bank visitors, the river is the scenery and the boat an obstruction to their primary goal; while to river travelers the inverse may be true (although most boaters during a Chattooga public meeting considered hiking and angling "complementary activities"^{xi} which is why the conflict appears one-sided).

Similarly, nature viewers and kayak spectators desire two different visual experiences. Whitewater spectators seek canoeists' flirting-with-danger at large rapids. Extreme sport spectators are most interested in the best view of the kayak, not their impact on the rare and sensitive spray-zone^{xii} ecosystem surrounding waterfalls. On the other hand, waterfall viewers want to see cascading water uninterrupted by man – for them kayaks are an unwanted obstruction. The waterfall viewer seeks, and respects, the natural beauty and force of the river. Given these conflicting scenic preferences, it is essential that opportunities within the entire resource, and geographical area, be inventoried to insure both visual experiences remain available.



The lower Chattooga's Bull Sluice is considered the "best rapid to watch" by Blue Ridge Outdoors^{xiii} while the lower river is considered "breathtakingly beautiful"^{xiv} by paddlers. Both paddler and spectator scenic preferences are already available along the majority of the Chattooga River, below Highway 28.

Another concern is boater impact during low-water runs. Boating without sufficient water creates a long-lasting visual imprint as boats drag along river bottom. Picturesque moss and

Managing for the View of The Wild & Scenic Chattooga

wildflowers covering riverbed boulders are replaced with colorful marks created by the kayak's abrasion against the riverbed. Some boaters reported impacting the riverbed over forty times during the January 2007 high-water boating trials; during lower flow levels impacts will only increase. Canoe marks and flora removal are not in keeping with a wilderness character of the upper Chattooga.

An indirect impact to the River corridor will be the need for signage³ warning paddlers of the "hazardous whitewater"^{xv}. Markers and signs will most certainly impact scenery on a "wild" or "scenic" section of the river.

The Wilderness Act was established "In order to assure that an increasing population ... does not occupy and modify all areas within the United States and its possessions, leaving no lands designated for preservation and protection in their natural condition"⁴ Wilderness should be "unimpaired for future use and enjoyment as wilderness" and managed for the "preservation of their wilderness character." Limitless parades of multicolored boats is the antithesis of wilderness and certainly not the "primeval character" described in the Wilderness Act. "Recreational use can have negative



impacts to the quality, character, and integrity of the wilderness resource due to overuse."^{xvi} Ellicott Rock Wilderness was designated specifically to protect this wild area from increased recreational demand⁵ like those being pursued by the boater lobby. The Forest Service manual notes: "Where there are alternatives among management decisions, wilderness values shall dominate over all other considerations"^{xvii}. The Wilderness Act and Forest Service guidelines instruct protecting natural scenery over increases in recreational demand.

Unmanaged recreation is now considered a major threat to our public lands^{xviii}; the USFS must not cede the Chattooga to those lobby organizations demanding boundless access, who look only to their own wants, and not the other visitors or requirements of the Wilderness and Wild and Scenic River Acts, by which the Forest Service must be guided. Section 10 of the Wild & Scenic River Act requires the agency to protect the resource over balancing recreational uses with conflicting goals. Further enhancement of recreational boating values, at the expense of many others values, would not attain the widest range of beneficial uses when considering opportunities in the entire resource or within the geographical area. The wilderness scenery along the Chattooga is unarguably spectacular and considered a focal point enjoyed by river visitors:^{xix} however greater numbers of visitors have a negative impact on the visual experience^{xx}. Consider a parallel: A highway built along the Chattooga would enable more visitors to enjoy the scenery thereby enhancing opportunities for scenic viewing; however, vehicles and traffic would certainly diminish the aesthetic of the resource itself. Conversely, forbidding entrance to all visitors would eliminate enjoyment of the Chattooga's splendor but also violate the Wild and Scenic River mandates to "protect and enhance" scenery values. This appears to create a dilemma for managers under the "protect and enhance mandates" for scenery; recreation values requires enhancement but for the Chattooga to stay "wild" and "scenic" access

³ Forest Service Manual 2354.42p advises the agencies use of signage to alert the public to hazards.

⁴ [16 U.S.C. § 1131(a)].

⁵ (Public Law 93-622) Designation of Ellicott Wilderness was due to "pressures from a growing more mobile population"

Managing for the View of The Wild & Scenic Chattooga

limitations are necessary. Fortunately, this is not a dilemma for land managers, the decision has been predetermined by the laws that guide management of Wild and Scenic Rivers. WSR Act Section 10(a) mandates “*primary emphasis shall be given to protecting esthetic, scenic, historic, archaeological, and scientific features.*

Management plans for any such component may establish varying degrees of intensity for its protection and development on the special attributes of the area.” It is clear that the USFS must protect the scenery over increased demand for recreational activities and they are given that authority to limit recreational uses under Wild & Scenic River statute: 16, 28 § 1281⁶.



Image by William Clay

For thirty years the Chattooga Wild and Scenic River has offered a variety of scenic opportunities from unobstructed rapids on the North Fork to undeveloped scenery for paddlers on the lower river. The visual expectation and aesthetic standards are well established and documented for lower and upper river visitors. To meet scenic integrity objectives^{xxi}, the Sumter National Forest must continue to provide a broad spectrum of visitor opportunities in a variety of landscapes and natural settings. The visual diversity and unique experiences, currently offered within the Chattooga River corridor, is exactly what the boat lobby demands be eliminated. “Beauty is in the eye of the beholder” and the Upper Chattooga offers an alternative experience to nearby boat-filled creeks for those less tolerant of crowds to also enjoy during higher flows.

Destruction of the wild and scenic character of the Upper Chattooga scenery to accommodate the egocentric wishes of some paddlers would not be an equitable policy for most visitors⁷ and would be illegal under the Wilderness and Wild & Scenic River Act. The Forest Service must be guided by the priorities set forth within the laws, management objectives and their own internal guidelines. Further diminishment of the Upper River character to placate recreational whims –under threats of a lawsuit by access lobbyists- sets a ruinous precedent for all public land managers attempting to “balance use” across the broad spectrum of recreational activities.

⁶ 16, 28 § 1281: Gives the managing agency the responsibility, therefore accountability, of limiting users that interfere with the enjoyment of the designated values and special attributes.

⁷ The Sumter FEIS published participation rates of 60% for scenery seekers and 3% for kayakers.

Managing for the View of The Wild & Scenic Chattooga

Appendix : Waterfall Viewing references from local guidebooks

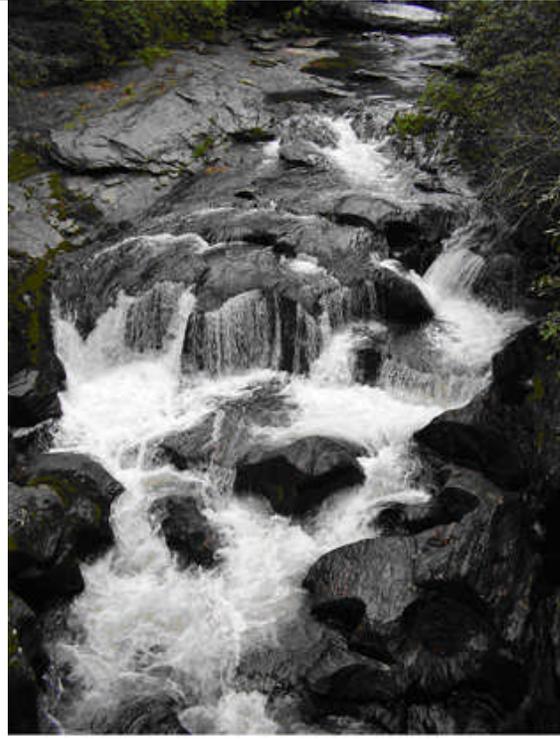
The two most popular falls on the main channel of the Chattooga's North Fork are the Bull Pen Cascades and Big Bend

Bull Pen Cascades

"A beautiful series of rugged cascades occurs along the Chattooga River high in its headwaters region along Bull Pen Road. Immediately upstream of Bull Pen Bridge a crashing 10 foot waterfall is easily viewed. This falls features numerous swirl holes caused by the powerful currents. Other small falls can be seen further upstream amidst huge boulders. An easy one-mile loop trail skirts the river then climbs circles back around. This is a fascinating area to explore."

Primitive path upstream from Bull Pen Bridge,... "For those desiring a longer hike, away from the crowds, this would be a good option."

Pg 62 Waterfalls of Southern Appalachia, 1993 Fern Creek Press



"The highlands section of the Chattooga Wild and Scenic River contains a few small cascades". The only cascades mentions in the book because of its "popularity and inclusion into Highlands-area publications".

pg.103 "North Carolina Waterfalls, Where to find them How to photograph them." 1961-1994
Kevin Adams John F Bliar publisher

Managing for the View of The Wild & Scenic Chattooga

Big Bend Falls

“The water of the Chattooga cascades 15 feet over a 30 degree tiered rocky slope; then the water is forced between massive boulders creating a 15-foot block waterfall”

"The shoreline of the Chattooga River below the falls provides small sandy beaches and large boulders on which to relax and picnic after a long hike. The river provides some safe places for wading and swimming close to the shoreline."



Photo by William Clay

Pg 34 Waterfall hikes of Upstate South Carolina, T. King, 2006

“Its energy is infectious though, so you’ll quickly spring back to life after the two-hour trek and your first glimpse of the largest drop on this Wild and Scenic River.”

SCTrails <http://www.sctrails.net/Trails/ALLTRAILS/waterfalls/Bigbend.html>

“A moderate 2.7 mile trail affords views of the biggest drop on the Chattooga River, a rumbling 30-foot hydraulic known as Big Bend Falls.”

Sumter Forest Service: <http://www.fs.fed.us/r8/fms/forest/recreation/waterfalls.shtml>

"The river cascades over one of the most spectacular waterfalls on the Chattooga River, Big Bend Falls."

GA online <http://www.georgiaencyclopedia.org/nge/Article.jsp?id=h-2629>

Also *Pg 113 Waterfall Walks and Drives in the Western Carolinas M Morrison, HF publishing 1994*

For greater detail of the many other smaller falls visit the Sherpa Guides publication...

http://www.sherpaguides.com/georgia/mountains/blue_ridge/eastern/chattooga_river.html

or SC http://www.theblueridgehighlander.com/waterfalls/south_carolina_upcountry/oconee.html



Chattooga Boating Trials at Big Bend Falls.

Photo by Becky Johnson.
Smokey Mountain News.

A-2

Managing for the View of The Wild & Scenic Chattooga

Other waterfalls recommended for viewing on Upper Chattooga Tributaries:

King Creek Falls

This 70-foot tumble through a laurel choked gorge is on King Creek. After a moderate 30-minute hike, you will reach a spot where you can relax all day long and enjoy the spray from the falls. Perhaps it is the backward slant of the rocks, but in any case the drop appears to be much higher than 70 feet.

Sumter Forest Service:

<http://www.fs.fed.us/r8/fms/forest/recreation/waterfalls.shtml>



Spoonauger Falls

Set back into a hillside and surrounded by an explosion of shrubbery, Spoonauger Falls runs down a stepped rock face in a broad sheet. The 50-foot high waterfall is among the more popular in this area of the Chattooga River Watershed, no small part due to the easy, 20-minute hike. Like its cousin, [King Creek Falls](#), this waterfall is camera-friendly, especially in the summer when plants snake all about and afternoon light highlights the innumerable horizontal slashes of

Sumter Forest Service:

<http://www.fs.fed.us/r8/fms/forest/recreation/waterfalls.shtml>



Managing for the View of The Wild & Scenic Chattooga

Bibliography

- ⁱ Senate report P.L. 93-279 1974,
- ⁱⁱ "the Cashiers-Highlands area has always been called the "the land of waterfalls"" pg 377 *Western North Carolina Since the Cival War*, Noppen, Maple press, 1973. Also www.georgiaencyclopedia.org/nge/Article.jsp?id=h-2629 2006
- ⁱⁱⁱ pg 3-9 2004, *Final Environmental Impact Statement for the Revised Land and Resource Management Plan Sumter National Forest (Sumter 2004 FEIS)*. reference USDA Management Bulletin R8-MB 116B
- ^{iv} pg. H-4, Sumter 2004 FEIS
- ^v pg. H-25, Sumter 2004 FEIS
- ^{vi} pg. H-12, Sumter 2004 FEIS
- ^{vii} pg 116 *Chattooga*, J.Lane, University of Georgia Press 2004
- ^{viii} pg 103 *Diversity in Outdoor Recreation, Planning and Managing a Spectrum of Visitor Opportunities in and among Parks* : Warzecha, Manning, Lime, and Freimund, The George Wright Forum, 2001
- ^{ix} USFS Website <http://www.fs.fed.us/conf/ne-ga-waterfalls/index.htm>
- ^x pg. 73 Whittaker, D. , B. Shelby, W. Jackson, and R. Beschta. 1993. Instream flows for recreation: a handbook on concepts and research methods. U.S. Department of Interior, National Park Service, Anchorage, AK
- ^{xi} Public Comments Recreation Opportunities and their Desired Conditions Visitor Use Capacity Analysis, Upper Chattooga River Third Public Meeting, December 1, 2005
- ^{xii} pg 3-140 Sumter 2004 FEIS. Describes waterfall spray zones as rare and sensitive habitat
- ^{xiii} Blue Ridge Outdoors Newspaper, November 2006 pg 26
- ^{xiv} pg 88 *North Carolina Rivers and Creeks* , L. Davis, 2005, Brushy Mtn. Publishing Inc.
- ^{xv} Legislative history Page 3008 Senate report 93-738
- ^{xvi} 3-283 Sumter 2004 FEIS
- ^{xvii} Forest Service Manual: FSM 2320.3
- ^{xviii} *Four threats to public lands*, symposium chaired by Dale Bosworth October 2006.
- ^{xix} 2004 FEIS pg 3-18 "Riparian and stream areas are a desired focal point of many activities. People love the sights and sounds, life and movment associated with streams and riparian habitats."
- ^{xx} Manning, R., D. Lime, R. McMonagle, and P. Nordin. 1993. *Indicators and Standards of Quality for the Visitor Experience at Arches National Park*: St. Paul: University of Minnesota Cooperative Park Studies Unit.
- ^{xxi} pg 33 Summary FEIS Sumter Forest Service, 2004 R8-MB 116D **Scenic Objectives: A**: "Protection and enhancement of the scenic and aesthetic values of national forest lands in the Southern Appalachians."
B: "Management of national forests to provide a variety of landscape character themes with the predominant themes being natural appearing, natural evolving, and variations of these themes.

Friends of the Upper Chattooga

2368 Pinnacle Drive
Clayton, Georgia 30525

May 30, 2007

Supervisor Jerome Thomas
Sumter National Forest
USDA Forest Service
ATTN: John Cleaves
4391 Broad River Road
Columbia, South Carolina 29212-3530

Dear John:

The undersigned Friends of the Upper Chattooga request that the attached “white paper,” *“Managing for the View of the Wild & Scenic Chattooga,”* be made part of the administrative record for the USDA Forest Service’s Upper Chattooga River Visitor Use Capacity Analysis and that its obvious conclusions be taken into account as the agency develops alternatives for continued resource protection on the upper reaches of this river.

Thank you for your time and attention to these issues. Please call if there are questions.
Sincerely,

Joseph Gatins
Co-district leader, Georgia ForestWatch

Doug Adams,
Newsletter Editor, Rabun Chapter, Trout Unlimited
By JG, with express permission

Charlie Breithaupt,
Chairman, Georgia Council of Trout Unlimited
By JG, with express permission

Tom McInnis,
Chairman, South Carolina Council of Trout Unlimited
By JG, with express permission

Rusty Berrier,
North Carolina Council of Trout Unlimited
By JG, with express permission

Buzz Williams,
Executive Director, Chattooga Conservancy
By JG, with express permission

David Bates,
Executive Director, Jackson-Macon Conservation Alliance
By JG, with express permission

Wyatt Stevens,
Director, Whiteside Cove Association
By JG, with express permission

George Nickas
Wilderness Watch
By JG, with express permission

John Benbow,
President, North Carolina Wildlife Federation
By JG, with express permission

Jerry McCollum
Georgia Wildlife Federation
By JG, with express permission



File Code: 2350-4

Date: April 27, 2007

Michael Bamford
River Director
Whiteside Cove Association
P.O. Box 2725
Cashiers, NC 28717

Dear Mr. Bamford:

This is in response to your March 22, 2007 letter, regarding the Chattooga Wild and Scenic River Visitor Use Capacity Analysis and future management of the river. We understand your concern regarding how the Forest Service intends to analyze the 1.7 miles of the river located within the Wild & Scenic River corridor flowing through private property in North Carolina. As we have stated in earlier correspondence, the Forest Service is in no way interested in taking any measures that may unlawfully infringe upon any private property rights. As is the case with many issues the agency is currently analyzing on the Chattooga, there are conflicting views and opinions on whether this section of the river is navigable under state law. As stated in our letter of September 19, 2006 to Congressman Taylor copied to Mr. Wyatt Stevens (copy enclosed), we do not claim to have the authority to determine whether a watercourse is legally navigable.

I want to update you on where we are in the NEPA process as it relates to your issue of concern. Within a few months, we intend to issue a proposed action that will initiate the public scoping phase of the project. We will then proceed to further analyze the proposed action and other alternatives to the proposed action. We expect that we will receive public comments on the issue of navigability on this section of the river. In addition to a review of public comments, we plan to use the results of the visitor use capacity analysis and a variety of other information to inform the NEPA analysis.

I understand that you would like the agency to eliminate the 1.7 miles from further consideration in our analysis but we intend to use the NEPA process to systematically identify and work through the issue and the Forest Service believes that eliminating this section of the river from our analysis at this point in the process is not appropriate.

I have discussed your letter with Forest Supervisor Jerome Thomas and Regional Planning Director Chris Liggett. If you would like to discuss this issue further, they will both be in Asheville during the week of May 14 and have offered to join us in a meeting. My phone number is 828.257.4269.

Sincerely,

/s/ Marisue Hilliard
MARISUE HILLIARD
Forest Supervisor



ALAN R. JENKINS
(404) 527-4642

EMAIL ADDRESS
ajenkins@mckennalong.com

October 16, 2006

Mr. Chuck Myers
Southern Regional Forester
USDA Forest Service
1720 Peachtree Street
Atlanta, GA 30309

Re: Chattooga Wild & Scenic River Visitor Use Capacity Analysis

Dear Mr. Myers:

Enclosed please find the Amicus Brief of the Friends of the Upper Chattooga, which was filed in the United States District Court for the Northern District of Georgia. We respectfully request that you please include this brief as the comments of the Friends of the Upper Chattooga River in the above-captioned Forest Service Proceeding.

Thank you for your attention to this matter. Please contact us with any questions or concerns.

Sincerely,

Alan R. Jenkins

ARJ:trm

ATLANTA:4856321.1

Albany
Atlanta
Brussels
Denver
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ALAN R. JENKINS
(404) 527-4642

EMAIL ADDRESS
ajenkins@mckennalong.com

May 3, 2007

John Cleeves, Project Coordinator
United States Forest Service
4931 Broad River Road
Columbia, SC 29212

Re: *Chattooga River Visitor Use Capacity Analysis*

Dear Mr. Cleeves:

The Friends of the Upper Chattooga (“Chattooga Friends”)¹ collectively and as individual members have submitted various comments in the above-captioned proceeding in order to protect the environment and the wilderness experience of individuals seeking the solitude and beauty of protected recreation uses in the foot-traffic portion of the Chattooga River. We are troubled that the Forest Service appears not to have followed a number of our key recommendations, and as the information collection process winds down, we urge the Forest Service to do so.

For example, in its April 11, 2006 letter to Ms. Atkinson, Ms. Hilliard, and Mr. Thomas (“Attachment 1” hereto), the Chattooga Friends demonstrated that to alter the status quo “the USFS must prove why the 30-year zoning use is no longer necessary to protect the environment and ORVs. *E.g.*, 5 U.S.C. §556(d); *Minn. Milk Producers Association v. Glickman*, 153, F.3d. 632 (8th Cir. 1998).” The Chattooga Friends also stated that having an “expert” hand-picked by American Whitewater collect subjective information from boaters associated with that group would not “provide concrete evidence of the impact boating would have on the protected environment of the Upper Chattooga.” Instead, the Chattooga Friends urged the Forest Service to evaluate the objective, historic evidence of how boating has already impacted the environment and the various types of recreation that make up the protected Outstandingly Remarkable Value

¹ Georgia ForestWatch, Rabun Chapter of Trout Unlimited, Georgia Council of Trout Unlimited, South Carolina Council of Trout Unlimited, North Carolina Council of Trout Unlimited, Chattooga Conservancy, Jackson-Macon Conservation Alliance, Whiteside Cove Association, Wilderness Watch, North Carolina Wildlife Federation, Georgia Wildlife Federation, South Carolina Wildlife Federation, and Atlanta Fly Fishing Club.

John Cleeves
May 3, 2007
Page 2

of Recreation on the portion of the river below Highway 28. Unfortunately, the Chattooga Friends have seen little evidence of a concerted effort by the Forest Service to evaluate this objective historic evidence.

Nor does it appear that the Forest Service has done a significant analysis of the effect of imposing boating use on other recreation users above Highway 28. While the expert panel field assessment report had some minimal discussion that fishers and boaters would be on the river at the same time if boating is allowed above Highway 28, there has been little or no evaluation of the impact of boating on angling or other recreation uses, such as nature-watching or swimming. **Historically, the Forest Service has done an excellent job of protecting those uses above Highway 28** by balancing the needs of the various visitor/user types.² Indeed, the Chattooga River area has been recognized as one of the top ten birding opportunities in Georgia in trail.com and is included in "Trout Unlimited's Guide to America's 100 Best Trout Streams," Ross (Falcon Press 1999). We urge the Forest Service to continue to protect such high quality recreation wilderness experiences.³

We are also troubled by the evidence of bias in the expert panel report. In the October 24, 2006 letter to Mr. Jerome Thomas ("Attachment 2"), the Chattooga Friends questioned how stacking the boater panel with boaters closely connected to American Whitewater could possibly result in scientific, unbiased information. Nevertheless, the consultant for the Forest Service, who was recommended by American Whitewater, drafted a boater survey report based on such biased information. As pointed out in the April 20, 2007 letter of the Whiteside Cove Association to you, the Forest Service consultant further evidenced his bias and/or lack of scientific approach by relying on what he admitted was "anecdotal evidence from boaters" of physical characteristics of the river as it flows through the private property section instead of relying on published USFS reports and the observations of the USFS representative who walked

² Historically, the USFS has done so by zoning uses so that one use that substantially interferes with other uses is permitted only in zoned areas. Thus, bicycles and horses are zoned from certain trails, ATVs to designated areas, and boating, which substantially interferes with nature-watching, swimming, fishing and other uses, has been zoned away from a relatively minor portion of the river, the portion above Highway 28. See 16 U.S.C. § 1281(a).

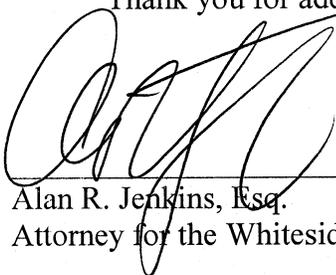
³ The claim of American Whitewater that boaters are being "banned" from the Wild and Scenic River area above Highway 28 is nothing more than clever word play. It is not the user that is restricted from the foot-traffic area but the transport vehicle. Boaters have the same right to access the corridor above Highway 28 as any other user, and each user's use of a "vehicle," whether a car, ATV, horse, bicycle, or boat, is limited as is appropriate to preserve the environment and wilderness experience. Such reasonable restrictions are routinely upheld by courts. See e.g., Bicycle Trails Council of Marin v. Babbitt, 83 F.3d, 1445, 1461 (9th Circuit 1996) (upholding as reasonable an agency decision that limited bicycle access to over 64 percent of the parks trail system and the agency's conclusion that "experiences that will remain available to cyclists are numerous and varied"). See also, Northwest Motorcycle Association v. U.S. Department of Agriculture, 18 F.3d 1468 (E.D. Wash. 1992) (banning off road vehicles from a particular area to reduce actual and/or likely user conflicts was neither arbitrary nor capricious).

the section. Such bias and unscientific approach is troubling, particularly as the anecdotal “evidence” reported is inaccurate.

Finally, as also stated in the October 24 letter, the Chattooga Friends have been concerned with the lack of emphasis on the potential impact of boating above Highway 28 (and historic impact below Highway 28) on the environment. This concern likewise was raised in the Amicus Brief of the Chattooga Friends that was sent to Mr. Chuck Myers in October 2006 to be filed as the comments of the Chattooga Friends in this USFS proceeding (“Attachment 3” hereto). In that brief, the Chattooga Friends raised the issue of boaters removing large woody debris from the river and its tributary streams, which practice damages the insect populations and wildlife, and violates Forest Service policy. A recent letter from the Chattooga Friends followed up on this point, which is a particularly important point in light of catastrophic impact wooly adelgids on eastern hemlocks and the resultant negative impact on stream temperatures from the loss of these streamside evergreens. Removing large woody debris will further harm riverine insect, plant, and wildlife populations that will be stressed by loss of shading and erosion as hemlock roots give way. We trust that Forest Service will continue to prohibit the removal of large woody debris by anyone and otherwise act to protect the environment.

Thank you for addressing these concerns.

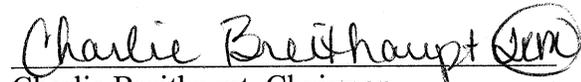
Sincerely,



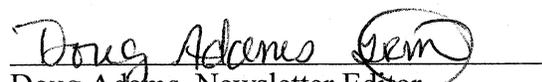
Alan R. Jenkins, Esq.
Attorney for the Whiteside Cove Association



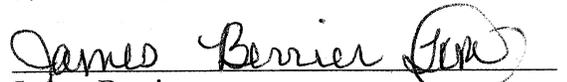
Joseph Gatins, Co-district leader
Georgia Forest Watch
(by TRM with express permission)



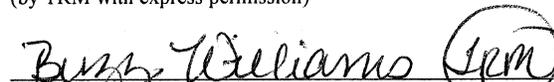
Charlie Breithaupt, Chairman
Georgia Council of Trout Unlimited
(by TRM with express permission)



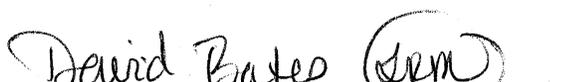
Doug Adams, Newsletter Editor
Rabun Chapter of Trout Unlimited
(by TRM with express permission)



James Berrier
North Carolina Council of Trout Unlimited
(by TRM with express permission)



Buzz Williams, Executive Director
Chattooga Conservancy
(by TRM with express permission)



David Bates, Executive Director
Jackson-Macon Conservation Alliance
(by TRM with express permission)



Jerry McCallum
Georgia Wildlife Federation
(by TRM with express permission)

John Cleaves
May 3, 2007
Page 4

George Nickas (TRM)
George Nickas
Wilderness Watch
(by TRM with express permission)

Tom McInnis (TRM)
Tom McInnis, Chairman
South Carolina Council of Trout Unlimited
(by TRM with express permission)

John Benbow (TRM)
John Benbow, President
North Carolina Wildlife Federation
(by TRM with express permission)

WILLIAM A. & HOLLY KESTER

108 Windward Ct.
Pendleton, SC 29670

April 12, 2007

Mr. John Cleaves
Sumter National Forest
4931 Broad River Rd.
Columbia, SC 29212

RE: PUBLIC COMMENTS /
PADDLE PETITION CHATOOGA RIVER ABOVE HWY 28 BRIDGE

Dear Sir:

I am against any boating in this area.

As a boater and rafter, I know how much damage my rented boating equipment has caused in the Western U.S. as well as in rivers and near rivers in North Carolina.

I feel the same way about boats and rafts in some of our more pristine areas as I do about ATV's. They are a detriment to the majority of our population and that kind of destructive recreation should not be permitted.

There are already areas where I can boat and raft. I do not need this .

Very truly yours,


W. A. Kester

JAMES M. KIMZEY
ATTORNEY AT LAW
39 EAST MAIN STREET
POST OFFICE BOX 506
BREVARD, NORTH CAROLINA 28712

TRIAL AND APPEAL OF CIVIL CASES

TELEPHONE
(828) 883-4200
FACSIMILE NUMBER
(828) 883-4275

May 23, 2007

Ms. Marisue Hilliard, Forest Supervisor
National Forests in North Carolina
160A Zillicoa Street
Asheville, NC 28801

Mr. Jerome Thomas, Forest Supervisor
Francis Marion and Sumter National Forests
4931 Broad River Road
Columbia, SC 29212

Mr. Christopher Liggett, Director of Planning
USDA Forest Service
1720 Peachtree Road, NW, Room 811N
Atlanta, GA 30309

Mr. John Cleaves, Project Coordinator
Francis Marion and Sumter National Forests
4931 Broad River Road
Columbia, SC 29212

Dear Forest Service Representatives:

Thank you for your time and attention during the meeting on May 18th concerning the NEPA and its relation to the private property of Mr. Rust.

I believe we all agreed that this section of the Chattooga has been determined to be non-navigable by the Corps of Engineers, the only agency capable of making such a determination, and that the forest service does not intend to make any determination concerning its navigability since it has no jurisdiction to do so. In addition, you have repeatedly stated, both in writing and to us at the meeting, you have no intention to encroach on private property rights.

However, it is our understanding that you consider that the USFS must include all sections of the designated wild and scenic corridor within its NEPA review including in-holdings. Since such a study cannot and will not determine navigability, which is the determining factor as to public access, neither the study nor the management plan that results can affect public access to this private property.

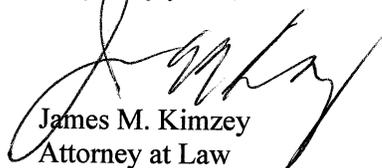
In fact, we repeatedly requested, and continue to request, that the forest service state openly and fairly that the 1.7 mile section belonging to the Rusts is private property, that it is illegal for the public to access this private property and that the forest service cannot and will not change that situation. The public should be notified of the forest service's position on these

May 23, 2007
Ms. Marisue Hilliard
Mr. Jerome Thomas
Mr. Christopher Liggett
Mr. John Cleeves
Page two

points and its authority even though the entire wild and scenic corridor is included with the NEPA study or/and perhaps within a management plan for the future.

Since the Chattooga River that flows through Jackson County, North Carolina (particularly the 1.7 mile section belonging to the Rusts) is non-navigable, the river, the riverbed and the banks that are necessary for any boating are on private property and these cannot be accessed or used without the landowner's permission. In the interest of fairness and openness, we believe that it is imperative that the forest service make very clear to the public at every opportunity that "the forest service is in no way interested in taking any measures that may unlawfully infringe upon any private property rights" and that the forest service does "not claim to have the authority to determine whether a water course is legally navigable" (see Hilliard's letter of April 27, 2007) or as stated by Mr. Tilden to me in his January 30, 2006 letter, that "the forest service is not claiming to be the federal agency charged with determining whether a water course is legally navigable and has no intention of assuming any authorities held by the US Army Corps of Engineers" and "the agency is not interested in violating any private property rights held by your client or their lessees." In other words, just as the above quoted positions of the forest service have now been made clear to us, in writing, out of fairness and openness to all parties, we insist that these positions of the forest service should be made clear to the public at all future stages of the process.

Very truly yours,



James M. Kimzey
Attorney at Law

JMK/jm

Cc: Matt Tilden

Attn: John Cleeves

I read w/ great excitement the recent article in the American Whitewater about the legal running of the otherwise closed section of the Chat toga. I've been reading this magazine since 1975 and nothing before has gotten me so excited.

Why would news about a river 2800 miles away for person who has only been in his kayak about 3 times in the last 3 years be exciting. I got my first kayak in 1974 when living in Birmingham, Alabama. The boat I purchased may have been the first in town sold from a retail establishment.

We heard bits and pieces of what the upper Chattooga had in store when and if we achieved the needed skills. To some of us, kayaking or to be more exact, being on a fine river in a kayak, became our religion. Even though most of us had never seen it , this section of the river somehow became "holy" to us.

We got the skills without a problem, but before most of us could give it a try it was closed to boating. I never knew for sure what the rationale was for excluding boating. I think the word was that the Forest Service considered it unsuitable for boating as it was extremely steep and rocky. The recent piece in the magazine suggests the real reason was simply the clout of the locals. I'm sure you government folks by now have become rather expert at dealing w/ user conflicts. When I'm hiking I don't like sharing the trail w/ a bicycle, when I'm mountain biking I don't like to have hikers in the way. On a river I'd rather not see the commercial rafters. When I'm home I really don't like reading in the paper that some more public land has been opened for logging or mineral extraction. In most of these dislikes there are dozens or even millions of folks who share my opinion and just as many that don't. I don't believe that my preferences should be given priority but neither should the others.

Since I've been following white water boating I've heard of a number of complaints against us. The ones that come to mind are public nudity, trespassing and creating dangerous traffic situations when parking along roads. Except for the nudity, none of these are unique to white water. Other than getting on and off the river I've not seen a lot of complaints. This is the case even when rivers are totally on private land.

Seems to me that kayaking the upper Chattooga is a quite legitimate way to recreate. How much negative impact on the area we would have I don't know. Until it's opened I don't see how anyone could say with confidence that the impact in going to be that significant.

If there was negative impact the problems could be addressed. On some foot trails near my house the bicycles are only allowed every other day. On one or two single day river runs in California they restrict the number of folks paddling each day to preserve the wilderness quality.

Boating a river does bother the fisherman and the fish are probably not real happy to have us there either. However I've never heard of boating killing off a fish population depriving the fisherman their activity there. In effect the fisherman / landowner group w/ your agency's help has been able to destroy the recreational opportunity of hundreds of potential boaters.

If the number of boaters becomes large enough there will be problems. It's even possible that the disturbance to the fishermen will be enough to where some of them will prefer to go elsewhere. Well, us boaters have had to go elsewhere for 30 years as we have had no choice.

I'm hopeful that the difficulty of the run itself as well as the difficulty finding the right amount of water

will keep the numbers down to a manageable level. If not, I don't have a problem w/ restrictions. On Maui at some parks the surfers get the mornings free of windsurfers. How big problem could it be if the number of boating groups was limited to say 2 a day. The Selway in Idaho has / had a two group limit and I've managed to run it three times in the last 30 years w/o even trying very hard.

Just wanted to be cast my vote.

Don Sessions
Bellevue, Wa.

Don Sessions 4/8/07

Whiteside Cove Association

Wyatt S. Stevens, Director

Roberts & Stevens, P.A.

One West Pack Square, Suite 1100

P.O. Box 7647

Asheville, NC 28801

Direct dial number 828-258-6992

Facsimile number 828-253-7200

April 20, 2007

Mr. John Cleeves, Project Coordinator
United States Forest Service
4931 Broad River Road
Columbia, SC 29212

Via E-mail, only

Re: *Chattooga River Visitor Use Capacity Analysis, Expert Panel Field Assessment Report*

Dear Mr. Cleeves:

This letter concerns the Upper Chattooga River Phase 1 Data Collection Expert Panel Field Assessment Report ("Report") dated February, 2007 and recently posted on the Forest Service website. Section 6.2.1 of the report describes erroneously the 1.7 mile section of the Chattooga River as it flows through private property. Further, the manner in which the erroneous information was reported indicates that the consultant who prepared the report is biased toward boating interests and/or unscientific in approach. This erroneous information should be removed from the report.

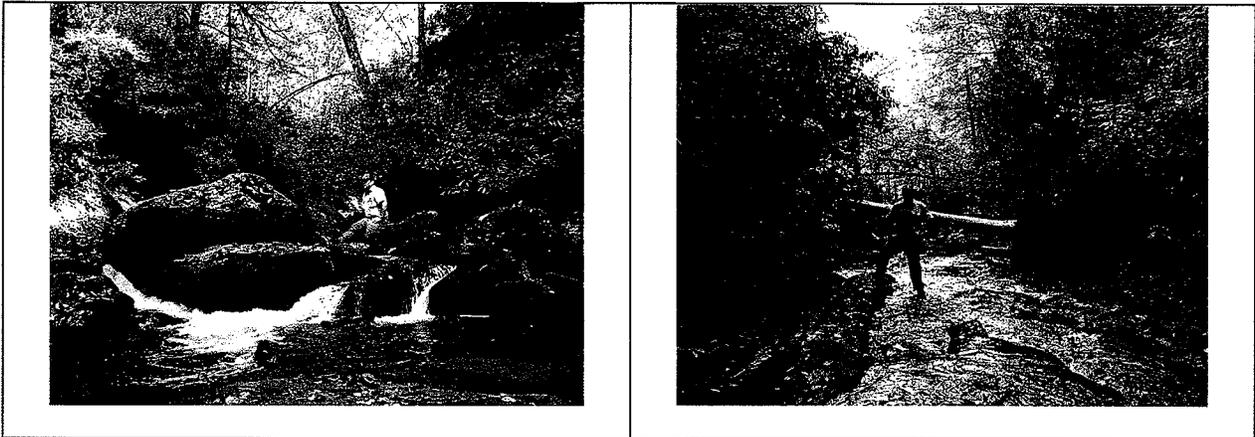
In October, 2005, Mr. Jeff Owenby of the United States Forest Service ("USFS") surveyed the property, at which time pictures were taken of the river and its physical characteristics. For some reason, the consultant drafting the Report disregarded the USFS published reports and observations of this Forest Service official but instead relied on hearsay, personal communication from Kevin Colburn of the American Whitewater group that has sued the Forest Service. According to this "anecdotal information from boaters," the "river is approximately 30 feet wide" and the "major rapid in this reach. . . is an approximately 18 foot vertical waterfall." Report, p. 27. The information is erroneous.

The average width of the river flowing through the private property averages less than 15 feet at normal flow levels and approximately 20 feet at water flow levels in the top 10 percent

April 20, 2007

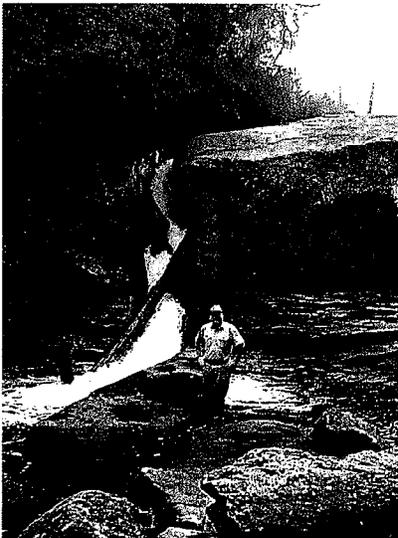
Page 2

range of flows. The USFS correctly described this section as “narrow” in the 1971 Chattooga WSR Study Report published by the USDA (“1971 Report”).



The height of the waterfall on the property is 24 feet, is considered unboatable, and would require a mandatory portage. Indeed a description of this waterfall and its accurate height was included in the Forest Service’s 1971 Report (p. 73) – “the river crashes over a massive precipice and down a 25-foot high corkscrew falls.”

This is just one of the many portages that would be required on this section of the stream.



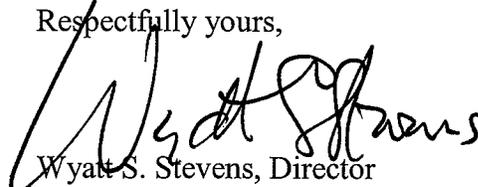
That the consultant would rely on anecdotal information from a biased party that likely obtained the faulty information while trespassing, instead of relying on published Forest Service

April 20, 2007

Page 3

studies and the observations of a Forest Service employee, shows clear bias and unscientific method. Please remove the incorrect anecdotal information from the Report.

Respectfully yours,



Wyatt S. Stevens, Director
Whiteside Cove Association

cc: M. Hilliard; via e-mail, only

J. Thomas; via e-mail, only

July 23, 2006

To: US Forest Service

Re: The Chattooga River User Analysis

To Whom It May Concern:

My name is John Toomey. I reside in an 800 acre development called Cullowhee Forest located just downstream of the Glenville dam and borders the West Fork of the Tuckaseege River.

I speak for all the property owners in opposition to the proposed water releases over the Glenville dam for recreational boating. The 4.5 mile run is bordered on both sides by private property.

American Whitewater's claim that an estimated 350 canoes and kayaks can make the run without getting out of the river and becoming trespassers is an unbelievable claim. We are asked to accept the position of American Whitewater that they will never leave the boats to survey the river or by-pass hazards.

In the float study in the West Fork, participants needed to scout the drops and did so according to the recommended safety practices. One participant made it about 200 yards, landed at the Stanger homer in Cullowhee Forest and had to be given a ride back to his vehicle.

I read that American Whitewater is attempting to open up the Chattooga River for whitewater boating. Again the same misleading claims that kayakers never leave the water and, therefore do not impact river banks or trespass on private property. The float study on the West Fork proved these claims to be false.

American Whitewater rated the West Fork a Class IV. The Chattooga headwater, above Highway 28, is rated IV and V, even more difficult than the West Fork. Kayakers will most definitely need to exit the water to survey and portage around the Chattooga's higher rated sections. The result - trespass on private property.

I strongly suggest that the USFS should survey existing open kayaking runs in Western North Carolina to determine the amounts of erosion and silt resulting from recreational boating before issuing any approval allowing boating along the Chattooga. The USFS needs to have a factual analysis regarding environmental impacts on our narrow mountain streams resulting from kayaking.

Fishing and kayaking can hardly have a peaceful coexistence. The USFS has successfully managed the conflict along the upper Chattooga by a policy of separating the fishermen and the boaters. I strongly support the current USFS policy of separation along the upper Chattooga, a policy which has worked well for 30 years. This policy should be extended to all rivers and streams in Western North Carolina protecting the remaining fishable waters.

John Toomey
Project Manager
Cullowhee Forest

ENSR

P.O. Box 506, 11 Phelps Way, Willington, CT 06279-0506
T 860.429.5323 F 860.429.5378 www.ensr.aecom.com

May 3, 2007

John Cleeves
Forest Planner
Francis Marion & Sumter National Forests
4931 Broad River Road
Columbia, SC 29212-6090

Subject: Upper Chattooga River Phase I Data Collection Expert Panel Field Assessment Report

Dear Mr. Cleeves:

I am a water resources manager employed by ENSR Corporation with broad experience in managing recreational waters. This experience has included evaluation and regulation of boat traffic, fishing conditions, and water quality as relates to recreational uses. I have been involved in studies of the recreational carrying capacity of lakes and rivers, impacts of boating on the aquatic environment and other users, potential improvement of streams for recreational uses, and minimum flows for a variety of uses, particularly habitat maintenance. I work extensively with user groups, many with clear conflicts with other users, in both public and private settings, seeking rational management approaches.

ENSR was hired by a private client in North Carolina to review work relating to the potential impacts of opening the upper Chattooga River to boating. To this end, the February 2007 report by the Louis Berger Group entitled "Upper Chattooga River Phase I Data Collection Expert Panel Field Assessment Report" and related methodological documents were reviewed. I also went to the upper Chattooga River and spent considerable time in, on and near portions of the river to become familiar with conditions.

This letter addresses the validity and utility of the Upper Chattooga River Phase I Data Collection Expert Panel Field Assessment Report published February 2007 by the Louis Berger Group. While recreation science often involves accumulating subjective opinions to arrive at an overall evaluation of the suitability of an area or set of conditions for an activity, there are procedures generally applied to limit bias or at least to characterize it. Aspects of the study design, implementation, results and conclusions are overly biased and flawed in this case. According to the authors, "The purpose of the expert panel assessment was to gain information about boating and angling opportunities on the upper Chattooga River, with particular attention to boaters and anglers flow preferences for these flow-dependent activities." By assessing conditions at only one flow and considering only the most rudimentary aspects of the recreational experience, it misses this target substantially.

This report is one component of a larger analysis being conducted by the United States Forest Service (USFS), so there is opportunity for the USFS to recognize this and either rectify the shortcomings or disregard questionable conclusions. Please consider the following issues.

Criteria For Member Panel Selection

The selection process to choose panel members to participate in the flow study seems biased towards getting boaters with more experience, skill and inclination to find the conditions suitable. The panel members were selected based on "...the review of the following qualifications: years of experience, skill level, previous experience participating in flow studies, level of availability, and knowledge of the area and/or river." One requirement of the boater panel members was experience in Class V whitewater (expert boaters). Angler panel members needed only have experience in a full range of angling techniques, but no documented skill level or experience with this river or similar conditions. In essence, members of the angler panel were not required to be experts in the field of fishing, whereas the boating panel members were clearly expert paddlers.

Limiting the panel members to those with Class V whitewater experience immediately eliminates the majority of potential boating/rafting users on the upper Chattooga River. Novices or even advanced kayakers and below were not able to participate on the expert panel, so all thoughts, opinions and results of the panel are going to relate to expert kayakers only. We recognize that there are safety issues involved with participant selection, however, it must be acknowledged that no viewpoint on boatability by amateur, beginner, moderate or even advanced kayakers is supplied. Would any opening of the upper Chattooga River to boating be limited to those with some documented minimum skill level? Would the river be open to boating only on selected days when conditions were deemed appropriate? Who would make those determinations? Management policy cannot ignore the potential risks and associated liabilities associated with every potential user on both private and public lands.

It is our understanding that boating panelists were members of the American Whitewater Association (AWA), a group that has publicly pushed for opening the upper Chattooga River. This does not foster an unbiased analysis. In contrast, the criteria for selection for the fishing panel do not preclude a range of panelists with different backgrounds. However, it does not appear that familiarity with the entire target reach of the river was sought in the fishing panel; for certain, no member of the existing outing club utilizing the Chattooga Cliffs section of the river was included. This may seem like an effort to avoid bias from a group with a vested interest in keeping boating off this river segment, but limits the expertise and coverage on the fishing panel. It is surprising that no effort was made to at least acquire data from individuals or groups that routinely fish this river as such use is already permitted.

The consultants that conducted the boatability and fishability study as sub-contractors to the Louis Berger Group (Whittaker and Shelby) were apparently recommended by the AWA, and correspondence indicates that the AWA was accorded some form of review in the selection of panelists. It would not be unusual for a group such as AWA to hire a consultant or develop a review team to provide support for its opinion, but it is not appropriate for an interest group to

guide the selection process for a publicly funded study to determine USFS policy on appropriate public uses. How much influence did AWA have in the selection of the consultant team and the panel members? Were panelist opinions influenced by AWA? Was input sought from other interest groups?

River Segment Selection

For the purpose of the Phase I study, the Chattooga River was separated into three sections based primarily on access locations to deploy and retrieve the panel members. Boating panel members planned to float the entirety of each section while fishing panel members were only able to experience a very limited area along each reach due to time constraints imposed by the study. Specific study zones were not selected based on conditions or physical attributes considered favorable or unfavorable to fishing. Instead, the members of the fishing panel were asked to use the same stretches of river that had been selected based on the preferences of the boating panel. These areas may not reflect the appropriate river delineation based on river morphology, fishing preferences or opportunities.

Access and boatability are the primary issues for the boaters; certainly scenic aspects and whitewater challenges figure into opinions, but the key aspect of boatability is the ability to move between access points. Fishing acceptability is far more complicated, and involves a number of factors for which evaluation was not facilitated by this study. The sub-consultants to the Louis Berger Group who conducted the boatability and fishability assessments are also authors of recreational study manuals (e.g., Whittaker et al. 1993, 2005) that point out the difficulty in assessing those many factors for fishability. However, ignoring them because they are difficult to assess is not acceptable in this process. Even narrowing the focus to access and flow related factors, fishing panel members should have been given the opportunity to assess conditions over a larger reach of river offering more varied conditions, and could have considered additional access points, as hauling equipment is less of a problem for anglers than boaters.

Study Approach

Boatability

The report does not include adequate discussion on the methods used to assess boatability. Specifically, no information is included on the number of hits, stops, drags or portages that are acceptable for any of the studied sections. The ranges and averages for these variables are provided, but there is no clear discussion of how these data were used. It appears that no pre-determined objective criteria were used to assess boatability. According to Whittaker et al. (1993), writing on the assessment of boatability, "...studies should systematically define the nature of problems as well as the number of such problems users will tolerate for various types of experiences." What was the tolerance level of the boating panel? Is the tolerance level of the expert boating panel likely to be similar to that of novices who could boat this section of river if opened to the public for such use?

Assessment of boatability also varies between craft type, yet only kayaks and a single canoe were used in this assessment. Is it to be assumed that if the upper Chattooga River was opened to boating, the types of craft would be specifically limited? Whittaker et al. (1993) state, "Relationships between flows and boatability will differ for different types of craft with different loads, and studies need to explicitly define any assumptions in this regard." No such assumptions appear to have been defined in this study, and the consultants appear to violate many of their own recommendations for proper assessment.

On the topic of boater skill level, Whittaker et al. (1993) state that "Flow-boatability relationships will differ for boaters with different skill levels, and studies need to state any assumptions about this variable." The authors of the Phase I report do not discuss the basic and inherent assumptions of the study. Clearly boatability is being based on a single trip by a group of expert kayakers and one canoeist, taken at a time when the flow was most conducive to that trip. Can one infer from successful completion of that trip that the river is suitable for boating at a level that warrants opening it to the public for boating? Note that Whittaker et al. (1993) described boating some stretches of some rivers as "... more like stunts than a recreation experience." While Whittaker et al. referred specifically to low water conditions in that report, the same could apply to rare high water conditions requiring extreme skill to successfully complete. Any conclusion that the entire upper Chattooga River could be opened to boating because a group of expert kayakers can make it through a selected portion of the river at a rare flow is unjustified.

"Boatability is an attribute directly affected by flow" (Whittaker et al. 1993), and the lack of a dam or other flow control structure makes it impossible for the consultants to control conditions. Given that the flow varies considerably over the upper Chattooga River, assessment of boatability will be complicated and limited by the pattern of natural flows and the timing of field assessments. There are no upstream dams that allow flow control for comparative analysis by the panel; this study depended upon a single assessment trip at a naturally elevated flow, with extrapolation to any other condition or un-assessed river segment.

With only one field assessment of selected portions of the target river reach, the utility of the results will be severely limited. For example, the upper 2.2 miles of the roughly 5.3-mile long Chattooga Cliffs section does not appear to have been floated in the assessment of the Chattooga Cliffs river reach. This upstream portion has much less flow than the downstream portion studied, with major confluences near where the boating panel began its run. Extrapolation of results from the lower portion (Mills Creek to Bull Pen Bridge) to the upper portion will be highly erroneous; the upstream section will be much less boatable for any given level of flow than the downstream portion. The situation is similar in other sections of the upper Chattooga River; conditions may vary markedly over a short distance as a result of tributary confluences. A field visit in November of 2006 supports this contention.

Lack of control over flows creates lack of predictability for boating conditions. Even if some portion of the target area is deemed boatable under some naturally occurring flow, knowing

when it will be boatable with enough notice to take advantage of it will be difficult. Offering recreational opportunity for boating under uncontrolled flow conditions creates many potential hazards for both boaters and the environment. Assuming that some portion of the target area is boatable by a select few under rare conditions on short notice is an entirely inadequate justification for opening an area to the public for boating at times of public choice.

Fishability

The term fishability is not defined in the Phase I report. According to Whittaker et al. (1993), "...fishability refers to the combination of conditions that provide a good fishing opportunity, including all the factors listed above." The factors to which the authors refer include access, water clarity, presence of various mesohabitats, and fish activity. A more recent document states that "Fishability studies only address immediate effects that anglers can evaluate, they do not provide information about immediate or long-term biophysical effects (Whittaker et al. 2005)." Biophysical effects in this reference include mainly features of the fish population. In some studies the use of pre-evaluation focus groups allows anglers to concentrate their efforts on two aspects of fishing, "...access to fishable water (wading, from the bank, or by boat) and use of fishable water (tackle and technique considerations)" (Whittaker et al. 2005). General goals of the fishing panel are supplied in the report, but there is no discussion of exactly what the authors were trying to assess during the fishability portion of the study. We would submit that even ignoring the factors Whittaker et al. find difficult to assess, a much better job could have been done evaluating the impacts of scenery, solitude, and related features of a fishing trip that make it special. Fishing is most definitely not just about access and flow considerations.

The members of the fishing panel were not given adequate time to fish any of the three pre-selected study sections. According to written reports supplied by the fishermen, the time allotted each day to fish depended on the amount of time the consultants spent with the boating panel. The focus on boatability to the detriment of proper assessment of fishability is evident.

No one from the fishing panel actually fished in the Chattooga Cliffs section of the river, although one fisherman did acknowledge that fishing was possible based on a short reconnaissance trip while waiting for the boating panel to arrive from upstream. No valid conclusions can be drawn about the Chattooga Cliffs section of the river during the survey except that it was fishable based on brief visual inspections.

Fishing in the Ellicott Rock reach was limited to 45 minutes due to the unexpected length of time for the boating panel to float the Chattooga Cliffs section. Ellicott Rock reach is a 5.3 mile section of the Chattooga River and it is difficult to believe that anyone could assess a 5.3 mile section of river in a meaningful way in 45 minutes. The fishermen could not even walk this section in the time allotted to them for fishing it. The lack of time allotted for fishing stands in contrast with the admonition of Whittaker et al. (2005), who suggest "It is challenging to assess a diversity of potential fishing locations during a short assessment period (a few hours

or a day).” Assessment periods were completely inadequate in the fishing portion of this study.

Another disturbing aspect of the Phase I fishability report is the range of flows applied to the fishability evaluation. The authors stated that “Most anglers are ‘calibrated’ to stage levels at the Highway 76 gage...” They also stated that the “boater panel, in contrast, made their evaluations relative to the Burrells Ford gage...” Flows in the upper reaches of the Chattooga River have not been correlated to the levels at the Highway 76 gage, so it is unclear how the authors are supplying recommended flows for fishing. The authors state that “...flows at the Highway 76 gage and Burrells Ford gage are not necessarily easy to ‘convert’...” If there is no way to convert flows from the Highway 76 gage to the Burrells Ford gage with any confidence, how are the authors able to supply flow recommendations for the angler panel members based solely on the Highway 76 gage? Anglers were fishing upstream in the same areas the boating panel was boating, so why apply data from different gages?

Even under known flows, single flow assessments are noted as “...unlikely to provide precise flow ranges for different opportunities” (Whittaker et al. 2005). The limitation of this study in this regard casts great doubt on conclusions drawn from it. While it may be possible to establish some sense of applicable flow range from a single outing, the confidence interval surrounding such an estimate is expected to be too large for use in such a critical determination of recreational suitability. Put simply, not enough work has been done to support meaningful conclusions.

It appears that the focus of the angler panel evaluation was the quality of access to fishable water on the days of the study. Whittaker et al. (2005) state that in lieu of a controlled observational study, real data for use of a specific reach can be used to assess access and fishability. For the Chattooga Cliffs section, such data exist from the Whiteside Cove Association logbook previously submitted to the Forest Service that gives fishing dates and corresponding water levels since 1962. These data provide valuable input to answer the question of whether the Chattooga Cliffs area is fishable under a wide range of flows. Certainly there are other anglers who frequent other portions of the upper Chattooga River who could have provided useful input. Why bring in fishermen unfamiliar with this portion of the river and give them inadequate time to actually assess fishability?

The Louis Berger Group study concludes that the upper Chattooga River was fishable during the two-day study period, but may not have been optimal at the elevated flows encountered. The challenge is to create a distribution of fishability over the range of potential flows for all segments within the target reach of the river and compare that to a similar distribution of boatability. The study did not generate adequate data to derive such a distribution, and must conclude that fishing and boating activities will overlap in time and space. Historical records and my site visit indicate that fishing opportunities will exist over the range of natural flows. Angler preference for any given area will change as flows change, but the opportunity to fish under favorable conditions still exists. As noted previously, aspects of fishability extend beyond the quantitative level of fishing success, and access is sufficient to allow fishing at a

very wide range of flows. Unlike boaters, fishermen do not need an extended area of river to enjoy their recreational pursuit, and with less equipment to transport, can access points more readily.

Fishability vs. Boatability

The impacts of boating on fishing in the Chattooga River have not been addressed by the authors of the Phase I report. Human-related fishing impacts are detailed in the scientific literature, and failure to consider them in the overall assessment is a major shortcoming. Boat-related effects on fish and fishing are most often related to motorized boats and prolonged exposures. Non-motorized boats present a different type of impact on the fish community, one that is less often studied but still important in cases such as this one. Impacts from non-motorized boats include increased noise and disturbance through boat hits, stops and drags, increased noise from paddle strikes on the boat and river bottom, increased noise from talking and yelling, increased overhead shadows, and competition for habitat (human vs. fish). Additionally, desire to make boating more enjoyable may lead to intentional habitat alterations detrimental to fish and fishing, but we will focus on the direct impact of boating here.

Sudden, loud noises associated with boating (paddles, yelling, boats hitting bottom) will cause fish to momentarily seek shelter as far away from the noise as possible. Laboratory experiments have demonstrated fish reactions to sudden loud noises. Juvenile Chinook salmon and rainbow trout exhibited a strong flight response in relation to loud noise created by an aluminum tube and motorized piston. After multiple tests, the flight response was replaced by the fish moving as far away from the noise source as possible (Knudsen et al. 1997). Two additional laboratory studies reported that fish exhibited fright response and arousal from aquarium tapping and/or moving shadows (Laming and Ebbesson 1984; Laming 1987). In these studies the fish had nowhere to escape to, because they were living in captivity. The results in a river might be different, and would likely be more detrimental to fish and fishing. Effects will be magnified in the upper Chattooga River, which is not wide in most places. Fish will not be able to escape by moving laterally, and obstructions prevent upstream movement in many areas; downstream flight is expected, with no guarantee that the fish can return to their former position.

In a wild setting, fish experiencing continued disturbances will leave the disturbed area or hide to avoid what they perceive as a threat. Fish leaving a particular stretch of the river reduces their catchability in that area and ultimately has a negative impact on the fishing opportunity. Where there are physical barriers to fish passage in the upstream direction, scaring fish into flight may substantially reduce fish availability in a formerly productive fishing area. It is not difficult to envision fish being chased from pools into riffles or rapids that may limit their return. At the very least, boating will result in energy expenditures by fish not conducive to maintaining high quality fish condition. Thus angling satisfaction may be affected both by fish availability and condition.

Shadows and movement from humans and boats will startle fish and cause them to seek shelter away from the disturbance area. Ingram and Odum (1941) reported that pumpkinseed (*Lepomis gibbosus*) exhibited a flight response when a human shadow was reflected over the nest. This general response of fish to human presence is common in most species. Healthy salmonids will rapidly swim away from overhead shadows or from a hand waved slowly over a tank (White 2000). The increased overhead shadows and paddles breaking the surface of the water will translate to increased flight and fright responses by the fish inhabiting the river, even without considering the noise aspect. As with noise impacts, the narrowness of the upper Chattooga in many areas will maximize the impact of passing boat shadows

An additional concern is the conflict over habitat between humans and fish. Boaters will seek out deeper runs and pool areas for easier passage, rest breaks and possibly other recreational use (e.g., swimming). The impact of human activity in these important fish refugia will force fish to leave the area or hide at the first sign of any disturbance. The response of fish to most human activities is fright (Lassee 1995). The result of fright response is increased oxygen demand, disruption of internal balance and ultimately death if the stress is not removed (Lassee 1995). It seems unlikely that actual fish deaths will occur from boating use of the river, but the potential for added stress is noted. Clearly, increased boating disturbances will only result in deleterious affects to the fish community; no benefits accrue to the fish.

Beyond impacts on fish availability and condition, boating effects on angling are well known and require no special studies to elucidate. Fishermen do not enjoy having boats pass through their fishing locations any more than boaters would enjoy getting hooked by a fisherman's cast. The many pools at the base of small waterfalls constitute prime fishing areas, and would be the landing areas for watercraft coming over those falls; in addition to effects on fishing success, angler safety is a legitimate concern. The upper Chattooga River has been managed for fishing activities for over three decades and is fished over a very wide range of flows. The USFS must consider the established expectations of fishermen and the impact boating would have on the recreational experience now offered on the upper river.

Conclusion

The authors of the Phase I study have inadequately assessed fishability as it relates to the upper Chattooga River. One of three areas was not assessed, and an additional 5.3 mile section was only fished for 45 minutes. The hydrology of the area is insufficiently understood and no accurate conversion has been developed between the gage locations, making the flow ranges applied to impressions from the fishing and boating panels unreliable. Uncontrollable variability in flow over the target river reach is high, has not been characterized in this study, and affects conclusions on fishability and boatability. Existing real data from an upstream outing club may offer decades of fishability information that has not been considered. Key factors in fishability have been ignored, including additional access potential, adaptation to varying flow conditions, interference by boating, fish community features, and non-fishing aspects of a fishing trip. Any conclusion that the upper Chattooga River should be considered

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boatable based on a single trip by expert kayakers and a perception that there is no significant overlap with fishing activity should be rejected.

I would be happy to discuss any aspect of this review or provide additional information upon request.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Kenneth J. Wagner". The signature is fluid and cursive, with a long horizontal stroke at the end.

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