

4110 Quail View Rd.
Charlotte, NC 28226-7956

July 7, 2015

Re: "Chattooga River Boating Access Project"

VIA E-MAIL

objections-southern-north-carolina@fs.fed.us

Ms. Kristin Bail, Reviewing Officer
Forest Supervisor, National Forests in North Carolina
160 Zillicoa Street, Suite A
Asheville, North Carolina 28801-1082

Dear Ms. Bail:

INTRODUCTION:

Building *any* special boater access trails to the banks of the upper Chattooga in North Carolina constitutes a highly controversial waste of public resources.

Building one at Green Creek constitutes something worse: it demonstrates the illegal predetermined nature of the Forest Service's decision to build these trails while raising concerns about from whom the Forest Service is taking its orders. It represents an unlawful attempt to break up what is essentially a single agency action into smaller components in order to minimize public controversy while avoiding any legal accountability for the project's capacity for causing significant adverse impacts on the "special attributes" of the Wild and Scenic Chattooga River.

The construction of such trails will violate the Wild and Scenic Rivers Act ("WSRA") 16 U.S.C. § 1271 et seq., the National Forest Management Act ("NFMA") 16 U.S.C. § 1600 et seq., the National Environmental Policy Act ("NEPA") 42 U.S.C. § 4332, the Clean Water Act, the Wilderness Act, the Data Quality Act, the Administrative Procedures Act ("APA") 5 U.S.C. § 706 and attendant regulations, manuals, handbooks, and guidelines.

Neither the need to balance conflicting recreational interests nor the need to build more convenient recreational facilities explains the push to build these new trails in North Carolina. First of all, the Forest Service mischaracterizes *both* the demand for the proposed trails as well as their utility for anyone other than boaters. The record does not contain evidence that any recreational user group, other than boaters, has demanded, much less, *even requested* that the Forest Service consider these trails. In fact, the record evidences overwhelming opposition to these new trails by everyone other than boaters. Opponents understand that an existing designated trail, the Chattooga River Trail, already provides sufficient access for *all*. What should be limited is where boaters are allowed to put in to the river using this existing trail.

Consequently, the Forest Service must abandon these new trails because such new trails will irreparably degrade the unique backcountry experience still present on the North Carolina portion of the Chattooga---an experience which the Forest Service has already caused to disappear in South Carolina and Georgia. Opponents understand that the ruggedness of the terrain and the limited accessibility into this wilderness like area has preserved and protected the “special attributes” of the North Carolina part of the Chattooga for over thirty years, consistent with the discrete non-degradation and enhancement duties imposed upon the Forest Service pursuant to Section 1281(a) of the Wild and Scenic River Act.

Despite reams of procedural paper shuffling being prepared to try to justify this proposed management decision, anyone with common sense understands that there is neither a pressing need today nor in the foreseeable future for building any boater access trails in North Carolina.

In fact, the Forest Service’s own boater permit counts *conclusively* demonstrate just the opposite.

The Forest Service’s 2014-2015 boater permit count demonstrates the truth behind the charade: demand does not exist for these trails---although, revealingly, the Forest Service failed to disclose these unfavorable statistics by electing to forego publishing them in the May 2015 version of its *Chattooga River Boating Access* Environmental Assessment (“2015 EA”).

These boater permit counts are either accurate or inaccurate.

If accurate, they *conclusively* demonstrate there has been virtually no boater use on the upper Chattooga above Bull Pen bridge over the last three boating seasons. In fact, during the most recent 2014-15 season, *zero* boaters reported using the Green Creek put in and only 11 boaters reported floating any part of the uppermost section of the Chattooga River in North Carolina. Consequently, there is no measurable boater demand/need for building the proposed trails in North Carolina---other than to provide a tailored convenience for a handful of “expert” boaters at the expense of everyone else who oppose such trails. Even then, there is no demand if one accepts the premise that all boaters are properly filling out the registration permits.

Alternatively, if the Forest Service claims such permit counts understate actual boater use, this admits the Forest Service’s inability or unwillingness to dedicate sufficient resources (under adaptive management) to ensure that boaters aren’t sandbagging the capacity monitoring efforts, by either refusing to fill out the appropriate permit, or by unlawfully floating the river outside of season or during insufficient flows. *There is at least one case of boaters having been witnessed putting in kayaks at Green Creek in June 2014 in violation of the rules on season and flows.* The individuals that witnessed this might be willing to attest to this fact---although coming forward would put them at risk of being subjected to the intimidating aggressiveness of those who choose to break the law.

In addition to this eye-witnessed event, there is also substantial physical evidence on the river that boaters are actually using the stretch below Green Creek much more than what is being self-reported and subsequently tabulated by the Forest Service.

To explain, large stretches of the river downstream from Green Creek are now obstructed by multiple creek wide strainer logs/obstructions in the form of fallen Hemlocks etc. Such strainer logs are inherently dangerous and likely require portaging at higher water (>350 CFS) for all but

the most expert of boaters. Additionally, *since* the publication of the 2012 Notice Decisions, the diversity of the riverbed's structural form has been virtually eliminated by an exponentially larger amount of sedimentation having deposited itself in the crevices and pools of the river from Green Creek down to Cane Creek and beyond. In many places, it is not an exaggeration to state that the river bed appears to have been "paved" with sediment. The river bed is flat and the depth of the channel has been seriously diminished in total.

It is clear that such sections of water are largely undesirable flat water or unboatable. Therefore, it is not unexpected that boaters would have attempted to establish ways to avoid or bypass this flat and obstructed section of water.

In fact, there is substantial physical evidence that boaters have unlawfully done just that. Boaters have chosen to create new access points at locations that violate the parameters specified in the 2012 Decision Notices. They have done so apparently to avoid the substantial number of stream wide obstructions that exist from Green Creek downstream. For one example of an unlawful boater constructed put in, please visit 35 03 00.94 N 83 07 09.47 W.

Exhibit A comprises photographs documenting this unlawful boater put in at 35 03 00.94 N 83 07 09.47 W. This unlawful boater put in was created presumably to give boaters a chance to float the small waterfall, plunge into a large pool that exists less than 1000 feet downriver at 35 02 54.50 N 83 07 12.98 W.

The 2012 Decision Notices required boaters to self-register and to put in within 500 feet of the Norton Mill Creek confluence or within one quarter mile downstream of the Green Creek confluence. This boater created put in at 35 03 00.94 N 83 07 09.47 W does not comply with either of those requirements. It violates that requirement. Furthermore, as the pictures demonstrate, the rhodies on the bank have actually been cut or sawed off in order to make it easier for a boater to slide their kayak down the bank and push themselves into the river. It is hard to understand how this new access point could be so worn down if the Forest Service's permit counts reflected accurate usage above Bull Pen bridge by boaters---zero boaters in 2014/2015 boating season.

The level of increased sedimentation and the large number of fallen "strainer" logs now blocking the river channel from Green Creek downstream makes this water substantially less desirable and prospectively unboatable except by a handful of expert boaters. Less than one quarter mile downstream from the proposed boater put in at Green Creek, the river is almost totally obstructed by two log jams that have developed generally proximate to 35 03 20.22 N 83 07 05.79 W. At high water these strainers constitute dangerous points requiring boaters to find some portage around.

Exhibit B documents this streamwide logjam that make boating largely untenable by putting in at Green Creek---unless the boater is prepared to have to bushwhack portage around such obstructions which start here and are present at other downstream locations.

Most importantly, the Forest Service has been put on notice, that since the publication of the 2012 Decision Notices, the same stretch of the river where the Forest Service proposes to build these new trails has suffered unacceptable physical impairment and degradation because of an

exponential increase in the amount of sedimentation being deposited into the riverbed. This exponential increase in sedimentation has reduced the diversity of the riverbed's physical form by filling in entire stretches of the riverbed below Green Creek. When advised of this calamity occurring under its watch, the Forest Service's response was "not my job."

Exhibit C documents various examples of the unacceptable levels of sedimentation now found from Green Creek to Cane Creek and beyond.

In addition, there is compelling evidence that the Forest Service has ignored or failed to take sufficient steps to cure other erosion problems known to be occurring at the same time that the Forest Service was blindly pushing forward the boater's agenda. Despite having previously remained stable for decades prior to the 2012 Decision Notices, there is one conspicuous case documenting where the top of the bank on river right has now collapsed and eroded into the river generally proximate to 35 02 50.71 N 83 07 14.84 W. Such bank collapses are not uncommon where the hydrology of a river changes because of a loss of a river's bedform diversity and because of a loss in the depth of a river channel owing to an exponential increase in sedimentation deposits within the river bed.

Exhibit D documents this river bank collapse and the pitifully unsuccessful attempt of somebody to use a silt fence to mitigate or prevent further erosion from taking place. Given this one instance of the riverbank's collapse, it is difficult to understand how the Forest Service pushes forward with its call for building new boater access trails---much less why boating is not being stopped because of these changed environmental circumstances under the Forest Service's vaunted adaptive management principles.

Ironically, at the same time that the bank collapses next to the existing Chattooga River Trail, the Forest Service asserts, with a straight face, that building five new trails on the highly erosive micaceous soils into the wilderness like riparian corridor of the river in North Carolina will actually reduce erosion—not increase it. However, the Forest Service can't use broad generalizations that do not square with the facts on the ground to defend building these trails. The use of logical fallacy is arbitrary and capricious. And the facts on the ground and the history of this river tell a different story than what the Forest Service proffers it will do in the future. Instead of taking care of the physical features of the river, the Forest Service has allowed substantial physical degradation to occur subsequent to the 2012 Decision Notices.

Under the Forest Service's watch, the existing Chattooga River Trail has not been properly maintained and in fact has been allowed to deteriorate to the point where parts of the trail are obstructed with fallen trees and downhill slope erosion.

Exhibit E offers photographs of various places on the Chattooga River Trail being ignored by the Forest Service. Given this history of trail maintenance negligence, it would be arbitrary to presume that the Forest Service will do with these new proposed trails what it has historically failed to do with the existing Chattooga River Trail.

Finally, the hollowness of the proffered purpose for the proposed trails is evidenced by the following facts and circumstances: (1) the Chattooga River trail already provides sufficient access for all, (2) the proposed Green Creek trail would eliminate just 15 minutes of the 45-50

minute hike required to reach an environmentally more sustainable and less controversial boater put-in that exists immediately adjacent to the Chattooga River trail at 35 02 54.34 N 83 07 12.60 W, and (3) the Forest Service's limited resources would be better used in rehabilitating and hardening the deteriorated conditions along the existing Chattooga River trail for the benefit of all instead of building conveniences for a handful of "expert" boaters who already have access to 85% of the river in North Carolina by using the existing Chattooga River trail.

The Forest Service's published explanation for its proposed trails employs scientific sounding jargon and circular reasoning¹ that runs counter to the evidence before the agency and that is so implausible that it could not be ascribed to a difference in view or the product of agency expertise. *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43, 103 S.Ct. 2856, 77 L.Ed.2d 443 (1983). The rationale given for constructing these highly controversial trails is neither founded on any technical analysis nor scientific judgment to which a reviewing court should defer as being within the Forest Service's special area of expertise.

It is clear that the proposed trails are planned for only one reason: to create a special convenience of access for boaters while serving no convenience for everyone else. In fact, if the Forest Service holds true to its statements, everyone else will be "funneled" (forced) to use these boater selected points of access in order to reduce the number of user created trails. The reasoning behind this stated justification constitutes logical fallacy. The Forest Service fails to produce any evidence, separate and distinct from its own conclusory statements, to show how these proposed dead end trails will be useful to anyone other than boaters---especially with respect to that portion of the river already classified as "primitive" under the Forest Service's Recreation Opportunity Spectrum ("ROS").

SPECIFIC LEGAL PROBLEMS WITH THE PROPOSED PLAN TO BUILD SPECIAL BOATER ACCESS TRAILS

1. VIOLATES THE WILD AND SCENIC RIVER ACT

Today, the Forest Service attempts to justify a new recreational convenience for a single user group (boaters) without regard for the significant adverse environmental impacts of its proposed action and without regard for the plain meaning and overarching mandate of Congressional instruction set forth in Section 1281(a) of the Wild and Scenic Rivers Act ("WSRA").

¹ Circular reasoning is not a formal logical fallacy but a pragmatic defect in an argument whereby the premises are just as much in need of proof or evidence as the conclusion, and as a consequence the argument fails to persuade. Other ways to express this are that there is no reason to accept the premises unless one already believes the conclusion, or that the premises provide no independent ground or evidence for the conclusion. Nolt, John Eric 1998, *Schaum's outline of theory and problems of logic*. McGraw-Hill Professional. P. 205 ISBN 9780070466494. [Begging the question](#) is closely related to circular reasoning, and in modern usage the two generally refer to the same thing. Walton, Douglas 2008, *Informal Logic: A Pragmatic Approach*. Cambridge University Press.

Congress was clear that when managing/administering a designated river that primary emphasis shall be given to protecting and enhancing the river's **esthetic, scenic, historic, archeologic, and scientific features.**²

Congress announced the following policy purpose for the Wild and Scenic Rivers Act: "It is hereby declaredthat certain selected riverswith their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values,and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations." 16 U.S.C. §1271

In explaining the public policy purpose behind Wild and Scenic Rivers designations, Congress **offered this non-exhaustive list** (in §1271) of the kinds of characteristics that would qualify as an outstandingly remarkable value or "ORV". Rivers seeking designation as a Wild and Scenic River must possess at least one of these ORVs that can be cataloged at the time of designation. This is the purpose of Section 1271. After designation as a Wild and Scenic River, this policy statement makes clear that these ORVs must be preserved and enhanced for the benefit of future generations---not just the current generation.

But more importantly, and apparently overlooked by the Forest Service, Congress also dictated *discrete* instructions via three sentences set forth in Section 1281(a) about how specifically to manage these designated rivers.

Unlike the National Forest Management Act, the WSRA overtly omits any mention of the Forest Service being required to manage scenic rivers according to the principles of multiple use and sustained yield objectives. This is not an accident. In fact, both the WSRA and the Wilderness Act are not concerned about those principles and in fact they were intended to make such considerations subordinate to the different primary objectives of these two highly conservation minded pieces of legislation. The WSRA does not require that restrictions on recreational uses be balanced against anything, if any of the five enumerated features would be adversely impacted by the pursuit of some kind of recreational hobby.

Furthermore, the three sentences of §1281(a) must be construed together and it should be assumed that the chronological order of the sentences are intended to provide progressively greater detail about the precise scope and ambit of the discrete duty being imposed upon the Forest Service: "Each component of the national wild and scenic rivers system shall be administered in such manner as to protect and enhance the values which caused it to be included in said system without, insofar as is consistent therewith, limiting other uses that do not substantially interfere with public use and enjoyment of these values. *In such administration primary emphasis shall be given to protecting its esthetic, scenic, historic, archeologic, and scientific features.* Management plans for any such component may establish varying degrees of intensity for its protection and development, based on the *special attributes* of the area." 16 U.S.C. §1281(a) (italics emphasis added).

Read in this context, §1281(a) implicates the need for the application of a zero tolerance management continuum towards activities threatening the degradation of any of the five

² 16 U.S.C. §1281(a)

specifically enumerated features in the second sentence. This implied duty arises because the third sentence of §1281(a) announces that even greater intensity of protection is warranted where these “special attributes” of the Chattooga River are threatened.

The plain language demonstrates Congress requires the Forest Service to give prioritized emphasis to protecting and enhancing these five features over all other values set forth in the non-exhaustive list of values that might otherwise qualify a river for official designation.

Congress chose the imperative “shall” as opposed to the precatory word “may” or “should”. This specific word choice demonstrates that Congress intended for the Forest Service to manage Wild and Scenic Rivers so as to insure and prioritize the protection and enhancement of these five enumerated features over all other named and unnamed “other similar values” set forth in the non-exhaustive list of values that might be used to qualify a river for Wild and Scenic River designation.

In short, although opportunities for “recreation” was listed in the policy declaration as one of many kinds of values on which designation could be based, “recreation” was overtly omitted from this special enumerated list of five “features” to be prioritized for special enhancement and special protection by the Forest Service. “Features” differ from “values”. They are not equivalent.

Only one logical conclusion can be reached from a plain reading of the statute. Alteration of the physical river environment in order to improve recreational conveniences (such as building boating put-in trails or any other infrastructure tailored to any particular recreational use) must remain subordinate in degree of importance compared to the enhancement, preservation, and protection, of these five special features: (1) esthetic, (2) scenic, (3) historic, (4) archeologic, (5) scientific.

The Forest Service has neither the authority to alter the Chattooga’s basic environment in order to enhance recreational pursuits nor the authority to construct infrastructure conveniences to facilitate any recreational pursuit when such activity or undertaking would degrade any of these five special features. Instead, the statute clearly mandates that: **“In such administration primary emphasis shall be given to protecting its esthetic, scenic, historic, archeologic, and scientific features.”**

This makes perfect sense. In contrast to the pursuit of recreational hobbies which may have other physical locations where they can be pursued, these five enumerated features constitute the “special attributes” of the Chattooga. They constitute the unique physical flesh and bones, and soul of the river, which cannot be replaced or substituted if allowed to be broken or destroyed.

These five specially enumerated features are both concrete and intangible. Once these features are diminished or degraded, they are gone forever. The true intended beneficiaries of requiring enhanced protection for these five specifically enumerated “special attributes” are the future generations who would be denied the opportunity to experience the esthetic, scenic, historic, archeologic and scientific features of the Chattooga, in their original

splendor, if these “special attributes” were permitted to be degraded in order to accommodate recreational hobbies. There is substantial evidence in this administrative record documenting how the Forest Service in South Carolina and Georgia has already allowed recreational pursuits to consume and diminish these five special attributes. In particular, the esthetic and scenic values on those parts of the river have been seriously impaired by the Forest Service’s willingness to encourage and expand an excessive amount of commercial rafting on that part of the river. The result has been litter and excessive diminution of the physical environment proximate to places such as Woodall Shoals and Earls Ford. This must not be unlawfully allowed to be replicated in North Carolina.

In short, the Forest Service must abandon any plan to build a Green Creek trail, or any other trail on the North Carolina section of the Chattooga because such trails will be duplicative, will diminish the primitive backcountry esthetic for other users, and because such trails will adversely alter the physical scenery of a no trail environment that still exists exclusively in that single tiny portion of the entire Chattooga River corridor.

2. ADVERSE CHANGES IN ENVIRONMENTAL CONDITIONS ARISING FROM AN EXPONENTIAL INCREASE IN SEDIMENTATION WARRANTS AN IMMEDIATE ABANDONMENT OF ANY NEW RECREATIONAL PURSUITS THAT MIGHT EXACERBATE THE DOCUMENTED PROBLEM OF SEDIMENTATION

In November, 2014 the Forest Service was provided with photographic documentation corroborating how a huge amount of silt had recently become deposited in that part of the Chattooga between Green Creek and downstream as far as Norton Mill Creek pool and beyond.

But instead of initiating a field investigation of the biological consequences of the river’s decreasing bedform diversity brought about by this massive silt buildup, the Forest Service has instead chosen to totally dismiss this cautionary warning. Instead of responding substantively by initiating some kind of field investigation of these possible undesirable ecosystem changes, the Forest Service answers with claims that the concern has already been considered and has been determined to be insignificant within the body of the 2012 Environmental Assessment *Managing Recreational Uses in the Upper Segment of the Chattooga Wild and Scenic River Corridor* (“2012 EA”).³

How can a *subsequent* decline in water quality owing to a huge amount of sediment (in some cases greater than one foot deep) or a potential decline in the river’s attendant aquatic habitat be deemed to be insignificant if nobody from the Forest Service even

³ On June 1, 2015 I spoke with the biologist responsible for working with the Chattooga River to inquire whether or not he was aware of my warnings about the huge increase in silt proximate to the planned boater put in on Green Creek. He confirmed for me that he had not done any field work on that part of the river for some time. Apparently, he had been a part of the group of professionals that made a site visit for the purpose of studying the prospective location of the trail to be constructed proximate to Green Creek. He did not indicate that he had made any recent field investigations into the current status of the macroinvertebrates and brown trout populations in that part of the river at that time.

bothered to go look or even evaluate the condition of the river after receiving notification of the potential problem?

Here's how. First, the Forest Service excuses itself from any responsibility for investigating this silt/sedimentation deposit by claiming that "the Forest Service has no jurisdictional authority over nonpoint source water pollution that does not originate from National Forest System Lands."⁴ This may be true in a world of legal distinctions.

However, the Forest Service **does have** responsibility under the Wild and Scenic River Act for protecting and enhancing the upper Chattooga's **esthetic, scenic, historic, archeologic, and scientific features**.⁵ Clearly, this huge increase of silt, whatever its original source, is having an adverse impact **on one or more of these features**. The Forest Service is lawfully obligated to do something other than to sit on his hands. It's obligation under the protect and enhance directive might be as great as to have to take affirmative action to mitigate or reverse and cure the problem.

In any case, at a minimum, the Forest Service shouldn't do anything that might risk exacerbating this problem by allowing additional erosion to enter into the river---like building unnecessary trails anywhere on these highly erosive micaceous soils. The Forest Service can not sweep away such concerns with self serving statements that such trails will be constructed to Forest Service specifications and therefore will not pose any risk of increased sedimentation getting into the river. Such self-serving assurances do not match up with the Forest Service's abysmal record in maintaining the existing Chattooga River Trail or other physical features in South Carolina, Georgia, and North Carolina. Consequently, such assurances are fictions that bear no resemblance to the history of experience.

Second, the Forest Service disclaims any responsibility for worrying about the current quality of the water by resorting to a plethora of NEPA friendly quotations wherein the Forest Service inventories all that it claims to have done to "study" conditions on the Chattooga---even if such analyses were done almost a decade in the past. To understand this point, look at the table of Forest Service responses to specific public objections that are set forth in Appendix A of the 2015 EA. Many answers are substantively non-responsive to the actual issue/question being raised by the public commenter. Frequently, they only repeat Forest Service statements of conclusions made previously in the administrative record.

While NEPA may be primarily concerned with the procedural form in which the Forest Service conducts its analysis and paper shuffling, the Forest Service should not ignore its clearly substantive duties under Section 1281(a) of the Wild and Scenic River Act. The Forest Service can't avoid its non-degradation and enhancement responsibilities by simply quoting a plethora of NEPA friendly statements previously made in its various environmental assessments, wherein it inventories all the things that it claims to have

⁴ 2015 Environmental Assessment *Chattooga River Boating Access*

⁵ 16 U.S.C. §1281(a)

done to make the hard look at the possible impacts that the proposed trail construction could have on the Chattooga.

At a minimum, before disturbing any soils proximate to Green Creek, the Forest Service must conduct sufficient field work to make sure that the macroinvertebrates and wild brown trout populations are not in decline as a consequence of the huge silt deposition that has occurred and which has significantly reduced the bed form diversity of that part of the river. To do anything less would be to arbitrarily ignore the problem. This would be unlawful under the WSRA.

The United States Forst Service shouldn't be allowed to employ vagaries of administrative law and the ruse of thousands of pages of paper shuffling to justify decisions that fly in the face of common sense in order to sustain a predetermined objective. The time is coming where Courts must simply take a closer look at automatically deferring to agency decisions under the premise that the agency knows best.

"Enough is enough."⁶

The Forest Service can't excuse itself from a finding of significant impact by either asserting that the impacts of building new trails has already been considered and simply tiers to a previously approved environmental assessment or by refusing to investigate the changed circumstance associated with my specific charges of excessive sediment deposition in the river proximate to Green Creek, or by disclaiming any responsibility for diminished water quality owing to this increased level of sedimentation.

Environmental conditions have changed substantially since the 2012 Decision Notices and the Forest Service must take notice of these changed conditions in order to discharge its responsibilities under §1281(a). This can not be avoided.

Given the documented presence of an exponentially greater amount of silt/sedimentation that has almost choked the river from Green Creek downstream to Cane Creek, it flies in the face of common sense for the Forest Service to plan to build new trails on highly erosive mica laden soils when such new boater access trails will serve no genuine necessary purpose other than to create greater conveniences for a recreational pursuit that has not demonstrated sufficient interest or demand to justify the construction of any new trails.

It certainly shouldn't do so without preparing a full Environmental Impact Statement to assess the possible biological implications of these changed sediment conditions on the upper Chattooga. The Forest Service does not have any recent information pertaining to the health of the macroinvertebrates in the river or the wild brown trout populations. As such, the Forest Service has not applied the best science available in moving forward with this trails initiative.

⁶ Decker v Northwest Environmental Defense Center, 133 S. Ct. 1326, 1339 (2013)(Justice Scalia's dissent.)

Furthermore, the required hard look at alternatives must be conducted objectively and in good faith, not as an exercise in form over substance, and not as a subterfuge designed to rationalize a decision already made. Unfortunately, the Forest Service appears to want to resort to such impermissible tactics to defend and move forward with this ill-conceived and predetermined project. The amount of sedimentation in the river is too great to draw any other rationale conclusion about why the Forest Service persists in the face of these momentous adverse ecological changes.

3. THE 2015 EA IMPROPERLY CLAIMS TO TIER TO THE 2012 EA WHEREIN A FINDING OF NO SIGNIFICANT ADVERSE IMPACT WAS DECLARED FOR THE INTRODUCTION OF BOATING ON THE UPPER CHATTOOGA. INSTEAD, THE 2015 EA REVEALS THE COMPLICITY OF THE FOREST SERVICE IN USING A STRATEGY OF SEGMENTATION TO AVOID THE POSSIBILITY OF A FINDING OF SIGNIFICANT ADVERSE IMPACT BACK IN 2012 WHEN BOATING ON THE UPPER CHATTOOGA WAS FIRST EVALUATED.

In the May 2015 EA, the Forest Service proffers that the proposed construction of these new trails has already been outlined pursuant to Alternative 13A of the 2012 EA wherein boating on the upper Chattooga was claimed to have no significant adverse impact. See May 2015 EA @ p.4.

But this is a bold face fiction. The 2012 EA discussed the future need to designate five (5) future boater put ins but it did so by implying that the District Ranger would do so by requiring boaters to use the existing Chattooga River trail to gain access to the river. The only thing left open was the precise points on the existing Chattooga River trail where the put ins would be ultimately designated---using the existing Chattooga River Trail.

Further to this point, the 2012 Decision Notice specifically stated:

“Require boaters to start or complete their trip only at specific boater put-ins and takeouts, which will be designated after site-specific NEPA analysis and will be a condition of the self-registration boating permit. In the interim, require boaters to start or complete their trip only at existing trails at the following locations:

- a) Within one-quarter mile downstream of the Green Creek confluence;
- b) Within 500 feet of the Norton Mill Creek confluence;
- c) Within one-quarter mile of Bullpen Bridge;
- d) Within one-quarter mile of Burrells Ford Bridge; and
- e) downstream of the Lick Log Creek confluence.”

The public was left with a clear impression that boaters, like everyone else would be using the existing Chattooga River Trail, which runs 6.5 miles from Whiteside Cove to the Bull Pen Bridge. The public was left with the unmistakable impression that the Forest Service would limit where boaters should put in using the existing Chattooga River Trail after some experience with boating the river was acquired.

Today, the Forest Service attempts a fast one by claiming that the cumulative environmental impacts of constructing new trails today was previously considered in the 2012 EA.

This is not the case. But in any case, given the drastic changed sediment conditions that have manifested themselves, the matter takes on substantive rather than merely procedural importance.

4. THE PROFFERED PURPOSE AND NEED FOR THE CONSTRUCTION OF THESE PROPOSED NEW TRAIL CONSTITUTES A FICTION

First, based on Forest Service counts of boater permits over the last three boating seasons, on average the trail proposed to Green Creek might be expected to be used by less than thirty two (32) individuals per season.⁷ But this average use grossly overstates the true level of any prospective demand or need for a new boater access trail at Green Creek.

From the 2012-2013 boating season to the 2013-2014 boating season, the number of boaters putting in at Green Creek dropped from 79 boaters to just 14 individuals---a whopping 82% decline in use. Furthermore, during the 2013-2014 season, boaters only used 27% of total qualifying days to boat anywhere on the upper Chattooga.⁸ During the most recent 2014-2015 boating season, zero boaters used the Green Creek put in and only 11 boaters reported floating any section of the upper Chattooga over the entire season.⁹

After a decade of complaining and unknown amounts of the Forest Service's budget consumed in fighting this lobby, the boating community musters only 11 individuals to float any part of the uppermost section of the Chattooga within the Nantahala National Forest during the 2014-2015 season.¹⁰

So for whom and exactly why are we planning to devote so much personnel time and budget dollars to build a special boater access trail proximate to Green Creek? Why diminish the rapidly disappearing esthetic of a primitive backcountry experience that characterizes this small corner of the world? Why go forward with building new dead end trails when we know that such trails are unnecessary based on the Forest Service's own boater counts? Why risk building such trails on highly erosive soils when the Forest Service knows that such trails

⁷ See Table 3.2.1-2 and Table 3.2.1-3 found at pages 21-23 of *Environmental Assessment Chattooga River Boating Access* published May 15, 2015 (hereinafter referred to as the 2015 Boating Trail EA).

⁸ It might be interesting to see how many of these hand full of boaters were repeat recreationalists.

⁹ As of the date of these comments, the Forest Service has only completed its tabulation of the results for the 2014-2015 season through March 20, 2015. Information gathered from emails with Mr. Jim Knibbs of the Forest Service documents that there were a total of just 11 boaters that boated the upper Chattooga in 2014-2015.

¹⁰ A reasonable person would hope that the Forest Service would not try to explain away this damning statistic by now claiming that the tabulated record of boater use distorts true demand for the resource because the number of days and flow restrictions are too restrictive for boaters to fully utilize the resource. A skeptic, or someone who fears that the boaters and Forest Service have a predetermined outcome already in mind, might be concerned that these statistics might be used to justify giving the boaters even greater access to the resource under the excuse that boater use has not tripped the user capacity limits for boating. But how could the Forest Service draw such a conclusion when it can't prove that the self-reporting permit system has not been disregarded by boaters in order to be able assert the right to have a longer season with lower flow restrictions.

will permanently and significantly degrade the primitive backcountry esthetic of the uppermost public section of the river in North Carolina? ¹¹

Second, the Forest Service defends its plan to build special boater access trails with Kafkaesque logic. It offers the illogical assurance that building these new boater access trails on highly erosive soils will actually diminish overall erosion by allowing the Forest Service to eliminate elsewhere what it pejoratively refers to as “user created trails.”¹² The Forest Service has made a big effort to tabulate the total length of “user created trails” throughout the Chattooga river corridor in order to implicitly make the generalization that all “user created trails” are bad.

This inventory never explains or details why any particular segment of “user created trail” is objectionable. It simply throws the baby out with the bath water. Without any true factual foundation on which to proceed (no matter how benign or infrequently used a particular manway might be), the Forest Service bases its analysis on the unsubstantiated and unqualified assumption that all “user created trails” erode and cause an unacceptable amount of sediment to reach the river. In contrast, the Forest Service implies that bestowing its imprimatur on a trail intones the trail with some kind of magical environmental sustainability---when the facts on the ground expose this is a lie because the Forest Service doesn’t maintain the trails that it has already designated---including the existing Chattooga River trail.

In fact, infrequently used manways throughout the forest are often in better condition than the designated trails---because the designated trails are most heavily used but not adequately maintained by the Forest Service. It is interesting to note that while the Forest Service claims that “user created trails” are problematic, the Forest Service proposes to adopt an existing manway at Green Creek on which to build its designated trail. This powerfully underscores the arbitrariness of the Forest Service’s actions in general. Furthermore, in wilderness designated areas, such as the Ellicott Rock Wilderness area, people are supposed to be given as much freedom to move on foot across the recreational area and not to be restricted to using designated trails.

However, assuming hypothetically that user created trails are always undesirable (which isn’t necessarily true), the Forest Service’s comprehensive measurement of “user created trails” suggests that any erosion problems associated with the presence of “user created trails” disproportionately plagues that part of the river corridor in South Carolina and Georgia where boating has been permitted for decades and where outfitters have been allowed to run over forty thousand rafting trips per year.

In contrast, this inventory makes clear that no such problem plagues the uppermost portions of the river in North Carolina. The number of user created trails on the uppermost portions of the river in North Carolina are inconsequential. So it is simply false for the Forest Service to

¹¹ “The ‘hard look’ must be taken objectively and in good faith, not as an exercise in form over substance, and not as a subterfuge designed to rationalize a decision already made.” *W. Watersheds Project v. Kraayenbrink* 632 F 3d 472, 491 (9th Cir. 2011).

¹² By implication, any non-designated trail presumably constitutes a “user created trail.”

claim that building 5 new boater access trails in North Carolina will have any positive impact on reducing non-existent erosion from user created features in North Carolina. They certainly won't have anything to do with abating the environmental degradation that exists in South Carolina and Georgia.

Furthermore, despite this huge geographic distinction between the condition of the environment in South Carolina and Georgia compared to North Carolina, the Forest Service sets up the false premise that all users of the resource, no matter where they are on the resource, should/must move through the lands included in the project area on designated trails. It ignores the practical fact that one recreational user group of the upper Chattooga, grouse, bear, and deer hunters, must lawfully follow their game wherever it runs. This is frequently off of any designated trail.

Additionally, it ignores that part of the project area lies within lands inventoried as "primitive" under the Recreation Opportunity Spectrum ("ROS")¹³ while another part of the project area lies within a designated "wilderness" area. It ignores that in such areas: (1) designated trails are supposed to be extremely primitive in design and maintenance (2) recreational users are intended to be free to explore the resource by moving off designated trails and exploring on their own.

Nevertheless, under the guise of fixing a problem that does not exist on the uppermost parts of the Chattooga river, the Forest Service uses the sinister sounding term, "user created trails", to imply broadly and without exception that recreational users should never be allowed to transit through the forest on anything but Forest Service designated trails. We acknowledge that something needs to be done in over-utilized areas like Earl's Ford and Woodall Shoals where heavily used boater created trails dominate the landscape.

However, it is arbitrary and capricious for the Forest Service to attempt to justify its construction of new boater access trails in the uppermost pristine part of the river in North Carolina by claiming that this *unrelated* project will somehow help reduce erosion in South Carolina and Georgia.

Third, despite assurances to the contrary by the Forest Service, the proposed dead end Green Creek boater access trail off the main Chattooga River trail will only benefit boaters---not other recreational users of the river.

Knowledgeable and frequent visitors to the upper Chattooga are unlikely to use this special boater access trail¹⁴ because they understand that it leads to nowhere of spectacular interest.

¹³ The Green Creek area is acknowledged by the Forest Service to be "primitive" ROS classification, see 2015 EA @ page 23-24.

¹⁴ Frequent visitors to the river would be unlikely to want to use the proposed boater access trail at Green Creek because this spur trail does not lead to any particularly spectacular scenery or special place on the river. The proposed location of this boater put in is unremarkable vis a vis the rest of the river. Faced with the prospect of having to retrace their steps up a steep hill, frequent visitors will opt to continue down trail knowing that there are more scenic places to gain access to the river using the designated Chattooga River trail. Because of the huge amount of silt that has deposited itself in that part of the river, it is unlikely that river waders or boulder hoppers

In contrast first time visitors are likely to be unpleasantly surprised if they commit the energy and time to hike down one of these trails only to learn that they are at a dead end.

The proposed dead end spur trail near Green Creek powerfully illustrates this point. If built, it will lead to a non-descriptive and small pool next to a flat ledge rock---a pool that is now threatened with a huge amount of silt which makes this scene even less scenic. There is nothing remarkable to see at that spot on the river. First time visitors to the Chattooga would be surprised to learn, that once you reach the river, this spur trail does not afford any way to transit up or down the rhododendron choked riverbank. Once at the river, non-boaters will be faced with either (1) retracing their steps back up a steep ridge to get back to the Chattooga River trail, (2) wading and rock hopping a long distance down the slippery and dangerous river bed of the stream until you reach a place where the Chattooga River trail returns to the river bank,¹⁵ or (3) bushwhacking their way up and across the ridge of impenetrable rhododendrons, “to try to cut the corner” to the Chattooga River trail further down trail. Over time, if infrequent visitors elect to try bushwhacking, this will have the unintended but plainly foreseeable consequence of creating a new user created trail.¹⁶

Fourth, the marginal 15 minute benefit to be achieved for just a hand full of boaters per year will neither vindicate the personnel and material costs incurred to date nor justify the resources that will need to be dedicated in the future to managing and maintaining this additional boater convenience. This resource consuming project overlooks how more urgent and less controversial projects on the Nantahala Forest are being totally ignored or displaced from moving forward because of the Forest Service’s obsession with finding a way to allow a hand full of boaters per year to consume 100% of the upper Chattooga’s recreational resource in North Carolina.¹⁷

would want to hike downstream through this section of the river. There are much more beautiful parts of the river available elsewhere for these knowledgeable and frequent visitors to the Chattooga.

¹⁵ Boulder hopping or wading in this river is dangerous---especially for a first time visitor to the river. It is unlikely that a first time visitor is going to attempt to wade or boulder hop downstream. It would be extremely easy to turn or break an ankle or a hip by slipping on a slippery rock turned round and smooth by eons of time. This would discourage any first time visitor from attempting this.

¹⁶ The Forest Service might attempt to avoid this dilemma for first time visitors by placing signage explaining that the trail dead ends at the river. But by placing signage in an area that is designated as “primitive” under the Recreational Opportunity Spectrum (“ROS”) classification system, the Forest Service would be ignoring its own directives about how to manage a primitive area while driving another nail into the coffin of the increasingly scarce backcountry esthetic and sense of wilderness embodied by that part of the upper Chattooga. This would be contrary to its responsibilities under the protect and enhance directive of the Wild and Scenic River Act.

¹⁷ Why does the Forest Service insist on using scarce budget dollars to accommodate the convenience requirements of just a handful of boaters. During the decade that this controversy has raged, the Forest Service could have devoted the manpower and material resources being consumed for the benefit of just a handful of boaters per season to much more urgent safety related projects or for enhancing the accessibility of other Nantahala resources for the benefit of a much larger group of people. For example, there is a well documented and extremely dangerous parking circumstance that exists on Highway 107 South at Silver Run Falls. Silver Run Falls is a popular scenic destination that enjoys much greater use in a single weekend than the all the boaters who float the Chattooga over an entire boating season. Is someone going to have to die at that popular parking spot before something gets done? Where is the common sense in choosing which projects to accelerate?

Fifth, the plan to build these new trails overlooks the Forest Service's demonstrated inability to maintain the existing Chattooga River trail and its inability (or unwillingness) to actively enforce the rules that it has already set in place.¹⁸

The reality is that the Forest Service lacks the enforcement personnel and the budget capacity to reverse adverse biophysical impacts once they occur, to put the genie back in the bottle once he is allowed to escape.¹⁹ If the Forest Service truly meant what it writes in its Environmental Assessments, or was truly capable of using adaptive management to correct its mistakes, the severely degraded physical condition of the lower Chattooga corridor in South Carolina and Georgia would have already been addressed sometime over the last two years---or long before then. But the Forest Service has not addressed this degradation. Why?

SUMMARY AND CONCLUSION

The Chattooga River trail already provides sufficient access for all recreational users of the upper Chattooga in the Nantahala National Forest. New trails are not required. Boaters are not the only recreational users that are inconvenienced by the distance of difficult terrain associated with this part of the river. It is the difficulty of the terrain and the limited access that protects the primitive backcountry esthetic from becoming trashed out like the reaches in South Carolina and Georgia. The proposed construction of these new trails represent unlawful arbitrary actions on the part of the Forest Service and should be abandoned---especially in light of the existing documented violations of the rules governing boating on the upper Chattooga by recreational kayakers.

Please incorporate these comments and exhibits into the administrative record and add my name and address to your notice list regarding actions taken regarding this issue.

Respectfully,

Bill Floyd

¹⁸ Boaters have been observed to be using the river during the summer of 2014 in violation of the existing rules. Furthermore, the Forest Service has been provided with photographic evidence in November 2014 evidencing the possible sawing loose and removal of LWD in an area immediately proximate to the Green Creek put in.

¹⁹ No doubt the employees of the Forest Service like the employees of the National Park Service are dedicated professionals who want to do the right and just thing. But the fact remains that this agency like the National Park Service has a large problem marshalling adequate resources in the field to do what it claims it can do on paper. As an example, visit the Chattahoochee River National Recreational Area. On some days the permit box (containing hundreds of three dollar fees) is stuffed so full with un-retrieved permits that additional visitors can-not even comply with the law. If the National Park Service can't even collect its fees on a timely basis, how can it be trusted to maintain the physical resource so as to avoid overuse? And it can't. As a frequent visitor to that park might attest, despite making promises that it can maintain various improvements made for boating access, these improvements have not been adequately maintained and sediment is being allowed to pour into the river in some visible quantities when it rains.

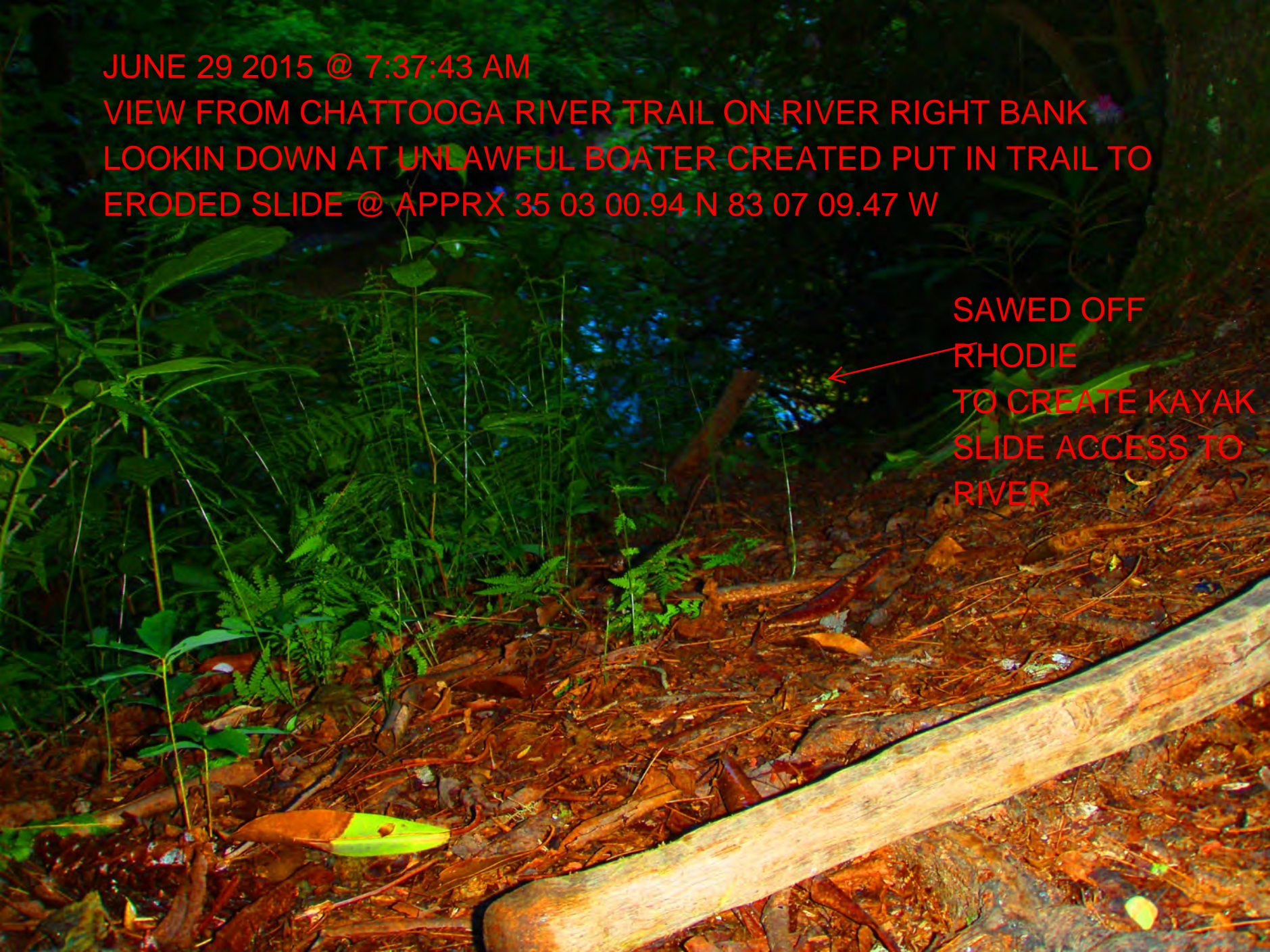
EXHIBIT A

JUNE 29 2015 @ 7:37:43 AM

VIEW FROM CHATTOOGA RIVER TRAIL ON RIVER RIGHT BANK

LOOKIN DOWN AT UNLAWFUL BOATER CREATED PUT IN TRAIL TO
ERODED SLIDE @ APPRX 35 03 00.94 N 83 07 09.47 W

SAWED OFF
RHODIE
TO CREATE KAYAK
SLIDE ACCESS TO
RIVER



JUNE 29 2015 @ 7:37:53 AM

SAWED OFF
RHODIE TO ALLOW
BOAT TO SLIDE DOWN
BANK TO WATER



JUNE 29 2015 @ 7:38:29 AM

ERODED BANK
WHERE BOATS
HAVE BEEN SLID
INTO WATER



JUNE 29 2015 @ 7:38:43 AM
VIEW OF BOATER CREATED PUT IN
@ APPRX 35 03 00.94 N 83 07 09.47 W



JUNE 29 2015 @ 7:38:58 AM
VIEW FROM RIVER RIGHT BANK
LOOKING DOWN AT UNDESIGNATED BOATER PUT IN
@ APPRX 35 03 00.94 N 83 07 09.47 W

SEE ALSO JUNE 6 2015
PICTURES @ 4:05:10 PM
ET AL THAT SHOW
BOATER PUT IN SLIDE
FROM RIVER VIEWPOINT



JUNE 6 2015 @ 4:05:10 PM
SANDBAR ON RIVER LEFT
@ APPRX 35 03 00.61 N 83 07 08.74 W

LAUREL
"X"
ERODED AND UNDESIGNATED
BOATER PUT IN
NOT THERE PREVIOUSLY

@ APPRX 35 03 00.94 N 83 07 09.47 W

JUNE 6 2015 @ 4:06:56 PM
@ APPRX 35 03 00.94 N 83 07 09.47 W

SEE ALSO
JUNE 29 2015 PICTURES
@ 7:37:43 AM ET AL
SHOWING RHODIES CUT
ON CH RIVER TRAIL TO
CREATE BOATER PUT IN

SEE THIS SPOT ON RIVER RIGHT
WHERE RHODIES HAVE BEEN
SAWED DOWN ON CHATTOOGA
RIVER TRAIL TO CREATE
BOATER PUT
NOT OBSERVED IN PAST

JUNE 6 2015 @ 4:07:06 PM

@ APPRX 35 03 00.94 N 83 07 09.47 W

CHATTOOGA RIVER TRAIL



UNLAWFUL BOATER PUT IN SLIDE



JUNE 29 2015 @ 7:39:26 AM

VIEW BACK UPHILL TO CHATTOOGA RIVER TRAIL

FROM UNLAWFUL BOATER PUT IN

@ APPRX 35 03 00.94 N 83 07 09.47 W

CUT RHODIE FOR
KAYAK TO SLIDE
DOWN HILL



EXHIBIT B

JUNE 6 2015 @ 12:56:46 PM
VIEW DOWNSTREAM AT LWD LOGJAM
@ APPRX 35 03 20.22 N 83 07 05.79 W
PRECLUDING BOATERS
FROM FLOATING THIS SECTION WITHOUT GETTING UP INTO
RHODODENDRON OR CLIMBING OVER LOGS



JUNE 6 2015 @ 12:59 PM

VIEW DOWNSTREAM AT LOGJAM ON RIVER RIGHT

@ APPRX 35 03 20.22 N 83 07 05.79 W



JUNE 6 2015 @ 1:01:45

@ APPRX 35 03 20.22 N 83 07 05.79 W

VIEW DOWNSTREAM ON RIVER LEFT SIDE
OF LARGE ROCK. CURRENT IS ONLY FLOWING LEFT
RIGHT SIDE CHOKED OFF.

ROCK "LJ-1"



CURRENT FLOWING

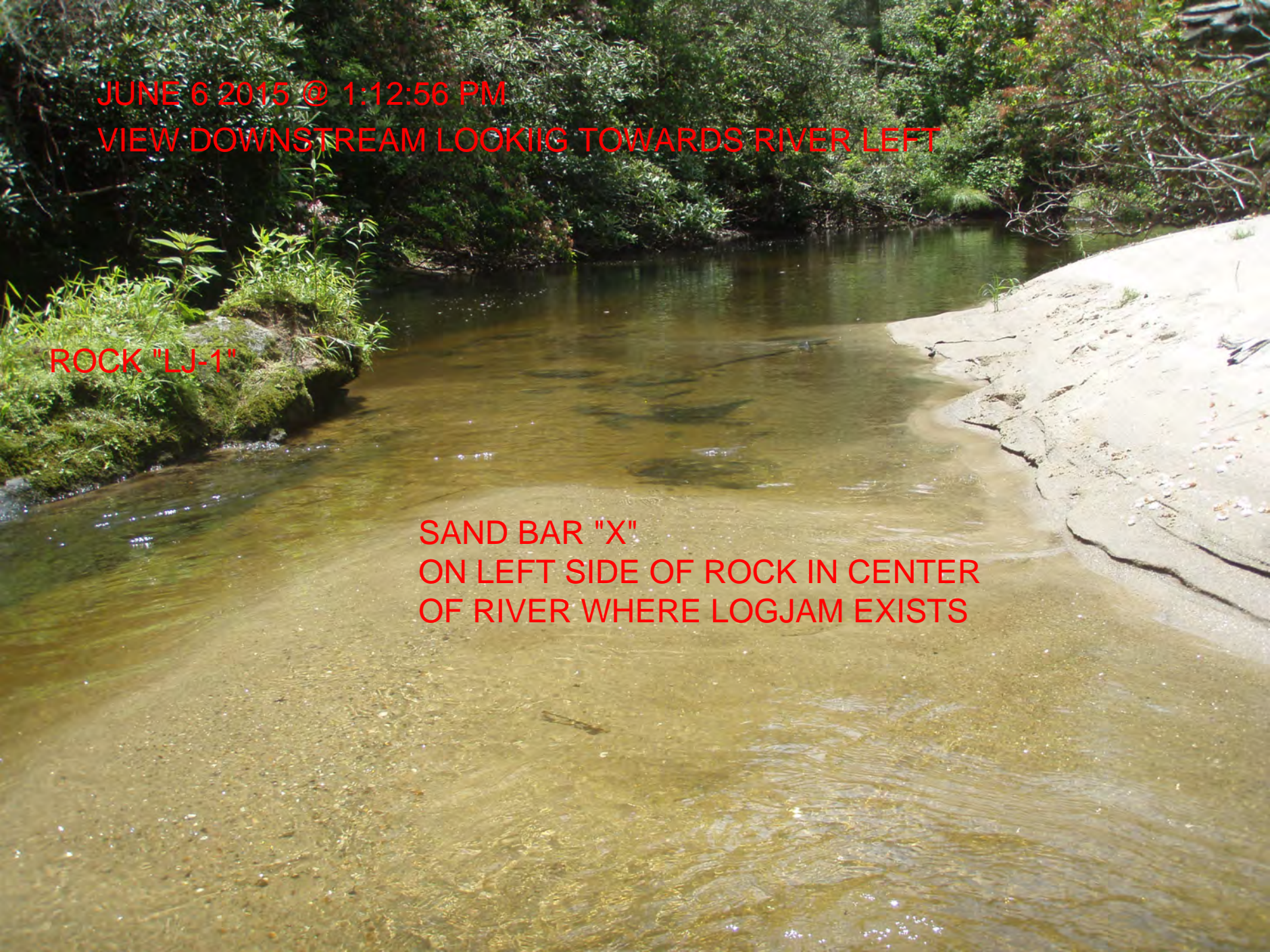


JUNE 6 2015 @ 1:12:56 PM

VIEW DOWNSTREAM LOOKIIG TOWARDS RIVER LEFT

ROCK "LJ-1"

SAND BAR "X"
ON LEFT SIDE OF ROCK IN CENTER
OF RIVER WHERE LOGJAM EXISTS



JUNE 6 2015 @ 1:14:11 PM

ROCK "LJ-1"

"A"



JUNE 6 2015 @ 1:14:19 PM

VIEW DOWNSTREAM AT LWD BLOCKING RIVER

@ APPRX 35 03 19.87 N 83 07 05.55 W



ROCK "LJ-1"

JUNE 6 2015 @ 1:14:28 PM

VIEW DOWNSTREAM FROM RIVER LEFT/CENTER

JUST BELOW THE PARTIAL LOGJAM BELOW GREEN CREEK

ADDITIONAL BOATER OBSTRUCTION @ 35 03 19.87 N 83 07 05.55 W



JUNE 6 2015 @ 1:15:06 PM
VIEW DOWNSTREAM AT
LWD OBSTRUCTION ACROSS
SLOW WATER

COMPARE PIC#31
OCT 31 2014 @ 2:25:50 PM



MINOR LOGJAM @ APPRX 35 03 19.87 N 83 07 05.55 W

JUNE 6 2015 @ 1:19:35 PM
VIEW FROM CENTER OF RIVER LOOKING AT
TWO OF THE LOGS BLOCKING RIVER RIGHT



LOG "A"

JUNE 6 2015 @ 1:19:42 PM

VIEW FROM CENTER OF RIVER AT ONE OF THE LOGS BLOCKING
RIVER RIGHT

LOG "A"

A photograph of a river scene. A large, moss-covered log, labeled "LOG 'A'", is partially submerged in the water, blocking the river. The log is covered in green moss and has several smaller branches and debris attached to it. The water is murky and brown. In the background, there are dense green trees and bushes. The sky is not visible. The text "JUNE 6 2015 @ 1:19:42 PM" is in the top left corner. The text "VIEW FROM CENTER OF RIVER AT ONE OF THE LOGS BLOCKING RIVER RIGHT" is in the top center. The text "LOG 'A'" is in the bottom left corner.

JUNE 6 2015 @ 1:19:50 PM



JUNE 6 2015 @ 1:20:03 PM

VIEW FROM 35 03 19.80 N 83 07 05.47 W

LOOKING BACK UPSTREAM AT RIVER LEFT SIDE
OF TAIL OF LOG JAM



EXHIBIT C

JUNE 6 2015 @ 11:38:28 AM

@ APPRX 35 03 30.63 N 83 07 06.85 W

VIEW FROM RIVER LEFT @

TAIL OF GREEN CREEK BOATER PUT IN POOL

SEE LARGE AMOUNTS OF SILT THAT HAS RECENTLY BECOME
DEPOSITED IN SPACE BETWEEN ROCKS



JUNE 6 2015 @ 11:38:37 AM

@ APPRX 35 03 30.63 N 83 07 06.85 W

VIEW FROM RIVER LEFT

LOOKING ACROSS GREEN CREEK BOATER PUT IN POOL



JUNE 6 2015 @ 11:39:05 AM

@ APPRX 35 03 30.63 N 83 07 06.85 W

VIEW UPSTREAM FRO RIVER LEFT LOOKING BACK
AT GREEN CREEK BOATER PUT IN "ROCK"



JUNE 6 2015 @ 11:53:20 AM

@ APPRX 35 03 30.63 N 83 07 06.85 W

VIEW UPSTREAM FROM CENTER RIVER LOOKING
AT GREEN CREEK BOATER PUT IN ROCK AND POOL



JUNE 6 2015 @11:53:41AM
VIEW DOWNSTREAM FROM TOP OF RUN JUST
BELOW GREEN CREEK BOATER PUT IN POOL

35 03 30.22 N
83 07 06.23 W





JUNE 6 2015 @11:55:50 AM

@ APPRX 35 03 30.22 N 83 07 06.23 W

VIEW DOWNSTREAM

FROM RIVER LEFT @ TAIL OF POOL ON RIVER RIGHT

BELOW GREEN CREEK BOATER PUT IN POOL

JUNE 6 2015 @ 11:55:59 AM
@ APPRX 35 03 30.22 N 83 07 06.23 W
VIEW FROM RIVER LEFT ACROSS TAIL OF POOL
AT EXCESSIVE AMOUNT OF SILT



JUNE 6 2015@ 11:57:21

VIEW UPSTREAM

TOWARDS RIVER LEFT SIDE/HEAD OF PLUNGE POOL

35 03 30.22 N 83 07 06.23 W

BELOW GREEN CREEK BOATER PUT IN

NOTICE HUGE AMOUNTS OF SILT DEPOSITED IN CURRENT LINES



JUNE 6 2015 @ 11:58:54 AM

VIEW DOWNSTREAM

HEAD OF LEDGE INTO POOL

35 03 29.59 N 83 07 05.89 W

SEE LARGE SILT DEPOSIT THAT IS THREATENING
TO FILL 50% OF WIDTH OF STREAM

ORIENTATION
ROCK "Z"



JUNE 6 2015@ 11:59:03AM

VIEW DOWNSTREAM

@ 35 03 29.59 N 83 07 05.89 W



ORIENTATION
ROCK "X"

JUNE 6 2015@ 12:03:25 PM
VIEW DOWNSTREAM LOOKING
HEAD OF PLUNGE POOL
@ 35 03 29.59 N 83 07 05.89 W

SEE PICTURE
OCT 31 2014@ 1:09:40 PM

↑
ORIENTATION
ROCK "X"



JUNE 6 2015 @ 12:03:34 PM

@ 35 03 29.59 N 83 07 05.89 W

VIEW DOWNSTREAM FROM RIVER LEFT LOOKING AT TAIL OF POOL
ON RIVER RIGHT: NOTE HOW RIVERBED FORM DECREASING IN
DIVERSITY

ORIENTATION
ROCK "X"

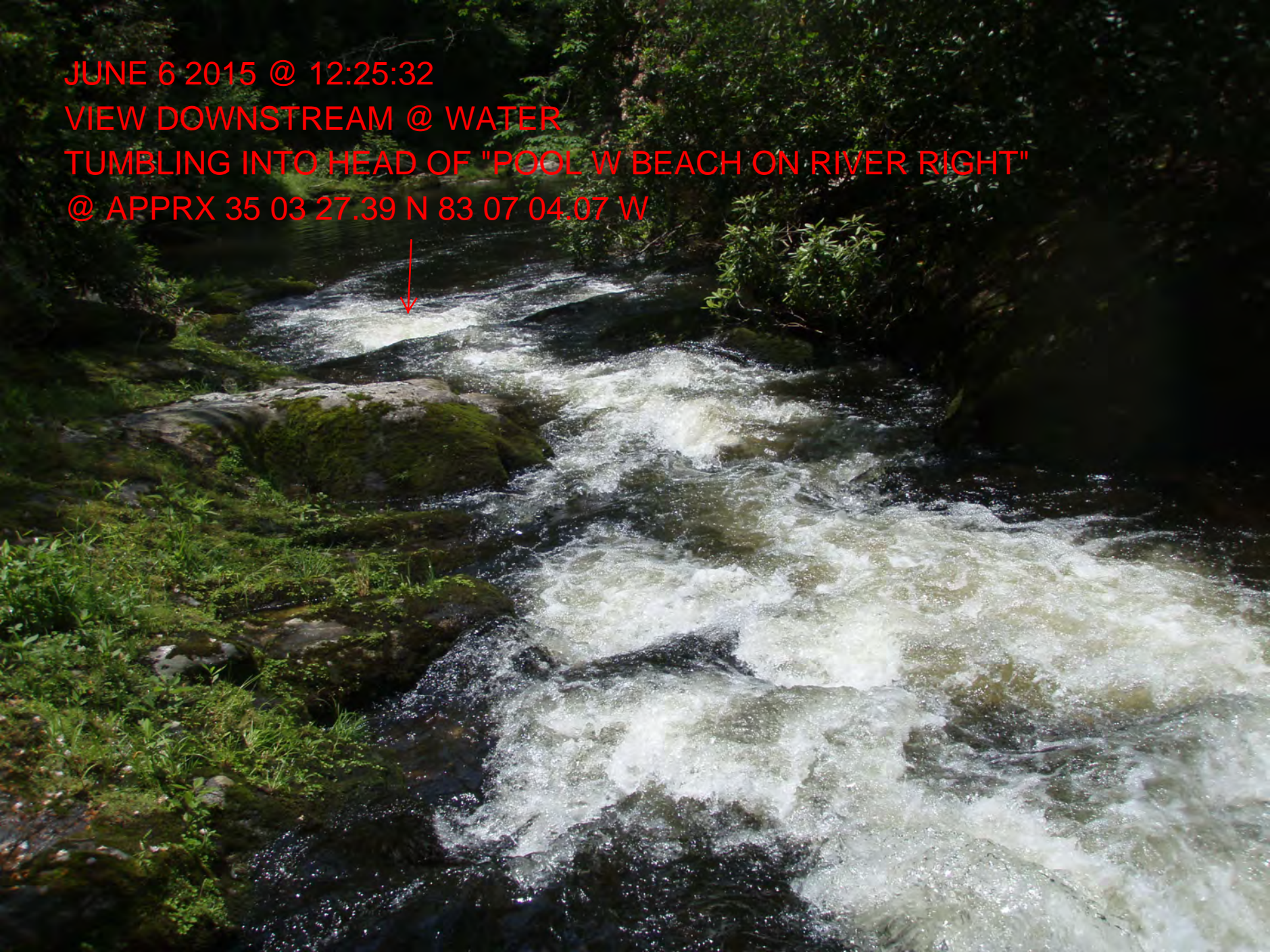


JUNE 6 2015 @ 12:25:32

VIEW DOWNSTREAM @ WATER

TUMBLING INTO HEAD OF "POOL W BEACH ON RIVER RIGHT"

@ APPRX 35 03 27.39 N 83 07 04.07 W



JUNE 6 2015 @ 12:27:37 PM
@APPRX 35 03 26.88 N 83 07 04.00 W
VIEW DOWNSTREAM AT MIDDLE OF
"POOL W BEACH ON RIVER RIGHT"
LOOKING AT WHERE RIVER IS TURNING RIGHT



JUNE 6 2015 @ 12:43:44 PM

ORIENTATION ROCK "K"
COMPARE PICTURE FROM
OCT 31 2014 @ 2:06:35 PM



JUNE 6, 2015 @ 12:46:30 PM

@ APPRX 35 03 26.18 N 83 07 04.64 W

HEAVY SILT

HEAVY SILT

JUNE 6 2015 @ 12:46:57 PM
VIEW FROM RIVER LEFT
LOOKING DOWNSTREAM FROM APPRX
35 03 26.14 N 83 07 04.61 W

COMPARE TO PRIOR PIC
OCT 31 2014 @ 2:06:35 PM!

HEAVY SILT

HEAVY SILT



JUNE 6 2015 @ 12:49:05 PM

LOG JAM ON RIVER RIGHT
@ APPRX 35 03 20.22 N 83 07
05.79 W

HEAVY SILT



JUNE 6, 2015 @ 12:52:46 PM

HEAVY SILT

LOGJAM ON
RIVER RIGHT
@ APPRX
35 03 20.22 N
83 07 05.79 W



JUNE 6 2015 @ 12:52:55 PM
VIEW DOWNSTREAM FROM CENTER OF RIVER
LOOKING AT LOG JAM IN DISTANCE
APPRX @ 35 03 24.96 N 83 07 06.02 W

LOG JAM ON RIVER RIGHT

SEE OCT 31 2014 PICTURE

@



JUNE 6 2015 @ 12:54:49 PM
VIEW DOWNSTREAM AT LOG JAM ON RIVER RIGHT
@ APPRX 35 03 20.22 N 83 07 05.79 W
LOGJAM IS APPROXIMATELY 1250 FEET BELOW
GREEN CREEK PUT IN



JUNE 6 2015 @ 3:06:13 PM

@ APPRX 35 03 08.16 N 83 07 05.21 W



JUNE 6 2015 @ 3:06:21

@ APPRX 35 03 07.90 N 83 07 05.19 W

SILT AND TURBIDITY ISSUES

JUNE 6 2015 @ 3:06:30 PM

@ APPRX 35 03 07.90 N 83 07 05.19 W

RIVER BEDFORM DIVERSITY
BEING DIMINISHED BY HEAVY
SILT DEPOSITION

JUNE 6 2015 @ 3:06:42 PM

@ APPRX 35 03 07.90 N 83 07 05.19 W



JUNE 6 2015 @ 3:09:21 PM
@ APPRX 35 03 07.71 N 83 0 07.05 W
VIEW FROM LARGE ROCK LEDGE
LOOKING DOWNSTREAM FROM RIVER LEFT



JUNE 6 2015 @ 3:09:28 PM

@ APPRX 35 03 07.71 N 83 0 07.05 W

COMPARE PIC#51

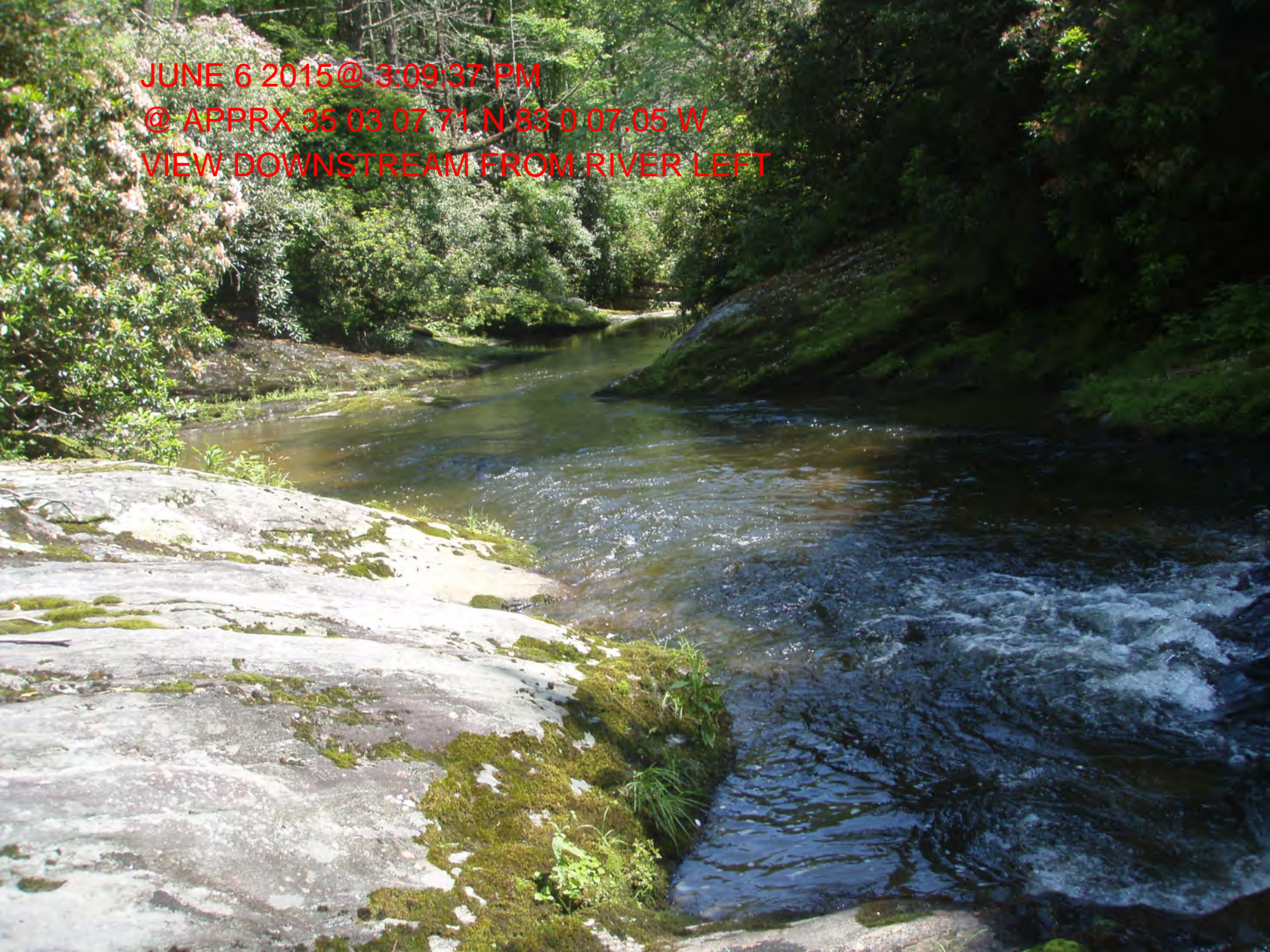
OCT 31 2014 @ 3:53PM



JUNE 6 2015 @ 3:09:37 PM

@ APPRX 35 03 07.71 N 83 0 07.05 W

VIEW DOWNSTREAM FROM RIVER LEFT



JUNE 6 2015@ 3:15:25 PM

@ APPR 35 03 06.52 N 83 07 04.02 W

VIEW DOWNSTREAM TOWARDS HEAD OF
"ROCK LEDGE" POOL



JUNE 6 2015 @ 3:21:12 PM
VIEW DOWNSTREAM FROM HEAD OF "ROCK LEDGE" POOL
35 03 04.86 N 83 07 04.13 W

← SANDBAR "A"

"ROCK LEDGE"



JUNE 6 2015@3:21:24 PM
VIEW DOWNSTREAM @
"ROCK LEDGE" POOL
35 03 04.84 N 83 07 03.98 W



JUNE 6 2015 @ 3:45:43 PM
35 02 59.74 N 83 07 06.18 W



JUNE 6 2015 @ 3:47:49 PM

35 02 59.74 N 83 07 06.18 W



JUNE 6 2015 @ 3:47:47 PM

35 02 59.74 N 83 07 06.18 W



JUNE 6 2015 @ 3:48:04 PM



JUNE 6 2015 @ 3:48:11 PM



JUNE 6 2015 @ 3:48:19 PM



JUNE 6 2015 @ 3:49:58 PM



JUNE 6 2015 @ 3:50:07 PM

@ APPRX 35 02 59.81 N 83 07 06.62 W



JUNE 6 2015 @ 3:50:16 PM

@ APPRX 35 02 59.81 N 83 07 06.62 W



JUNE 6 2015 @ 4:01:15 PM

@ APPRX 35 02 59.81 N 83 07 06.62 W



JUNE 6 2015 @ 4:01:28 PM

VIEW FROM RIVER RIGHT SANDBAR

@ APPRX 35 02 59.81 N 83 07 06.62 W

LOOKING ACROSS AND UP SLIGHTLY TO RIVER LEFT



JUNE 6 2015 @ 4:02:03 PM
VIEW FROM SANDBAR RIVER RIGHT
@ APPRX 35 02 59:80 N 83 07 06:69 W

BUSH "Z-2"



JUNE 6 2015 @ 4:02:13 PM

@ APPRX 35 02 59.80 N 83 07 06.69 W



JUNE 6 2015 @ 4:03:44 PM

VIEW DOWNSTREAM FROM SANDBAR ON RIVER RIGHT

@ APPRX 35 02 59:80 N 83 07 06.69 W

HUGE AMOUNTS OF SILT
BEDFORM DIVERSITY
ADVERSELY IMPACTED



JUNE 6 2015 @ 4:04:00 PM
@ APPRX 35 03 00.49 N
83 07 07.51 W

STANDING ON RIVER RIGHT
LOOKING AT RIVER RIGHT



JUNE 6 2015 @ 4:05:02 PM

@ APPRX 35 03 00.61 N 83 07 08.74 W



JUNE 6 2015 @ 4:05:10 PM
SANDBAR ON RIVER LEFT
@ APPRX 35 03 00.61 N 83 07 08.74 W

LAUREL
"X"
ERODED AND UNDESIGNATED
UNLAWFULLY LOCATED
BOATER PUT IN
NOT THERE PREVIOUSLY
@ APPRX 35 03 00.94 N 83 07 09.47 W