EXHIBIT 36

The compilation of photographs set forth below illustrate the excessive embedded sediment conditions being suffered on an extended reach (approximately 2 miles) of a stream that simultaneously carries Class B, Trout, Outstanding Resource Waters ("ORW") water quality classifications plus a National Wild and Scenic River designation. This stream is 1 of 3 out of 12,000 bodies of water that have this status. The *specific reason* why this stream was classified ORW in 1989 was to provide for the highest intensity of the Clean Water Act's antidegradation protection for the stream's *then* "outstanding" trout habitat and its "outstanding" wild rainbow, brook, and brown trout fisheries—*a much narrower designated use of ORW water quality than the broader aquatic life use.* So far, efforts to have this problem recognized by the responsible federal and state agencies have not succeeded. These agencies have not yet agreed to use the *best available science* (peer reviewed)[1] for recognizing how the amount of embedded sediment shown below exceeds any reasonable minimum effects threshold for disrupting the reproductive and early life cycle needs of trout—in violation of the Clean Water Act's mandate to prevent any degradation. This compilation starts at a massive logjam and moves upstream from there.

Downstream view, of excessive embedded sediment conditions in front of the huge logjam @ 35.033897, -83.128544, photographed by me on June 29, 2015 @ 2:45:18 PM. This logjam constitutes a blessing because it acts as a sediment catch basin which serves to slow the fouling of the trout habitat further downstream. However sediments are managing to pass through this logjam as evidenced by the following photographs taken June 29, 2015.

[1] The *best available science* which has been embraced by EPA Region 10 is articulated by Bryce, Lomnicky & Kaufmann, *Protecting sediment-sensitive aquatic species in mountain streams through the application of biologically based streambed sediment criteria*, Journal of North American Benthological Society, 29(2):657-672(April 2010), and Bryce, Lomnicky, Kaufmann, McAllister, & Ernst, *Development of biologically-based sediment criteria in mountain streams of the western United States*. North American Journal of Fisheries Management 28:1714–1724 (2008).

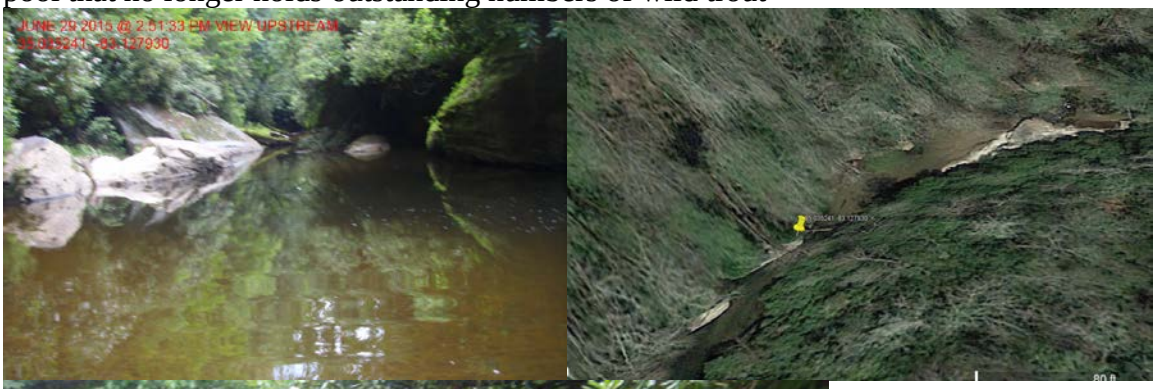
The following photos look back upstream at the back of the logjam. Clearly sediment is making its way through this logjam. This logjam is prevented from being dislodged during high water due to these boulders that serve as a foundation for the dam.

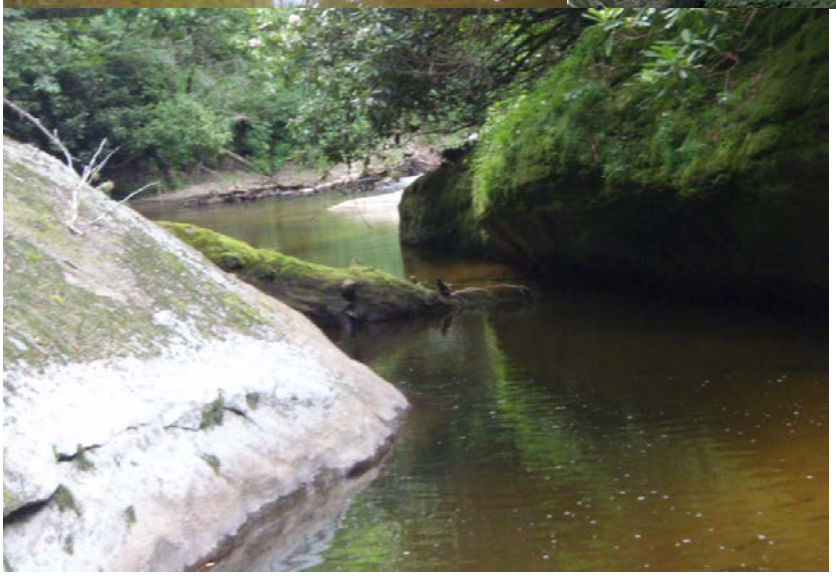
The Photos below demonstrate how sediments are impounding upstream of the logjam.

These upstream photos were taken June 29, 2015 at 35.034636, -83.128258 (35 02 04.69 N, 83 07 41.73 W), 350 feet upstream of the massive logjam. Here is a Google Earth aerial view.

The stream bed is embedded by a foot of sandy sediment which is bank to bank.

The following photos evidence the degraded trout habitat conditions as you approach a minor pool that no longer holds outstanding numbers of wild trout





These photos look upstream at a point approximately 525 feet upstream of the logjam. This view looks up into the tail of a minor pool that has become filled in with sandy sediment. The photos below show how this minor pool has been filled in with sediment.

This minor pool is approximately 550 feet upstream of the logjam.

The photo below illustrates streambed conditions approximately 1,600 feet upstream of the logjam at 35.037846, -83.126654. See also the Google Earth Pro aerial view.

Sediment has embedded the larger streambed substrates in quantities that exceed any minimum effects threshold for disrupting the reproductive and early life cycle of trout. The photo below reflects conditions at 35.037466, -83.125874 which is 2,100 feet upstream of the logjam.

As the hiking staff evidences, the sediment was almost a foot deep at that point in time. The photos below evidence how large wood continues to fall into the river as a consequence of the hemlock die off. This personifies conditions found up and down these headwaters.

This obstruction evidences why this narrow stream is ill-suited for the sport of creek boating.

The photos below look upstream at yet another stream obstruction that is less than 300 feet upstream from the obstruction shown in the photo immediately above. This obstruction (35 02 25.05 N, 83 07 30.30 W) exists in the tail of Norton Mill Creek pool—which constitutes one of two large pools on the North Carolina part of the river—the other pool being Bull Pen pool.

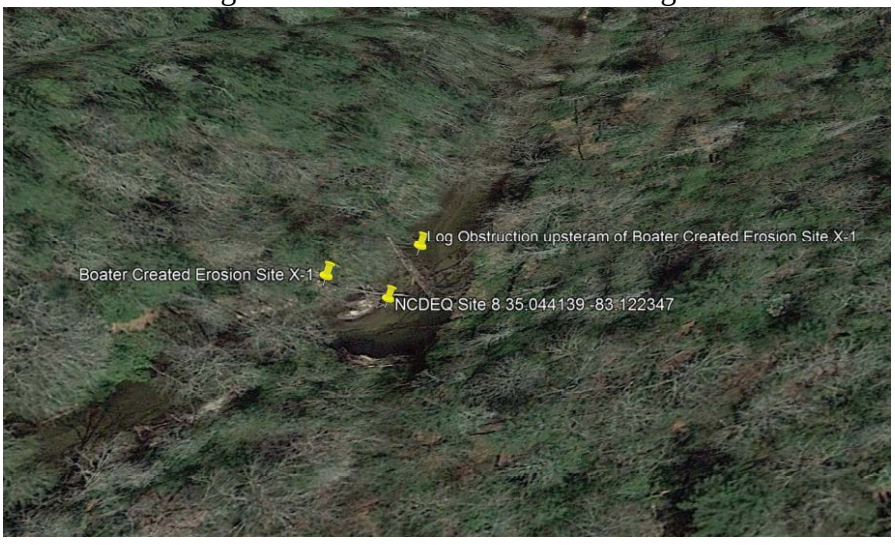
As the Google Earth Pro aerial reflects above, significant amounts of sediment have embedded the stream bottom in Norton Mill Creek pool. An individual wading in the tail of Norton Mill Creek pool will find themselves sinking well above their shins in this sediment.

In 1998, the state of North Carolina placed Norton Mill Creek on its Section 303(d) list of impaired waters because of excessive sediment. In 2000, North Carolina took this tributary off of the Section 303(d) list because North Carolina relaxed the standards being used to make its Section 303(d) determinations—and not because this sediment had somehow been abated by human efforts. The amount of sediment that has become embedded in the tail of Norton Mill Creek pool shows no evidence of being reduced through downstream hydraulic transport. This suggests that the quantity of sediment that is present exceeds the hydraulic capacity of this river

to move this sediment downstream over any reasonably short a period of time—if ever. These conditions on Norton Mill Creek Pool suggests that the Chattooga's headwaters have insufficient sediment transport capacity to abate this embedded sediment problem. Human assistance is required. See below the large amount of sediment that has become impounded in the tail of Norton Mill Creek Pool.

See the two photos below that evidences conditions at approximately 1,500 feet upstream of Norton Mill Creek Pool. The left photo looks upstream while the right photo looks downstream.

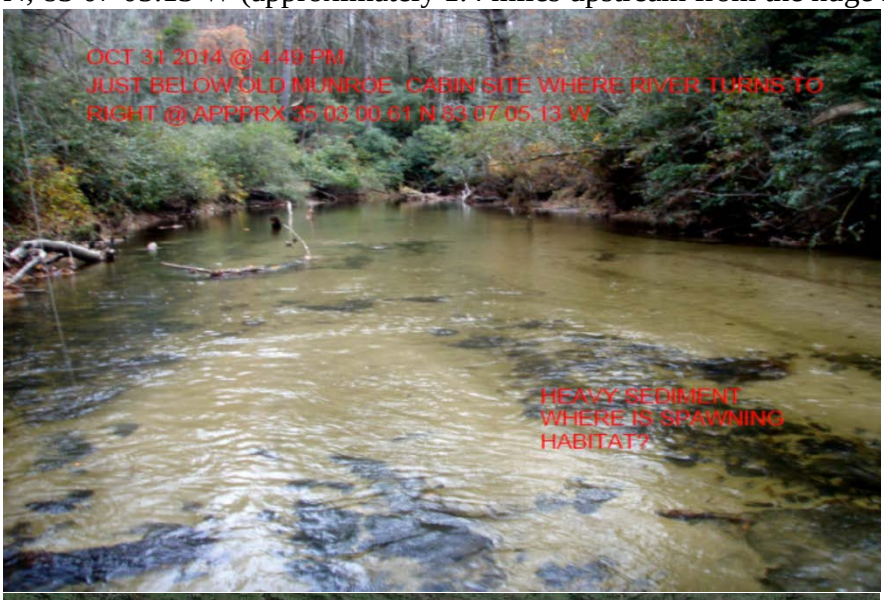
See below a Google Earth Pro aerial view of this log obstruction shown above.

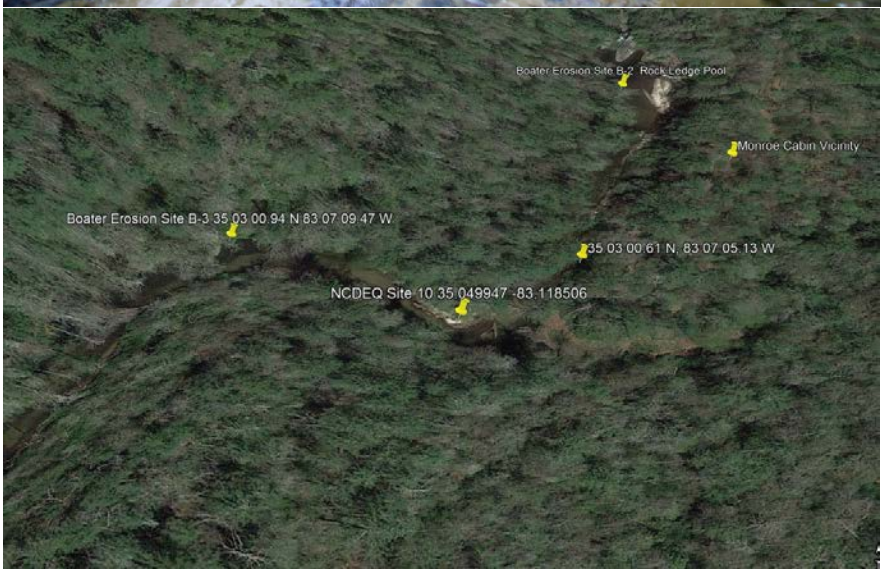


As the photos evidence, sediment is impounding in visibly excessive quantities at this location.

In addition, the presence of this stream-wide log constitutes a potentially life threatening obstruction to whitewater creek boaters. Paddlers must portage around this obstruction. This need to portage around this obstacle resulted in the creation of Boater Created Erosion Site X-1 on the river right bank. Boater Created Erosion Site X-1 now constitutes a chronic point source of sediment discharge into this ORW stream.

The October 31, 2014 photo below reflects degraded spawning habitat conditions at 35 03 00.61 N, 83 07 05.13 W (approximately 1.4 miles upstream from the huge logjam)..





As the Google Earth Pro aerial photo above demonstrates, this straight and relatively wide reach of riffle water, @ (35 03 00.61 N, 83 07 05.13 W, or 35.050170, -83.118091) lies within the 600 foot reach that the North Carolina Department of Environmental Quality ("NC DEQ") defined as "Site No. 10" while electro-fishing in September 2016. In September 2016, NC DEQ captured just 2 young-of-the-year brown trout on this 600 foot reach. Similarly, Site No. 10 yielded an

extrapolated brown trout standing crop weight of just 10.1 kg/hectare—*a far from outstanding standing crop.* But for the damaging impacts of this blanket of sediment, the physical nature of Site No. 10's stream bottom substrates (availability of cobble) and lower flow characteristics should have yielded much greater young-of-the-year numbers.

Most remarkable, despite their continuing existence further downstream in the main stem of the river, but in less than outstanding numbers, NC DEQ did not capture a single rainbow or brook trout in the main stem of the river at any of the eight locations (e.g. 1 mile of river) sampled during this September 2016 study.

Floyd Photograph, June 29, 2015 @ 3:50:07 PM View Downstream @ 35.049947, -83.118506 . This depicts conditions on an approximate 100 foot section of the 600 foot reach that NC DEQ defined as "Site No. 10" during the September 2016 trout population study. NC DEQ assigned a *generous* habitat score of 63 out of 100 despite the fact that approximately 1/6 of the overall reach was suffering 100% embeddedness of its stream bed substrates.

As you move further upstream, you have more large wood debris obstructing the stream. Whenever there is an obstruction, paddlers must find a way to portage around such obstructions. This increases the risk of additional disturbances of the trout buffer causing the creation of chronic point sources of sediment input into this already over stressed stream

Set forth below are photos of some of these minor logjams.

This photo below constitutes an upstream view of a minor logjam #2 located at approximately 35 03 18.38 N, 83 07 06.14 W. It is difficult to see.

See below the downstream view of minor logjam #2 and a Google Earth Pro aerial.

See below the photos of minor logjam #1 which lies just upstream of #2 minor logjam.

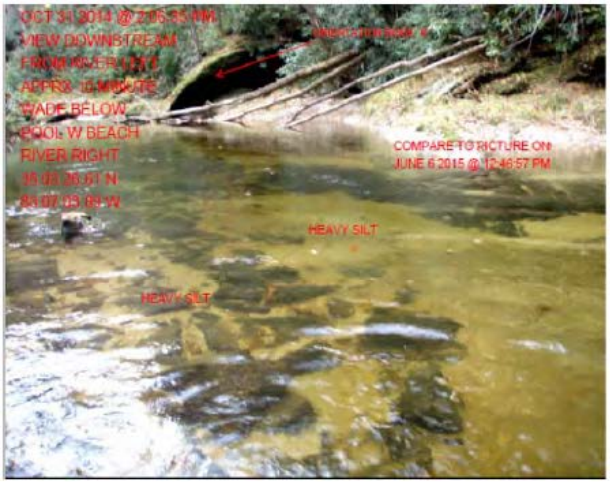
The photo on the left looks downstream at minor logjam #1. The photo on the right looks back upstream and show how excessive sediment is being impounded upstream.

Here is another downstream view of minor logjam #1. It shows how sediment is being impounded in front of it.

All of these photos show how sediments are impounding in many locations. This sediment does not appear to be dissipating. This suggests that the river's normal sediment transport capacity is insufficient to clear away this sediment in any reasonable short period of time.

The photographs below offer a downstream view of conditions proximate to the uppermost part of the public waters in North Carolina (at 35.057500 -83.117778)—over 2 miles upstream of the massive logjam.

The photo on the left shows how the streambed's cobbled substrates are smothered with fine particle sized sandy sediments on October 31, 2014. The photo on the right shows the non-temporary nature of this embeddedness on June 6, 2015.



Compare these two snapshots of stream bottom conditions to the United States Environmental Protection Agency's ("EPA") rapid assessment protocol photos shown below.

Optimal Range *(William Taft, MI DNR)*

Poor Range *(William Taft, MI DNR)*

Habitat Parameter	Condition Category			
	Optimal	Suboptimal	Marginal	Poor
2.a Embeddedness (high gradient)	Gravel, cobble, and boulder particles are 0-25% surrounded by fine sediment. Layering of cobble provides diversity of niche space.	Gravel, cobble, and boulder particles are 25-50% surrounded by fine sediment.	Gravel, cobble, and boulder particles are 50-75% surrounded by fine sediment.	Gravel, cobble, and boulder particles are more than 75% surrounded by fine sediment.
SCORE	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0

Unfortunately, these examples of what the EPA would call "Poor" stream bed habitat are representative of the degradation being suffered up and down this extended reach of stream.