EXHIBIT 41

Upper Tellico Decision Response to Public Comments to Transportation System and Related Recreation Management Actions for the Upper Tellico Off-Highway Vehicle System, DRAFT Environmental Assessment September 2009

Upper Tellico OHV System Management Project

Response to Comments

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Commonly Encountered Comments

1. **Public Comment: The Forest Service should incorporate the "Recommended Trail System Repair and Maintenance Plan" prepared for Southern Four Wheel Drive Association (SFWDA) by Caliber Engineering Consultants LLC, in association with Mike Eagan, Biologist (hereafter referred to as the Caliber Report).**

   According to this independent watershed study, streams are healthy and have excellent water quality per North Carolina standards and are capable of sustaining viable, reproducing native trout populations. Degradation of water quality and aquatic habitat in Upper Tellico is non-existent.

   Response: The Caliber report is considered in two parts: (1) the stream assessment; and (2) the trail assessment and recommendations.

   1) In regard to the stream assessment: The Forest Service received two independent reviews of the Caliber stream assessment from individuals familiar with the NCDWQ protocols for collection and analysis of NCIBI data, including one from the NC Division of Water Quality. These are available in the project record. These commenters provided expert reviews indicating the proper protocols were not followed for the Caliber report, making the results unusable. The State Division of Water Quality recently completed an assessment of habitat, benthic macroinvertebrates and water chemistry for streams in the upper Tellico area and reference streams. While all sites received a bioclassification of "excellent"**, NCDWQ found there was clearly more sand, embeddedness, and in some cases silt in the streams adjacent to the OHV system than in the reference streams.** Also, streams adjacent to the OHV system displayed definite indicators of the effects of sedimentation in the array of macroinvertebrate species collected, even though those differences didn't reduce the bioclassification. An example of this was the reduced number of filter-feeding caddisflies (species especially susceptible to the adverse effects of sedimentation) in sites adjacent to the OHV system. Also, in each case NCDWQ calculated lower scores for habitat characteristics for streams adjacent to the OHV system than calculated for the reference streams. In total, the NCDWQ data "suggest adverse impacts to many of the streams" in the area of the OHV system.

   2) In regard to the trail assessment and recommendations: We acknowledge that professional engineers may differ in their approaches to road and trail construction, reconstruction, and maintenance. Professional Forest Service engineers must also comply with accepted agency policies and practices in regard to managing a natural resource. The Caliber trail assessment and recommendations were made assuming "Excellent" water quality exists in the Tellico watershed. The above paragraph (1)) summarizes why we do not agree with their assumption.

A number of recommendations in the Caliber report are similar or identical to components already included in various alternatives analyzed in the predecisional EA. In response to comments, several other of the Caliber recommendations are incorporated into Alternative F-modified in the EA. Other recommendations were determined to be inadvisable or unreasonable and are not included in an alternative. These are discussed in Chapter 2 of the EA, Section 2.3 – Alternatives considered but not analyzed in detail.

2. **Public Comment: Why are the costs associated with renovating and maintaining the OHV areas so greatly divergent between the Forest Services's Environmental Assessment (EA) and the report contracted by SFWDA?**

Response: The SFWDA renovation costs were based on, among other things: 1) a misinterpretation of water quality data and on a non-comprehensive condition survey; 2) employing some techniques that would not be accepted on National Forest System lands; 3) employing some techniques that have proven to fail in the past in Upper Tellico, and: 4) excluding the cost of Trail 1 paving and reconstruction, Fain Ford bridging, and Trail 8 bridging. The maintenance costs were based on maintenance costs from the Trails Unlimited report, which we have since determined to be much too low.

3. **Public Comment: Why didn't the Forest Service refer to the Trails Unlimited report "Review of the existing Tellico OHV System on the Nantahala NF for Maintenance practices, Re-alignment-Reconstruction and their associated costs" of September 13, 2007? Why were the repair and maintenance cost figures in this report so much lower than the figures in Appendix C of the EA?**

Response: We have added references to the Trails Unlimited report to the Environmental Assessment (EA). Several critical cost elements were not included in the Trails Unlimited figures:

- Cost for replacing three bridges on Trail 8;
- Cost for the Fain Ford Bridge;
- Cost for Trail 1 paving and reconstruction;
- Cost for "five large projects for repair of the extreme 4x4x trails" Trails Unlimited acknowledges as necessary but unspecified (the high challenge areas).

Additionally, the Trails Unlimited maintenance costs do not appear to be derived from a detailed and comprehensive unit cost approach, but from a more general costing approach.

4. **Public Comment: The biggest threats to native brook trout are the stocked rainbow and brown trout and fishing pressure.**

Response: As stated within the EA (Section 3.2.1) the North Carolina Wildlife Resources Commission (NCWRC) does not stock any waters within the Tellico River system. NCWRC's stocking lists may be viewed at www.ncwildlife.org. The

Tennessee Wildlife Resources Agency (TWRA) stocks the Tennessee portion of the Tellico River. While some of these fish may move into North Carolina waters, these fish can only access a portion of the Upper Tellico River watershed because waterfalls on the Tellico River, Tipton Creek, and Peckerwood Creek prevent them from accessing these areas. These falls present an insurmountable obstacle to any rainbow trout or brown trout stocked by TWRA. Therefore, there are no effects to the Upper Tellico River brook trout upstream of the falls resulting from the TWRA stocking program. In addition, based on trout monitoring, NCWRC has determined that fishing pressure does not exert a measurable negative influence on trout populations. Additional information can be found in section 3.2 of this document.

5. **<u>Public Comment:</u> Not only do these trails provide recreational opportunities to the public, they are considered a center of commerce for hundreds of local businesses. These businesses support countless employment opportunities and are tremendously important to the financial stability of the local and state economy. Closing the Tellico trail system would financially cripple the township of Murphy, NC. At a time when our nation's economy is wavering from recession to depression, this unique trail system provides opportunities for many local business owners to keep a roof over their head and provide for their families.**

   Closing the Tellico trail system would effectively force hundreds of people into unemployment. Businesses like Jeep Jamboree USA, who is celebrating their 25th anniversary; by operating trail rides for off-highway enthusiasts will no longer be able to facilitate their events. Just last year, Jeep Jamboree USA along with 215 participants from 21 different states, some as far away as Utah, contributed over $120,000.00 dollars to the local community of Murphy, NC.

   Response: The financial impact of the Upper Tellico OHV System was studied by the University of Tennessee Human Dimensions Lab and the findings are disclosed in Chapter 3, section 3.5and 3.11 of the EA. The complete study is included as Appendix D of the EA. This study found that the OHV system is a very minor contributor to the Murphy economy and does not support "countless employment opportunities." A few individual businesses may experience a serious loss of revenue.

6. **<u>Public Comment:</u> The average surface area or coverage of OHV trails on Federal Land today is .04%. The Upper Tellico OHV area is no different. A very small percentage (less than one-tenth of one-percent) of the actual surface area of the Nantahala National Forest is being used for OHV travel. Over 99% of the Nantahala National Forest is available for other user groups to enjoy.**

   Closure would mean locking out a segment of forest users- stripping them of their rights to share our national forests with other recreationists.

   I feel that it's tremendously important to keep the Upper Tellico OHV area open for all future OHV recreational opportunities.

Response: We agree that a very small percent of the surface area of the national forest is used for OHV travel, and the Upper Tellico OHV System is very important to OHV recreationists. However, there are approximately 1053 miles of OHV trails on public lands within a day's drive of Murphy, NC. Status of these roads and trails will not be affected by a decision on Upper Tellico OHV Trail System. Most OHVers also indicate an interest in visiting the national forests for reasons that are not limited to OHV trail riding and other recreation opportunities would continue to be available in the Upper Tellico area regardless of this decision, including some opportunities for motor vehicle travel. This segment of users would not be "locked out" of the forest.

7. **Public Comment: Comments from the general public, including non off-roading individuals have expressed support to keep trails in the Upper Tellico OHV area open for future usage.**

   Response: The general public has expressed a wide variety of responses to the various proposals for management of Upper Tellico. These range from support for the trail system to support for complete closure.

8. **Public Comment: The Upper Tellico OHV area is one of North Carolina's great assets, both for its overwhelming scenery and ability to financially stimulate the local and state economy.**

   I feel that it's tremendously important to keep the Upper Tellico OHV area open for all future OHV recreational opportunities. Thank you for taking the time to consider the comments that I have outlined in this letter.

   Closure and loss of this destination recreation area would be devastating to my family and thousands of others like us who recreate with OHVs at Tellico.

   Response: We acknowledge the scenic qualities of the area and the value placed on Upper Tellico OHV System by the OHV community. Effects of the alternatives are disclosed in the EA. Rationale for the selected alternative is in the Decision Notice.

9. **Public Comment: I am opposed to the stated preferred alternative of simply closing the System. Aside from the economic impact to the surrounding area, the Forest Service must also recognize that closing the opportunity was never the intent or desire of the interested stakeholders. Proper management for the use is the better solution. The Upper Tellico OHV System is an important destination for OHV recreationists in the eastern United States. Simply removing the opportunity without providing an alternative will displace thousands of the recreating public with little if any alternative. I encourage the Forest Service to exhaust all possible options to mitigate the issues prior to closure. Closure alone will not solve the stated issues. Mitigation of those issues still must take place. Resolving those challenges in partnership with the OHV community provides both the manpower and additional funding from the private sector necessary for proper mitigation.**

Response: We acknowledge the value placed on Upper Tellico OHV System by the OHV community. Providing an alternative OHV opportunity is outside the scope of this assessment, however there are approximately 1053 miles of OHV trails on public lands within a day's drive of Murphy, NC. We agree closure must be followed by rehabilitation of the closed trails to resolve the sedimentation issues.

10. **Public Comment: Do not exclude the "high challenge" areas, this is the reason people travel to the region. These trails can be managed properly and sustained with effort but to exclude the high challenge trails with language like ~'provide moderate to easy trails" would be a permanent end to patrons of Tellico OHV area (see the economic impact statements above).**

    Response: We acknowledge the high challenge areas are a main attraction for patrons of the Upper Tellico OHV System. Through the scoping process this was identified as a significant issue and Alternatives B, E, and F retain some high challenge opportunities. In response to comments, Trail 2 and the Rock Garden challenge area are included in Alternative F-modified. The environmental effects are disclosed in Chapter 3, and the cost is disclosed in Appendix C.

11. **Public Comment: Also, the failure by the Forest Service to consider other sources of sedimentation invalidates the agency's implication that the OHV system is the cause of high turbidity measurements. This leads to an inaccurate and unsupported conclusion that closure of the OHV system will resolve turbidity issues, if such exist.**

    Response: Other sources of sediment are disclosed. See Chapter 3.1 of the EA. The predominant sources of sediment identified were 673 locations on the trail system where sediment was seen leaving the trail system and entering the stream system.

12. **Public Comment: I fully support and applaud the Forest Service's preferred alternative, Alternative C, which would close the Tellico OHV trail system, but would maintain over 10 miles of existing Forest system roads in the area, open year-round or seasonally, to provide for public access for highway-legal vehicles for hunting, fishing and other recreation uses. The analysis in the Forest Service's Environmental Assessment is clear that only Alternative C, which would close the OHV system, has a high probability of meeting state water quality standards and protecting the future viability of the native brook trout population.**

    Response: Comment noted. Rationale for the selected alternative is located in the Decision Notice.

13. **Public Comment: Years of declining water quality prove that it is impossible to maintain a trail system as extensive as the Tellico OHV area, particularly in an area as sensitive as the Tellico watershed. I strongly agree with the Forest Service conclusion that the Tellico watershed is not a suitable location for an OHV area because of highly erosive soils and close proximity to important trout streams. The Tellico River watershed is one of the last remaining strongholds of the southern**

Appalachian brook trout in North Carolina and Tennessee, and is of critical value to me and all members of Trout Unlimited in the southeast.

Response: Information concerning the soils, water, and the aquatic wildlife and effects of the alternative can be found in Chapter 3 – sections 3.1 and 3.2. Rationale for the selected alternative is located in the Decision Notice.

14. **Public Comment: There must be a compromise solution that provides access to all for what is a treasured part of the country for many.**

Response: Alternatives B, E, and F-modified in the EA could be considered "compromise" alternatives since they maintain varying amounts of OHV opportunity while reducing the potential for sediment from the trail system reaching the stream system. The rationale for selection/non-selection of alternatives is in the Decision Notice.

15. **Public Comment: How can the Forest Supervisor state her personal preference for closure (Alternative C) in a letter before the EA is finalized?**

Response: Alternative C was identified as the "preferred alternative" in a letter accompanying the predecisional EA and signed by the Forest Supervisor who is the individual responsible for making the decision. The concept of the "preferred alternative" is recognized in the Forest Service Handbook 1909.15 as: "The alternative(s) which the Agency believes would best fulfill the purpose and need for the proposal, consistent with the Agency's statutory mission and responsibilities, giving consideration to the environmental, social, economic, and other factors and disclosed in an EIS." While it is not required to disclose a preferred alternative in a predecisional EA, identifying it in the letter was done as a courtesy to enable individuals and organizations to better respond during the comment period. Alternative C is analyzed in the EA as having a high likelihood for meeting State and Federal standards related to water quality (see Table 3.1.2.1.1).

16. **Public Comment: I ask that the Forest Service conduct additional study and planning in an Environmental Impact Statement for the Upper Tellico OHV System. Given the potentially devastating economic impact to the local communities alone (as cited in the University of Tennessee survey), a finding of no significant impact cannot be a determined outcome.**

The range of alternatives should be developed utilizing the additional science and information provided in both the Caliber report and the Trails Unlimited report discussed previously.

Response: An EA is used to evaluate whether or not there may be significant environmental impacts that would necessitate completion of an EIS. If a finding of no significant impact is made (a FONSI), an EIS is not required. 40 CFR 15008.14

states in part: “[T]his means that economic or social effects are not intended by themselves to require preparation of an environmental impact statement.”

The EA has been edited to include reference to the Trails Unlimited report and Alternative F has been modified to include additional recommendations from Caliber. Some of the Caliber recommendations were similar or identical to what was already in Alternatives B, E, and/or F, and some recommendations were considered but not analyzed in detail (see Chapter 2 for details).

Comments On Chapter 1 Of The Environmental Assessment, With Additional Comments on Process

1-1. Public Comment: The EA states on page 1 "The OHV System was established May 1, 1986…"
Even though the OHV system might have been officially established per the USFS on May 1, 1986, active OHV use in Tellico has occurred regularly since the 1950's. This pre-existing recreational use of the land was not referenced in the EA.

Response: The pre-existing recreational use **is** referenced – in Section 3.6.1.

1-2. Public Comment: There is a need to stem the flow of sediment that is entering the Upper Tellico River and its tributaries from the OHV System, and thereby improve habitat for native brook trout." Is made in bold, underlined text:

- **Provide a documented reference as to what page in the EA shows this to be true.**
- **Please provide DIRECT evidence that sediment from the trail system is negatively affecting brook trout numbers. At what point will brook trout habitat be improved enough?**
- **No data has been presented documenting excessive sediment entering the stream systems in the Upper Tellico River watershed nor the origin of such sediment. Without data documenting excessive sediment inputs and its potential origin(s), the above statement cannot be made.**
- **Remove this statement from the EA.**
- **Please note that native brook trout are neither an endangered, threatened species or species of concern.**

Response: Refer to EA Chapter 3.1.1, subheading "Hydrologic Connectivity," where it states that 31 percent of the trail system is hydrologically connected to a waterbody and that in many cases sediment could be tracked directly from the trail system to that waterbody. Visual evidence is also recorded in photographs included in the EA and the project record. The previous paragraph states that 673 locations on the trail system were identified where sediment was tracked from the OHV System to the stream network.

See section 3.2 of this document regarding brook trout numbers. Brook trout are a management indicator species for the Nantahala National Forest (Forest Plan at III-22, as amended).

The statement referenced in the comment remains "as is" in the EA.

1-3. Public Comment: The EA states on page 2 "The Nantahala and Pisgah Land and Resource Management Plan (the Forest Plan or LRMP) standard for soil and water management states:
"Prevent visible sediment from reaching perennial and intermittent stream channels..."

- **Does a single location of visible sediment from a road or trail reaching a stream mean that the road or trail is in violation of the Forest Plan and therefore should be closed?**

Response: A single location of visible sediment reaching a stream is a violation and fixing the problem would prevent any need for closure. In the case of the Upper Tellico OHV System, 673 locations were identified where visible sediment from a system trail was reaching the stream network, making it difficult to fix all the problems and keep them fixed.

1-4. Public Comment: On page 3 of the Tellico EA section 1 it states that the Forest Plan direction for all OHV trails on the NFsNC call for providing "easy to moderate level of challenge". Could there be a link or a way to check this forest plan? You should be able to prove this and not expect us to take your word for it. Either provide this info (Plan number, date, page, section/item) or delete this from the EA.

Response: The Plan is available electronically at: http://www.cs.unca.edu/nfsnc/nepa/nantahala_pisgah_plan/nantahala_pisgah_94_plan_amendment.pdf. The relevant page is III-11.

1-5. Public Comment: On page 2 of the Tellico EA under item 2) Best management practices are currently failing. It is quite apparent that this is truly the fault of the USFS….All of the info needs to corrected in this section or this needs to be deleted from the EA.

Response: The fact that best management practices are currently failing is accurate and therefore remains in the EA.

1-6. Public Comment: On page 2 of the Tellico EA it talks about in the 39 mile trail system it has over 2000 sources of visible sediment.

- **Provide a map of these locations so they may be viewed by the public.**
- **Provide a GIS shapefile or equivalent GIS data and supporting tabular and report data of these locations**
- **Revise the EA to include summary statistical information about the types of sediment sources, amount of sediment leaving the source and type of trail maintenance required to fix the location.**
- **All sources need to be photographed and listed by trail or this should be deleted from the EA.**
- **Has there been scientific evidence that OHVs are causing any damage that has been brought up?**

Response: Tabular information, written description and photograph of every sediment source noted on the trail system is available in the project record. This is hundreds of pages of data and therefore is not duplicated in the EA. A graphical display of the locations of the sediment sources that were seen reaching the stream system is included in the graphic supplement to this EA available electronically.

The amount of sediment leaving the trail at any time would vary by amount of rainfall and level of OHV use and therefore was not relevant to the condition survey. The condition of ANY sediment leaving the trail system and reaching the stream system was deemed sufficient information. Empirical evidence of OHVs causing damage to Upper Tellico OHV trails could be viewed on countless You Tube videos available as of June 2008 by anyone with internet access.

1-7. <u>Public Comment:</u> The EA states on page 2 "Six miles of the trail are within 100 feet of streams and 1.7 miles are within 25 feet of streams."

- **Provide a reference for where a contiguous, riparian buffer of 100 or 25 feet must be maintained.**
- **Provide a map of these locations so they may be viewed by the public.**
- **Provide a GIS shapefile or equivalent GIS location data.**

Response: The following may be accessed by the commenter to produce a map: The Forest Service Road and Trail layer is called "travel_route," and contains route.road and route.trail features. Projection Info is: StatePlane, Feet, Nad27 Fipszone 3200. A replacement geodatabase in nad83 is in production now.

- These can be joined to their respective features using " rte_cn " in the coverage and in the *road_linear_events.dbf* and *trail_linear_events.dbf*. This contains more information than just the road number.
- These can be pulled, along with nc_travel_route.e00 from: ftp2.fs.fed.us/incoming/nfsnc
- The ftp site is sometimes hard to access from newer, more restrictive pc security settings-if you have trouble call our GIS database manager Holly Hixson for a work-around.
- The most current water layer would be the state-maintained NHD (National Hydrography Dataset) from the NCCGIA or USGS websites

1-8. <u>Public Comment:</u> The EA states on page 2 "Best management practices are currently failing. Best management practices (BMPs) include 2000 trail drainage features- waterbars, broad-based dips, grade sags, ditches, cross drain culverts, outsloping, and sediment traps. Less than half of the trail drainage features are functioning properly."

- **Does this number take into account features that contractors and volunteers attempted to install but could not finish the install due to site constraints? If so, then the statement that "Less than half of the trail drainage features are functioning properly." is misleading.**
- **Provide a map of these locations so they may be viewed by the public.**
- **Provide a GIS shapefile or equivalent GIS data and supporting tabular and report data of these locations.**

Response: This number reflects existing features identified on the ground during the condition survey. The fact that volunteers could not install additional features due to site constraints reemphasizes the limitations of the site for OHV use. The data you refer to is available electronically in the project record and may be

requested for download to an external memory device. The Forest Service has not generated a visual display of this information.

1-9.<u>Public Comment:</u> The EA states on page 2 "Poorly designed, located, and maintained drainage features coupled with excessive use has resulted in significantly deteriorated travel-ways to the point that regular road or trail BMPs are no longer adequate to protect trails from erosion and stream channels from sedimentation."

- **Simply put, proper installation of drainage features (which is possible) coupled with appropriate maintenance performed by competent contractors can keep drainage features functioning properly. Remove this statement from the EA.**

Response: The accuracy of the commenter's statement does not diminish the accuracy of the statement from page 2 of the EA.

1-10.<u>Public Comment:</u> The EA states on page 2 "BMPs are not sustainable due to severely erosive soils and heavy rainfall. The area receives greater than 80 inches of rainfall per year with the wettest period occurring during the winter months."

- **If the wettest periods and freeze/thaw occur during the winter months then a winter closure during these periods should suffice as a major alternative to prevent accelerated trail erosion instead of a full closure of all trails year round.**
- **Modify this statement to read "BMPs are not sustainable due to heavy use, inappropriate levels of maintenance, severely erosive soils and heavy rainfall. The area receives greater than 80 inches of rainfall per year with the wettest period occurring during the winter months."**

Response: We agree winter closure would have a positive effect on reducing accelerated erosion. Winter closure is included as a management technique in Alternatives B, D, E, and F. However it is not the only action included to reduce accelerated erosion. We agree to the suggested BMP statement modification.

1-11.<u>Public Comment:</u> The EA states on page 2 "All trails on the system are classified as severe hazard by the Natural Resources Conservation Service (NRCS). A rating of severe indicates that erosion of the trail is expected, the trail requires frequent maintenance, and costly erosion control measures are needed. The soil types in the watershed rate as *poorly suited for* using the natural soil surface for roads. Poorly suited ratings indicate that overcoming the risk of erosion would require special road designs, extra maintenance, and costly alteration."

- **Trails such as Trail 3 that receive little traffic have been able to withstand current use levels based on current maintenance levels. Other trails that receive the same amount of maintenance or less maintenance are not able to withstand their levels of use.**
- **Appropriately funded maintenance will keep trails from degrading to unacceptable levels. Any trail is going to require more maintenance than a road.**

Response: We agree some trails are not able to withstand their current level of use. Appropriate funding levels calculated for each alternative can be found in Appendices C. These levels of funding have never occurred on a continuing basis and are not expected to occur.

1-12.<u>Public Comment:</u> The EA states on page 2 "About 75,000 tons of soil has eroded from the existing trail system since the old logging transportation system was put in place, beginning many years before the Forest Service acquired the land."

- **The figure of 75,000 tons of soil (actually 74,450 tons as cited later) is incorrect. Your calculations do not take into account dirt that was removed from a trail section (cut) to fill (fill) an adjacent area to create a level trail surface, sediment cleaned out of sediment traps and relocated, sediment that had already eroded from the trails before the USFS acquired the property, or the FACT that many of the trails were built incised under direction by the USFS. This information was obtained from an individual who built many of the trails under direction by USFS personnel.**
- **Remove all references to this loss of soil due to the incorrect methods use to arrive at this number.**

Response: Calculation of the tons of soil lost is based on the existing condition of the trail, including the height and length of entrenchments and incisions, regardless of why or how the missing soil went missing. You are correct that soil was removed in many ways. The result remains the same: those tons of soil are gone. This does not imply that designated OHV use is the lone reason it is gone.

1-13.<u>Public Comment:</u> The EA states on page 2 "The effectiveness of the BMPs is continuously compromised due to the sheer number of sediment control features (2000) that must receive very frequent maintenance due to the severe soils and heavy rainfall."

- **Appropriately funded maintenance levels can prevent sediment control features from being compromised.**
- **Competent contractors can reach all sections of trail and perform appropriate maintenance. Southern Four Wheel Drive Association (SFWDA) volunteers have successfully performed maintenance on every foot of trail (excluding trail 10 where they were not allowed to go), including challenge areas, with the use of heavy equipment.**
- **Competent contractors who are trained to operate heavy equipment in mountainous and rocky settings are crucial to successful trail maintenance.**
- **Modify this statement and add "Competent and well trained contractors such as SFWDA volunteers have the ability to reach every foot of soil on the trail system and in the past have done so under maintenance agreements with the USFS."**
- **Not modifying the above statement is very misleading.**

Response: We acknowledge the tremendous effort of SFWDA volunteers over the years in helping with maintenance of the OHV system. This does not change the validity of the statement in the EA you reference in your comments.

1-14.<u>Public Comment:</u> The EA states on page 2 "It is virtually impossible to remove the water from deeply entrenched trail sections using standard road and trail engineering or drainage structures. If the trail becomes worn down to bedrock it may also expose springs that add to water flow and thus potential sedimentation. Several trail sections on the OHV System exhibit this deeply entrenched condition, making it difficult to manage the runoff without closure and rehabilitation."

- **This is incorrect.**
- **Caliber has designed Modified Best Management Practices (MBMPs) that are capable of removing water from deeply entrenched trail sections. In some geographic settings, such as at Tellico, MBMPs and other modified or altered practices will be necessary.**
- **Bedrock does not erode like dirt does. If a section has eroded to bedrock then further vertical erosion will be greatly reduced and any horizontal erosion can be appropriately managed.**
- **Modify the last sentence of the above statement to read "Several trail sections on the OHV System exhibit this deeply entrenched condition, making it difficult to manage the runoff with standard road engineering and drainage structures and therefore modified structures must be employed."**
- **The USFS Trails Unlimited report makes the same conclusion as the Caliber report.**

Response: In regard to the MBMPs as presented by Caliber, we have concerns with each of the details provided by Caliber Engineering. If the details provided are implemented, each of these sites would need to be monitored and inspected after each rain event to ensure pipes are clean and able to handle the next event of precipitation:

<u>Detail A – Slopes less than 5%</u>
Detail A has been designed for incised trail sections with a profile slope of less than 5%. Caliber has proposed importing 24" dia. boulders which is very expensive and time consuming and would not add any benefit to drainage control. The boulders proposed are round placed on non-compacted fill material with an unknown bearing capacity. The detail shows using the existing berm along the cut slope of the roadway to be compacted in the travelway. This is a typical repair for slopes less than 5% and we agree with the proposal without the boulder. However we risk compacting organic soil within the travelway, the organic soil would need to be separated and the poor material wasted to a designated area to prevent runoff.

<u>Detail B – Slopes greater than 5%</u>
This detail is similar to Detail A to the non-engineer. However major differences have been introduced/proposed.

1. The existing berm material is proposed to be used as fill material with“geogrid” as a continuous layer throughout the travelway. This is not the manufactures intent for geogrid. When soil has silt and clay components this soil is never used as the backfill material in geogrid applications. Geogrid is designed to stabilize weak soil by layer and placing angular material, not existing organic soils as shown here.
2. Again the riprap is shown to be placed in a geogrid faced wrap on the cut side of the road prism. This application is designed to keep vehicles on the travelway and allow sheet flow to pass through the porous riprap. This application again adds a tremendous amount of weight to the edge of the fill slope with unknown bearing capacity, which is the weakest section of a travelway.
3. Geogrid is not designed for erosion protection and does not slow or stop water velocity or reduce shear stress of the water particles.
4. Given the profile slope the riprap geogrid basket will be very unstable.
5. Geogrid is not designed to be take blows from large tires on OHV vehicles.

Detail C/D -

1. The design proposed shows a mating on the bottom of each of the traps and given the maintenance frequencies this application will be difficult to maintain.
2. The proposed design shows extremely long pipe that would be required to be banded in some manner (welding) and would be extremely abused by passing OHVs. The pipe (3/8” thick – 18 inch diameter pipe) designed is extremely heavy and cumbersome to mobilize to the various sites. This pipe weighs approx. 70 lbs/foot – approx. 14,000 lbs per culvert @ 200 foot length making it difficult to handle within the narrow trail sections.
3. Pipe installation could not occur on by-pass trails due to the chassis clearance of the vehicles passing. Proposed details would need to be modified.
4. Inlet opening is proposed to be 8” high and 6’ long is opening has a very high potential for clogging due to debris.
5. The culvert section projected out into the travelway as mentioned above is designed without any soil backfill or covering. Caliber’s design allows OHV traffic to traverse over the pipe within the travelway. This design has a high potential for failure due to the pipe resting without embedment into the travelway. If the travelway is compromised in some way and water finds its way under the pipe the structure will fail completely. This failure has a very high potential due to the frequent OHV vehicles climbing grades in excess of 30%. Vehicle tires will be digging for traction just to maneuver up and over each of the protruding pipes designed to capture flow. After water has piped under the culvert fill material will need to be used to seal under the pipe returning the flow into the culvert. Maintenance of these structures again will be impossible with excavation equipment due to the size, shape and location of each of the drainage pipes within the entrenchments. Track excavators will be forced to track around each of the culverts because of limitations of crossing a 18” high culvert within the travelway. Track excavators will be limited to rubber tracks only unless the equipment can be maneuvered around each of the culverts.

The statement that horizontal erosion can be managed does not supply enough information to evaluate how you would propose to do this. The only statement in the Caliber Plan is a restatement of what was in the Trails Unlimited Report: "To prevent continued widening of the trail in the extreme rock crawling site obstacle areas the trail needs to be restricted to the desired alignment and barriers placed to prevent use of the lateral/adjacent areas along the alignment." This statement does not provide specifics as to what "barriers" would be effective over a reasonable amount of time, available, able to be properly placed in the affected sites, and not be an increased safety hazard for OHVers. The EA discusses the difficulty of ensuring BMP effectiveness in this location.

1-15.<u>Public Comment:</u> Please provide evidence that shows what percentage of sediment in the Tellico River and its tributaries is contributed by the trail system.

- **Provide solid data and studies that show definitive trends of decreasing levels of brook trout reproduction. Do not cite sediment levels and other antidotal evidence.**
- **At what point will a specific level of reduction in sediment satisfy the USFS?**
- **The USFS has not quantified the current erosion rate or the current amount of sediment that is reaching the Tellico river system. Without this information as a baseline a level of appropriate action cannot be determined. Remove this section from the EA.**
- **All streams within the Upper Tellico River watershed may be suitable for brook trout however, brook trout populations may not be a viable option in all streams. Brown and rainbow trout inhabit the lower reaches of the Tellico River due to stocking. During higher flows these predatory species are able to migrate upstream into new unoccupied habitats. This upstream migration will have a detrimental effect on native brook trout populations. Therefore, while the streams may be suitable for brook trout, human introduced predatory species may limit their actual range. Barriers greater than 1-foot limit brook trout migration, but they do not inhibit rainbow or brown trout.**
- **Additionally, the Tellico River fishery is managed as a Delayed Harvest fishery during the winter months. At this time rainbow and brown are released into the river system and are unavailable for harvesting. Brook trout spawning occurs during this same time period. The addition of larger predatory fish during the spawning season will have a significant negative effect on brook trout survival.**
- **No data has been presented documenting elevated sediment levels within the Upper Tellico River watershed. The data presented documents higher levels of sediments at specific sites; however, the amounts vary from site to site and year to year. This same fluctuation is noted at the reference sites.**
- **Recent macrobenthic sampling has determined that there are several intolerant species present in the Upper Tellico River watershed. Elevated sediment and/or other pollutants would have a detrimental effect on these species. Their presence is an indicator of good to excellent water quality within the Upper Tellico River watershed.**

Response: The location of the 673 sites where sediment was entering in the Tellico River or its tributaries is sufficient for analyzing the effects of the alternatives.

- Besler (2007) referenced in the EA discloses trends in brook trout reproduction in the Tellico River Watershed;
- The Forest Service has not established an acceptable level of sedimentation;
- The commenter acknowledges amounts of sedimentation vary by location and time. We agree, and therefore we chose to quantify number of sites where sediment could be tracked from the trail system to the stream network rather than amount of sediment;
- As stated in section 3.2 of this document, sufficiently high physical barriers prevent brown and rainbow trout from migrating up to the Tellico headwaters;
- Thus there would be no mixing of stocked with native brook trout in the headwaters during spawning season;
- The macrobenthic sampling conducted by Caliber engineering was not conducted following established protocols and the results are therefore unsusable. See Section 3.2 for further information.

1-16.<u>Public Comment:</u> The EA states on page 3 "Toxicity tests near three high challenge areas show elevated levels of petroleum products. Research has shown that these toxic substances can inhibit reproduction and recruitment of fish populations." and later in the EA the USFS states that no data has been produced to show that these areas with elevated levels of petroleum products have reached any waterways.

- **Based on Caliber's recent aquatic macrobenthic sampling and the presence of several intolerant benthic species, it is obvious that petroleum contamination is either not entering the aquatic systems associated with Trail 2, 7, and 9 or if they are they have no detrimental effect on water quality or benthic species.**
- **Remove this section from page three from the EA and do not use elevated levels of petroleum products as justification to close challenge areas.**

Response: The Caliber macrobenthic sampling was not conducted following established protocols and the results are therefore unusable. See Section 3.2 for further information

The rationale (i.e. "justification") for selection of an alternative that closes the challenge areas may be found in the Decision Notice for this project.

1-17.<u>Public Comment:</u> The EA states on page 3 and 4 "The Forest Plan direction calls for providing approximately two miles per square mile of OHV trail. The current system is currently over four miles per square mile. Either some trails should be closed to meet the existing trail density standard, or the Forest Plan would need to be amended to allow higher density for the Upper Tellico OHV System."

- **Provide an original source and justification for why the threshold of "two miles per square mile of OHV trail" should not be exceeded.**
- **Why can a density of four square miles of trails not be allowed besides the Forest Plan figure?**

- **With appropriate maintenance performed by appropriately trained and competent contractors the trail density of four square miles can be sustained.**

  Response: The Forest Pan standard referenced in the EA is the limiting factor in OHV opportunity density. To propose an action that would result in a trail system with a higher density would require amending the Forest Plan, as is proposed in Alternatives B, E, and F.

1-18.Public Comment: The EA states on page 4 "There is a need to comply with the Travel Management Rule and corresponding Directives."

- **Why can the Travel Management Rule not be amended as proposed in the Proposed Action?**
- **What caused the full change in direction of thought from amending the Travel Management Rule to not allowing any amendments and following the Travel Management Rule to the letter?**

  Response: The Travel Management Rule was promulgated at the National Level and is beyond the responsibility of the National Forests in North Carolina. We never proposed to amend the Travel Management Rule.

1-19.Public Comment: The EA states on page 4 "The current trail system is not in compliance with the Forest Plan, and is not financially or environmentally sustainable in its current configuration."

- **Amend the Forest Plan for trail density as proposed in the Proposed Action.**
- **Many USFS facilities and programs are not financially stable. If the USFS did not receive tax dollars most all USFS facilities would have to be shut down. Why can tax dollars not be used to support the Tellico trail system when it has such a huge impact on the local economy?**
- **The current Tellico trail system is environmentally sustainable in its current configuration if maintenance is fully funded.**

  Response: The National Forests in North Carolina manages approximately 1000 miles of open road system and an additional 1500 miles of closed roads throughout the National Forest. These roads are maintained with an annual road budget of $1,000,000 per year. The Upper Tellico OHV System accounts for 1.6% of the roads on the Forest. With a limited road budget it is difficult to address all the needs of the OHV System when it is not the only priority across 1.2 million acres of National Forest System lands.

  The EA analysis of effects discloses that Alternative A would not meet State and Federal water quality standards.

1-20.Public Comment: We agree with the purpose and need statements on page 1-4 of the EA, starting with the "need to stem the flow of sediment…"

  Response: Comment noted.

1-21.Public Comment: Page 2 of the Environmental Survey states "If the trail becomes worn down to bedrock it may also expose springs that add to water flow and thus potential sedimentation. "Have there been surveys of the trails to determine if springs exist? Please elaborate, provide sources and locate these areas. If no survey has been conducted this should be removed or revised.

Response: A condition survey of the trail system in the upper Tellico watershed occurred in late 2007 and early 2008. During this survey the location of the springs were documented and this documentation is in the project record.

1-22.Public Comment: We also believe that the criteria used to formulate the initial purpose and needs statement was faulty.

Response: It is within the responsible official's prerogative to establish the purpose and need for a proposed action. The purpose and need for this project was an outcome of consideration of the data collected during a trail system condition survey performed during late 2007 and early 2008.

1-23.Public Comment: I believe that TU/SELC's attempt to use the Clean Water Act as a basis for a lawsuit is a perversion of the intent of the Clean Water Act.

Response:

- Section 303 of the Clean Water Act, "Each…agency…of the Federal Government (1) having jurisdiction over any property or facility, or (2) engaged in any activity resulting… in the discharge of pollutants…shall be subject to, and comply with, all; Federal, State, interstate, and local requirements…."
- Section 304 of the Clean Water Act defines "suspended solids" as a pollutant (304(a)(2)(4));
- Suspended "matter" causes turbidity (EPA Interim Enhanced Surface Water Treatment Rule Guidance Manual, http://www.epa.gov/safewater/mdbp/pdf/turbidity/chap_07.pdf, accessed April 9, 2009);
- 15A NCAC 02B.0211 Fresh Surface Water Quality Standards for Class C Waters (i.e. "state requirements") establishes a 10 NTU maximum for trout waters in North Carolina. NTU is a measure of turbidity.
- Therefore one could interpret that an NTU measurements above 10 for trout waters in North Carolina is not in compliance with the Clean Water Act.
- NTUs well in excess of 10 were recorded in the upper Tellico watershed, as discussed in Chapter 3.1 of the EA.

1-24.Public Comment: The purpose/need statement in the EA is simply inaccurate or unduly limiting. Item 1 asserts that Forest Plan standards are being violated, citing a "prevent visible sediment from reaching streams" standard. EA at 2. Taken at face value, as the Forest does here, this standard will preclude any meaningful use of the Forest. It is the construction and continued existence, and use of roads/trails that

is the primary factor in sediment delivery. *See, generally,* Robert C. Davies Testimony (December 8, 2004) The Lands Council v. Stringer; Case No. CV-03-344-N-MHW; at 20 ("it's basically just the existence of roads" that is most significant factor influencing sedimentation); at 26 ("just the existence of the roads out there is the problem, that sheerly just by opening-- or just by closing these roads, you're not alleviating the problem") (transcript attached hereto).

Response: There is a Forest Plan Standard to prevent visible sediment from reaching streams. Refer to http://www.cs.unca.edu/nfsnc/nepa/nantahala_pisgah_plan/nantahala_pisgah_94_plan_amendment.pdf
See pages III-11, III-41, III-184, and III-185. We agree that the construction and use of roads and trails is a primary factor in sediment delivery. Such is the case in the vicinity of the Tellico OHV System, where condition surveys have documented numerous specific instances of sediment delivery to waterbodies from the trail system. If trails are closed they would be rehabilitated and planted with woody vegetation to eliminate the accelerated erosion.

1-25.<u>Public Comment:</u> The EA improperly fixates on elimination in the face of a legal mandate to provide for and properly manage access. At the most basic level, the Travel Management Rule requires the agency to apply "general criteria" when designating roads, trails and areas for vehicle use, which include effects on natural and cultural resources, public safety, provision of recreational opportunities, access needs, conflicts among uses of National Forest System lands, the need for maintenance and administration of roads, trails and areas, and the availability of resources for maintenance and administration. 36 C.F.R. § 212.55(a). The agency recognizes that "motorized use is a legitimate use of the National Forests." Travel Management Rule Final Communication Plan, November 2, 2005, p.5. The agency should broaden the purpose and need statement to include recognition of the need to provide appropriate and diverse mechanized access opportunities through a designated system of roads, trails and areas.

Response: We disagree that the predecisional EA "fixates on elimination" since there are six alternatives analyzed, only one of which (Alternative C) "eliminates" the OHV system. In the final EA, Alternative D is modified to change the OHV system to a smaller road system for highway-legal high clearance vehicles. The general criteria mentioned in the above comment are followed in the regulations by specific criteria whereby the responsible official shall consider effects on the following, with the objective of minimizing: (1) Damage to soil, watershed, vegetation, and other forest resources…. (36 C.F.R. 215.55(b)). The purpose and need for this project is not a forest-wide evaluation of access opportunities but is instead more limited in scope to specifically the Upper Tellico area and the need to minimize damage to soil and watershed resources in the upper Tellico watershed. See Chapter 1.1

1-26.<u>Public Comment:</u> Purpose and Need "The 1986 analysis called for using a range of 18-25 miles of the existing 58 miles of roads for ORV's The analysis concluded that "It is within the Forest Supervisor's authority to close areas where motorized vehicle use is causing or is likely to cause considerable adverse effects. However, these changes should be sufficient to meet Forest Service policy and still allow user enjoyment of the area." It appears the Forest service failed in its implementation of its own policies and recommendations in 1986. The FS is part of the problem as you have identified it in the EA.

Response: The agency acknowledges insufficient resources were applied over the past 20+ years to adequately maintain the Upper Tellico OHV System. The Forest receives approximately $1,000,000 to maintain approximately 2500 miles of roads, of which the Upper Tellico OHV System represents approximately 1.6%. With 1986 over 20 years behind us, the situation in Upper Tellico has changed. Use increased markedly after the turn of the century with the rise in the OHV sport and the use of the internet to provide information about the OHV System to many potential users. Conclusions from 1986 became out-of-date with the higher demands being made on the system.

1-27.<u>Public Comment:</u> Reference to diesel fuel on table 3.1.1.1 and fact that most OHVs don't run on diesel.

Response: We recognize that many OHVs do not run on diesel. However some large 4WD trucks and some trail maintenance equipment do run on diesel.

1-28.<u>Public Comment</u>: On page 5 it is stated that the USFS received over 1500 letters and comments by the close of business on July 9th, 2008 and that the vast majority of the letters were 'form e-mails.' Exactly how many were 'form e-mails' and how many were not? What prescribed methods are used to determine if a letter is a form letter?

Response: Over 1000 scoping responses were what we categorized as "form e-mails." The method for identifying them was to look on the websites of the Southern Four Wheel Drive Association and Trout Unlimited to see what was being suggested as content on their respective "letter generators." Responses that provided the suggested content were easy to identify as having identical elements of structure and content. Any non-standard content was considered separately.

1-29.<u>Public Comment:</u> Scoping • Please provide a copy of the spreadsheet of the summary of the comments received by July 9, 2008.

Response: The summary spreadsheets are available in the project record.

1-30.<u>Public Comment:</u> Other concerns listed in the EA involve trail density and trail difficulty. These issues, quite simply, can be dealt with, if the FS would choose to do so.

Response: We agree. Alternatives B, E, and F deal with these issues by proposing to amend the Forest Plan.

1-31.<u>Public Comment:</u> The proposed action calls for require 4WD OHVs to lock in 4 wheel drive. It also proposes to pave trail 1. The owner's manual for an older 4WD plainly states NOT to engage 4WD on paved or dry surfaces unless wheel slippage is present. Modify or delete from the EA.

Response: After Trail 1 paving and reconstruction in Alternatives B through F, it would no longer be considered part of the trail system. Therefore 4WD lock-in would not be required on the pavement.

1-32.<u>Public Comment:</u> I am writing in regards to the statement below located on page 5 of the Environmental Assessment of the Tellico OHV area. "There are elevated fine sediment deposits in the Tellico River and its tributaries compared to nearby reference streams that are not impacted by the trail system. Brook trout spawning is reduced by increases in fine sediment deposits. "According to the independent contractor Caliber Engineering Consultants:1) Streams are healthy, have excellent water quality per North Carolina standards, and are capable of sustaining viable, reproducing native trout populations.2) Degradation of water quality and degradation of aquatic habitat in Upper Tellico is non-existent. What are your sources for the statement made in the EA? Please provide them or revise.

Response: The Caliber Engineering Consultants did not evaluate fine sediment deposits and did not challenge this finding. Neither did this report challenge that trout spawning is reduced by increases in fine sediment deposits. The EA identifies the sources of data as riffle pebble counts and pool filling measurements. In the EA see sections 3.1.1 – Sediment Deposition and 3.1.1 – Pool Filling. Additional information regarding water quality evaluations and brook trout populations is located in sections 3.1 and 3.2 of this document.

1-33.<u>Public Comment:</u> Specifically, the "1.4 Significant Issues..." numbers 5 through 8 raised on pages 6 and 7 and *"1.5 Other Issues"* on pages *7* and 8 along with the income data gathered on OHV users paints a very ugly picture of those who will oppose you. They want what they want regardless of the harm done to the natural resources on the national forest or the rules put into place to protect those resources.

Response: Many members of the OHV community have expressed a desire to reduce environmental impacts while still maintaining the opportunity to enjoy their sport. The capacity of the Upper Tellico area to provide the desired OHV recreation opportunity without excessive environmental impacts is the essential question being evaluated in this analysis.

1-34.Public Comment: In the EA you state on page 7; "Brook trout reproduction is being negatively affected." "Toxicity tests near three high challenge areas show elevated levels of petroleum products. Research has shown that these toxic substances can inhibit reproduction and recruitment of fish populations." I demand you include when these tests were performed as well as GPS coordinates to these three high challenge areas tested. I also demand that you expand on what tests were done by whom as well as include the indepth findings of said tests. I also demand the above research findings to be available for review.

Response: The complete 21-page report by Mountain Environmental Group (Mahan 2008) is available in the project record and may be requested through appropriate channels.

1-35.Public Comment: Also I do not know if there is the additional issue of clear cutting in the upper watershed but would like to see this issue addressed also.

Response: Effects of past clearcutting in the watershed is briefly discussed in the EA. It is also discussed in this document. See response to comment 2-29.

1-36.Public Comment: I ask that the Forest Service conduct additional study and planning in an Environmental Impact Statement for the Upper Tellico OHV System.

I feel that a true EIS is needed to provide the baseline data and trends needed to make sound management decisions.

Response: An EA is used to evaluate whether or not there may be significant environmental impacts that would necessitate completion of an EIS. If a finding of no significant impact is made (a FONSI), an EIS is not required. 40 CFR 15008.14 states in part: "[T]his means that economic or social effects are not intended by themselves to require preparation of an environmental impacts statement."

While preparation of an EIS has numerous requirements, the baseline data that would be provided in such a document would be very similar, if not identical, to what is provided in the EA under discussion.

1-37.Public Comment: More information needs to be gathered in the area before making a final decision

A comprehensive study of all impacts from all intended users of public lands that are located in the Nantahala and Cherokee NF's is needed and warranted in this situation to properly protect the environment.

It seems that the concerns of Trout Unlimited, while valid, have not been validated with enough time or energy.

Response: The amount of information gathered in the Upper Tellico area is extensive. National Environmental Policy Act Regulations state in part at 40 CFR 1502.1: "Agencies…shall reduce paperwork and the accumulation of extraneous background data…." It is the opinion of the agency that the amount of data collected and the analysis presented in the EA is sufficient for this decision.

1-38.<u>Public Comment:</u> FS needs to conduct additional study of alternate sources of sedimentation in the area

Response: The agency acknowledges that other sources exist and these are disclosed in the EA. In addition, the many sediment plumes coming from the OHV trail system are well documented. One of the alternative sources of sediment suggested by commenters – the private Tipton Creek settlement – has been noted as contributing sediment into Tipton Creek. However this is not the source of sediment upstream in the upper Tellico watershed – that is physically impossible. A major source above Tipton Creek is established as the OHV trail system, where 673 locations were identified where sediment was leaving an OHV trail and reaching the stream network.

1-39.<u>Public Comment:</u> I feel that if the Forest Service is going to use "scientific research" to permanently close the Tellico OHV area that it bears that the Forest Service at the very minimum conduct more research as the environmental assessment completed by an independent party contracted by the Southern Four Wheel Drive association presents strong scientific argument refuting the Forest Service's environmental assessment.

I hope that you will take the opportunity to get a second opinion" as well as offered by the SFWDA & their offer to pay for further studies. Please consider extending the comment and discussion process as needed to accommodate this testing!

Response: The Caliber Report contracted by Southern Four Wheel Drive Association is not based on a detailed survey of trail conditions as is the agency's EA. While they identify their work as a "formal trail assessment," there is no indication in the documents provided to us that the "assessment" performed was as detailed as what was performed by USDA Forest Service professionals during late 2007 and early 2008. Caliber Engineering may have been unaware that the Forest Service condition survey took place, since they do not acknowledge it in their report. The Forest Service collected detailed trail condition information from over 2,000 points along the trail system and evaluated every trail for spots where sediment was leaving the trail. Fifteen to eighteen agency personnel spent over four weeks collecting trail condition information, and additional days were devoted to collecting runoff data and in-stream data. The Forest Service measured turbidity, pebble counts, and sediment deposition. Evidence that this kind of data was collected for the Caliber report is not apparent in the documents provided to us. In addition, trout surveys have been done by the NC Wildlife Resources Commission for years. The macroinvertebrate surveys reported in the Caliber Report actually

indicate POOR in-stream habitat conditions. In conclusion, the data used for analysis in the EA was much more thorough in regard to trail conditions and in-stream fish habitat than what was collected for the Caliber report, and the agency does not deem additional data collection is warranted.

1-40.<u>Public Comment:</u> I DO NOT ask that the Forest Service conduct additional study and planning in an Environmental Impact Statement for the Upper Tellico OHV System.

Response: Comment noted.

1-41.<u>Public Comment:</u> Request 90 days extension to comment period. This will also serve to allow additional time for equitable review and thoughtful comment by all concerned stakeholders.

I'd like to see an extension on the comment period too. There's a lot to read in the EA, the report by caliber, and the associated water quality laws.

Since the anthrax threats in Washington DC shortly after 9/11, there is an approximate 2-4 week delay in delivery of all mail to our public representatives in congress, as all incoming mail is re-routed to be checked before sent to their intended recipient. Due to this mail handling procedure - it is unreasonable for the Forest Service to give us less than 30 days to comment on the EA, as it unfairly limits the recognized standard of access to our congresspersons to weigh in on the EA on their constituents' behalf. That said, you should request an additional 90 days for the comment period at a minimum to allow us to contact our public representatives and have them represent us to the Forest Service on this issue.

The Forest Service should be concerned with avoiding the perception of purposely overwhelming the public with data that could not possibly be absorbed within the given timeframe.

With the public in mind the deadline for comments should be a minimum of one hundred and eighty days. It is in the Forrest Services best interest that it looks out for the people and not the fastest resolution.

Extend comment period to 240 days.

Response: While we acknowledge there is much information to be "digested" in the documents available for review in regard to the Upper Tellico project, we are unable to extend the comment period. Please refer to the Code of Federal Regulations. (36 CFR Part 215) states: "215.6(a)(1)(i) Environmental Assessment. Comments on the proposed action shall be accepted for 30 days following the date of publication of the legal notice." and "215.6(a)(1)(iv) The time period for the opportunity to comment on environmental assessments shall not be extended."

Based on these Federal Regulations it is not within our authority to extend the comment period.

It should also be noted that there has been no delay experienced by U.S. Senators and Representatives in receiving letters from the public in regard to the Upper Tellico OHV area. They have received such mail in a timely manner, to which we can attest since they have passed those letters on to us for response.

1-42.<u>Public Comment:</u> I believe the FS should use the Pirate 4x4 rally as part of the comments on the closure of the OHV area. I would like a response on why it can or why it can't be used.

Response: Decline. Everyone who participated in the Pirate 4x4 rally had an opportunity to provide their comments directly to the Forest Service during the 30-day notice and comment period. The purpose of the 30-day Notice and Comment period is so the public can provide comments on the proposed action to the Responsible Official. Refer to the Code of Federal Regulations 36 CFR Part 215.

1-43.The EA states on page 5 "Concern that state water quality standards be met in managing the OHV System. The North Carolina Forest Practices Guidelines for Water Quality establish performance standards for protection of water quality. These include: Streamside Management Zones.. .(and)Minimizing stream crossings."

- **Is it necessary to meet NC Forest Practice Guidelines for Water Quality when both NC and TN water quality standards are being met per the EA?**

Response: The statement you refer to was identified as a Significant Issue as a result of the Scoping process. Significant Issues are generated through the Scoping process from public and agency concerns. When proposed actions involve unresolved conflicts concerning alternative uses of available resources (40 CFR 1501.2(c), appropriate alternatives are developed that attempt to address one or more significant issues to a greater or lesser degree. This is a typical part of the NEPA (National Environmental Policy Act) process.

The EA does not say NC and TN water quality standards are being met. You may be referring to a statement that in 2006 the State of North Carolina characterized the Upper Tellico as being of adequate quality to support all uses. An explanation of this is in section 3.2 of this document.

1-44.The EA states on page 6 "Concern that the proposed action still has OHV trails near streams and on sensitive soils and that these should be removed from the system to better protect the Tellico River and its tributaries from sediment. Reducing sediment inputs would improve habitat for native brook trout."

- **If all trails that were on NRCS designated sensitive or erosive soils then the whole trail system would need to be shut down along with Trail 1 and River Road.**

- **If all trails on sensitive or erosive soil at Tellico were closed then this would mean that any other trails on sensitive or erosive soils would have to be closed and this is not keeping with a mixed-use philosophy.**

Response: The statement you refer to was identified as a Significant Issue as a result of the Scoping process. Significant Issues are generated through the Scoping process from public and agency concerns. When proposed actions involve unresolved conflicts concerning alternative uses of available resources (40 CFR 1501.2(c), appropriate alternatives are developed that attempt to address one or more significant issues to a greater or lesser degree. This is a typical part of the NEPA (National Environmental Policy Act) process.

1-45.The EA states on page 6 "Concern that the OHV System should be closed until all the needed repairs are finished, in order to prevent additional accelerated erosion of the trails into the Tellico River and its tributaries and protect trout populations."

- **SFWDA does not agree with any 'across the board' temporary trail closures. Short segments of trail may be closed while construction occurs on these individual, short segments.**

- **The EA states on page 7 "Concern that the proposed storm-event closures and new camping restrictions would be burdensome on OHV trip planning, family experiences, and special event planning. Also, there are concerns as to how these might be implemented."**

- **SFWDA does not agree with storm-event closures as they would significantly impact individuals who have traveled great distances to experience the Tellico trail system.**

Response: When proposed actions involve unresolved conflicts concerning alternative uses of available resources (40 CFR 1501.2(c), appropriate alternatives are developed that attempt to address one or more significant issues to a greater or lesser degree.. This is a typical part of the NEPA (National Environmental Policy Act) process. It is not expected that all interested parties would agree with any particular alternative.

Comments on Chapter 2 of the Environmental Assessment

2-1. Representative Public Comments on Alternative A:

Would like to see Alternative A put back into effect.

I do not want to you interfere with the park trails at all.

I support Alternative A; the OHV areas are very important to our sport and should not be taken away.

The Forestry Service needs to do the right thing and let us work together to keep it open for everyone, not just a select few. I hope that you will think of this letter when the Forestry Service decides the fate of Tellico, and you all decide on "Alternative A" to keep it open for all to enjoy.

Alternative A - to do nothing, fixes nothing...

Alternative A. Although this alternative would best please all the off-roaders, it does have the potential for the most environmental impact. Being a practical off-roader, we understand that this alternative may not be selected, but some type of off-roader/environinent compromise must be developed.

My strong preference is that Alternative A be implemented with proper funding. I recommend raising funds through increasing user fees and through public donation of both money and manpower.

> **Response:** Alternative A is the "No Action" alternative which is the trail system, level of funding, management and maintenance that was taking place as of 2007. The impacts of this scenario are described in Chapter 3 of the EA. Of the alternatives, Alternative A is the least likely to meet State water quality standards (Table 2.2.2) and the least likely to meet the Forest Plan and State of North Carolina Performance Standards for sediment (end of Chapter 3.2)

2-2. Representative Public Comments on Alternative B:

Support expressed for B & E

Support expressed for B and D

Alternatives B and E as written would keep the OHV area open, while still reducing sediment from the trail system.

I support Alternative B – Proposed Action

I ask that your office reconsider the proposed closure of the Tellico OHV area and instead work with the OHV users in upgrading and maintaining the area. This combined effort will result in more local jobs, a better local economy, and even better quality of the natural area in and around Tellico. If you must pick

one of your proposals than I request that you consider Proposal "B" as the best for all involved.

Alternative B. This alternative appears to be the proposed trail system changes from June 2008. Many club members mainly have smaller sized vehicles (33" tires) and will probably never attempt some of the "high challenge" areas (trails 12 and 9). Typically we organize two club functions a year where we enjoy a nice ride through the mountain, but do expect to encounter some minor obstacles (typical rock outcroppings on trail 4, 6, and 8), during our rides. The reroutes around the Peckerwood Creek (trails 4 and 7) and Tellico River (trail 5 to trail 4) are considered necessary to protect the creek and river.Trick N Traction 4WD Club supports the SFWDA effort to maintain the Tellico OHV System, utilizes many of the various area services (spending money for food, fuel and accommodations) are concerned about the surrounding environment, and identified Alternative B as the best choice.

As avid and responsible off-roaders, with a smaller size vehicle (33" tires), we feel that alternative B is the best choice. Alternative B provides smaller size vehicles minimal impact to the current trail system and does consider some of the higher environmental issues (Peckerwood Creek below trail 4 and Tellico River at the top of trail 5).

> **Response:** Alternative B was the "proposed action" developed as a starting point for scoping. Alternative B tends to fall in the middle of the range of alternatives in regard to addressing issues and in regard to environmental impacts.

2-3.<u>Representative Public Comments on Alternative C</u>

I feel that by opting to choose to go with ALT C that the forest service is not doing its job as public officials to provide the public with access to public lands .With as many options as there are on the table and many more that could be come up with, I think it's the forest service's duty to come up with a plan that would meet forest service guidelines as well as provide the TAX paying public with a place to recreate.

The Forest Service proposal of implementing "Alternative C" will not adequately provide recreational opportunities or address access needs.

Additionally, the proposed "Alternative C" would be in direct contradiction to Table III-11 and the Forest Wide Direction which dictates that the Forest Service shall "provide recreational riding opportunities for use by vehicles commonly classified as off-road vehicles (ORVs) on designated routes within established ORV areas…includes Upper Tellico." The trail system is already established and the Forest Service has the responsibility to manage and maintain that trail system. Any trail closures would violate this Dispersed Recreation Management Directive.

Alternative C should be removed from the EA as it does not provide a variety of trail opportunities.

If Alternative C is chosen I feel certain that this will force OHV users to file a lawsuit to seek fair consideration of the issues, in which case the FS own internal studies and other independent studies which conflict with this EA will reveal the bias that was inherent in this EA.

Alternative C is also unreasonable and simply creates problems elsewhere as the 4x4s will find new/private locations without oversight.

Alterative C: We find this alternative totally unacceptable. The proposed remaining trails (parts of trail 4 and 6) would not provide adequate trail riding to continue to attract the volume of offroaders needed to sustain the OHY System. The reduced amount of trails proposed will most likely affect the large amount of support from SFWDA could allow the area to "wither away and die". This prospect of the entire area being slowly closed is also unacceptable.

We do however strongly oppose Alternatives C and D. Basically closing the Upper Tellico OHV System (Alternative C) or removing all "challenge areas" (Alternative D) could greatly reduce the large amount of off-roader's "Day Use" fees and support from SFWDA who maintain the Upper Tellico OHV System. These prospects are unacceptable.

Alternative C - this is the option that causes me the most concern. It fixes nothing and instead pushes the 4x4s from returning to Tellico, but all this will accomplish is for "problems / if any" to move up/down stream to other properties, private lands, etc. that the Forest Service does not control!?

I do strongly feel that Alternatives C and D would completely cripple the local economy and Alternative D would be just as bad as Alternative C in the long run. Eliminating the high challenge areas would keep myself and just about everyone I know away from Tellico.

The first thing that caught my eye when reviewing the annual revenue and expenses is that Alternative C, closing the OHV park is only $10,000 cheaper than continuing the current maintenance plan and trail status (Alternative A). Having been to Tellico as recently as this fall, I understand that the system is in need of some repair to maintain the beauty of the area and develop a sustainable trail system, so Alternative A is unlikely. According to the Caliber's estimate, a trail system that has been repaired and designed for OHV use would require approximately $200,000 per year to maintain. According to the USFS estimate, it would cost almost $280,000 to maintain the Upper Tellico area with no vehicle traffic (Alternative C). This seems to contradict the Caliber data and my common sense. I would appreciate some clarification on how this is possible.

While I disagree with the selected alternative C as the solution to the issues presented, I do not disagree that an action is appropriate to control discharges to the trout supported environment. I do not believe all reasonable alternatives have been considered. It is unconscionable to propose alternative C to close the OHV area for all intense and purposes putting a number of jobs at risk in the current economy. Neither does it make sense to close 40 miles of 4WD trails when there is only 36 miles of 4WD trails with in a 100 mile radius without the Tellico OHV area.

I prefer alternative "C" as described in your letter…I feel that any efforts to protect water quality and improve wildlife habitat should be considered.

We can't thank you enough for your constructive proposal in Alternative C to shut down the ORV trails in the Upper Tellico watershed. You have built a strong case for the closure to protect publicly owned resources and restore watershed values.

Tennessee Chapter of the Sierra Club strongly supports Alt C.

The Pisgah Group of the Sierra Club, representing some 800 members in Transylvania and Henderson Counties, is completely in favor of Alternative C, closing the upper Tellico OHV area to vehicles in order to eliminate and avoid further damage to the trails and erosion and sedimentation into the Tellico.

Only Alternative C adequately addresses the water quality impacts of ORV trails within MA 18 (100 feet of streams) and the Wild and Scenic River Study Corridor (25 feet of streams).

I applaud your environmental assessment study and conclusions that show the current situation is untenable to maintain the natural environment and fisheries in the region. I agree with Marisue Hilliard in her opinion that Option C is the best action to take to correct this issue. Although we as an organization have no issues with OHV areas per se, this specific area of the National Forest System is unsuitable for the activity.

My vote would be for option "C". Although I am a committed off road vehicle user, there are other places for me to go which impact the waterways and environment less.

I applaud and support the preferred alternative to close the ORV area in the Tellico watershed. Basic resource protection is the foremost and overriding responsibility. Accommodation of ORV's should be based on suitability of the site to support that use without impairing water quality, and biota. It is clear that past management efforts have been unsuccessful in that regard.

Now that you have scientific data pointing to siltation caused by the OHV System I believe the only option you have is Alternative C.

I fully support the Forest Service's "preferred" alternative to close the Tellico OHV system. As an avid fisherman of the area for over 30 years, I have seen a sharp decline in the quality and quantity of native trout in the area.

Cherokee Forest Voices agrees with the Forest Service's preferred alternative, Alternative C, which would close the OHV trail system. This alternative would maintain over 10 miles of existing Forest system roads in the area, open year-round or seasonally, to provide for public access for highway-legal vehicles for hunting, fishing and other recreation uses. …The analysis in the Forest Service's Environmental Assessment is clear that only Alternative C, which would close the OHV system, has a high probability of meeting state water quality standards. The Tellico watershed is not a suitable location for an Off Highway Vehicle area. CFV stands behind the Forest Service alternative C to close the OHV trail system.

Support Alternative C. The Forest Service is required by law to take the action necessary to meet state water quality standards and protect trout habitat.

We congratulate the Forest Service for proposing a solid long-term solution to the damage done by ORVs, the "preferred" Alternative C. This project is of concern throughout our region because ORVs have so clearly damaged the land and natural resources of the Nantahala National Forest. If this obvious impairment were allowed to continue, it would set a terrible precedent for other national forests such as the George Washington and Monongahela – the forests closest to Maryland. We support Alternative C because it is the only one of the six alternatives that will decisively solve the problems of Tellico, namely erosion, pollution, and a too-dense route network. It closes 27 of 39 miles of dirt-surfaced trails previously open to ORVs and converts the rest to erosion-resistant roads. This should end the pollution of the Tellico and its tributaries by sediment flowing from severely eroded ORV trails. Other alternatives keep various trails open, but the analysis concludes there is only low to moderate likelihood of meeting state and federal water quality standards under these alternatives (Table 3.1.2.1.1 on page 44). Alternative C is found to have "high" likelihood of meeting those standards.

> **Response**: Alterative C was the only alternative in the predecisional EA that proposed closing the OHV system (Alternative D-modified also closes the system in the final EA). It elicited many strong comments both for and against. Alternative C is analyzed in the EA as having a high likelihood for meeting State and Federal standards related to water quality (see Table 3.1.2.1.1). At the same time it would have the greatest impact on recreation opportunities in the area since it would eliminate one current use (see Chapter 3.6). Economic Impacts of the alternatives are disclosed in Chapter 3.11.

Alternative C was identified as the "preferred alternative" in a letter accompanying the predecisional EA. The concept of the preferred alternative is recognized in the Forest Service Handbook 1909.15 as: "The alternative(s) which the Agency believes would best fulfill the purpose and need for the proposal, consistent with the Agency's statutory mission and responsibilities, giving consideration to the environmental, social, economic, and other factors and disclosed in an EIS." While it is not required to disclose a preferred alternative when comments are solicited for an array of alternatives analyzed in a predecisional EA, it is a courtesy to enable individuals and organizations to better respond during the comment period.

2-4. Representative Public Comments on Alternative D

I urge you to select alternative D. This maximizes the area usage for all user groups

Alternative D, the next most effective alternative with respect to this issue of concern, would still leave 18.6 miles of active ORV trail on highly erosive, unstable soils. (Id.) That result cannot be justified in an area that already has lost an estimated 75,000 tons of soil to erosion from highly unstable soils because of ORV traffic.

Alternative D would be a better compromise between the natural environment and the human economic environment.

I do strongly feel that Alternatives C and D would complete cripple the local economy and Alternative D would be just as bad as Alternative C in the long run. Eliminating the high challenge areas would keep myself and just about everyone I know way from Tellico.

Alternative D. Many club members have smaller sized vehicles (33" tires) and will probably never attempt some of the "high challenge" areas (trails 12 and 9). However, trail 11 (Guard rail) poses some extra challenges and by-passes for smaller vehicles (33" tires). The by-passes around the "Guardrail" obstacle and Helicopter Pad do provide means to ride trail 11 and watch other off-roaders negotiate the "high challenge" areas on trail 11. We believe that trail 11 (Guard rail) does not pose any type of environment threat and should not be closed. The re-routes around the Peckerwood Creek (trails 4 and 7) and Tellico River (trail *5* to trail 4) are considered necessary. Trick N Traction does not favor Alternative D as a viable solution for the Upper Tellico OH System.

Response: Alternative D proposed providing an easy to moderate trail system with no high challenge area. It was evaluated as having a moderate likelihood of success in meeting State and Federal standards. There were a number of comments that asked for more access to be provided for highway-legal 4WD vehicles as opposed to larger rock-crawler vehicles (see the section "General

Comments on the Alternatives" in this document). Others wanted more vehicular access to the area than would be afforded with Alternative C. Alternative D has been modified in the EA to respond to comments asking for a less challenging road system for highway-legal high-clearance vehicles looking for more motorized access to the Forest than what was proposed in Alternative C. Alternative D-modified is described in Chapter 2 and its impacts are disclosed in Chapter 3 of the EA.

2-5. Representative Public Comments on Alternative E or Alternatives E and F

I would like to ask that the FS plan be amended to allow higher OHV trail density in the area…I write in support of either Alternative E or Alternative F…I would like to see a compromise worked out between the FS, OHV users and the Anglers to improve the Tellico area for use by all.

I do not fully agree with any of the proposed alternatives…with E being the favored alternative.

I am aware of the proposed alternatives, and if forced to support an alternative from the possible selections, alternative E would get my support. Alternative E does seem to be a viable option that has potential to satisfy all involved parties

I do not agree 100% with any of the proposed Alternatives, but if I had two options, I would go with E and F. Of these two Alternatives, I would have to agree more with E, though both seem to be good options for all parties involved.

I think that Alternative E or F would be a much more beneficial outcome for everybody. This would help with the sediment issue while keeping the area open for ORV and other types of use.

Alternative E or F both seem to actually address the situation in a way that will allow full access to the challenges that bring the OHV folks to Tellico AND actually reduce traffic on the higher danger areas!

I recommend option E emphatically; it allows consideration of adding new areas with proper sustainability measures in place, and keeps Tellico open to avoid economic pitfalls while reducing the sediment. It also allows for the most opportunity for all parties to get involved without irrational decision making, like closure. Closure is such an extreme measure, please consider the whole picture and be brave and courageous. We can work this out for the benefit of the brookies, the anglers, the OHV community, and the public.

I personally would believe alternative "E" is the best all around choice. I am not a "4-wheeler" but I do realize the impact of closing Tellico, surrounding communities will be hard hit economically & during these tough economic times anything that is negative to the economy is simply unacceptable. If alternative

"E" is chosen some jobs could be created in the rebuilding/re-locating of trails, etc.

Alternative E and F are also viable solutions, but the immediate focus should be placed on keep the trail system open (trails 4, 5, 6, 8, and 11) and then implementing such plans as an additional parking area and new "challenge areas".

While I do not necessary agree with all aspects of the Assessment, option E would appear to be the best option. Removing higher challenge areas would cut most likely traffic in half and probably cut economic impact as well by a similar amount.

Response: Alternative E was developed to provide additional trail and high challenge opportunities than was provided in the proposed action, while still eliminating some of the high sediment producing stretches of trail. It is described in Chapter 2 of the EA and its effects are disclosed in Chapter 3. The rationale for its selection or non-selection are in the Decision Notice.

[Also see response to Alternative F comments below.]

2-6.<u>Public Comment on a Proposed Change to Trail 4 in Alternative E.</u>

In 2006 trail 4 was recognized, by BF Goodrich, as one of the nationwide top 5 outstanding trails. The construction of a parking area for ATVs and UTVs would greatly increase the traffic on trail 4. The increased traffic would probably spoil the ambience of the trail up to the proposed area (base of trail 11). Changing trail 4 into a "highway" to allow trucks and trailers (containing ATV's, UTV's, and other non-street legal vehicles) to the intersection of trail 4 and 11 would create large "traffic" issues (vehicles going both directions, who has the right of way, and parking). Since there is already a large parking area on the north side, ATV's, UTV's, and other non-street legal vehicles can enter the OHV system from the Tennessee side. However due the concentration of challenge areas around trail 11, the proposed changes to trail 4 and the new parking area may be a necessary evil and still could be considered an acceptable alternative. The cost of construction of a parking area and reconstruction of trail 4 may not be a cost effective at this time. The money saved from postponing the proposed parking area on trail 4, can be utilized immediately for other higher priority areas.

Response: With Alternative E, the changes to Trail 4 would provide access for non-highway legal vehicles at the southern end of the system. Implementation of any alternative would be driven by available funding and based on a list of priorities.

2-7.<u>Public Comment on Paving Trail 1 in Alternative E.</u>

In alternative E, page 168 of the Tellico EA it is stated: "Paving Trail 1 may decrease the amount of trail use but may result in an increase by non- street legal OHVs of user-created trails to access the area, impacting sites in proximity to designated trails. Trail use, off-trail use, maintenance, erosion, reroutes, reconstruction, parking lot construction, and unauthorized artifact collection affect heritage resources." I respectfully ask that this portion of the EA be removed or edited. To state that there may be user created trails is wrong. Can you prove there will be user created trails, do you have signed affidavits from OHV users stating that they will create trails or remove artifacts? These statements unfairly characterize OHV users as criminals and thieves. It clearly creates a bias within the assessment, how is one expected to make a fair decision when the language is so clearly biased.

Response: Our experience in the Upper Tellico area is that user-created trails **do** occur, as they have occurred in the past. The following sentence is more general in nature and lists various actions that may affect heritage resources. This sentence is not meant to imply that OHV users are criminals and thieves.

2-8.<u>Representative Public Comments on Alternative F</u>

My second option would be Alt F

The USFS states in alternative F that the cost to repair and update the trails (excluding trails 2 and 12, which will be closed permanently) would be five million dollars. However, the SITA estimates the total cost to update and repair the trails to be 2.2 million. Again, why are the EA numbers so much higher?

I support Alternative F above the other alternatives being considered regarding Tellico.

Personally I agree that option F is the best for our sport. I realize that something has to be done and nothing is free. However, simply shutting down the park is a lose-lose for all currently involved. The local economy gets negatively impacted and 4x4 enthusiasts that frequent Tellico are impacted.

I believe Option F would the best plan to follow and help to keep the local economy from getting any worse that it already is, not to mention the loss of good clean fun that thousands of off-road enthusiasts gain from the Upper Tellico OHV Area.

I encourage you to choose option F which provides only 2.0 miles less OHV trail than we currently have.

Alternative F. Same general comments as Alternative E except the re-routing of trail 9 (Slickrock) should be postponed to a later date. It is important that the

Upper Tellico OHV System remains open, and then the re-routing of trail 9 could commence.

Response: The SFWDA renovation costs were based on, among other things: 1) a misinterpretation of water quality data and on a non-comprehensive condition survey; 2) employing some techniques that would not be accepted on National Forest System lands; 3) employing some techniques that have proven to fail in the past in Upper Tellico, and: 4) excluding the cost of Trail 1 paving and reconstruction, Fain Ford bridging, and Trail 8 bridging. The maintenance costs were based on maintenance costs from the Trails Unlimited report, which we have since determined were not based on a comprehensive unit cost approach.

Alternative F was developed to offer more OHV trail miles and challenge areas than what is provided in Alternative B (proposed action) and to provide ATV access from the southern end of the system. Alternative F has been modified in the final EA to incorporate some of the Caliber recommendations. F-modified is described in Chapter 2 of the EA and the effects are disclosed in Chapter 3. The rationale for its selection/non-selection is in the Decision Notice.

2-9. Representative Public Comments on the Plan Amendments Associated with the Alternatives

Would like the Forest Plan amended to allow for higher challenge levels.

Alternatives B, E and F must be rejected because they require the Forest Service to adopt unsupportable amendments to the Forest Plan.

We cannot agree with alternatives that would change standards in the Nantahala Forest Plan to sanction "high-challenge" ORV trails and allow higher route density.

I would like to ask that the FS plan be amended to allow higher OHV trail density in the Upper Tellico OHV area.

Allow the Tellico OHV area to have a higher density of trails per square acre; this area is perfect for off road access so you might as well get the most of it versus paring it down to nothing more than dirt roads. This assumes proper management and involvement by the off road community with regards to self policing, maintenance, and sustainability projects like water control and so on.

Response: Management actions must comply with the Forest Plan or the Forest Plan must be amended. Amending the Forest Plan to allow for implementation of a particular project is allowed under the National Forest Management Act and Forest Service regulations and policy. The Nantahala

Forest Plan has been amended over 20 times. Alternatives B through F-modified would each necessitate a Forest Plan amendment. The proposed wording is shown along with the description of each alternative in Chapter 2 of the EA.

2-10.Representative Public Comments on Seeking a Compromise Alternative

I would like to see a compromise worked out between the Forest Service, OHV users and the Anglers to improve the Tellico area for use by all.

Help keep this viable multi-use land open to all to enjoy even if it means rotation of trails and closures during inclement weather.

I have reviewed the "Alternatives" and several of them are great ideas. Alternatives and E as written would keep the OHV area open, while still reducing sediment from the trail system. Obviously, winter and storm event closures seem to make sense, along with reconstruction, re-routing, and adding new trials (the system is located on 8,000 acres; I believe there is room to grow).

As a TU member, I am very disappointed in this decision. I love to ride ATVs as well as fish the Tellico watershed. I believe we can produce a better-compromised management schema if everyone were onboard.

Any alternative including permanent and total trail closure would be a crippling mistake.

If every group involved is allowed representation, a reasonable agreement can be reached. These means all sides are willing to compromise in order to reach this agreement.

Closing the whole area to OHV access because of lack of maintenance of the trails is a poor decision. I agree a few trails will need to stay closed. This is unfortunate, but a necessary compromise.

I strongly recommend that the Forest Service adopt one of alternatives B, D, E, or F as the preferred alternative.

I believe more emphasis should be put on education for land conservation as opposed to just shutting down the area for OHVs.

I would support higher fees, public participation in work days, whatever is necessary to keep the trails open for riding.

Closure of the OHV area benefits no one but hikers and a select group of fishermen, Hiking appeals to a limited number of people and I feel that the

Southeast Region already has more than enough trails for hikers to choose from. Personally I only hike to get to a promising fishing location.

If it is being over utilized limit permits or put in a reservation system, explore turning it over to a concessionaire. But to close it totally seems like one more piece of PUBLIC LAND being denied to those of us who OWN it and restricted to those who are elitist by nature.

The Forest Service is doing a disservice to the town of Murphy, NC and the entire outdoor community by simply caving to the SELC and Trout Unlimited as opposed to creating a viable maintenance program LIKE IT IS SUPPOSED TO in order to satisfy everyone.

Restrictions and rules would def be a good start and help please both sides. Work with us, you have out attention (most organized groups are already helping). …Lets work together and make something good happen here!

I have reviewed the recent EA plan as well as the SFWDA's independent study. While both reports seem to be drastically different, it does show that a compromise needs to be made to benefit all parties involved (FS, OHV users, and Angers). It also shows that quite possibly more information needs to be gathered in the area before making a final decision on the future of Tellico OHY area.

Tellico needs to reopen. Now. It needs to be slowly, year by year, improved and expanded to meet the needs of the huge amount of people seeking OHV opportunities. With the help of clubs and associations interested a lot of work can be done for a little well spent money.

…I am in favor of controlling the runoff caused by off road vehicles in the Tellico Off-road Vehicle Area. I would in no means want this area closed or made off limits to those wanting to enjoy their ORV but I feel erosion protection methods are available to correct this problem to everyone's satisfaction.

> **Response**: Alternatives B, E, and F-modified retain an OHV trail system while eliminating some of the sections of trail that are high sediment producers. As such, they could be considered "compromise alternatives." They are described in Chapter 2 of the EA and their effects are disclosed in Chapter 3. Rationale for selection/non-selection of an alternative is in the Decision Notice for this project.

2-11.<u>Representative Public Comments Associated with the Alternatives that use the Resources of the OHV Community to Manage the Trail System</u>

I think that the forest service will find OHV enthusiasts willing and eager to supply any resources that the forest service might be deficient in performing

necessary repairs and maintenance (such as labor, tools, and funding) in order to keep the OHV System working properly.

This proposal flies in the face of 30 years of cooperation and volunteer work with OHV user groups like the Southern Four Wheel Drive Association (SFWDA). I strongly recommend that the Forest Service adopt one of alternatives B, D, E, or F as the preferred alternative.

I support either making the trails less harmful to the environment, or closing those sections if they can't be modified properly. Surely the 4WD associations can volunteer labor and raise funds to modify existing, or create new, more environmentally friendly trails, so they can enjoy their activities.

I suspect that the real issue behind the "Low likelihood of success," is not that the Forest Service is unable to design a plan that will be successful, but is, rather, simply the potential cost of a "successful" plan for initial trail improvements and ongoing maintenance, given the sensitive soils and high rainfall in the area. If this is the case, I suggest that the Forest Service consider ways to both reduce the costs (volunteers, "adopt-a-trail" programs, donated materials, etc…) and to increase funding (user fees, sponsorships, etc…). I am certain that the off-road community will gladly pay the necessary prices to keep Tellico open. In fact, when I do make it to Tellico (hopefully within the next year or two), I will willingly donate some of my time to trail maintenance or repairs in exchange for a day or so of enjoying the OHV system, I will willingly pay a prudent and necessary entrance and usage fee to enter and use the trail system, and I will gladly donate additional funds if there is a program in place to do so. Also, if I learn that there are non-profit organizations (such as Jeep clubs, etc…) that are involved in maintenance or "adopt-a-trail" programs, I will donate to those organizations. If I learn of official Tellico sponsors, I will honor those businesses as a customer. Don't let maintenance costs deter you from considering your alternatives fully.

> **Response:** We acknowledge the volunteer support that has contributed to maintaining Upper Tellico OHV System in the past. This support, combined with fee collections and appropriated dollars, has not been sufficient to prevent visible sediment from the trail system reaching the stream system. Analysis indicates that reconstruction, repair, and maintenance would need to be escalated well beyond what has occurred in the past to stand a chance of meeting State and Federal water quality standards. The likelihood of meeting State and Federal standards is displayed in Table 3.1.2.1.1.

2-12.<u>Representative Public Comments on Alternatives that Employ Seasonal, Storm-Event, or Other Forms of Temporary Closures</u>

I support a limited winter closure, increasing the amount of rock crawler trails and also leaving the most challenging obstacles as they are….It is my belief that

adding trails, enforcement, and an enhanced maintenance partnership between users and USFS would be the best option for the local community and the OHV users.

The significant rain event closures are not a viable way to manage the Tellico OHV area.

I understand and appreciate the need for seasonal closures to maintain the area around the river.

A few months out of the year should be taken off for the course to be cleaned and maintained.

Maybe the trail could be closed in the months that have the worst conditions.

Obviously, winter and storm event closures seem to make sense, along with reconstruction, re-routing, and adding new trails (the system is located on 8,000acres; I believe there is room to grow).

If it means altering the trial to let a certain section recover, that is fine, but total closer is not reasonable.

Sediment control is the best option, and is available through users of these trail systems. Trail closures for a certain times of year has already been done, and can continue to benefit the trail system.

Forget about the "storm closure" idea, lead times on trips there would be ruinous to happy patrons. The winter closure is a great idea and I was happy to see it implemented. That seemed like responsible management.

The proposal of storm-event closures do not help the OHV community utilize the area enjoyably. Since many people plan their trips to Tellico months in advance, and then travel several hours to the area, arriving and finding the trails closed represents a huge financial burden on the individual. Perhaps trail design solutions and improved BMPs will stem the need to close the area in the event of a storm. A final suggestion for your consideration is to require 4-wheel drive lock-in for all future actions. It should be a standard that if you need an OHV to travel the trail system, 4WD should be required while on the trail system. This will help reduce the erosion due to spinning wheels of vehicles in 2WD. I am not certain that this is a common ideal held by all the OHV community, but one that makes sense to me.

As seen in 2007 the implementation of the winter trail closure of Lower #2, #7 and #9 really had very little affect on those who actually enjoyed the winter off road experience as well as the overall economy. During the winter months the Tellico OHV area does not see large number of visitors, however there are a

minority of off road users who do enjoy this time of year to engage in their passion, or this may simply be the only time that they can get the time off of work to enjoy their passion. This may be a decent way to assist in the cost associated with the maintenance of these trails during the frost thaw cycle as well as give those very popular trail segments a little time to rest. The total winter closure as seen in the 2008 season is not justified and has caused a great economic negative impact to the local economy as there are no visitors to the area for the supporting businesses of the Tellico OHV area…. The significant rain event closures are not a viable way to manage the Tellico OHV area. This place is nationally known vacation destination. User groups, families and other visitors sometimes plan a year in advance to visit the Tellico OHV area…. This process is usually not easily altered at the last minute…..

Response: While a winter closure is included in Alternatives B, D-modified, E, and F-modified, the storm-event closure and 4WD lock-in requirement is only in Alternative B. We recognized when developing alternatives that the storm event closure could be problematic and for that reason did not include it in Alternatives E and F.

2-13.<u>Representative Public Comments Regarding High Challenge Opportunities Among the Alternatives</u>

Many of the problems with the area as I see it could be resolved by closing the most difficult trails[lower #2 #7 #9 #11 #12]as the users of these trails are the ones causing the most damage to the rest of the trail system from my experience when I visit the area [I.E. heavily modified trail rigs ,not street legal] This past year has been the most enjoyable one so far with the trails that were closed this year. I know my opinions are not very popular with the mainstream off road community but I'm more into the peace and tranquility of nature and not the run -it -till- it- breaks crowd and we are the ones that are loosing out, like I said there are plenty of private places to go to spend a day in the extreme stuff but for a guy like me the private parks have little to offer.

Closing down the higher challenge areas of the Upper Tellico OHV area will severely limit the ability of these national events to be held at the Upper Tellico. This kind of education and information is not offered by any local group, land users, or land owners. Losing the national events will mean not only less users to the area, but also less education of users in terms of their skills and their understanding of how to care for the natural resources. It likely that more environmental impact, more personal injuries, and more vehicle damage would occur without these national events which provide a tremendous benefit to OHV users and the Upper Tellico area

It is trails like Lower 2, Slickrock, School bus, and Guard rail that make Tellico the place it is, and they are the trails that help bring tourist dollars to our state. To close Tellico in any way would be a horrible mistake felt for generations.

The Forest Service has proposed closure of high challenge trails such as Lower#2, #7, #9, #11, #12. As documented by the Caliber Engineering report, these trails are suitable for off road users and would not have an environmental impact with proper maintenance and management by the Forest Service.

Do not exclude the "high challenge" areas, this is the reason people travel to the region. These trails can be managed properly and sustained with effort but to exclude the high challenge trails with language like "provide moderate to easy trails" would be a permanent end to patrons of Tellico OHV area.

With the latest announcement of trail closures I feel that it is impossible to ensure "user enjoyment" when propositions are being created that exterminate "high challenge opportunity" trails. These high challenge areas are why the OHV community supports Tellico so faithfully. If you take way these areas (Alternatives B, C, D) you take away user enjoyment and you effectively eliminate the presence of the OHV community in this area.

Modify plans A or F. Don't take away the high challenge areas that make Tellico special. Modify the trail density rules and the rules regarding trail difficulty. Tellico is the king of the very few south eastern street legal OHV areas. Nothing on public land compares.

The Forest service considered multiple alternatives, but all of them with the exception of Alternative A (doing nothing) reduce the attractiveness of the park to OHV users who primarily go to Tellico to experience the unique high challenge trails. While you detail the other opportunities within a radius of a few hundred miles, you seem to fail to recognize that closing this area severely impacts most of the OHV users in the entire Southeast US. For The goal of the Forest Service should be to maintain or enhance the recreational value of the park for OHV users while protecting the environment and water quality as previously established in their management plans for the area. The two are not mutually exclusive! Almost all OHV users would readily agree to taking steps to protect the environment as long as the quality of the OHV experience is maintained. This could be accomplished by relocating sections of trails close to creeks and streams, implementing modified best management practices to control erosion, and adding additional miles of high challenge trails in areas strategically located to minimize sediment runoff. Example, I have a moderately built but street legal vehicle. I can tolerate driving the 100 miles to Tellico in it for a weekend of recreation, and while other areas do exist, locations like Harlan Kentucky that have similar experience are way too far to go for a weekend and way to far for me to drive my vehicle, which would require me to purchase a tow vehicle, a trailer, and take time off of work to enjoy a similar experience. Therefore, on a personal basis this would have a severe impact on my recreational opportunities

Response: The importance of the high challenge areas to the Upper Tellico OHV experience was identified as a Significant Issue during scoping and Alternatives E and F were designed to provide more high-challenge opportunities than Alternative B (proposed action). Alternative F is modified in the EA in response to comments to include the Rock Garden challenge area. F-modified is described in Chapter 2 of the EA and the effects are disclosed in Chapter 3.

2-14. Representative Public Comments Associated with Building Bridges in the Alternatives

I would hope that a bridge would be built on Trail 5 at that creek crossing (if it has not been done already).

I understand the importance of keeping the habitat there balanced, but there are ways of working together with 4x4 groups to achieve the kind of balance that this area needs. For example: Building bridges over streams where local trout "might" be affected by the use of some trails.

It seems that someone could come up with a solution to the problem without having to close it altogether. Perhaps bridges could be built over the waterways and the park could be closed on rainy days. …I'm sure there are enough 4WD clubs that would help keep the trails maintained. Its getting to the point where you can't go 4 wheeling anywhere anymore so I hope you will keep Tellico opened and come up with a solution to the problem.

Closure is not management….I believe that if water quality is an issue isn't there a possibility of bridge or rocky stream crossings? Clearly there is a better answer to this problem than just closing it completely.

Response: A number of bridges already exist on trails of the Upper Tellico OHV System and new or replacement bridges are included in the cost for Alternatives B, D-modified, E and F-modified. There are also numerous springs and seeps throughout the trail system that require culverts or other devices to help channel water off, from, or across system trails. The sheer amount of springs and live water that must be crossed is part of what makes costs of repair and maintenance so high.

2-15. Representative Public Comments Supporting Alternatives that Limit OHVs

As an avid fly fisherman and conservationist, I would like to support reform that limits off road use around this delicate river and its tributaries.

I am in favor of supporting trout streams and clean water over ORV use in the Tellico River watershed. Native trout are becoming far too rare to sacrifice them for off road vehicles that cause serious habitat decline. If ORVs are allowed to

remain in the forest I would like to see them used in a responsible way that keeps them away from areas that will erode or affect water quality.

As a fly fisherman and hiker who has a home on Lake Santeetlah, I wholeheartedly endorse proposed restrictions or bans on ATV in the Tellico River area. The stricter the better!

Given the Forest Service's decades-long track record of inadequate maintenance of the Tellico ORV area, Alternatives A, E and F which would maintain or expand ORV usage are unacceptable. The Forest Service projects that these alternatives have no or "low" likelihood of meeting water quality standards.

With due respect to those who enjoy OHV activities I am totally opposed to their use in the Upper Tellico and any other portion of the National Forest with the exception, at least in this context, of the seasonal use of a little over 10 miles of existing Forest system roads to provide for public highway-legal vehicle access for hunting, fishing, and emergency purposes

I support any and all efforts to curb activity involving OHVs in this area whereby sediment and the erosion thereof negatively affects the water quality and stream-base of the run-off creeks and the upper Tellico River.

Please do all you can to keep the trout healthy by not allowing the Off Road Vehicles to damage the river any longer.

I am very against compromising coldwater streams for ATV fun.

It is my opinion that no brook trout steam can survive with vehicles tearing up the land near the stream and thus I am in favor of closing all of the OHV trails to all off-highway vehicles, to include ATVs; to allowing those trails to be for hiking only, and to keeping the 10 miles of existing forest system roads in the area upgraded enough so that it is either tar and gravel or asphalt so that people with disabilities, as well as folks who are getting old and cannot hike that much anymore will have access to the streams, as well as to the area.

Response: Alternative C and D-modified would eliminate Upper Tellico as a designated OHV trail system. Alternative C would leave about 13 miles of roads available for highway-legal vehicles; Alternative D-modified would leave about 22 miles of roads available for highway-legal, high clearance vehicles.

2-16. Public Comments Associated with Forest Supervisor Identifying a "Preferred Alternative"

While the preferred alternative in the EA is listed as alternative "B", Marisue Hilliard lists there "personal preference" as Alternative "C" which closes the entire area to OHV use. This is not only unprofessional, but it also hints at a

"desired" or "pre determined" outcome by that forest supervisor and the Forest Service before the public comment period is even finished. Does this negate the entire NEPA process? Are there not certain steps that need to be taken before a decision is reached? Should the public even comment during the public comment period if the Forest Supervisor has already reached their decision? Obviously they have already made their choice, and do not care about the public input that is mandated by the NEPA process.

I am extremely displeased with the forest supervisor's comment that the preferred alternative listed in the EA is not the forest supervisor's "personal" preferred alternative. This comment by the forest supervisor is not only unprofessional, but shows that forest service may have already selected an alternative even before the public comment period has ended. This is in violation of the NEPA process, and a process error. The entire EA should be thrown out if the process is not allowed to continue as it should. The public should be able to comment.

I am outraged that the forest supervisor has listed their "opinion" in a letter regarding the Tellico OHV area. It especially irks me that they did so against the recommendation of the Environmental Assessment report. It is not the position of management to tout their position on a topic that the public hasn't had a chance to even comment on.

From what I understand, the forest supervisor has already listed his recommendation before the public comment period has ended. This seems outrageous to me and gives the impression that the public opinion does not matter.

The apparently pre-determined decision to close one of the oldest and most recognized OHV areas on the entire east coast shows that the NEPA process has been corrupted and should be declared invalid. How can a fair and balanced review of the use of an entire area occur, when the Forestry supervisor involved in the judgment process has already indicated that he has a "preferred alternative" other than the listed alternative in the Report?

Response: Alternative C was identified as the “preferred alternative” in a letter accompanying the predecisional EA and signed by the Forest Supervisor who is the individual responsible for making the decision. The concept of the “preferred alternative” is recognized in the Forest Service Handbook 1909.15 as: “The alternative(s) which the Agency believes would best fulfill the purpose and need for the proposal, consistent with the Agency’s statutory mission and responsibilities, giving consideration to the environmental, social, economic, and other factors and disclosed in an EIS.” While it is not required to disclose a preferred alternative in a predecisional EA, identifying it in the letter was done as a courtesy to enable individuals and organizations to better respond during the comment period. Alternative C is analyzed in the EA as

having a high likelihood for meeting State and Federal standards related to water quality (see Table 3.1.2.1.1).

Other Public Comments Associated with the Alternatives

2-18.I have seen what closing parts of a trail down does the forestry comes in and they cut down 25 or 30 trees to keep off-roaders from going up 500 ft of trail.

Response: Rehabilitation of closed trails might include felling into the entrenched trail sections those trees undermined by the eroding side slopes, reshaping the soil to reduce the amount of entrenchments, and planting with large woody vegetation to increase the rate of soil stabilization.

2-19.Closing the trail system without giving these systems an opportunity to flourish appears to be a copout. That along with the grossly oversized bridge that was built makes it appear that the USFS is preparing for development, not land preservation… Rotate trails through open and closed seasons so that maintenance can be performed.

Response: Information regarding the bridge you reference is in Section 4 of this document. If any development plans were known they would be disclosed in the "cumulative effects" sections of Chapter 3 in the EA. Any future action in the area would require disclosure following the procedures set out in the National Environmental Policy Act implementing regulations.

2-20.Save the trout, stop out competing them with non-native species, limit the catch, allow the OHV users to get more involved with trail maintenance, and find a solution that ultimately saves the trout and allows access for people to continue to generate the desire to conserve wild lands.

Response: The trout situation is discussed in Section 3.2 of this document. OHV users have provided support for trail maintenance. The range of alternatives includes a variety of management options for Upper Tellico. The rationale for selection/non-selection of alternatives is in the Decision Notice.

2-21.This area could be rehabbed for horse back riding and mountain biking which might eventually offset the temporary loss of tourism dollars for this area.

Response: As neither horseback riding nor mountain biking were identified as an issue during scoping, no alternative was developed to include one or both of these activities. They could be considered at some future date and would require disclosure following the procedures set out in the National Environmental Policy Act implementing regulations.

2-22.I submit that the Forest Service has chosen to arbitrarily and capriciously react to a few people wanting to limit access to this public resource to all but themselves, rather than any scientific information.

Response: Extensive data was collected in the Upper Tellico area prior to developing and analyzing the alternatives presented in the EA. The presumption that scientific information was not used is inaccurate. Se the References Cited section of the EA for an idea of some of the scientific information used.

2-23.I would like to ask the Forest Service to look to see about acquiring stimulus money to repair and improve Tellico.

Response: The Tellico trail project was proposed as a project under the American Recovery and Reinvestment Act and may or may not receive funding. The current status of funded projects can be found at: http://www.fs.fed.us/arra/arra-releasedfsprojects-2009-6-3pm.pdf

2-24.First suggestion is: Ban these over sized vehicles from the trails. The people driving these monsters are the main problem. They come there with on thing in mind, go or break. Ask the people to be responsible and inform the ranger station about people abusing the privilege to ride these trails. Second suggestion is: Maybe only allow ATVs.

Response: In response to comments Alternative D has been modified to retain about 22 miles of road open to only highway-legal high clearance vehicles, rather than all types of OHVs.

2-25.Shutting out the group that has put so much work into this public asset amounts to theft of thousands of documented man hours of the public's time.

Response: We acknowledge the volunteer support that has contributed to maintaining Upper Tellico in the past. This support, combined with fee collections and appropriated dollars, has not been sufficient to prevent visible sediment from the trail system reaching the stream system. Analysis indicates that reconstruction, repair, and maintenance would need to be escalated well beyond what has occurred in the past to stand a chance of meeting State and Federal water quality standards. The likelihood of meeting State and Federal standards is displayed in Table 3.1.2.1.1.

2-26.Even after much reading and attending the open house/question and answer day at Murphy, I still find it difficult to understand (from a simple, common sense perspective) closing the entire trail system - and I'm not talking about just keeping trail one open. I trust the FS will make a good decision based on public demand and

land conservation. It is our desire that all the trails at Tellico remain open to the public and that resources (Government or otherwise) be used to maintain it and minimize harm to the streams and trails.

Response: Alternative A, B, E, and F would keep the OHV trail system open. The rationale for selection or non-selection is in the Decision Notice.

2-27.The Forest Plan (amended 1994) correctly calls for protection of environmental resources, specifically water quality. But that same Forest Plan also provides an exemption for OHV trails that may not meet water quality standards. The specific text from Table III-47 is excerpted here: Insure road stability and protection of the environment, except, existing four wheel drive ways may not be in full compliance with water quality standards. Develop strategies to bring these roads into compliance unless physical conditions preclude complete correction and the road cannot be legally closed. Schedule implementation consistent with funding. If OHV trails do not meet current water quality standards then it is incumbent upon the Forest Service to work towards the goal of a properly managed trail system according to the guidelines of their own regulatory framework. I would suggest an incremental approach to management, rather than an abandonment of all pretenses of management.

Response: Alternatives B, E, and F retain an OHV trail system while eliminating some of the sediment sources. Rationale for selection/non-selection is in the Decision Notice. Most roads and trails in the system are not subject to legal constraints, such as deeded private access, and could be legally closed.

2-28.Finally, the Forest Goals represent a noble attempt by your predecessors to protect "multiple use…across interests", to "meet the livelihood and recreation needs", to "improve economic prosperity of local communities, the region and the nation", to "provide for a variety of recreation activities" and to "use facilities to the highest level of access practicable". These are all clearly spelled out in Forest Goals 1, 2 and 8 and they should be reviewed prior to making a final decision. But most of all, Forest Goal Number 10 is to "facilitate discussion among interests and enlist them in joint problem solving". I would like to respectfully submit that this goal has been completely eschewed following the initial threat of a lawsuit by the SELC and others. Instead, we are presented with a "preferred alternative" that satisfies the loftiest desires of one interest group (trails available only to fishermen) while criminalizing another interest group.

Response: A range of six alternatives was presented for review during the 30-day Notice and Comment period. This opportunity allows the public to provide additional information and ideas to consider as the decision-making process progresses. The rationale for the decision is in the Decision Notice for this project. There is no intent to "criminalize" an interest group. The purpose

and need for the project is to stem the flow of sediment entering the Upper Tellico River and its tributaries from the OHV System (EA, Chapter 1.1).

2-29.I think what your doing is wrong. But the worst part is you would rather hurt the community around the trails because of your neglect of the trail in years past and your ability to do more test on whether the clear cutting you have done in the area as well as the induction of non native species into the streams have caused the decline of the trout population.

Response: A comprehensive trail condition survey identified 673 locations where sediment was leaving the OHV trail system and entering the stream system. We acknowledge a backlog of trail system repairs and maintenance has not helped the situation in Upper Tellico. The prevalence of highly erosive soils and abundant rainfall, seeps and springs, along with increased trail use makes it difficult to provide a level of maintenance sufficient restrain accelerated erosion from the trail system. No erosion has been identified that can be traced to logging activities under the jurisdiction of the Forest Service. We acknowledge that historic logging prior to Federal ownership that established most of the original roads and trails did contribute to sedimentation at that time. Many of these old roads were closed, stabilized and revegetated. The ones that remain part of the OHV System continue to contribute sediment to area streams with continued use. Non-native species are not causing a decline in trout populations in the upper Tellico watershed (see Section 3.2 of this document for details).

2-30.Trail density is being exceeded. An allowable trail density by the Forest Plan is 25 miles for 8000 acres. I am not opposed to reducing the trail density to the required levels. However, we should be able to do this and maintain some significant challenge areas. Again, I believe a trail rotation plan will achieve this objective as well as protecting the fishery.

Response: A trail rotation system was considered but not analyzed in detail. See Chapter 2 of the EA for more information.

2-31.The Forest Service has proposed to open trail segments #10 and #10A to the use of all off road vehicles. I agree with that proposal. I believe that most of the issue with the maintenance of the trail system could be less impacted with more trail riding opportunities. The addition of the above mentioned trails would create less trail congestion, less impact on other trails in the system, add to the intended off road users experience and would benefit my business as well as the overall local economy. These trail segments would increase the easy to moderate trail mileage, giving more trail opportunities to visitors. By adding to the total mileage of the trail system, this will create a much more positive value to cost ratio. I believe this would cause people to stay longer in the area, which leads to more money entering the local economy. This would be a good use of taxpayer money with a positive impact to the intended off road user. The Forest Service has proposed to add additional trails to the entire

trail (Including opening all currently closed trails) system in general. I support this proposal and believe this would be a very positive move towards the viability of the Tellico OHV area. The Forest Service implementation of newly added trails could not only be used to rotate out trails for maintenance or winter closure, it would lesson the impact of use overall for the area. This option would add to the intended off road user experience, positively impact the environment and be good for the local economy.

Response: Alternative E includes reconstructing Trail 10 for full-sized OHVs. Alternative F-modified includes constructing a new trail, Trail 13, for full-sized OHVs. Effects of these alternatives are in Chapter 3 of the EA. The rationale for their selection or non-selection is in the Decision Notice for this project.

2-32. One of the issues with the level of maintenance needed at the Tellico 0HV area is due to amount of actual trail miles and lack of maintenance/management by the Forest Service. Trail #l is not considered a trail by the intended off road users. Trail #1 (FS420) is a Forest Service rural (gravel) road that connects the States of Tennessee and North Carolina. Though because of the design of the Tellico OHV area, it is currently necessary because of the multiple entry points to trail segments that are on both sides of this roadway. However, by adding access from the Tennessee State Line Parking area and Alan Gap (North Carolina) parking areas by new trail segments this would create a opportunity for the Forest Service to pave the highest contributor of silt entering the Tellico Water Shed, Trail #l (FS420) and still offer access to both sides of Tellico OHV area to the intended off road users and unregistered motor vehicle. This option would be a good use of taxpayer money and would positively contribute to the viability of the Tellico OHV area, local businesses and overall economy.

Response: We agree the Trail 1 paving would reduce sediment coming from this source, and the new trail segments from Stateline and Allen Gap proposed in some alternatives would provide more access options for non-highway-legal vehicles. Effects of the various alternatives are disclosed in Chapter 3 of the EA.

2-33. I find none of the alternatives appropriate because you have not considered all the facts in reference to the area.

Response: Following the implementing procedures for the National Environmental Policy Act, alternatives to a proposed action are developed when significant issues concerning effects of the proposed action are identified through the scoping process. Eight Significant Issues were identified. These are described in Chapter 1.4 of the EA. The alternatives developed in response to issues are described in Chapter 2 of the EA. Data

and information sources are then used to analyze the environmental effects of these alternatives that are then disclosed in Chapter 3 of the EA.

2-34. Comments on the Paving of Trail 1 – A unified response to all these comments is at the end of this section

Public Comment: Nowhere in the EA is anything said about the process of actually paving Tipton Creek trail. Nowhere in the EA are the negative effects of what this paving will do to this area.

Public Comment: The ATV Riders Association of America does agree that Tipton Creek is being contaminated with silt from the trail UT 1 from Tennessee line to the junction of UT 1 and UT 4. This section should be paved.

Public Comment: The Forest Service has proposed paving of trail#1 (FS420). I do not have an issue with this decision if the intended off road user of unregistered motor vehicles have access to the trail system from Alan Gap as well as the Tennessee State Line parking areas.

Public Comment: By adding access from the Tennessee State Line Parking area and Alan Gap (North Carolina) parking areas by new trail segments this would create a opportunity for the Forest Service to pave the highest contributor of silt entering the Tellico Water Shed, Trail #1 (FS420) and still offer access to both sides of Tellico OHV area to the intended off road users and unregistered motor vehicle.

Public Comment: We would benefit from both an expense and safety perspective if Trail 1 (FS Road 420-1) were improved for street vehicle access.

Public Comment: By paving 420-1, it will also help the local economy and create income for those who contract the road work.

Public Comment: I travel this section of road quite often and paving all of it you can would be great. I think perhaps it will offer some jobs for people who need the work now and most of all I think it will be a benefit for the streams and creeks on 420-1.

Public Comment: I would personally like to see the entirety of Trail 1 paved so that all of the general public can access this area….

Public Comment: All I can say is, "I wish I owned private mountain land bordering a popular trout fishing area that the Forest Service is PAVING an access road to." Several developers are about to become extremely wealthy at the hands of the government. Thanks.

Public Comment: Another key factor that is not discussed in this report is something that is listed as part of every Alternative except for A. That is the paving of Tipton Trail (trail #1).According to the EA report, this trail is 5.3 miles long.

Tipton Creek trail is within 100' of a mapped stream and over 70% of that mile is within 25' of a mapped stream. Nowhere in the EA is anything said about the process of actually paving Tipton Creek trail. Nowhere in the EA are the negative effects of what this paving will do to this area. This is blatant attempt at leaving out the full effects of all of the alternatives and needs to be changed. The USFS needs to redo this EA report and this time it needs to be done in a non-rushed fashion and include ALL the correct finds. "Likely" and "Nearly" and "Possibly" all need to be removed and replaced with definite findings

Public Comment: Nowhere in the EA is anything said about the process of actually paving Tipton Creek trail. Nowhere in the EA are the negative effects of what this paving will do to this area. This is blatant attempt at leaving out the full effects of all of the alternatives and needs to be changed. Asphalt is petroleum based product and will increase the petroleum hydrocarbons in the area.

Public Comment: Where is the study on what direct and indirect effects this will have on the area? What are the cumulative effects the paving and the paving equipment will have on the area? How will the paving process be able to not destroy a large amount of vegetation and negatively affect the soil and water quality when almost three quarters of a mile will be paved within 25' of a mapped stream? I demand a full study done on the effects of paving Tipton Creek trail before an Alternative is chosen.

Public Comment: You do not list any of the drastic impacts that paving trail 1 will have on the trout waters.

Public Comment: Has a study been done to determine the impacts of run-off water due to addition of an impervious surfaces being introduced into the forest?

Public Comment: Propose that in addition that trail 1 not be paved but should be kept closed most of the time. Paving will greatly increase traffic and greatly hinder the possible connection of 2 significant roadless areas in the 2 states.

Public Comment: Paving FS 420-1 is a land disturbing activity and will add petroleum based pollutants to the environment

Public Comment: I would rather no new paving, but if it helps to allow for protecting more of the forest in the long run then I am in favor of it.

Public Comment: Paving trail 1 is not a good idea due to thermal and other pollution directly connected to the stream. If you use standard asphalt pavement you will increase flow rate and volume of runoff to Tipton Creek. This will cause degradation of the stream. If you pave you must consider al alternative such as porous pavement.

<u>Public Comment:</u> I would prefer that Alternative C be modified by refraining from paving Trail 1. I think it would be wiser to gate it and leave it available only to administrative traffic. Large roadless areas lie on both sides of Trail 1. Closing the road to public traffic would limit its use severely. Hopefully retaining its use for administrative purposes only would limit the silt flowing from it to acceptable levels. This modification would retain for the Forest Service and for the public the option in the future, to join the roadless areas that lie on each side of Trail 1.

Response: The proposed improvements to Trail 1 for all action alternatives are clarified in each alternative description in Chapter 2 of the EA. Effects from paving Trail 1 have been incorporated into Chapter 3 of the EA.

All action alternatives propose to pave an additional 4,860 feet from Tipton Crossing to Harshaw Gap (see Trail 1 graphic in the Graphic Supplement). Paving this section would reduce the sediment coming from this stretch of Trail 1 which is entering Tipton Creek.

Maintenance improvements to Trail 1, including paving, will require heavy equipment and result in increased movement of soil and sediment from the road prism. However, the effects of the paving process will be short-term and minor compared to the improved long-term effects that the paved surface will have by reducing the amount of sediment that is entering Tipton Creek.

Many of the above comments raise the concern regarding the fate of petroleum-based hydrocarbons generated from paved surfaces. In a 2003 study by Clinton and Vose, they observed that total petroleum hydrocarbons (TPH) were more than 300% below EPA and NCDENR standards for TPH in sediment. While there is not a clear understanding of the long-term implications of these TPHs on the ecosystem, they are believed to be minimal compared to the current negative effects of sediment runoff into Tipton Creek.

Regarding the comment on increased surface runoff from an impervious surface, properly installed road design structures will ensure that drainage will be managed to minimize sedimentation.

Overall, paving the proposed section of Trail 1 will result in less erosion and soil movement off of the road prism and therefore, less total suspended solids in the stream (Clinton and Vose 2003). For more discussion regarding the effects of paving Trail 1 see Chapter 3.1 of the EA.

Comments on Chapter 3 of the EA

3.1 Soil and Water

3-1.<u>Public Comment:</u> The USFS water quality study is not conclusive and is contradicted by the fact that water quality meets state requirements as proven by independent studies. The State of NC has not cited the water quality as being substandard.

Response: NC Division of Water Quality recently completed an assessment of habitat, benthic macroinvertebrates and water chemistry for streams in the upper Tellico area and reference streams. While the NCDWQ study resulted in a bioclassification of "excellent," **NCDWQ found there was clearly more sand, embeddedness, and in some cases silt in the streams adjacent to the OHV system than in the reference streams.** The streams adjacent to the OHV system displayed definite indicators of the effects of sedimentation in the array of macroinvertebrate species collected, even though those differences didn't reduce the bioclassification. An example of this was the reduced number of filter-feeding caddisflies (species especially susceptible to the adverse effects of sedimentation) in sites adjacent to the OHV system. Also, in each case NCDWQ calculated lower scores for habitat characteristics for streams adjacent to the OHV system than calculated for the reference streams. In total, the NCDWQ data "suggest adverse impacts to many of the streams" in the area of the OHV system (NCDENR 2009).

3-2.<u>Public Comment:</u> 74,000 tons of soil has been displaced, but it does not address how much of this was originally dug out by the FS in an attempt to "help" Tellico with erosion and runoff.

Response: If some part of this was "originally dug out by the FS," there is no record of this and the amount is irrelevant to the fact that sediment continues to come from the trail system and enter the stream system today.

3-3.<u>Public Comment:</u> The erosive soil mitigation efforts of BMPs may have been more effective if used in earlier years and not as a last effort.

Response: It is likely that additional mitigation measures beyond what was implemented during previous years would have helped reduce erosion and sedimentation.

3-4.<u>Public Comment:</u> On page 64 it states that the toxicity tests within and adjacent to 3 high challenge areas within the OHV system have shown elevated levels of petroleum products. But then states "we do not yet know if these substances are reaching water, so more testing is planned: Either complete the test or delete this from the EA.

Response: The EA has been edited to be specific to soil testing.

3-5.<u>Public Comment:</u> EA needs to clearly state ALL possible contributing factors to the petroleum products and not ASSUME where they came from.

Response: Petroleum hydrocarbons as diesel and gasoline, oil and grease portrayed in Table 3.1.1.1 can only come from vehicles. The EA has been edited to state this fact.

3-6.<u>Public Comment:</u> Table 3.1.1.1 shows diesel fuel is a lot higher than gasoline. It should also have a table that shows % of OHV that run on diesel, % of OHV that run on gasoline.

Response: This data has not been collected from the Upper Tellico OHV System users.

3-7.<u>Public Comment:</u> Runoff will happen regardless of OHV use; your EA even stated that on the non-OHV section runoff was high.

Response: Runoff will occur from most compacted areas during storm events. Our greatest concern is the level of erosion that occurs as a result of runoff.

3-8.<u>Public Comment:</u> The very close proximity of these FS dirt and gravel roads is the largest contributor of sedimentation entering the creeks, streams and rivers that the native and non-native trout species depend on.

Response: The EA supports this statement.

3-9.<u>Public Comment:</u> The scientific appraisal of the situation* has concluded that the primary impact to the environment and the ecosystem is _not_ off-highway vehicle use, but is in fact the logging going on in the forest. In fact, the Caliber report indicates: "Historic clear-cutting of land in Upper Tellico has contributed more to the off-site sediment transport than the trail system."

Response: The Caliber report comment must be qualified. Watershed analysis from 2005 and trail surveys conducted during 2007 and 2008 found that the trail network was the primary source of sediment in the watershed. Impacts from recent logging were not found during the analysis. The “historic clear-cutting” that established the original road system (the residual of which is the OHV trail system) that occurred prior to Forest Service acquisition is acknowledged as having contributed sediment to the stream system. This does not negate the effects of the current sediment sources from the current trail system.

3-10.<u>Public Comment:</u> If poor water quality is a concern, enforce each group that goes out to bring an approved spill kit with them. Make the spill kits available at the office where you get your pass. Nobody wants to offroad in dirty messy trails.

Response: Spill kits do not mitigate the effects of sediment sources coming from the trail system. They could eliminate some hazardous materials entering the environment and would be a good idea for OHVers to have on hand.

3-11.Public Comment: If water quality is an actual issue, then scheduling certain trails to be open when silt in the stream bed will not be so detrimental. I'm also assuming the bad water quality is linked to a declining fish population done by your states game and fish?

Response: Sediment will persist in the stream channel, sometimes for years depending on the occurrence of high flows. Two scheduling techniques presented in the alternatives were winter closures and storm event closures, both of which were determined to have a positive effect in reducing sedimentation.

3-12.Public Comment: I would like to direct your attention to the study by Kathleen B boomer, Donald E Weller and Thomas E Jordan, entitled "Empirical Models Based on the Universal Soil Loss Equation Fail to Predict Sediment Discharges from Chesapeake Bay Catchments" This study was from the Smithsonian Environmental Research Center, Edgewater, MD 21037-0028 ."Our results reinforce previous arguments that USLE-based sediment delivery models provide an inadequate framework for managing land and water resources at the catchment scale" If the USLE is NOT intended to predict the effects on stream water quality, then this entire Environmental Assessment is based on faulty science. How can the forest service close an area if they are not completely sure about the amount of actual sediment?

Response: The USLE was not used in the analysis. Actual amounts of sediment are difficult to determine, therefore we looked at sediment sources and the affects of sediment to the stream channel and water quality.

3-13.Public Comment: On page 20 of the Tellico EA it is stated; "Compared to current North Carolina industry practices these routes would have never been constructed" This line must be removed from the assessment. While current trends may be different, it is unfair to judge the decisions of the past based on current information. No information about the reasons for why the roads were built as such is presented, only that it is done differently now. There is no mention of technology advances that allow the industry to build roads differently, no citing of regulation that had since been passed that would disallow the roads built the way they were.

Response: Regardless of when and how the travel routes were constructed, they are currently contributing sediment to the stream system and are not sustainable in their current condition.

3-14.<u>Public Comment:</u> According to this EA on page 34 there are only 6.05 miles of trails within 100 feet of streams. This also needs to include how many miles are within 1/4mile, 1/2mile, and 1mile from streams.

Response: The criteria for evaluation of impacts are 25 feet and 100 feet. The recommended larger distances become meaningless relative to stream impacts.

3-15.<u>Public Comment:</u> (turbidity samples needed from other rivers; natural occurrence)

Response: We do have turbidity measurements from other rivers representing managed and natural conditions. See Table 3.1.1.4

3-16.<u>Public Comment:</u> The FS EA states that the water quality does not meet NC standards but the SITA report states that the water not only meets the NC standards but that the streams have excellent water quality…Are these differing reports not grounds enough for at the least another study and…can the FS provide a notice of Violation from the State of NC?

Response: The Caliber Report does not assess water quality relative to the Turbidity Standard. They tried to use aquatic macroinvertbrates as a surrogate for the State protocol. More detailed information concerning this is located in section 3.2 of this document. NC has not issued a notice of violation for the Tellico OHV Area. It only recently conducted its own macroinvertebrate survey and has not yet made any determination.

3-17.<u>Public Comment:</u> Keeping the trail system with the included high challenge area intact and open for responsible use has not shown to decrease the area's water quality

Response: Erosion from the trail system was found to be a major contributor to sedimentation in the Upper Tellico River watershed. Sediment is considered a pollutant by the state of NC, and thus decreases water quality.

3-18.<u>Public Comment:</u> I was up there three years ago after a long absence and could not believe the amount of silt that was in the river….1). Their sport creates a devastating amount of erosion on the trails that they ride. 2) Gravity delivers the product of their environmental destruction to a fragile river ecosystem that is being choked to death by the silt that runs down from their playground.

Response: Comment noted.

3-19.<u>Public Comment:</u> Is it not true that these trails were "entrenched" first by the lumber companies then later by the Forestry Service. The OHV users can not be blamed for all the soil that has been displaced.

Response: Most trails were historic logging roads and skid trails inherited by the Forest Service and that had continued in use without proper maintenance resulting in road degradation and entrenched conditions. Some initial entrenchment may have been intentionally created to connect trails and/or make a desired experience, but nowhere near the degree that exists widely on the trail system today.

3-20.Public Comment: Tellico watershed is not a suitable location for an ORV area because of highly erosive soils and close proximity to important trout streams.

Response: This comment is supported by the EA.

3-21.Public Comment: What is perhaps worse is the petroleum levels in the soil that will get washed into the streams. Unlike the sediments that settle out in quiescent areas, pools, etc., the petroleum will make its way all the way down the river and pollute water and shore lines all the way.

Response: We agree that petroleum products leaching through the soil to adjacent streams is a concern. We have not determined if petroleum is reaching the streams. We have not yet determined appropriate remedial measures to remove these substances from the soil.

3-22.Public Comment: The FS provided information states that Jenks Branch is the creek with the most sedimentation. I feel that it is coming from the Tipton Community rather than the OHV area. The upper portion of the "Lower 2" trail does not drain in the watershed and, even if it did, can be maintained. This erosion is not due to the OHV area and therefore we as users of the area should not be punished for actions for which we are not responsible.

Response: The Tipton Community is not in the Jenks Branch drainage.

3-23.Public Comment: The failure by the Forest Service to consider other sources of sedimentation shows false information in the agency's implication that the OHV system is the cause of high turbidity measurements.

Response: We looked at all potential sources of sediment including the private lands, instream sources e.g., streambank erosion, and the road/trail system. The OHV trail system was found to have many sources of sediment reaching adjacent streams.

3-24.Public Comment: The EA reports states that there are 2000 sources of visible sediment along the 39 mile trail system. The EA needs to define what these sources are from. How many of these sources are the direct result of motorized recreation in the trail system? In the EA, ALL 2000 sources need to be listed with latitude and longitude coordinates and there needs to be a description of each supposed "source" of sedimentation. For all 2000 sources, it also needs to be determined from where this run off is coming from.

Response: The predecisional EA states on page 25, 2,003 drainage features on the Upper Tellico OHV Area trail system. These features are points where runoff from the trail can exit the trail prism. Fifty-three percent of these features were not properly functioning and 673 of the sites delivered sediment to streams.

3-25.<u>Public Comment:</u> Item1. a and b. The State Water Quality rules establish a 10 foot separation between the active disturbed area and the waterbody. You reference the NC Forest Practice Guidelines for Water Quality. These have no force and effect, they are guidelines. While these guidelines present some good ideas they are very vague and obscure. The fact is that the Tellico OHV system meets the requirement in the 15A NCAC 02B.0206. As a matter of fact and by admission in your EA exceeds the rule by 2.5 times.

Response: The "10 feet separation" in the comment refers to a NC Forestry BMP found on page 46 of the NC Forestry BMP Manual to protect Water Quality (2006). BMPs refer to methods or practices that can be implemented to help prevent pollution from getting into our water and thereby protect water quality. BMPs are suggested practices that can be used to meet the Forest Practices Guidelines. **In North Carolina, the Forest Practices Guidelines (FPGs) are mandatory**, statewide requirements defined by N.C. Administrative Code 15A NCAC 01I .0100 - .0209. All forestry-related, site-disturbing activities must comply with the FPGs if that activity wishes to remain exempt from permitting and other requirements specified in the North Carolina Sedimentation Pollution Control Act of 1973 (referred to as the SPCA). The following NC FPG Performance Standard relates to the comment:
15A NCAC 01I .0201 STREAMSIDE MANAGEMENT ZONE
(a) A streamside management zone (SMZ) shall be established and maintained along the margins of intermittent and perennial streams and perennial waterbodies. The SMZ shall be of sufficient width to confine within the SMZ visible sediment resulting from accelerated erosion.
(b) Ground cover, or other means, within the SMZ shall be sufficient to restrain accelerated erosion.
(c) Access roads, skid trails, except as provided in Rule .0203 of this Section, logging decks and mill sites shall be placed outside of SMZs. When barriers such as property lines or limiting land features prohibit the location of any of these outside of SMZs, they can be located within the SMZs. When located within SMZs they shall have effective erosion control and sediment control structures or measures installed to restrain accelerated erosion and prevent visible sediment from entering intermittent or perennial streams or perennial waterbodies. The NFsNC LRMP refers to NC FPG Related to Water Quality for silviculture for trail management (LRMP page III-185).

3-26.<u>Public Comment:</u> Furthermore, fisherman walking on the banks and in the water also stirs up sediment. Has there been a study on this?

Response: Concentrated foot traffic on stream banks can trample vegetation and expose bare mineral soil to erosion. This was noted to occur only in small sections of the Tellico River near the state line and at Rough Crossing. Erosion of these sites is very minimal. Where fisherman walk in the stream sediments may be disturbed and become suspended. Fishermen may disturb deposited sediment, however the condition surveys verified that sediment continues to be deposited into the stream network from the trail system.

3-27.<u>Public Comment:</u> It's been shown the sediment issue has not increased due to the trail use.

Response: Continued trail use does not allow the trail surface to stabilize with leaf and vegetation cover. Bare soil is more erosive than soil covered with leaf litter and vegetation. Condition Surveys identified 673 sites where sediment was leaving the trail system and entering the stream system. Therefore your statement is incorrect.

3-28.EA also says that petroleum products are elevated but how can we say that OHVs are hurting this area when the tests are incomplete and the petroleum could be coming from forest service equipment.

Response: Soil contamination from petroleum was found at the "high challenge" areas where the Forest Service does not commonly ride because of the difficulty level. The Forest Service does not own equipment that can traverse these areas. It is possible that maintenance equipment has worked on these areas and has contributed to soil contamination from mainly diesel.

3-29.<u>Public Comment:</u> It is common sense that if you think silt is entering a stream from a particular source, you need to check up stream as well as down stream to check for silt coming from other sources as well. This was not done in the EA

Response: Potential sources of sediment were evaluated including private lands, the stream channel, and the road/trail system. Tipton Creek is a good example where we measured suspended sediment above the trail and private inholding, below the private inholding, and at the outlet of the channel into Tellico River.

3-30.<u>Public Comment:</u> USFS claims that by surveying existing roads, they can tell how much silt has entered the streams from the OHV system, not taking into account that most of the roads in question were built 70-80 years ago for logging purposes and only recently converted to OHV trails. Without a baseline, it is impossible to scientifically prove any of their claims.

Response: We do not claim how much silt has entered the streams from the OHV system. Page 27 of the EA only states "An estimated 74,550 tons of soil eroded from the current trail system since the establishment of the old logging

transportation system, approximately 50 years ago." We do maintain that sediment continues to leave the trail system and enter the stream system, and this can easily be seen by an observer.

3-31.Public Comment: OHV traffic on the Tellico trails has imposed heavy impacts on the land, watercourses, and fish habitat. The EA clearly establishes the connection between erosion and sediment pollution of the Tellico and tributary streams

Response: The EA supports this statement.

3-32.Public Comment: I notice in the EA that the Tellico OHV area streams turbidity levels are out of spec during storm events. What are similar streams and rivers at during storm events in your area? It would be interesting to know what percentage of rivers would pass during a storm event.

Response: Table 3.1.1.47 of the final EA shows total suspended solids and turbidity data from several streams in the Tellico and Citico Creek drainages.

3-33.Public Comment: Tennessee Department of Environment and Conservation has visited the area and found no problem with the water quality.

Response: The TDEC Water Quality Assessment of the Little Tennessee River Watershed, chapter 3, page 11, shows that the Tellico River Fully Supports all of its designated uses.

3-34.Public Comment: The ORV routes have deteriorated into deeply eroded gullies, and they have become a source of sediment pouring into the Tellico River and its tributaries with every rain storm.

Response: Table 3.1.1.3 in the EA displays 8.43 miles of trail currently in an entrenched condition. These sections of trail were found to be difficult to drain and maintain, and therefore more prone to erosion. The level of sediment delivery to Tellico River depends on several factors such as proximity to streams.

3-35.Public Comment: Chapter 3 of the EA, specifically data in Table 3.1.1.1 neglects to take into consideration the drought conditions that began in earnest in 2002. As you know, shallower streams and warmer waters can significantly impact aquatic life.

Response: Table 3.1.1.1 displays petroleum products found in the soil at some high challenge areas. It is not clear what connection is implied in this comment and therefore have no further response.

3-36.Public Comment: The test for acid rain should be included or proved that the OHV area is causing the acid rain

Response: The EA does not imply that the OHV trail system is causing acid rain. The EA states that acid rain can have an effect on aquatic organisms.

3-37.Public Comment: FS has not provided statistically valid data for sedimentation sources, background turbidity levels, brook trout population trends, etc.

Response: The EA conforms to USFS direction to use "Best Available Science" in the analysis of alternatives (Forest Service, USDA, Richard J. Cook letter dated May 2, 2007).

Statistical analyses are an accepted and practical tool for investigating relationships among groups of data. However, statistical significance (or nonsignificance) is highly dependent upon the survey design and random error effects. For example, the year-class failure for the rainbow trout population within the Tellico River in 2003 was "statistically insignificant" because the sample design did not lend itself to a statistical analysis. However, the biological significance of collecting 0 young-of-the-year rainbow trout is more indicative of the cumulative effects of the spring 2003 flood, possible acidification effects, and decades of habitat degradation from OHV use in the watershed. When these individual effects work in concert (cumulative effects), an environment is created where consistent rainbow trout reproduction is compromised.

The scientific literature demonstrates that trout populations are negatively affected by sedimentation (EA Section 3.2.1). While other environmental factors (floods, droughts, etc) affect trout densities, these effects occur to all watersheds. The trout population densities in the Upper Tellico River watershed are lower than other streams (Besler et al. 2007). The results of the NC Wildlife Resources Commission monitoring (including survey methods and data) in the Upper Tellico River watershed are contained within Besler et al. (2007).

When the upper Tellico area brook trout densities are compared to the 14 trout streams across western North Carolina, the streams affected by the OHV trail system exhibit a lower density than many of the reference streams (Besler et al 2007). The reference streams presented by Besler et al (2007) cover a full range of environmental conditions (e.g. substrates, stream orders, etc.).

Additionally, Bonner (1983) does not present correlation analyses for any of the streams within the document, nor does it provide trend analyses for trout streams in the upper Tellico River watershed.

3-38.Public Comment: Does a single location of visible sediment from a road or trail reaching a stream mean that the road or trail is in violation of the Forest Plan and therefore should be closed?

Response: The Forest Plan defers to NC Forest Practices and Guidelines (FPG) to protect Water Quality. The NC FPG Performance Standards state that access roads, when located within SMZs, shall have effective erosion control and sediment control structures or measures installed to restrain accelerated erosion

and prevent visible sediment from entering intermittent or perennial streams or perennial waterbodies (15A NCAC 01I .0201(c)). It goes on to say that "stream crossings shall be avoided when possible. Access roads and skid trails which must cross intermittent or perennial streams or perennial waterbodies shall be constructed so as to minimize the amount of sediment that enters the streams because of the construction. These crossings shall be installed so that:
(1) stream flow will not be obstructed or impeded;
(2) no stream channel or perennial waterbody shall be used as an access road or skid trail;
(3) crossings are provided with effective structures or ground cover to protect the banks and channel from accelerated erosion;
(4) they shall have sufficient water control devices to collect and divert surface flow from the access road or skid trail into undisturbed areas or other control structures to restrain accelerated erosion and prevent visible sediment from entering intermittent and perennial streams; and
(5) ground cover, or other means, sufficient to prevent visible sediment from entering intermittent and perennial streams and perennial waterbodies shall be provided within ten working days of initial disturbance and will be maintained until the site is permanently stabilized." (15A NCAC 01I .0203)
Therefore, a single location of visible sediment from a road or trail reaching a stream is in violation of NC Performance Standards and the Forest Plan. Additional BMPs would need to be applied to "restrain accelerated erosion and prevent visible sediment from entering intermittent or perennial streams of perennial waterbodies.

3-39.<u>Public Comment:</u> Which guidelines for turbidity are being violated during a storm event?

Response: The standard states: "the turbidity in the receiving water shall not exceed…10 NTU in streams, lakes or reservoirs designated as trout waters… if turbidity exceeds these levels due to natural background conditions, the existing turbidity level shall not be increased. Compliance with this turbidity standard can be met when land management activities employ Best Management Practices (BMPs)… recommended by the Designated Nonpoint Source Agency… BMPs must be in full compliance with all specifications governing the proper design, installation, operation and maintenance of such BMPs" (NC DENR 2007).We understand that the standard is violated when applied BMPs are not effective at preventing visible sediment from entering streams causing turbidity levels to exceed 10 NTUs.

3-40.<u>Public Comment:</u> Wording on pg. 46, 47, and 49 of EA "Trail 1 would be paved, and seasonal and storm-event closures would be implemented" This implies to the commenter who lives in the Tipton Creek community that trail 1 would have seasonal closure and this person would be unable to access their home.

Response: The EA has be edited to clarify that Trail 1 would not be closed for seasonal and storm-event closures

3-41.<u>Public Comment:</u> Based on water quality alone, the water is better leaving the area than what enters above the OHV area.

Response: Your statement is not supported by the EA. Looking at the turbidity data from 2002 – 2004 presented in Table 3.1.1.2 we can look at the "Tipton Creek Above 420-1 Crossing (TC-3) (reference)" site to get an indication of turbidity above the OHV area. Both the mean and median turbidity values are lower than sites below the OHV area. Turbidity values leaving the OHV area, represented by "Tellico R. Stateline" site, are not the highest from the watershed, but are higher than the Tipton Creek site previously mentioned.

3-42.<u>Public Comment:</u> The FS claims of degradation of the Tellico River's water quality are totally without scientific proof. Caliber Engineering Consultants, LLC, clearly shows that the river system is very healthy.

Response: The Caliber Assessment does not assess water quality relative to turbidity or sedimentation as the FS EA has done. Caliber tried to use aquatic macroinvertbrates as a surrogate but misapplied the State protocol. More detailed information on this is located in section 3.2 of this document.

3-43.<u>Public Comment:</u> The FS has based its action on some evidence of turbidity during significant rain events. There is not a stream in the mountains that does not experience this to varying degrees due to natural runoff.

Response: Your statement that turbidity during rain events is experienced to some degree by many streams is true and stated in the EA on page 37. Turbidity is one factor among many considered in this analysis.

3-44.<u>Public Comment:</u> p.27 Using figures based on erosion caused prior to the OHV system being in place as well as from logging and other activities unrelated to the OHV system should not be considered in the process of determining the future of the OHV system.

Response: It is our understanding that erosion did occur on the logging road system prior to the establishment of an OHV system. However the current trail system continues to be a source of sediment to the Tellico River and its tributaries.

3-45.<u>Public Comment:</u> p. 25 Winter closure already in effect should have provided for comparison data on actual sediment runoff from periods when open during high stream flow periods, and when the OHV system is closed during that period.

Response: Data from this period has been added to the EA.

3-46.<u>Public Comment:</u> In the EA, it is clear that the Forest Service has ignored history in calculating the total erosion. The engineers took the LxHxW of all the entrenched trail segments and calculated a volume measurement that greatly overestimates the volume that actually eroded. They've ignored statements by Mr. Gunner Byrd made during Forest Service meetings where he flatly stated to them that the original Forest Service and volunteer laborers bulldozed those trails to be entrenched at the USFS directive (i.e., Larry Fox) as that was thought to be the BMP at the time. The USFS further assumed that all the soil that is no longer there reached the streams, which cannot be assumed.

Response: In trail sections where entrenchment was constructed it would not be considered erosion, but the material was still displaced onto the adjacent side slope. The EA does not claim that the missing soil all reached the stream channel. In fact it is most likely that most of the sediments remained on the landscape. However our condition surveys identified over 600 locations where sediment from the trail system was reaching the stream network.

3-47.<u>Public Comment:</u> There is no reasonable belief that impacts to aquatic resources, including trout populations, will be affected with this closure, since OHV use has not been implicated in the studies. It is arbitrary to implement these actions when in fact there is no proven correlation between trail use / existence and perennial and intermittent stream protection.

Response: Condition surveys have identified over 600 locations where sediment was leaving an OHV trail and entering the stream system. Continued use of sites prone to erosion does not allow for rehabilitation and regrowth of vegetation that would stabilize the soil, making it much more difficult to stop the erosion and sedimentation.

3-48.<u>Public Comment:</u> Although activities "undertaken on forestland for the production and harvesting of timber products" are generally exempted from the Sedimentation Pollution Control Act, the Forest Service's operation and maintenance of the Tellico ORV trail system is unrelated to any silvicultural purpose or program.

Response: The management areas designated in the Forest Plan for the Upper Tellico OHV Area allow for lands to provide opportunities for timber harvest and other silvicultural activities. Since the Tellico trail system is a dual designation of road and trail, the System is the transportation system for silvicultural activities.

3-49.<u>Public Comment:</u> With 31% of the trail system hydrologically connected to streams, there is no doubt that the trails are contributing substantial sediment to local streams.

Response: The EA supports that the trails are contributing sediment to the streams.

3-50.<u>Public Comment:</u> The findings of the draft EA described above leave little doubt that the Tellico ORV Area is causing downstream violations of these Tennessee water quality standards. The Clean Water Act prohibits the Forest Service from taking action that causes violations of North Carolina and Tennessee water quality laws.

Response: We do not know if activities in the upper Tellico River watershed are causing downstream violations in Tennessee water quality standards. It is true that the Forest Service is not exempt from meeting state water quality laws.

3-51.<u>Public Comment:</u> The greater the trail density, the more likely that the cumulative effect of sediment-laden runoff will impair water quality. No management decision, whether for timber production or recreation opportunity, can be made without regard to impacts on water quality.

The existing trail system in the Upper Tellico Off-Highway Vehicle Road and Trail System ("Tellico OHV System") has exceeded the limits placed upon the development of this area by the Nantahala and Pisgah Land and Resource Management Plan ("Forest Plan") with little or no regard to impacts on water quality caused by 1) proximity of primitive roads and trails to streams, 2) density of roads and trails at twice the standard in the Forest Plan; 3) overuse of trails by OHV drivers during wet periods exacerbating erosion and sedimentation effects.

Response: This statement is partially true in that an increase in disturbance on the landscape increases the potential for erosion and sedimentation. Other factors contributing to sediment-laden runoff impairing water quality include those that affect routing of the water and sediment to the stream, e.g., slope of the land, distance to the stream, and the filtering efficiency of the buffer.

This EA takes a hard look at the affects of the Upper Tellico OHV Area on water quality.

3-52.<u>Public Comment:</u> In fact, erosion is a natural occurrence in nature, but cutting down acres of tree or harmful chemicals in water are not.

Response: We agree that erosion naturally occurs. What drives our concern in the upper Tellico River watershed is the elevated rate of erosion from natural occurrence because of the trail system.

3-53.<u>Public Comment:</u> With respects to Water Quality reports, this area is and has been specifically set aside as an OHV area.

Response: Designation in the Forest plan for OHV use does not relieved the Forest Service of meeting legal requirements of the Clean Water Act.

3-54.<u>Public Comment:</u> To the facts - it seems that the EA is a bit biased with rainfall and sedimentation figures only for high rainfall parts of the year…You study is flawed!!

Response: Sedimentation is studied and displayed in the EA since it is the primary issue in the analysis. Monitoring has and is currently occurring year round.

3-55.<u>Public Comment:</u> Environmentally the impact can be controlled, erosion issues are taken a little far there is so much natural erosion in areas like this and I believe the OHV community does get the blame for a lot that we do not effect, with a plan in place and help from the users of the trails managing ground water contamination and erosion can be accomplished.

Response: Unfortunately the current trail system was found to be a major contributor to sediment to the Tellico River. The EA identifies the "likelihood of BMP success" and "likelihood of meeting state and federal standards" in Table 3.1.2.1.1 for each alternative.

3-56.<u>Public Comment:</u> On page 2 of the Tellico EA it is stated: "It is virtually impossible to remove the water from deeply entrenched trail sections using standard road and trail engineering or drainage structures. If the trail becomes worn down to bedrock it may also expose springs that add to water flow and thus potential sedimentation. Several trail sections on the OHV System exhibit this deeply entrenched condition, making it difficult to manage the runoff without closure and rehabilitation." I respectfully ask that this section be removed. To say that something may happen if something else causes it is wrong, let's stick to facts here. Are there springs in danger of being exposed? If so, have they been individually identified and mapped? If they have been identified and mapped has the danger been assessed for each one individually? This is a critical issue and I don't think "Ifs" and "Mays" are a fair way to determine the future of this area.Certainly, if "Tread Lightly" practices are in use the impact on water quality can be minimized and continued responsible enjoyment of the Tellico Park can be had by the tax payers.

Response: The EA has been edited to say: "… Sections of the trail system are worn down to bedrock exposing springs that add to water flow and thus potential sedimentation."

Educating users of Tread Lightly practices is a good idea. However, physical changes to the trail system are needed to protect water quality.

3-57.<u>Public Comment:</u> Having traversed some of the trails, and seen the surrounding area, I am curious what percentage of the silt comes from the trails and what percentage comes from the surrounding non-trail area that is not covered with a high level of ground vegetation due to the tree canopy….Has any work been done to calculate the quantity of silt in the river system? Is it possible this came from non trail areas? Does anyone know what was the level of silt in the river before the trails opened? Is silt is this system natural or anthropogenic? Has any work been considered to stabilize the non trail areas?

Response: The greatest source of sediment in the upper Tellico River watershed is from human activities that remove vegetation and expose soil to weathering processes, e.g., freeze/thaw and rainfall, and storm runoff. Thirty-four percent of the drainage features on the OHV trail system contributed some amount of sediment to the Tellico River stream network and 31 percent of the trail length was connected to the stream network during storm runoff. Other potential sources of sediment include home site development and roading on private lands, stream bank erosion, and timber management, e.g., skid trails. Timber management has occurred within the last 10 years in the Jenks Branch drainage, but monitoring has shown that BMPs to be effective a preventing sediment from entering the stream network. Stream channels are stable because of the presence of stable substrate e.g., boulders. Erosion of stream banks does occur in places, particularly where the stream butts up to the toe of a steep side slope, but these sites are not common. Sediment produced by private activities is not well understood. The development within the Tipton Creek inholding is a likely source of sediment. These home sites are subject to State laws requiring erosion control. We do know from turbidity data from 2002-2004 that the mean turbidity went from 17 NTU above the private inholding to 77 NTU below the inholding, indicating a source of sediment from the private inholding. Sediment coming from the private land in the headwaters of Peckerwood Creek has not been assessed. We do not have data of sediment levels before the road/trail system was constructed. We have anecdotal evidence that because of timber harvesting sediment was excessive on the stream bottom of the Tellico River during 1966.

3-58.<u>Public Comment:</u> I notice in the EA that the Tellico OHV area streams turbidity levels are out of spec during storm events. What are similar streams and rivers at during storm events in our area? The Toccoa/Ocoee River in the area is also a big trout area. I'm sure it doest fall in the FS's realm of responsibility but I'd bet honest money that it wouldn't measure up either during storm events? It would be interesting to know what percentage of rivers would pass during a storm event. How that could be held up as some sort of measure? Every river around here runs brown with sediment during a storm event. That spec might not be realistic.

Response: We do have turbidity measurements from other rivers representing managed and natural conditions. See Table 3.1.1.4.

3-59.<u>Public Comment:</u> The Predecisional EA suggests that Alternative F would implement BMPs that would be "designed to restrain accelerated erosion and prevent sediment delivery to streams" (3.1.2.2). However, the Predecisional EA also states that there would be a "Low likelihood of BMP success" (3.1.2.2). This idea is absurd to me, how can you "design" BMPs to perform a specific task and then say that they there is a "Low likelihood" that they will successfully perform the task for which they were designed? Were the BMPs designed to fail? If so, re-design the trail runoff features, trail surfaces, sediment traps, and maintenance programs so as NOT to fail (If you need to call it something other than "BMPs" in order to implement a plan that works, do so), don't just close the trail system.

Response: BMPs can be implemented with the intent for success, but due to environmental conditions, in this case close proximity of some trails to streams and continued use during wet weather, effectiveness of preventing visible sediment from entering a stream is low. An intense storm event can lead to runoff control device failure to the point where sediment-laden runoff is flowing directly into streams. This can occur quickly; before equipment and personnel can reach the area and physically correct the damage.

3-60.<u>Public Comment:</u> From my experiences on the OHV trails at Tellico there is little damage done to the trails by the Jeeps that myself and company uses. The worst erosion area that I have seen while using the trails was performed by preservation groups. By hauling in massive amounts of soil to cover a 3 foot rock ledge on the trail known as "Slick Rock" they have constructed a major mud problem that didn't exist before hand. If the trail had been left alone the serious sediment issue there would not have existed.

Response: We are unaware of this occurring and would appreciate any additional information regarding this activity.

3-61.<u>Public Comment:</u> Realistically, what would the USFS do to stop erosion on trails they entrenched even without trail traffic? Most of the trails are rock, which does not erode!

Response: Rehabilitation of closed trails can occur through pulling in or reshaping the steep, eroding side slopes of the entrenchment, including allowing the undermined trees to be felled into the entrenchment, covered with soil and planted with large woody vegetation that would stabilize the reshaped soil.

3-62.<u>Public Comment:</u> The "petroleum levels" mentioned in the USFS EA were notable. As a counterpoint, did you take the petroleum levels of soils near roadways to compare? Every drop of oil product deposited on roads makes it into the watershed, how can you target the OHV area without targeting the roadways in the national forests with concern for the watershed? This is a point that you may deem incomparable but think about it, there are solutions to the petroleum levels on trails. My recommendation is to make each user take a ~responsible off road user course"

with certification annually (and charge a fee, maybe $100 /year?) which includes how to '~tread lightly, stay on the trail, limit wheel spin, carry garbage bags for litter, carry a spill clean up kit, etc. This would educate the users and generate income that can be funneled into the maintenance of the area, and increase awareness for everyone.

Response: The Forest Service focused in on the high challenge areas because that is where we suspected that contamination existed due to odor and visual observations of petroleum products. It is likely that there are other areas on the Forest where the risk of contamination to the soil is high. These areas are identified during FS management activities and mitigated.

Education of the public on treat lightly techniques is a fine idea.

3-63.<u>Public Comment:</u> I've fished and camped in Tellico since I was a boy and now with my young family. For a long time, I remember the river turning a murky turbid brown whenever a decent rain fell. I remember thick sediment on the riverbed A few years ago I visited New Hampshire and was stunned at the clarity of the rivers. I had never seen water like that this winter. I went to Tellico to fish, after the off-road vehicle area had been closed for a whole season - a wet season, as a matter of fact. The river before and after that steady rain was clean and clear. It was beautiful. I could see colors of stones at the bottom of medium-depth pools. Please, please, please, protect this beautiful resource. Protect the fish that grow there.

Response: We continue to collect turbidity data that should indicate if turbidity levels have dropped since closure of the system. Additional data is included in the EA from what was in the predecisional EA.

3-64.<u>Public Comment:</u> BTW. I've been trying to find the FS rules on water quality but haven't been able to pin it down on line. I have found the NC Sedimentation Pollution Control Act. But it seems to be about sediment control in work sites or places being developed. IF that is the source of the FS guidelines, I believe it is being wrongfully applied to this situation.

Response: Please refer to the Nantahala and Pisgah National Forest Land Resource Management Plan pages III-40 & III-185 for FS direction for management. Access the plan at the following FS web site: http://www.cs.unca.edu/nfsnc/nepa/nantahala_pisgah_plan/plans.htm

3-65.<u>Public Comment:</u> The assessment compared the erosion levels of various forests to the Upper Tellico OHV System and a parallel may have been reached but a direct comparison of OHV system to another OHV system may have provided a more comprehensive measurement.

Response: This would have been an interesting comparison; however, we do not have trail runoff data from another OHV trail system in similar geology.

3-66.Public Comment: The erosion on these trails has GOT to be lessened by the work that has already been done with gravel, rocks and bridges. Compared to logging, these trails are not very much of an impact.

Response: The application of the mitigation measures that you mentioned very likely reduced rates of erosion from the trail system. The 2007 and 2008 Trail Condition Surveys did, however, take into account current conditions. Logging can certainly have impacts to water quality if Forest Practices Guidelines (FPG) are ignored, however, Forest Service monitoring of FPG compliance on National Forest System lands shows logging to have minimal impacts to water quality.

3-67.Public Comment: However I still find it hard to believe that the sediment that is being washed into the rivers in the area is caused solely by the OHV traffic. If the sediment is the only concern, is there not a bridge plan that can be put into effect that would cover each water crossing, thus eliminating much of the sediment caused by OHV vehicles? I know there have been several bridges erected in the trail system to bypass major thoroughfares. I also understand that the sediment is not just entering the trails at the crossings, but my question is, with the steep terrain of the mountains, will this sediment decrease without traffic or stay nearly the same?

Response: Extensive restoration and rehabilitation activities would occur, including reshaping and planting with woody vegetation to accelerate stabilization of the soil.

3-68.Public Comment: On pages 33 and 34 the EA has a tough time determining whether or not BMPs will actually help or not in regard to keeping sediment out of the water when there is a trail within 100' of the water. This is very wishy-washy. Provide a detailed opinion that is supported by fact and references.

Response: In section 3.1.1, subheading BMP Effectiveness Summary, the EA states that "Sediment production from the trail can be reduced by implementing BMPs, but where the trail is located within 100 feet of a stream channel, preventing sediment delivery to streams is unlikely considering all the work that is needed." This statement is based on surveys done on Trail 1, presented on page 33, and followed up on page 34 with a discussion of trail survey results relative to sediment delivery. Approximately 87 percent of sediment sources from the trail were within 100 feet of a stream.

3-69.Public Comment: I have read the reasons why the USFS want to close this area to public motorized recreation and they are false. Nothing has changed from years past, now suddenly there is a water quality problem in a stream caused by vehicles. This was never a problem in the past and I'm sure it is not now.

Response: Based on the 2007 and 2008 trail condition surveys we have determined that there is a need to take action that would prevent visibly sediment

from entering the stream network in the Upper Tellico River watershed. No such extensive condition survey was performed in the past, so the implication from your statement is that this sedimentation condition has existed for some time but it just went undocumented.

3-70.<u>Public Comment:</u> The science does not support the closure decision. The USDAS EA measured science only during high-rainfall periods, which prejudices the data and doesn't account for the fact that the silt is being flushed by the river as it should.

Response: We measured turbidity during storm events because that is when storm runoff occurs. It is during these events when erosion occurs and the potential for sediment delivery to the stream network increases. To determine if the sediment is having an affect on the stream we measured channel bed composition, pool filling with fine sediment, and macroinvertebrates. It is true that fine sediment is moved downstream during high flow events, but because of the sources of sediment to the stream (the OHV system predominant among them) more sediment comes in to take its place.

3-71.<u>Public Comment:</u> While your report may find suspect water quality and reports of sedimentation (during normal storm events, a time when the natural process of erosion is supposed to occur) report from the State of Tennessee and North Carolina state "that all waters in the Tellico area are of adequate quality to support all protected uses" and "the Tellico River downstream of the Tellico trail system fully supports all protected uses". These two quotes are in reference specifically to trout populations, trout waters, and trout breeding areas. Despite your assessment that trails are sources of silt runoff and sedimentation, there are no empirical studies that document specific siltation levels. Neither a baseline "normal" silt level nor a "defining moment" follow-up finding that shows any type of increase in silt levels or any evidence of silt levels that would be problematic to endemic species. If there were such a study, then it would be beholden upon you to identify specific sources of siltation such as logging operations and roads built specifically and exclusively for such uses, private in holdings, and OHV use, and to quantify siltation levels from each potential source.

Response: To define and document siltation levels we measured average pool filling and channel substrate composition and compared data from the Upper Tellico River Watershed with reference streams, Tables 3.1.1.8 and Figures 3.1.1.9-3.1.1.11 in the EA. Reference streams, Citico Creek and Sycamore Creek, were considered as the baseline.

NC Division of Water Quality recently completed an assessment of habitat, benthic macroinvertebrates and water chemistry for streams in the upper Tellico area and reference streams. While the NCDWQ study resulted in a bioclassification of "excellent," **NCDWQ found there was clearly more sand, embeddedness, and in some cases silt in the streams adjacent to the OHV**

system than in the reference streams. The streams adjacent to the OHV system displayed definite indicators of the effects of sedimentation in the array of macroinvertebrate species collected, even though those differences didn't reduce the bioclassification. An example of this was the reduced number of filter-feeding caddisflies (species especially susceptible to the adverse effects of sedimentation) in sites adjacent to the OHV system. Also, in each case NCDWQ calculated lower scores for habitat characteristics for streams adjacent to the OHV system than calculated for the reference streams. In total, the NCDWQ data "suggest adverse impacts to many of the streams" in the area of the OHV system (NCDENR 2009).

National Forests Management Act (NFMA) 1982 Regulations (36CFR 219) "In order to insure that viable populations will be maintained, habitat must be provided to support, at least, a minimum number of reproductive individuals and that those individuals can interact with others in the planning area." "Each alternative shall establish objectives for the maintenance and improvement of habitat for management indicator species."

Under NFMA regulations, the USFS is required to protect and improve habitats for selected management indicator species. Raleigh (1982) stated that "optimal brook trout riverine habitat is characterized by clear, cold, spring-fed water; a silt-free rocky substrate in riffle-run areas; an approximate 1:1 pool-riffle ratio…". Raleigh (1982) also showed that a habitat suitability of $\geq .8$ occurs when the average size of substrate within spawning areas is between 2mm and 8mm. Pebble count data (Section 3.1.1 of the EA) show that the OHV impacted streams have elevated fines (diameters less than 2 mm) compared with the reference streams. The primary scientific literature is replete with studies documenting the negative effects of anthropogenic sedimentation (fines) and turbidity upon salmonids (Sigler et al. 1984; Newcombe and MacDonald 1991; Shaw and Richardson 2001; and Harvey and Railsback 2009; additional literature cited in Section 3.2.1 of the EA). The primary sediment sources within the Upper Tellico River watershed have been identified to be the OHV Trail system (Section 3.1.1 of the EA). Furthermore, the EA demonstrates the negative effects these trail-derived sediments are having upon the habitats (pool-filling and increased fines within riffles) of the four aquatic management indicator species (Section 3.1.1 and Section 3.2.1). Elimination of the trail-derived sediment sources would allow the streams within the Upper Tellico River watershed to process the existing sediment load, removing much of the sediments from the pools and riffles, and improvement of habitat conditions for the management indicator species.

3-72.Public Comment: The parking lots need to be closed in all the FS properties to prevent petroleum based pollution from reaching the water, eventually. That pollution part of the EA stinks.

Response: When petroleum spills occur in FS parking areas clean up is required. Where continued contamination to soil and water occurs, corrective action would be taken be the Forest Service.

3-73.<u>Public Comment:</u> The EA mentions in the "Background" section on page 2 that the current BMPS are failing. Later in the EA, page 29 to be specific, it is stated that several factors exist that limit the effectiveness of the BMPs, including soils sensitive to erosion, high precipitation amounts and intensity, a dense stream network, and shallow groundwater, among others. As an engineer, I understand these factors as constraints for developing maintenance practices and designing effective erosion control, not as reasons that "set-up any land disturbing activity for failure..." I would expect any solution evaluated to take advantage of the latest in engineering practices and technologies to reduce the amount of maintenance necessary while allowing the trails to remain open. The EA states that some sediment traps built in the Upper Tellico OHV area are not built to their effective size due to site constraints. Of those sediment traps, how many were built by USFS experts? How many by hired contractors? How many by volunteer labor from SFWDA? Were any of these people given proper design criteria for building a sufficient sediment trap? Perhaps, a more comprehensive design and implementation plan for BMPs designed for the difficulties particular to the Tellico area would be more effective than current "carte blanche" BMPs. On page 30 of the EA, a comment is made that I would like to see explained in more detail. "Compared to the current level of trail maintenance this would increase maintenance frequency considerably, at a minimum 4 times per year for the entire trail system, and an estimated 12 times, for trails within 100 feet of streams." What is the current maintenance schedule? How many hours are provided by USFS employees or contractors compared to volunteer hours? As stated in the EA, the current BMPs are ineffective. Is this due to the size of the sediment traps and water bars, or due to the current maintenance schedule? It would seem, based on the rainfall data provided, that the Tellico area would justify an increased frequency for maintenance. Why is this not addressed in the USFS alternatives? I can imagine that any BMP implemented in the Upper Tellico OHV will require a higher maintenance level to remain effective.

Response: A hard look was given to solutions that would take advantage of the latest in engineering practices and technologies to reduce the amount of maintenance necessary while allowing the trails to remain open.

For most of the sites the ground conditions do not allow adequately sized sediment traps due to the grade of the terrain in the locations that sediment traps are needed. Also the distance to the stream from the trail will not allow adequately sized traps, in most cases to be installed without excavating the stream banks in order to install traps. Traps have been installed throughout the trail system in these conditions causing additional erosion problems due to lack of space required to install.

3-74.<u>Public Comment:</u> A major concern that I have regarding the sedimentation study is that there are NO sites located upstream of the OHV trail system. I find it difficult to understand how the impact of the OHV system on the stream system can be evaluated if the stream is not sampled upstream of the trail system. I would expect

to see TSS and turbidity measurements upstream of the trail system. Also, the failure by the Forest Service to consider other sources of sedimentation invalidates the agency's implication that the OHV system is the cause of high turbidity measurements. This leads to an inaccurate and unsupported conclusion that closure of the OHV system will resolve turbidity issues, if such exist.

Response: The discussion of Suspended Sediment and Sediment Deposition in the EA presents data from the "Tipton Creek Above 420-1 Crossing (TC-3)" site. This site is above the influence of the trail system in the upper Tellico River watershed.

3-75.Public Comment: The EA ignores or brushed over significant aspects of the watershed and hyrdrologic background which are central to the purpose/need for action as well as any management strategy for the Area. The EA correctly notes that the Area's watersheds lie primarily, for regulatory purposes, within the Little Tennessee River Basin. The Little Tennessee River Basin "encompasses about 1,800 mi^2..." North Carolina Division of Water Quality, Little Tennessee River Basin Report (March, 2007); Executive Summary at I (the Executive Summary is available at http://h2o.ehnr.state.nc.us/basinwide/documents/ExecutiveSumrnar 03] .pdf). For rough calculation purposes, and given that "[a]lmost all of the Upper Tellico OHV System is within" this reporting Basin, the OHV Area comprises approximately 0.00694 percent of the Little Tennessee River Basin (8,000 acres divided by 1,800 square miles). Generally speaking, "{t]he Little Tennessee River basin has one of the most outstanding and diverse aquatic communities within the entire state." *Id.* at ii. Tellico Creek is located within subbasin 04-04-01 and is listed as "supporting" by the State DWQ. Subbasin report (March 2007) at 1.1, Table 3 (subbasin report is located at http://h2o.ehnr.state.nc.us/basinwide/documents/Chapter 1 008.i~df). Public Comment: Overall, of the 139 stream miles in this subbasin, all but 2.1 miles have been rated, with only 3.7 determined to be impaired, none of which are in the Area. To the extent it is singled out in the subbasin report, Tellico Creek is noted among those "[s]treams that have consistently been rated Excellent...." *Id* at 16. Similarly, Hanging Dog Creek, which is in the Hiwassee River Basin and is hydrologically connected to sections of Area Trails 1 and 2, is rated as "supporting" by the State DWQ. Hiwassee River Subbasin 04-05-02 Report (March 2007) at 2.1. Table 5 (located at http://h2o.ehnr.state.nc.us/basinwide/documents/Chapter2Subbasin0200 I .pdf). The Forest Service's efforts to create a self-inflicted water quality crisis contradict available data and the findings of the regulatory body with jurisdiction.

Response: Correction: 0.00694 x 100 = 0.694 percent.

The Tellico Creek you refer to in your comment **is not** in the Tellico River watershed. It is a direct tributary of the Little Tennessee River and is located in Macon County.

The State of NC has not monitored water quality in the Tellico River. NCDENR surveyed aquatic macroinvertebrates during the month of April 2009 for the first time, but an analysis of the results are not yet available.

3-76.<u>Public Comment:</u> Item 2 states that BMPs are "currently failing" and item 3 says BMPs are not sustainable. These statements are simply erroneous and are flatly contradicted by the Trails Unlimited and Caliber reports. The Forest is attempting to use the result of minimal management to justify total closure. Items 4 and 5 are similarly flawed. Applicable state standards for water quality are being violated. Turbidity measurements are not taken during stochastic events such as peak storm runoff. Again, the Forest should be more thoughtful before invoking such a standard, as there are probably very few sites or activities that could survive scrutiny under this standard. The EA ignores the guidance of the state water quality regulations, which provide, in part: Natural waters may on occasion, or temporarily, have characteristics outside of the normal range established by the standards. The adopted water quality standards relate to the condition of waters as affected by the discharge of sewage, industrial wastes or other wastes including those from nonpoint sources and other sources of water pollution. Water quality standards will not be considered violated when values outside the normal range are caused by natural conditions.

Response: The Trails Unlimited and Caliber reports do not take a hard look at BMPs and do not give an accurate description of the current condition. We measured turbidity during storm events, because that is when storm runoff occurs. It is during these events when erosion occurs and the potential for sediment delivery to the stream network increases. To determine if the sediment is having an affect on the stream we measured channel bed composition, pool filling with fine sediment, and macroinvertebrates. The State of NC has not monitored water quality in the Tellico River. NCDENR surveyed aquatic macroinvertebrates for the first time during the month of April 2009. Results of that survey are not available. We have consulted with the NC Division of Water Quality and believe that we are correctly interpreting the NC state standard for turbidity.

3-77.<u>Public Comment:</u> EA-Based Final Agency Action Will Violate the Clean Water Act. The EA is largely, and incorrectly, premised upon the Forest's apparent determination that management of the Area represents violation of the Clean Water Act. To the contrary, the Forest's determinations presented in the EA contradict the findings of the North Carolina Division of Water Quality. The Clean Water Act was enacted "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 125 1(a). The CWA makes the states primarily responsible for achieving the Act's goals. Id. at (b). Section 303 directs states such as North Carolina to adopt water quality standards, which are then reviewed by the EPA. Id. at §1313(a)-(c); 40 C.F.R. § 131.4(a). State water quality standards are developed for each water body and generally contain three elements: (1) designated uses (33 U.S.C. § 1313(c)(2)(A)); (2) criteria for allowable limits of specified pollutants (id.); and (3) an antidegradation policy to protect existing uses (Id. at § 13

13(d)(4)(B)). In North Carolina, such standards are partly contained in the North Carolina Administrative Code (the "NCAC"). As noted above, and contrary to the EA, applicable state standards are being met for those waters arising in the Area. The applicable waters are within the Little Tennessee River and Hiwassee River Basins. The only pollutant standard meaningfully discussed in the EA is turbidity, and the BA asserts that sediment load readings within the Area at peak storm runoff exceed the applicable 10 Nephelometric Turbidity Unit standard. BA at 36-37. However, these statements fail to recognize that the standards do not attempt to regulate, are not deemed violated by, "natural conditions." 1 5A NCAC 02B .0205. Similarly, the standard for turbidity is not deemed violated if "background levels" are above the standard or if BMPs are in place. 15A NCAC 02B .0211(3)(k). The BA misconstrues or misrepresents many of these regulatory provisions. Perhaps most importantly, the BA presents the flawed conclusion that existing conditions do not comply with state requirements or the Act. Instead, as noted above, "[t]he Little Tennessee River basin has one of the most outstanding and diverse aquatic communities within the entire state." Id. at ii. Tellico Creek is located within subbasin 04-04-01 and is listed as "supporting" by the State DWQ. Sub basin report (March 2007) at 1.1, Table 3 (sub basin report is located at http:/Ih2o.ehnr.state.nc.us/t~asinwide/documents/~hap~er 1008 .pdf).

Response: The Tellico Creek you refer to in your comment **is not** in the Tellico River watershed. It is a direct tributary of the Little Tennessee River and is located in Macon County.

The FS manages public lands in most instances without violation of the Clean Water Act. We do this by implementing management on the landscape that is appropriate for the area or region, taking into account land and soil types, climatic conditions, etc. Where reoccurring damage to resources important to ecological health occurs, a change in management is required.

NC Division of Water Quality recently completed an assessment of habitat, benthic macroinvertebrates and water chemistry for streams in the upper Tellico area and reference streams. While the NCDWQ study resulted in a bioclassification of "excellent," **NCDWQ found there was clearly more sand, embeddedness, and in some cases silt in the streams adjacent to the OHV system than in the reference streams.** The streams adjacent to the OHV system displayed definite indicators of the effects of sedimentation in the array of macroinvertebrate species collected, even though those differences didn't reduce the bioclassification. An example of this was the reduced number of filter-feeding caddisflies (species especially susceptible to the adverse effects of sedimentation) in sites adjacent to the OHV system. Also, in each case NCDWQ calculated lower scores for habitat characteristics for streams adjacent to the OHV system than calculated for the reference streams. In total, the NCDWQ data "suggest adverse impacts to many of the streams" in the area of the OHV system (NCDENR 2009).

We, the FS, have consulted with the NC Division of Water Quality and believe that we are correctly interpreting the NC state standard for turbidity.

3-78.<u>Public Comment:</u> On Page one of the EA you make the following statement: "There is a need to stem the flow of sediment that is entering the Upper Tellico River and its tributaries from the OHV System, and thereby improve habitat for native brook trout." I disagree with this assertion. If we are truly trying to improve the habitat for the native brook trout then we need to be about the business of reducing the flow of sediment entering the Upper Tellico River period, regardless of the source. We should be considering all sources of sediment. This EA does not consider all the sediment sources. To properly evaluate the total impact to the fishery the environmental assessment, while studying the impact of the OHV system, must include the contribution of other sediment sources. You have made an assumption that the OHV activity in the watershed is the only source contributing sediment of significance.

Response: The greatest source of sediment in the upper Tellico River watershed is from human activities that remove vegetation and expose soil to weathering processes, e.g., freeze/thaw and rainfall, and storm runoff. During condition surveys performed in 2007 and 2008, 34 percent of the drainage features on the OHV trail system were identified as contributing some amount of sediment to the Tellico River stream network and 31 percent of the trail length was connected to the stream network during storm runoff. Other potential sources of sediment include home site development and roading on private lands, stream bank erosion, and timber management, e.g., skid trails. Timber management has occurred within the last 10 years in the Jenks Branch drainage, but monitoring has shown that BMPs to be effective a preventing sediment from entering the stream network. Stream channels are stable because of the presence of stable substrate e.g., boulders. Erosion of stream banks does occur in places, particularly where the stream butts up to the toe of a steep side slope, but these sites are not common. Sediment produced by private activities is not well understood. The development within the Tipton Creek inholding is a likely source of sediment. These home sites are subject to State laws requiring erosion control. We do know from turbidity data from 2002-2004 that the mean turbidity went from 17 above the private inholding to 77 below the inholding, indication a source of sediment in the private inholding. Sediment coming from the private land in the headwaters of Peckerwood Creek has not been assessed. We do not have data of sediment levels before the road/trail system was constructed. We have anecdotal evidence that because of timber harvesting sediment was excessive on the stream bottom of the Tellico River during 1966.

3-79.<u>Public Comment:</u> In Chapter 3 of the EA you report data from various watersheds. You fail to evaluate each watershed for similarity to the upper Tellico watershed. You have reported data from other sub-basins but have not provided any analysis to determine if these basins as statistically similar in nature to the watershed in question. For example, you need to make a comparison of size, slope,

soils, percent of private ownership vs. public, flow, management techniques, stream characteristics, rainfall amounts in each basin, etc. You should compare these factors weighted by area, by slope, by soils and combinations of each. Then statistically evaluate similarities and differences to evaluate if the reference watershed is significantly similar to the watershed in question.

Response: Appendix E in the EA provides a comparison of the upper Tellico Watershed and reference watersheds.

3-80.<u>Public Comment:</u> You indicate that you began a monitoring plan in 2008 to evaluate the impact of the OHV area and continue for 6 years. You have assumed 6 years to provide for 3 "bank-full" events that you think occur every *1.5* to 2 years. It is not apparent, and you may not realize that a 2-year event can occur today and one two days from today or one may not occur for 10 years or longer. If you are serious about evaluating three 2 year events I suggest you review Hydrology and Sedimentology for Small Catchments by Barfield, et. al. 1986. Look specifically at work done by C.T. Haan on the probability of a certain storm event occurring in any given year. Dr. Haan developed a plot that will allow you to read a time period for your monitoring plan to have the highest probability that the given event will occur. I think you will be surprised at the results. As a result of this monitoring plan you have only reported two small storm events. It does not appear that your monitoring plan has been active long enough to provide enough data to develop a conclusion. Therefore, no decision should be until this monitoring plan is complete and the results properly analyzed and reported. You have not provided a QA/QC plan or procedure document for the monitoring plan. For example, how will you verify that all the bubble tube samplers are functioning before a rain event? We do it by checking each sampler for blockage in the tube and pump function for taking the sample and flushing the tube, battery function, ice the sample bottles in the sampler, be sure the path way and access to the sampler is clear of debris and that the notification process is working such that when the sampler begins to sample your beeper is alerted. Please provide your QA/QC manual and procedures for review. You mention TVA will be doing the lab work. Are they an EPA certified lab for the pollutants you are testing? If not, the data is suspect and should not be used.

Response: While we are aware of the unpredictable nature of rainfall events, however, a bankfull discharge having a recurrence interval of 1 to 2 years is a regionally accepted value assumption of the Tellico River. Therefore our assumption that we will experience several bankfull flows during the 6 years of monitoring is valid for planning a monitoring program. This plan is not set in stone and could be changed if necessary.

Since the release of the predecisional EA, additional suspended sediment data has been collected and will be presented in the final document. The Forest Service has decided that the evidence presented in the current data is adequate to come to a decision.

Quality assurance and quality control are incorporated into the field protocol described in the monitoring plan.

TVA has used their own certified lab until 2008 when they started to use a private certified lab.

3-81.<u>Public Comment:</u> You mention most of your equipment is borrowed. This makes me believe you do not know how to operate it. You only mention installation of one rain gage. This is not adequate by any means for 50 samplers. The proper procedure is to delineate subwatershed areas draining to each sampler and locate the gages using the Thiessen Polygon method for rain gage evaluation. The manner in which you have reported the TSS and Turbidity measurements give the appearance that there is an impact due to the OHV system. This may not be the case if the data were properly analyzed. The proper reporting of the comparison between the reference watersheds is to report the values that are statistically significantly different. I suspect that when all the information is considered that none of the data from the OHV area are significantly different from any similar reference watershed. In addition, you fail to recognize the fact that turbidity is not a measure of sediment in the stream. EPA admits that turbidity is not a good measure of sediment in their proposed rules for Effluent Limit Guidelines for Construction Activities published in the Federal Register November 28, 2008. In this document they provide an example of the case where a high turbidity reading is obtained but no suspended sediment is found. EPA also recognizes that the converse can be true. In your data this is the case where you show a high TSS level for Bald River but a lower turbidity measurement. There are two data points you have reported in Table 3.1.1.4 that should make you question the conclusion you have drawn. Again the data is reported in such a manner that it is misleading and slanted to show an impact due to the OHV area. The same is true for the data presented in the appendix. All of this data should have been tested statistically to determine if there is significant difference between the sub-basins reported. This error must be corrected to reach the correct conclusion.

Response: Although some of the equipment is borrowed we have been trained by Coweeta Hydrologic Lab personnel to us it.

We agree that more rain gages distributed throughout the upper Tellico River watershed would strengthen our understanding of the precipitation distribution during storm events. The one rain gage located near the confluence of Tellico River and Sycamore Creek at the Tennessee Fish Hatchery was determined to be the only acceptable site because of the lack of forest canopy cover and protection from vandalism.

As part of the monitoring plan, several water samples will be analyzed to separate the organic sediments from the inorganic sediments to address your comment.

Appendix E in the EA compares the upper Tellico watershed and the reference watersheds.

3-82.<u>Public Comment:</u> In Figure 3.1.1.3 you report turbidity measurements from a single storm event and appear to compare to the standard of 10 NTU. This is an incorrect application of the 10 NTU standards. This standard is not a storm event standard it is applicable to 7Q10 flows as per 15A NCAC 0213.0206 (a) (1). Please correct this error. In Table *3.1.1.5* you report storm event data from 1999 to 2006 for the median values of TSS in mg/i. You do not include all of the reference sites. There were several large events (i.e hurricanes 2004) that will skew this information. It is important to include all the reference sites. The Citico Creek site does not appear to pass the test of similarity to the Upper Tellico site due to the ownership status. Please correct the reporting in this table. You have not reported the eroded particle size distribution of the sediment in the runoff you have sampled. I do not mean a primary particle size distribution I said an eroded particle size distribution. This is quite a difference. Soils in our region is detached by rainfall energy or runoff energy and transported by stream power. Depending on cation exchange capacity of soils (particularly highly erodible soils) they erode differently and react differently in suspension. Some soils form aggregate particles and will settle quickly in the flow path. Others will develop particles that repel one another and act as primary particles in suspension. Many times water chemistry can affect these chemical reactions and change the settling characteristics of the soils. Please report the eroded particle size distributions for the samples from all the watersheds so we can tell how the particles are reacting in suspension. This is one variable in the design of BMP measures to be sure the lIMP performs properly. I doubt this information has ever been considered in design of BMP's by the FS. This may be a factor why many of your BMP's may not be functioning properly. You have applied the Rosgen methodology for stream stability classification and tried to directly tie this classification to habitat improvement. Rosgen techniques were developed for western streams primarily receiving their runoff from snow melt. This is a completely different application than streams in the eastern and southeastern US. Streams like the ones in the Upper Tellico Watershed were developed to receive runoff from high intensity rainfall events with yearly totals of 50 plus inches. Many western streams where Rosgen techniques were developed only receive a fraction of the rainfall amounts that occur in the western North Carolina area. I object to the use of Rosgen methodology and recommend you use the attractive force and permissible velocity methods to determine stream stability. This must be changed in the EA.

Response: We have consulted with the NC Division of Water Quality and believe that we are correctly interpreting the NC state standard for turbidity, therefore no correction is needed.

Appendix E in the EA compares the upper Tellico watershed with the reference watersheds. TSS data was not presented in the Table for streams surveyed outside the Upper Tellico River watershed and for those not considered reference sites.

These streams have varying levels of disturbance and other physical features not evaluated at this point.

We presented the suspended sediment as Total Suspended Sediment and/or Turbidity. We did not and are not planning to analyze the samples for particle size.

The Rosgen methodology is accepted by the Forest Service as well as other State and Federal agencies in the southeastern US as an acceptable method of characterizing and describing stream condition.

3-83.<u>Public Comment:</u> 1. Forest Plan standards for soil and water are being violated.

- **Visible sediment standards are not part of the Federal Clean Water Act requirements or part of a North Carolina water quality standard. This is admirable as part of the Land and Resource Management Plan for Nantahala but, is not necessary for water quality compliance.**
- **You mention 1/3 of the 2000 visible sediment sources are reaching the Upper Tellico River. Please provide a location map of these sources and evidence that they are discharging sediment to the upper Tellico River or its tributaries. You have indicated that 558 of these fall along trails within 100 feet of a stream. I am requesting this information as part of an FOl request.**
- **You mention that 1.67 miles of trails are within 25 feet of the stream. According to 15A.NCAC 02B.0104 (j)(1) this 25 foot buffer is *2.5* times the required buffer for forestry and agricultural activities.**

Response: The Forest Plan defers to NC FPG to protect Water Quality. The NC FPG Performance Standards state that access roads, when located within Stream Management Zones (SMZs), shall have effective erosion control and sediment control structures or measures installed to restrain accelerated erosion and prevent visible sediment from entering intermittent or perennial streams or perennial waterbodies (15A NCAC 01I .0201(c)). It goes on to say that "stream crossings shall be avoided when possible. Access roads and skid trails which must cross intermittent or perennial streams or perennial waterbodies shall be constructed so as to minimize the amount of sediment that enters the streams because of the construction. These crossings shall be installed so that:

(1) stream flow will not be obstructed or impeded;

(2) no stream channel or perennial waterbody shall be used as an access road or skid trail;

(3) crossings are provided with effective structures or ground cover to protect the banks and channel from accelerated erosion;

(4) they shall have sufficient water control devices to collect and divert surface flow from the access road or skid trail into undisturbed areas or other control structures to restrain accelerated erosion and prevent visible sediment from entering intermittent and perennial streams; and

(5) ground cover, or other means, sufficient to prevent visible sediment from entering intermittent and perennial streams and perennial waterbodies shall be provided within ten working days of initial disturbance and will be maintained until the site is permanently stabilized." (15A NCAC 01I .0203)

A map of the locations where sediment was seen leaving a trail and tracked entering a waterbody is located in the Graphics Supplement accessible at: http://www.cs.unca.edu/nfsnc. This is a very large format map designed to be viewed on screen or printed on a plotter.

The buffer comment refers to a NC Forestry BMP found on page 46 of the NC Forestry BMP Manual to protect Water Quality (2006). BMPs refer to methods or practices that can be implemented to help prevent pollution from getting into our water and thereby protect water quality. BMPs are suggested practices that can be used to meet the Forest Practices Guidelines. We have decided to use 25 feet as a minimum buffer to assess impacts.

3-84.<u>Public Comment:</u> 2. Best management practices are currently failing. BMPs require upkeep and maintenance just like property lines. You make a statement that less than 1/2 of the BMP's are functioning properly. Please provide back —up documentation to support this claim. This is a very easy statement to make but, is subject to interpretation and subjective. Providing support and analysis on each BMP to support your statement is necessary.

Response: All condition survey data is available through appropriate request channels to be downloaded to a large external memory device.

3-85.<u>Public Comment:</u> 3. BMPs are not sustainable due to severely erosive soils and heavy rainfall. Please quantify how much of the 75,000 tons of soil you estimate has been eroded since the FS began management of the area. This is 1908 tons per mile of trail or 1574 tons per acre since 1950 or 27 tons per acre per year or 33 tons per trail mile per year. What bulk density did you use to determine the weight of soil lost?

Response: Calculation of the tons of soil lost is based on the existing condition of the trail, including the height and length of entrenchments and incisions, regardless of why or how the missing soil went missing. A Soil Bulk Density of 90 pounds per cubic foot was used in the analysis to estimate volume of soil material eroded from the Tellico Road/Trail network. Bulk Density of soils in the area range from 62 to 106 pounds per cubic foot, based on NRCS Soil Survey Data.

3-86.<u>Public Comment:</u> 4. North Carolina standards for turbidity are being violated. 15A NCAC 02B.0206 (a) (1) provides the flow criteria to apply all water quality standards for classification as 7Q10 flows. You have applied the turbidity standard to storm flows. This is in error and should be corrected. The standard of 10 NTU is

a standard to be met in 7Q10 flow conditions not in storm events. No watershed in the region will meet this standard in a storm event including those without OHV activity. The data you report supports that this is the case. 1.4 Significant Issues Related to the Proposed Action Item 1.a and b. The State Water Quality rules establish a 10 foot separation between the active disturbed area and the waterbody. You reference the NC Forest Practice Guidelines for Water Quality. These have no force and effect, they are guidelines. While these guidelines present some good ideas they are very vague and obscure. The fact is that the Tellico OHV system meets the requirement in the 1 SA NCAC 02B.0206. As a matter of fact and by admission in your EA exceeds the rule by *2.5* times.

Response: The Forest Service has consulted with the NC Division of Water Quality and we believe that we are correctly interpreting the NC state standard for turbidity, therefore no correction is needed.

NC Forest Practice Guidelines for Water Quality must be met to meet the Clean Water Act. Best management practices (BMPs) refer to methods or practices that can be implemented to help prevent pollution from getting into our water and thereby protect water quality. BMPs are suggested practices that can be used to meet the Forest Practices Guidelines. We have decided to use 25 feet as a minimum buffer to assess impacts.

3-87.<u>Public Comment:</u> I believe in addition to the above practices, all camping areas, hiking trails and entry points along the creeks, streams and rivers should be removed and rehabilitated. This proposal would have a profound positive impact on the environment. These Forest Service campsites are located along these waterways and designated trout waters. The fragile vegetation along these waterway banks is in a terrible state. The silt from these camping areas, hiking trails and entry points is entering the waterways. Since these camping areas and hiking trails are open to public and there are no proper human waste disposal areas for campers and/or proper hygiene facilities, these camping areas and hiking trails are large contributors of the introduction of human wastes and garbage. The campers/hikers bath themselves and dump waste intentionally and unintentionally into these fragile trout waters. The introduction of these waste and cleaning products are not only a concern for the aquatic species and mammals that depend on these waters, it is also a public heath concern. Forest Service studies have produced documentation of high levels of human waste (Fecal) bacteria in these waters, which flow through public and private lands.

Response: The management areas where these activities occur have been determined suitable for such activities. Where these activities are resulting in adverse impacts to other resources, corrective action is required. We have no knowledge of any Forest Service studies that document high fecal coliform in the upper Tellico River or its tributaries.

3-88.<u>Public Comment:</u> Are Citico and Sycamore Creeks similar enough to Upper

Tellico drainage basin to serve as reference streams? Please provide a statistical analysis of comparison of soil types, slopes, flows, watershed configuration, rainfall amounts, size, ownership, and management techniques. Combinations of the parameters must be considered in the analysis. By performing this type of analysis of the parameters one can determine if the named watersheds are statistically similar to the Upper Tellico Basin and that there is a high probability that data is transferable and comparable between the watersheds. Just because they are located in the same region they may not be similar when all the factors are considered.

Response: Appendix E in the EA compares upper Tellico watershed with the reference watersheds.

3-89.<u>Public Comment:</u> Water in the assessment area is currently characterized by the State of North Carolina as being of adequate quality to support all protected uses (NC DWQ 2006). Water quality in the Tellico River downstream from the assessment area fully supports protected uses as of the 2006 State of Tennessee water quality assessment of the Little Tennessee River Watershed (Tennessee Department of Environment and Conservation 2006).I agree. You need go no farther concerning water quality.

Response: NC DWQ and TDEC both classify the Tellico River as "fully supporting" all protected uses, however, the State of NC has not monitored water quality in the Tellico River. NC DWQ surveyed aquatic macroinvertebrates during the month of April 2009 to establish baseline water quality conditions of the upper Tellico River. Those results are not yet available. Forest Service monitoring of the trail system and water quality has identified erosion and sedimentation issues.

3-90.<u>Public Comment:</u> The Cherokee County Soil Survey was done in 1921 and updated in 1951 copies of it are no longer available according to the NRCS website. I have found the following information from other nearby surveys on the soils you list for the Upper Tellico Basin. Based on this information it appears that these soils, when eroded, erode in the form of mostly sandy particles from 0.1 mm and larger in some cases particles as small as 0.074 mm may be found. These particles have a settling velocity of 0.015 to 0.028 ft/sec or 0.9 to 1.7 ft/mm. as you can see these particles in their primary state will settle quickly. This makes it easier to design BMPs that will work to trap the eroded soil form disturbed areas. The erosion hazard may be listed a severe but this is mostly due to the gradient. Since these soils are friable they are not suited for roads but are well suited for trails. They do not provide the stable tractive support that a strong clay soil would for a road bed. However, these soils are much more manageable for the purposes of an OHV system than a heavier soil.

Response: Soil data for Cherokee County is Available from the Soil Data Mart web site (http://soildatamart.nrcs.usda.gov/) in tabular form only. Spatial

information is available from the Natural Resource Conservation Service office in Murphy, NC. Information was obtained from NRCS including digital aerial photo images overlaid with soil types. In GIS, the Forest Service overlaid the trail system on the images and measured trail length by soil type. Information for "Hazard of Erosion" was obtained from the Soil Data Mart web site. The ratings take into consideration the slope and erodibility of the soil. This analysis is valid and will be used in the EA.

3-91.<u>Public Comment:</u> The EA states on page 20 "Since the funds for maintenance and improvements have been limited and the popularity of the area has grown."

- **Why have funds for maintenance and improvements been limited?**
- **Since the Tellico trail system brings in money, unlike many USFS locations, why can't additional money be appropriated for trail maintenance and improvements?**

Response: The Forest receives approximately $1,000,000 to maintain approximately 2500 miles of roads, of which the Upper Tellico OHV System represents approximately 1.6%. Some appropriated dollars are used at Upper Tellico each year. This OHV system is not the only priority on the 1.2 million acres that comprise the National Forests in North Carolina.

3-92.<u>Public Comment:</u> The EA stats on page 20 "For parts of the analysis of environmental effect it was necessary to put Upper Tellico condition data in context with similar sites away from the trail system. Reference sites were established in Citico Creek and Sycamore Creek… In addition to Citico Creek and Sycamore Creek, a third site, Tipton Creek-3 (613 acre drainage area), also serves as a reference site for comparison since it is in the Upper Tellico watershed but not subjected to sediment input from the current trail system."

- **Selection of reference sites is a critical component in the process of developing and applying biological indicators of ecological condition. The implementation of biological criteria requires: (1) selection of unimpaired (minimal impact) surface waters to use as the reference condition for each designated use, (2) measurement of the structure and function of aquatic communities in reference surface waters to establish biological criteria, and (3) establishment of a protocol to compare the biological criteria to biota in impacted waters to determine whether impairment has occurred.**
- **A key step in developing values for supporting narrative and creating numeric biological criteria is to establish reference conditions; it is an essential feature of environmental impact evaluations (Green 1979). Reference conditions are critical for environmental assessments because standard experimental controls are rarely available. For most surface waters, baseline data were not collected prior to an impact, thus impairment must be inferred from differences between the impact site and established references.**
- **Reference conditions describe the characteristics of waterbody segments least impaired by human activities and are used to define attainable biological or habitat conditions (EPA 2009). The reference sites should be monitored to the same level as the areas of concern.**

- **Reference conditions have not been determined or set as part of this analysis.**
- **Provide appropriate data (outlined above) to justify the USFS's use of its reference stations.**

Response: Reference conditions are defined further in the final EA.

3-93.<u>Public Comment:</u> The EA presents Figure 3.1.1.1 on page 21 which depicts a precipitation line that is based off of a period of data from 1971 to 2000.

- **Why is there so much fluctuation between precipitation amounts in January, February and March?**
- **Why is there similar fluctuation between precipitation amounts in months June, July and August?**
  Shouldn't a line that connects monthly precipitation average from a period of data of 29 years be smoother and not show as much irregularity?

Response: Rainfall amount fluctuate from year to year and month to month. The precipitation line on the chart simply connects the mean monthly precipitation amounts at the Andrews, NC site provided by the National Climate Data Center at the following web page:
http://cdo.ncdc.noaa.gov/climatenormals/clim84/NC/NC310184.txt

3-94.<u>Public Comment:</u> The EA states on page 21 "These stream types are defined as having a low sensitivity to increases in flow and sediment, and low bank erosion potential. These stream reaches are considered to be high energy reaches that can transport a large load of stream materials (both bedload and suspended load) and sediment from outside the channel. Therefore, under natural conditions channel habitat features, such as pools, are expected to maintain themselves without filling with fine sediments such as silt and sand size particles."

- **Caliber's analysis of the Tellico stream system confirmed that the Tellico streams have a low sensitivity to increases in flow and sediment, and low bank erosion potential. They also can transport a large load of stream materials and sediment from outside the channel.**
- **The Tellico streams were observed to currently be transporting sediment without bank erosion.**

Response: For the most part bank erosion is minimal; however there are sites where bank erosion is occurring. See EA Chapter 3.1.1 – Soils and the Erosion Hazard. However the amount or eroded material coming from "outside the channel" is beyond the capacity of the streams to maintain themselves, as demonstrated by pebble counts and pool filling data displayed in Chapter 3.1.1.

3-95.<u>Public Comment:</u> The EA states on page 21 "Water in the assessment area is currently characterized by the State of North Carolina as being of adequate quality to support all protected uses (NC DWQ 2006)."

- **Caliber agrees with statement above by the NC DWQ. If water in the assessment**

area as recent as 2006 is of adequate quality to support all protected uses, including trout, then why does the USFS feel that water quality is now so poor due to sediment that trails need to be closed?
Does the USFS not believe the assessment completed by the NC DWQ in 2006?
If the NC DWQ is correct in that all waters in the assessment area currently are of adequate quality to support all protected uses, including trout, then why did the USFS go to such expense to perform numerous studies of their own?
Who is correct — the NC DWQ or the USFS?

- **If the USFS believes that water quality violations are occurring then has NC issued a notice of violation? If so provide this or any other similar notices.**

Response: NC DWQ classifies the Upper Tellico River as "fully supporting" all protected uses, however, the State of NC has not monitored water quality in the Tellico River. NC DWQ surveyed aquatic macroinvertebrates during the month of April 2009 to establish baseline water quality conditions of the Upper Tellico River. Those results are not yet available. Forest Service monitoring of the trail system and water quality has identified erosion and sedimentation issues. The Forest Service has consulted with the NC Division of Water Quality and believes that we are correctly interpreting the NC state standard for turbidity, and therefore concluded that the standard is not being met. The EA Table 3.1.2.1.1 presents the "Likelihood of Meeting State & Federal Standards" by alternative.

North Carolina has not issued a notice of violation at this point in time.

3-96.<u>Public Comment:</u> The EA states on page 21 and 22 "Water quality in the Tellico River downstream from the assessment area fully supports protected uses as of the 2006 State of Tennessee water quality assessment of the Little Tennessee River Watershed (Tennessee Department of Environment and Conservation 2006.)

- **Caliber agrees with statement above by the TN DEC. If water downstream from the assessment area as recent as 2006 fully supports protected uses, including trout, then why does the USFS feel that water quality is now so poor due to sediment that trails need to be closed?**
Does the USFS not believe the assessment completed by the TN DEC in 2006?
If the TN DEC is correct in that water downstream from the assessment area as recent as 2006 fully supports protected uses, including trout, then why did the USFS go to such expense to perform numerous studies of their own?
Who is correct — the NC DWQ or the USFS?
Comments to the U.S. Forest Service Upper Tellico
- **If the USFS believes that water quality violations are occurring then has TN issued a notice of violation? If so provide this or any other similar notices.**

Response: TNDEC classifies the Upper Tellico River as "fully supporting" all protected uses as presented in the EA. However, Forest Service monitoring of the trail system and water quality has identified erosion and sedimentation issues. The Forest Service has consulted with the NC Division of Water Quality and believes

that we are correctly interpreting the NC state standard for turbidity, and therefore concluded that the standard is not being met as a result of the trail system.

The State of Tennessee has not issued a notice of violation to the Forest Service.

3-97.<u>Public Comment:</u> The EA states on page 23 "The primary source of erosion in the area is from soil disturbance, particularly the existing road and trail network."

- **The USFS provides no direct evidence that the primary source of erosion is the trail network.**
- **Additional significant sources of erosion include Trail 1 (which should be considered a road and not a trail), timber operations (documented in the Caliber report as contributing significant amounts of sediment to the river system) and private inholdings.**

Response: The greatest source of sediment in the Upper Tellico River watershed is from human activities that remove vegetation and expose soil to weathering processes, e.g., freeze/thaw and rainfall, and storm runoff. During condition surveys, 34 percent of the drainage features on the OHV trail system contributed some amount of sediment to the Tellico River stream network and 31 percent of the trail length was connected to the stream network during storm runoff. Other potential sources of sediment include home site development and roading on private lands, stream bank erosion, and timber management, e.g., skid trails. Timber management has occurred within the last 10 years in the Jenks Branch drainage, but monitoring has shown BMPs to be effective a preventing sediment from entering the stream network. Stream channels are stable because of the presence of stable substrate e.g., boulders. Erosion of stream banks does occur in places, particularly where the stream butts up to the toe of a steep side slope, but these sites are not common. Sediment produced by private activities is not well understood. The development within the Tipton Creek inholding is a likely source of sediment. These home sites are subject to State laws requiring erosion control. We do know from turbidity data from 2002-2004 that the mean turbidity went from 17 NTU above the private inholding to 77 NTU below the inholding, indicating a source of sediment in the private inholding. Sediment coming from the private land in the headwaters of Peckerwood Creek has not been assessed. We do not have data of sediment levels before the road/trail system was constructed. We have anecdotal evidence that because of timber harvesting sediment was excessive on the stream bottom of the Tellico River during 1966. Therefore it is likely that there was man-caused sediment in the Tellico River before the opening of the OHV area. Some level of sediment is natural to the Tellico River, as represented by the reference reaches used in the EA, but much of it is anthropogenic (man-caused). The private inholdings are the only other notable potential source of sediment to the Upper Tellico River. The Forest Service has no jurisdiction over these lands.

3-98.<u>Public Comment:</u> The EA states on page 23 "Sections of trail considered "high challenge", such as the "Rock Garden" on Trail 2 and "Slick Rock" on Trail 9, have

lost all soil and are eroded to bedrock and boulders, while sidewalls of the entrenched areas continue to erode." And "Sections of trail considered "high challenge", such as the "Rock Garden" on Trail 2 and "Slick Rock" on Trail 9, have lost all soil and are eroded to bedrock and boulders. Excessive erosion persists on trail sections such as these as the steep sidewalls continue to erode."

- **Once a trail has eroded down to bedrock very little additional vertical erosion can be expected. Horizontal erosion from trail widening (trail creep) can be managed effectively with BMPs.**

> **Response:** It is true that the vertical erosion is limited by the high rock content as stated in the EA, page 23. At this point in time BMPs have not been effective at eliminating horizontal migration of the trail segments at the challenge areas.

3-99.<u>Public Comment:</u> The EA states on page 23 "It is estimated that 74,450 tons of soil has been eroded from the current trail system (38.48 miles) since the establishment of the old logging transportation system more than 50 years ago (based on depth and length of entrenchments)." And on page 23 "Much of the displaced soil was deposited on the uplands, while some was transported to the stream network."

- **The number 74,450 is inaccurate as it does not take into account many factors including cut and fill, dirt removed from sediment traps, dirt used to construct sediment control features and dirt that eroded before the USFS took control of the area. How the statement is currently presented makes it appear that the erosion is due to OHV5. See additional comments further in this document.**

> **Response:** The 74,550 tons is only an estimate of soil loss from the current trail system. The excerpt from the EA, page 23, presented in the comment clearly states that the 74,550 tons of soil erosion occurred "since the establishment of the old logging transportation system more than 50 years ago", and does not state that the loss of soil is from OHV use alone.

3-100.<u>Public Comment:</u> The EA states on page 23 "On private lands in the Tipton Creek and Peckerwood Creek drainages, development and roads are likely to be other sources that add to the sediment load in the Tellico River."

- **Caliber agrees with this statement.**

If these private holdings are a likely source of sediment load then why have they not been fully investigated?

> **Response:** Although the Forest Service can not assess private lands, the state of North Carolina shall do the following as required by the Sediment Pollution Control Act of 1973 (As amended through 1999) North Carolina General Statutes Chapter 113A Article 4 § 113A-54. Powers and duties of the Commission:
> (3) Develop recommended methods of control of sedimentation and prepare and make available for distribution publications and other materials dealing with sedimentation control techniques appropriate for use by persons engaged in land-disturbing activities, general educational materials on erosion and sedimentation

control, and instructional materials for persons involved in the enforcement of this Article and erosion control rules, ordinances, regulations, and plans.
(4) Require submission of erosion control plans by those responsible for initiating land-disturbing activities for approval prior to commencement of the activities.

3-101.<u>Public Comment:</u> The EA states on page 23 "An analysis of the National Resource Conservation Service soil data and mapping identifies a severe hazard of erosion on most trail sin the Upper Tellico OHV System." And "A rating of severe indicates that erosion of the trail is expected, the trail requires frequent maintenance, and costly erosion control measures are needed (NRCS 1998)."

- **Without a detailed soil map it is difficult to determine the exact nature of potential effects or hazards. Soco, Stecoah, and Whiteoak soils are identified by the NRCS as having a severe hazard of erosion, however, based on slope gradient the erosion hazard ranges from slight to severe.**
- **Also, off-road usage by motorcycles is identified as not limited to limited based on slope gradient. Further refinement of the potential erosion hazard needs to be done based on soil slope.**

Clarify this section of the EA to add this information.

Response: The Soco and Stecoah soils are identified by the NRCS as having a severe hazard of erosion on roads and trails, while the Whiteoak soils have a moderate to severe hazard of erosion. The limiting features are the slope and erodibility of the soil. Looking at all soil types in the watershed there is a range of slight to severe hazard of erosion. A slight hazard of erosion occurs only on the Dellwood soil type that occurs on 0.87 miles of trails #1 and #5, a total of 2.2 percent of the trail system. A moderate hazard of erosion occurs only on the Whiteoak soil type, 0.13 miles of trail, 0.3 percent of the total trail length. The severe hazard of erosion predominates the watershed, with 38.35 miles occurring, 97.6 percent of the total trail length.

Based on NRCS soils data from the Web Soil Survey (http://websoilsurvey.nrcs.usda.gov/app/) soil limitations for Off-Road Motorcycle Trails is identified as "Very Limited" at 70%, "Somewhat Limited" at 18%, and "Not Limited" at12% for the Upper Tellico Area. This soil characteristic was not used in the EA since the OHV trail system is not an Off-Road Motorcycle Trail but a dual designated road and trail system. The FS believes that the analysis used in the EA that assesses "Hazard of Erosion on Roads and Trails" better represents the Upper Tellico OHV Area.

3-102.<u>Public Comment:</u> The EA states on page 24 "In addition to the concern of trail erosion in "high challenge" areas is the concern of vehicle derived pollutants." The EA goes on to present Table 3.1.1.1 that "Results from Soil Contamination Testing" at challenge areas on Trails 2, 7 and 9 and states "Even with the limited extent of testing completed to date, ten sites were found to exceed NCDENR action levels."

- **Based on the aquatic macrobenthic sampling completed by Caliber and the presence**

of several intolerant benthic species, it is obvious that either petroleum contamination is not entering the aquatic systems associated with Trail 2, 7, and 9, or if it is then it is not impacting water quality or benthic species.

Response: First of all, the Caliber analysis of aquatic macroinvertebrates did not correctly follow the North Carolina State protocol, and as a result, their conclusions were incorrect. NCDENR DWQ conducted an aquatic macroinvertebrate survey in April, 2009 and will publish their results in the near future. Secondly, streams near the contaminated soil were not tested for petroleum, nor was the rate of leaching of the contaminants measured. It is possible that the contaminants never reach water, but the risk is high due to local climatic and soil factors.

3-103.<u>Public Comment:</u> The EA states on page 24 "Trail condition surveys and turbidity data clearly indicate that State and Forest Plan standards for water quality are not being met in the area impacted by the Tellico OHV System." Yet states on page 21 "Water in the assessment area is currently characterized by the State of North Carolina as being of adequate quality to support all protected uses (NC DWQ 2006)." And on pages 21 and 22 "Water quality in the Tellico River downstream from the assessment area fully supports protected uses as of the 2006 State of Tennessee water quality assessment of the Little Tennessee River Watershed (Tennessee Department of Environment and Conservation 2006.)"

- **Which of the above quotes from the EA are correct?**

Are water quality standards being met per published reports from NC and TN or are NC and TN water quality standards not being met per interpretation by the USFS?

Response: Both are correct statements. Both NC and TN have identified the Tellico River as fully supporting designated uses. At the same time State and Forest Plan standards for water quality are not being met.
The following NC FPG Performance Standard relates to the comment:
15A NCAC 01I .0201 STREAMSIDE MANAGEMENT ZONE
(a) A streamside management zone (SMZ) shall be established and maintained along the margins of intermittent and perennial streams and perennial waterbodies. The SMZ shall be of sufficient width to confine within the SMZ visible sediment resulting from accelerated erosion.
(b) Ground cover, or other means, within the SMZ shall be sufficient to restrain accelerated erosion.
(c) Access roads, skid trails, except as provided in Rule .0203 of this Section, logging decks and mill sites shall be placed outside of SMZs. When barriers such as property lines or limiting land features prohibit the location of any of these outside of SMZs, they can be located within the SMZs. **When located within SMZs they shall have effective erosion control and sediment control structures or measures installed to restrain accelerated erosion and prevent**

visible sediment from entering intermittent or perennial streams or perennial waterbodies.
The Nantahala National Forest Plan defers to these FPG standards. Furthermore, the State standard for turbidity states: "the turbidity in the receiving water shall not exceed…10 NTU in streams, lakes or reservoirs designated as trout waters… if turbidity exceeds these levels due to natural background conditions, the existing turbidity level shall not be increased. Compliance with this turbidity standard can be met when land management activities employ Best Management Practices (BMPs)… recommended by the Designated Nonpoint Source Agency… BMPs must be in full compliance with all specifications governing the proper design, installation, operation and maintenance of such BMPs" (NC DENR 2007).

We understand that the standard is violated when applied BMPs are not effective at preventing visible sediment from entering streams causing Turbidity levels to exceed 10 NTUs.

Trail condition surveys identified 34 percent of the drainage features on the trail contributed some amount of sediment to the Tellico River stream network and 31 percent of the trail length was connected to the stream network during storm runoff.

3-104.<u>Public Comment:</u> The EA states on page 25 "Most trail segments were originally outsloped."

- **This is incorrect. Many trail segments were built entrenched per direction by the USFS. Trails 2, 9, 12, parts of 11 and potentially others were built under supervision and direction of Larry Fox, a USFS technician. Mr. Fox directed that these trails be built entrenched so water could be funneled where he wanted and also to keep vehicles from sliding off the trail. Typical entrenched areas were 2 to 3 feet deep at time of construction. The only water and sediment control features were water bars. No sediment traps or other features were constructed.**
- **Also, banks were built vertical under the direction of Larry Fox. Mr. Fox's reasoning was that vertical banks would not receive rainfall. Contractors and volunteers were not allowed to build sloped banks.**
- **Provide documentation and/or 'As-builts' that confirm your allegation that most trail segments were originally outsloped.**
  Correct this statement in the EA.

Response: It may be that portions of Trails 9 and 12 were built with 2-3' entrenchment. However, the statement, "Most trail segments were originally outsloped." is an accurate one according to district personnel. Since no record or personal knowledge exists regarding the commenter's statement about vertical banks, we cannot comment on its accuracy. The purpose of this project is not to place "blame" on one party or another but to prevent future accelerated erosion from the trail system to the stream system.

3-105.<u>Public Comment</u>: The EA states on page 27 "Trail 1 did not have sections of entrenchment."

- **Trail 1 does not have sections of entrenchment because it receives appropriate levels of maintenance, unlike Trails 2 through 12.**

> **Response:** We agree that Trail 1 has not become entrenched as have other trails. Since this is an open through road into Tennessee with passenger vehicle traffic, considerable maintenance and repairs have been implemented to minimize excessive erosion and road surface degradation.

3-106.<u>Public Comment:</u> The EA states on page 28 "Applying BMPs that are designed for constructing and maintaining trails constructed to today's standards are not sufficient to correct for the deteriorated conditions identified by conditions surveys of the Upper Tellico OHV System."

- **We, along with the USFS Trails Unlimited report, agree with this statement. However, there are other options available besides closing the trails. Properly installed and maintained BMPs are appropriate for maintenance of most non-challenge areas. Challenge areas will often require Modified BMPs as recommended by Caliber.**

> **Response:** The EA assesses other options besides closing the trails. Table 3.1.2.1.1 identifies the "Likelihood of BMP Success" for each alternative. Because of the factors limiting BMP effectiveness, listed on page 29 of the EA, the Forest Service believes that BMPs would not effectively protect stream channels from sedimentation with the current trail network. The "modified BMPs" recommended by the Caliber report have been reviewed by the Forest Service Engineering staff. This review is included in part in the response to Public Comment #1-114.

3-107.<u>Public Comment: The EA states on page 29 "Monitoring trail BMPs shows that gravel surfacing on the trail system is partially effective at reducing sediment production, but not eliminating it."</u>

- **Surge stone has been effectively used by SFWDA volunteers in key sections of the Tellico trail system to stabilize the trail bed and reduce erosion.**
- **Fully funding maintenance and hiring competent contractors will allow for similar applications throughout the trail system.**

> **Response:** The application of surge stone has been effective at reducing erosion from the trail segments where it was applied, but not eliminating it.
>
> Fully funding maintenance and hiring a competent contractor would help improve the trail system, but because of the factors limiting BMP effectiveness, listed on page 29 of the predecisional EA, the FS believes that BMPs would not effectively protect stream channels from sedimentation with the current trail network.

3-108.<u>Public Comment:</u> The EA states on pages 29 and 30 "Runoff from trails with gravel surfacing in Tellico produced much higher concentrations of sediment than

average values from forest roads with gravel surfacing found in a study by the Coweeta Hydrologic Laboratory on the Chattooga River Watershed in Georgia and South Carolina. Runoff from gravel surfaced roads in the Coweeta study had average sediment concentrations of 789.7 and 2,761.1 mg/L/cm depending on the level of road maintenance and improvements. (Personal communication with Barry Clinton Nov. 7. 2008 and Clinton and Vose 2003.)

- **What soil types and surrounding vegetative cover were present during the Coweeta study?**

> **Response:** The Coweeta study referenced in the EA on page 29 & 30 occurred on the following soil types based on NRCS Web Soil Survey data:
> Ashe-Porters association, Bradson fine sandy loam, Edneyville sandy loam, Edneyville-Ashe association, Saluda association, Toccoa fine sandy loam, Tusquitee loam, and Tusquitee-Haywood association. Vegetation is predominantly forested.

3-109.<u>Public Comment:</u> The EA states on page 30 "Runoff was also measured below sediment traps and below waterbars two of the most frequently used drainage control devices. The data collected shows that sediment traps improved the efficiency of waterbars; by reducing sediment runoff 74 percent from gravel surfaces and 60 percent native surfaces. Still, sediment traps are not 100 percent effective at retaining sediment."

- **No single BMP will be totally effective at eliminating sediment transport from a non-paved road surface.**
- **BMPs are designed to be used in conjunction with each other to reduce sediment transport.**
- **Provide this report to Caliber for analysis.**

> **Response:** We agree with your statements regarding BMPs. This report is available in the project record and may be requested through appropriate channels.

3-110.<u>Public Comment</u>: The EA states on page 30 "Compared to the current level of trail maintenance this would increase maintenance frequency considerably, at a minimum four times per year for the entire trail system, and an estimated 12 times, minimum, for trails within 100 feet of streams."

- **It is obvious that the current level of trail maintenance is not sufficient when you include the expertise of contractors hired to do the work. Currently, maintenance contracts are awarded on a periodic basis. Has the USFS considered hiring a part-time maintenance person who only works on trail maintenance? If not, why?**

> **Response:** We have considered a number of times over the past few years of doing trail maintenance by force account personnel and equipment but the logistics and safety factors would require a minimum of two people who would need to be 100% dedicated to the area. This would of course entail either purchasing or leasing the proper equipment and based on our experience this

"crew" would have to be there 100% of the time. Part time would not suffice. Contracting work is in our opinion the only practical way to go. The District Organization chart and budget levels would not allow the hiring of sufficient personnel with the experience necessary to conduct force account trail maintenance.

3-111.<u>Public Comment:</u> The EA states on page 31 "Along many trails in the analysis area sediment traps have not been designed to standards, and often are not even capable of retaining the flow and sediment from a 1 inch storm.

- **Many sediment traps within the trail system were never finished or are small due to site restraint criteria. At these locations any sediment control structure will be better than no sediment control structure.**
- **Does the USFS have record of which sediment traps were built by which contractors? If so please provide this information.**

Response: In the EA on page 30 the sediment data is summarized, stating that sediment traps do indeed reduce sediment delivery from the road/trail.

The Forest Service has no record of which sediment traps were built by which contractor.

3-112.<u>Public Comment:</u> The EA states on page 31 "Non-standard BMPs may need to be employed to either armor the trail surfaces or provide for ample drainage of concentrated flow."

- **We agree. Caliber has recommended Modified BMPs for applications in challenge and other similar areas.**

Response: Comment Noted.

3-113.<u>Public Comment:</u> The EA states on page 31 "Where the trail is located within 100 feet of a stream channel, preventing sediment deliver to streams is unlikely."

- **This is incorrect and misleading. Sediment delivery to a stream can be significantly reduced if maintenance is fully funded and implemented by competent contractors. A goal of intercepting 100% of sediment from any road or trail system whether it be for vehicle or foot travel is unrealistic. Revise this misleading statement.**

Response: Fully funding maintenance and hiring a competent contractor would help improve the trail system, but because of the factors limiting BMP effectiveness, listed on page 29 of the predecisional EA, the Forest Service believes that BMPs would not effectively protect stream channels from sedimentation with the current trail network.

3-114.<u>Public Comment:</u> The EA states on page 32 "BMPs on trails converted from other uses may temporarily minimize sedimentation but eventually fail due to a lack of maintenance and often poor design because they were never reconstructed to handle this use."

- **This statement is misleading. BMPs are effective on a longer than temporary basis if they are maintained properly. Modify this statement to read "BMPs on trails converted from other uses will minimize sedimentation but may fail due to lack of maintenance. Appropriate levels of maintenance are key to maintaining BMPs."**

> **Response:** This statement found in Table 3.1.1.4. is under the heading of "Existing Trail Conditions (Why BMPs fail in Tellico OHV)". We believe that it is an accurate interpretation as to why the referenced BMP is not working.

3-115.<u>Public Comment:</u> The EA states on page 32 "Runoff control structures receive inadequate maintenance because the trails are difficult to access for maintenance equipment and District personnel."

- **This statement is misleading and bordering on incorrect. Appropriately trained and competent contractors can reach any part of the Tellico trail system including all challenge areas. SFWDA volunteers have taken heavy machinery through every foot of trail at Tellico. Modify the USFS statement to read "Runoff control structures can be difficult to access for maintenance equipment if appropriately trained and competent contractors are not hired."**

> **Response:** OSHA regulations require proper mitigation and safety controls when accessing deeply entrenched trail sections for contracted activities.

3-116.<u>Public Comment:</u> The EA states on page 32 "Trails contain inadequate number and sizes of culverts since they often were not designed for this permanent use. Lack of maintenance of drainage features puts added stress on other structures that can add to failure rate."

- **The EA states on page 33 "Trails have not been properly designed, BMPs have not been properly designed, implemented and/or maintained, and the OHV System operations are not coordinated to enhance the effectiveness of the BMP5 and trail maintenance."**
- **The EA provides Table 3.1.1.3 on page 34 that lists "Miles of trail within 100 feet and within 25 feet of mapped stream (streams located on a U.S. Geological Survey topographic map).**
- **Trail 1 is scheduled for paving thereby reducing the miles within 100-feet by 1.0 mile (assuming the data provided is spatially accurate) and reducing the miles within 25-feet by 0.72 miles. This would dramatically reduce potential sediment inputs and needs to be taken into account in the USFS analysis.**
- **The quantity of sediment delivered to these streams has not been determined through investigation. Provide this data if it has been gathered. If this data is not available make a notation in the EA that concrete data has not been gathered that quantifies the amount of sediment delivered to these streams.**

> **Response:** The paving of part of Trail 1 is considered in the Environmental Consequences sections of the EA (Sections 3.1.2 and 3.2.2).
> The sediment rates and volumes data are not available.

3-117.<u>Public Comment:</u> The EA states on page 36 "Monitoring of suspended sediments (total suspended solids (TSS) and turbidity) and sediment deposition (streambed composition and pool filling) identified adverse affects to the aquatic ecosystem."

- **As the EA states the NF5, NC and TVA have monitored TSS and turbidity since 1999 in the Tellico and Citico sub-basins. Data is presented from 2002 through 2004 and depicts no significant differences among the sampling locations. Data supporting the supposition that adverse affects have occurred are not presented in the EA.**
- **The EA proposes the hypothesis that sediment from the OHV trails is entering the stream systems and causing adverse ecological effects. This hypothesis has then been used as proof of itself with no supporting data. Remove the assertion that suspended sediments and sediment deposition identified adverse affects to the aquatic ecosystem as sufficient, statistically significant data to support this hypothesis has not been presented.**

Response: The EA conforms to USFS direction to use "Best Available Science" in the analysis of alternatives (Richard J. Cook letter dated May 2, 2007). Statistical analyses are an accepted and practical tool for investigating relationships among groups of data. However, statistical significance (or nonsignificance) is highly dependent upon the survey design and random error effects. For example, the year-class failure for the rainbow trout population within the Tellico River in 2003 was "statistically insignificant" because the sample design did not lend itself to a statistical analysis. However, the biological significance of collecting 0 young-of-the-year rainbow trout is more indicative of the cumulative effects of the spring 2003 flood, possible acidification effects, and decades of habitat degradation from OHV use in the watershed. When these individual effects work in concert (cumulative effects), an environment is created where consistent rainbow trout reproduction is compromised. The scientific literature demonstrates that trout populations are negatively affected by sedimentation (EA Section 3.2.1). While other environmental factors (floods, droughts, etc) affect trout densities, these effects occur in all watersheds. The trout population densities in the Upper Tellico River watershed are lower than other streams (Besler et al. 2007). The results of the NC Wildlife Resources Commission monitoring (including survey methods and data) in the Upper Tellico River watershed are contained within Besler et al. (2007).

When the OHV Area brook trout densities are compared to the 14 trout streams across western North Carolina, the streams in the area of the OHV System exhibit a lower density than many of the reference streams (Besler et al 2007). The reference streams presented by Besler et al (2007) cover a full range of environmental conditions (e.g. substrates, stream orders, etc.). Additionally, Bonner (1983) does <u>not</u> present correlation analyses for any of the streams within the document, nor does it provide trend analyses for trout streams in the upper Tellico River watershed.

3-118.<u>Public Comment:</u> The EA states on page 36 "Focusing on streams in the Upper Tellico River watershed during this same period shows higher turbidity (mean and median) values in streams where trails occupy the drainage (Figure 3.1.1.2). Some of the highest turbidity values came from Jenks Branch, Tipton Creek at the mouth, and Tellico River above Tipton Creek and at the state line. The reference streams reaches of Tipton Creek (TC-3) above the 420-1 trail and Citico Creek (CC-3) at the wilderness boundary had the lowest turbidity values."

- **Investigating these higher turbidity values and their juxtaposition in the landscape would reveal other potential sources of contamination. The Forest Service authorized a tree harvest in the Jenks Branch watershed which stripped the surface of two hill slopes. There is no historical evidence of appropriate BMPs having been used or left in place subsequent to this harvest. Anecdotal evidence suggests rapid and abundant transport of soil from this area subsequent to the harvest. Sediment plumes are still evident in Jenks Branch downstream of this harvest and upstream of Rock Garden, and the Forest Service turbidity data would seem to verify this as a potential source. This site is directly adjacent to and upslope of Jenks Branch and would discharge directly into it during storm events.**
- **The private in-holdings above the confluence of Jenks Branch and Tipton Creek are being developed for secondary home sites. During Caliber's field investigations one of the sites being developed had no silt fence barrier in place down slope of a large disturbed area. Subsequent investigations revealed large amounts of in-stream sediments below this site. Since the upstream reference site (TC-3) had minimal turbidity, the potential source appears to be the residential in-holdings, not the trail system.**
- **Turbidity measurements at Tellico above Tipton Creek suggest that sediment may be entering the system below Rough Crossing. This may be an abnormality or due to other environmental conditions. However, turbidity measurements at Rough Crossing and Fain Ford are much lower, suggesting that the inputs are not from the trail system.**
- **Modify the EA to correct provide the above information to the public on sediment sources.**

Response: The Jenks Branch harvest **did not** "strip the surface or two hill slopes," and **did not** experience "rapid and abundant transport of soil." The Forest Service maintains harvest inspection records and has photographic documentation contrary to the commenter's claims. We question where exactly the commenter went to make these claims.

Refer to EA pages 38 and 40 for references to the Tipton private inholding. Although the Forest Service can not assess private lands, the state of NC shall do the following as required by the Sediment Pollution Control Act of 1973 (As amended through 1999) North Carolina General Statutes Chapter 113A Article 4 § 113A-54. Powers and duties of the Commission:
(3) Develop recommended methods of control of sedimentation and prepare and make available for distribution publications and other materials dealing with sedimentation control techniques appropriate for use by persons engaged in land-

disturbing activities, general educational materials on erosion and sedimentation control, and instructional materials for persons involved in the enforcement of this Article and erosion control rules, ordinances, regulations, and plans.
(4) Require submission of erosion control plans by those responsible for initiating land-disturbing activities for approval prior to commencement of the activities.
Therefore, private land owners are required to meet the State of NC requirements for controlling erosion and sedimentation.

A review of Figures 3.1.1.2 and Table3.1.1.5 of the EA indicates that suspended sediment as turbidity and total suspended solids are higher in the Tellico River below Rough Crossing Bridge and Fain Ford yet above the Tipton Creek confluence. Please note that the trail system still contributes runoff to the Tellico River in this reach of stream, specifically from Trail 4, 5, and 6.
No modification is needed to the EA.

3-119.<u>Public Comment:</u> The EA states on page 37 "As discussed earlier, turbidity values greater than 10 Nephlometric Turbidity Units (NTUs) do not meet North Carolina water quality standards for trout waters."

- **As discussed above, this is an inappropriate application of the North Carolina Sedimentation Pollution Control Act of 1973.**
- **The data from the reference sites, including Citico Creek at the wilderness boundary, exceed the 10 NTU level. While specific event data is submitted to document turbidity levels, the data is incomplete and does not address natural background conditions, thereby making comparisons invalid.**
- **Turbidity values are known to spike immediately after storm events and are subject to natural catastrophic events such as mast wasting, channel evulsion and/or migration or other influences. The natural background conditions, riparian vegetative structure, and stream condition and type will have a direct effect on the time needed to purge the system.**
- **This data does not give evidence to higher levels of erosion and sediment delivery to streams occurring within the Upper Tellico watershed where the trail system is present on the landscape.**
- **Provide complete, valid scientific data to support the USFS accusations or remove all sections from the EA that do not have complete data.**

Response: The State standard for turbidity states: "the turbidity in the receiving water shall not exceed…10 NTU in streams, lakes or reservoirs designated as trout waters… if turbidity exceeds these levels due to natural background conditions, the existing turbidity level shall not be increased. Compliance with this turbidity standard can be met when land management activities employ Best Management Practices (BMPs)… recommended by the Designated Nonpoint Source Agency… BMPs must be in full compliance with all specifications governing the proper design, installation, operation and maintenance of such BMPs" (NC DENR 2007).

We understand that the standard is violated when applied BMPs are not effective at preventing visible sediment from entering streams causing Turbidity levels to exceed 10 NTUs.

Trail condition surveys identified 34 percent of the drainage features on the trail contributed some amount of sediment to the Tellico River stream network and 31 percent of the trail length was connected to the stream network during storm runoff.

3-120.<u>Public Comment:</u> The EA states on page 38 "Additionally, both TSS and turbidity data indicates an increase in suspended sediment loading from the private inholding on Tipton Creek.

- **Caliber agrees with this statement. The private inholdings along Tipton Creek are contributing a large amount of sediment per Caliber stream sampling and analysis. This is a major sediment source that is not given enough credit for sedimentation impacts when compared to the trail system.**

Response: The TSS and turbidity data from the Tipton Creek drainage shall be shared with the NC Division of Land Quality and recommend that they investigate sources of sedimentation from the development of the private inholding. However, trail condition surveys identified multiple sources of sedimentation from the trail system (34 percent of the drainage features on the trail contributed some amount of sediment to the Tellico River stream network and 31 percent of the trail length was connected to the stream network during storm runoff).

3-121.<u>Public Comment:</u> The EA states on page 39 "Focusing on the fine sediment portion (<2 millimeters) of the stream bed, there is more fine sediment incorporated into the larger streambed material at sites affected by the trail system than in the three reference stations."

- **The percent of fine sediments, <2mm, at the Jenks Branch and Tipton Creek locations can be attributed to sources other than the trail system as described above.**
- **The riffle pebble counts are for one year and may represent baseline conditions. Without previous data conclusions cannot be drawn concerning accumulation of fine sediments in riffle habitat within these stream systems.**
- **Pool sediment data clearly documents yearly fluctuations in total amount of sediment available.**
- **Climatic events have direct effects on the amount and distribution of sediment available and delivered to stream channels.**
  The relative occurrence of flushing flows, catastrophic flows, and drought directly influence sediment loading. Without a clear understanding of the amount of normal background sediment available and delivered to these stream channels it is impossible to ascertain if the data is normal or excessive.

Response: Although other sources of sediment in the Tipton Creek drainage may exist, trail condition surveys identified multiple sources of sedimentation from the trail system, in this case Trails 1 and 2.

You are correct that this data represents a snap shot of current channel substrate composition and does not establish trends.

There are annual differences in the volume of sediment deposited in pools, per Figure 3.1.1.4 in the EA.

Precipitation is the predominant driving force for soil movement in the watershed. Normal background sediment is represented by the reference streams, Citico Creek and Sycamore Creek.

3-122.<u>Public Comment:</u> The EA states on page 41 "The pool filling analysis, conducted during 2005, 2007 and 2008, indicates that more fine sediment has accumulated in pools within the Upper Tellico River drainage than in reference streams (Figure 3.1.1.4).

- **The relative occurrence of flushing flows, catastrophic flows, and drought directly influence the perceived sediment loading. In addition, stream energy and will have a direct influence on the transport of fine sediments.**
- **The data presented in Figure 3.1.1.5 seems to indicate that stream energy may factor into the deposition of sediments in pools differently by stream channel.**
- **Without a clear understanding of the amount of normal background sediment available and delivered to these stream channels it is impossible to ascertain if the data is normal or excessive.**
- **Remove this analysis from the EA until further information is available.**

Response: We agree with your statements regarding flows and transport. Normal background sediment is represented by the reference streams, Citico Creek and Sycamore Creek.
This section will remain in the EA.

3-123.<u>Public Comment:</u> The EA states on page 43 "The larger the number of drainage features, the likelihood of them being effective decreases because of the logistical and financial limitations of increasing maintenance."

- **The USFS maintains larger trail systems with corresponding larger number of drainage features. It is not believed that these larger areas are on the verge of being shut down due to water quality problems.**
- **Why can the USFS maintain much larger trail systems elsewhere but not at Tellico?**

Response: Since we were not provided the identity of "larger trail systems with correspondingly larger number of drainage features…" we cannot ascertain the validity of this statement. A larger trail system does not in and of itself necessarily mean a "correspondingly larger number of drainage features." We are unaware of a large OHV trail system on National Forest System land in an area

with similar soils, slopes, and precipitation, and a similar stream system – essentially the factors that make it so difficult to restrain accelerated erosion in Upper Tellico.

3-124.<u>Public Comment:</u> The EA provides Table 3.1.2.1.1 on page 44 "Comparison by alternative of the number of sediment control BMPs for unpaved roads and trails in the analysis area." And states "Since meeting Forest Plan and State Water Quality standards is based on the success of applied BMPs, this measure will be used to assess the likelihood of each alternative meeting standards."

- **This is an incorrect assumption. A higher number of BMPs does not equate to a lower chance of being able to provide correct maintenance. An appropriately funded maintenance program, along with competent, well trained contractors will allow for any number of BMPs on the Tellico trail system to be properly maintained.**
  Revise Table 3.1.2.1.1 to remove this incorrect assumption.
  Remove the above statement and any similar statements from the EA.
  Correct any analyses that rely on the above, incorrect assumption.

Response: This comment refers to the statement on page 43 of the predecisional EA. Because of the factors limiting BMP effectiveness (erosive soils high precipitation amounts, etc.), listed on page 29 of the predecisional EA, the Forest Service believes that BMP effectiveness decreases as a function of the number of required maintenance visits, as well as proximity to a stream channel (Table 3.1.2.1.1.). Logistical difficulties and limitations on funding are real factors impacting the effectiveness of maintenance.

3-125.<u>Public Comment:</u> The EA states on page 46 "…the Tusquitee Ranger District has harvested 38 acres using the 2-age timber harvest method within the Jenks Branch watershed within the last 10 years. Post harvest monitoring has not located any sediment sources related to this timber sale, and none are anticipated from the Farmer Branch sale. Therefore, there would be no cumulative impacts to sedimentation from these activities."

- **The tree harvest in the Jenks Branch watershed stripped the surface of two hill slopes. There is no historical evidence of appropriate BMPs having been used or left in place subsequent to this harvest. This area was surveyed by Caliber personnel. Anecdotal evidence suggests rapid and abundant transport of soil from this area subsequent to the harvest. Sediment plumes are still evident in Jenks Branch downstream of this harvest and upstream of Rock Garden and the Forest Service turbidity data would seem to verify this as a potential source. This site is directly adjacent to and upslope of Jenks Branch and would discharge directly into it during storm events. Modify all statements throughout the EA that state the timber sale on Jenks Branch is not a sediment source. Statements should remain at a minimum in their current location but be modified to state that this timber operation did contribute significant amounts of sediment to Jenks Branch.**
  See stream sampling and survey information available in the Caliber report.

Response: The Jenks Branch harvest **did not** "strip the surface or two hill slopes," and **did not** experience "rapid and abundant transport of soil." The Forest Service maintains harvest inspection records and has photographic documentation contrary to the commenter's claims. We question where exactly the commenter went to make these claims.

The Caliber analysis of aquatic macroinvertebrates did not correctly follow the State of NC protocol, and as a result, their conclusions for Jenks Branch cannot be substantiated.

3-126.<u>Public Comment:</u> The EA states on page 46 "Total suspended sediment and turbidity data indicates an increase in suspended sediment in Tipton Creek below the private inholdings. It is likely that erosion is occurring as a result of these ongoing private activities and that these activities are leading to adverse cumulative effects to soil loss and sedimentation in the Tellico River drainage. Other ongoing activities on private lands affecting the soil resource in the analysis area include the network of roads and trails in the Peckerwood Creek drainage. The extent of potential effects of this road network has not been determined."

- **Caliber agrees that private activities in the Tipton Creek and Peckerwood Creek areas are contributing sediment to the Tellico river system. Caliber stream sampling and surveys indicated significant amounts of sediment coming from the private Tipton community.**
- **What is the USFS going to do to quantify the amount of sediment being contributed to the Tellico river system from these private activities in relation to the amount of sediment being contributed from the Tellico trail system?**

What concrete, scientifically defensible and statistically significant evidence does the USFS have that justifies the proposal that closing the Tellico trail system will dramatically improve the native brook trout habitat when numerous other activities such as the private activities in the Peckerwood and Tipton areas and the timber harvest in the Jenks Branch area cocontributors?

Response: Although the FS can not assess private lands, the state of NC shall do the following as required by the Sediment Pollution Control Act of 1973 (As amended through 1999) North Carolina General Statutes Chapter 113A Article 4 § 113A-54. Powers and duties of the Commission:
(3) Develop recommended methods of control of sedimentation and prepare and make available for distribution publications and other materials dealing with sedimentation control techniques appropriate for use by persons engaged in land-disturbing activities, general educational materials on erosion and sedimentation control, and instructional materials for persons involved in the enforcement of this Article and erosion control rules, ordinances, regulations, and plans.
(4) Require submission of erosion control plans by those responsible for initiating land-disturbing activities for approval prior to commencement of the activities.
Therefore, private land owners are required to meet the State of NC requirements for controlling erosion and sedimentation.

The development within the Tipton Creek inholding is a likely source of sediment. We do know from turbidity data from 2002-2004 that the mean turbidity went from 17 NTU above the private inholding to 77 NTU below the inholding, indication a source of sediment in the private inholding. Sediment coming from the private land in the headwaters of Peckerwood Creek has not been assessed. The TSS and turbidity data from the Tipton Creek drainage shall be shared with the NC Division of Land Quality and recommend that they investigate sources of sedimentation from the development of the private inholding.

Regardless of what is occurring on private lands within the upper Tellico watershed, the Forest Service is responsible to meet State and Forest Plan standards to protect water quality on federal lands.

We have determined that erosion and sedimentation to nearby streams is excessive from the trail network. Thirty-four percent of the drainage features on the trail contributed some amount of sediment to the Tellico River stream network and 31 percent of the trail length was connected to the stream network during storm runoff. Eliminating these sources of sedimentation will have beneficial effects on suspended sediment levels and sediment deposition in the stream channel. Native brook trout are expected to respond to these improvements in water quality positively. Refer to page 75 of the predecisional EA.

The private activities in the watershed are required to meet the State of NC requirements for controlling erosion and sedimentation.

3-127.<u>Public Comment:</u> The EA states on page 47 "Additionally, the sections of trail considered "high challenge" on Trails 2, 7, 9, and 12 would be decommissioned in each alternative, reducing the risk of vehicle fluid spills and subsequent soil (and potentially water) contamination from petroleum products. The elimination of these sites would meet North Carolina state guidelines to reduce nonpoint sources of pollution (NC DFR 2006).

- **NC state guidelines to reduce nonpoint sources of pollution are not being applied correctly. If challenge areas and trails need to be closed to prevent potential non-point source contamination from petroleum products then by that rational eall parking lots should be closed as they are large contributors of petroleum products from vehicles.**
  Remove this rational from the EA.

Response: The statement you refer to is **a statement of the effect** of closing the challenge areas, not a rationale for closing the challenge areas. The mission of the NC Nonpoint Source Management Program is "To restore and protect waters of the State whose uses are impaired or potentially impaired by nonpoint source pollution."

3-128.<u>Public Comment:</u> General comment on data presented from pages 34 through 43 in the EA.

- **The Forest Service based their analysis on the foundation that they need to meet the State water quality standard for turbidity. However, the State Sedimentation Pollution Control Act of 1973 is directly associated with the removal of vegetation for the purposes of land development. The use of the Upper Tellico trail system does not meet the definition of land clearing activities and therefore the State water quality standard for turbidity do not apply. Therefore, the USFS analysis is invalid and should be removed from the EA.**
- **Severe hazard soils may be present in the Upper Tellico watershed, however there is no current published soil survey for the area. In addition, adjacent counties with published soil surveys classify soil hazard based on gradient slope with values ranging from slight to severe. No data is presented in the EA that documents soil types found in the Upper Tellico watershed or quantifies the extent of each soil type and slope gradient associated with the individual traits. Therefore, the USFS analysis is invalid and should be removed from the EA.**
- **The Forest Service, in Section 3.1, has assumed that any and all sediment is directly attributed to the OHV use. However, the data presented does not document or verify the source of sediment inputs. Based on the TSS, Turbidity, riffle pebble counts, and pool filling sampling alternative potential sources can be identified. Background levels of sediment supplied by the surrounding watershed have not been identified and therefore, no conclusions concerning the detected levels can be inferred. Because of this the USFS analysis is invalid and should be removed from the EA.**

Response: The Forest Service has consulted with the NC Division of Water Quality and believes that we are correctly interpreting the NC state standard for turbidity.

Soil data for Cherokee County is available from the Soil Data Mart web site (http://soildatamart.nrcs.usda.gov/) in tabular form only. Spatial information is available from the Natural Resource Conservation Service office in Murphy, NC. Information was obtained from NRCS including digital aerial photo images overlaid with soil types. In GIS, the FS overlaid the trail system on the images and measured trail length by soil type. Information for "Hazard of Erosion" was obtained from the Soil Data Mart web site. The ratings take into consideration the slope and erodibility of the soil.

The EA discusses all potential sources of sediment in the area including the private lands, instream sources (e.g., streambank erosion), and the road/trail system. The OHV trail system was found to have many sources of sediment to adjacent streams.

Normal background sediment is represented by the reference streams, Citico Creek and Sycamore Creek.

3.2 Aquatic Wildlife

3-129. Public Comment: USFS does not have data correlating brook trout densities and sediment

Response: No quantitative fisheries or fish habitat data exist dating prior to the evolution of the OHV Area. In the absence of pre-disturbance data, reference stream data were used in the EA. These reference streams provide targets for appropriate habitat quality and quantity, and guidelines for expected trout population densities. Additionally, the EA conforms to USFS direction to use "Best Available Science" in the analysis of alternatives (Richard J. Cook letter dated May 2, 2007).
Statistical analyses are an accepted and practical tool for investigating relationships among groups of data. However, statistical significance (or nonsignificance) is highly dependent upon the survey design and random error effects. For example, the year-class failure for the rainbow trout population within the Tellico River in 2003 was "statistically insignificant" because the sample design did not lend itself to a statistical analysis. However, the biological significance of collecting 0 young-of-the-year rainbow trout is more indicative of the cumulative effects of the spring 2003 flood, possible acidification effects, and decades of habitat degradation from OHV use in the watershed. When these individual effects work in concert (cumulative effects), an environment is created where consistent rainbow trout reproduction is compromised. The scientific literature demonstrates that trout populations are negatively affected by sedimentation (EA Section 3.2.1). While other environmental factors (floods, droughts, etc) affect trout densities, these effects occur to all watersheds. The trout population densities in the Upper Tellico River watershed are lower than other streams (Besler et al. 2007). The results of the NC Wildlife Resources Commission monitoring (including survey methods and data) in the Upper Tellico River watershed are contained within Besler et al. (2007).

When the OHV Area brook trout densities are compared to the 14 trout streams across western North Carolina, the OHV affected streams exhibit a lower density than many of the reference streams (Besler et al 2007). The reference streams presented by Besler et al (2007) cover a full range of environmental conditions (e.g. substrates, stream orders, etc.).

Additionally, Bonner (1983) does not present correlation analyses for any of the streams within the document, nor does it provide trend analyses for trout streams in the Upper Tellico River watershed.

National Forests Management Act (NFMA) 1982 Regulations (36CFR 219)
"In order to insure that viable populations will be maintained, habitat must be provided to support, at least, a minimum number of reproductive individuals and that those individuals can interact with others in the planning area." "Each alternative shall establish objectives for the maintenance and improvement of habitat for management indicator species.

3-130.Public Comment: Need to evaluate the effects of fishing pressure. Ban fishing in Tellico. Prohibit stocking of rainbow and brown trout.

Response: As stated within the EA (Section 3.2.1) the NCWRC does not currently stock any waters within the Tellico River system. NCWRC's stocking lists may be viewed at www.ncwildlife.org. The Tennessee Wildlife Resources Agency (TWRA) stocks the Tennessee portion of the Tellico River. While some of these fish may move into North Carolina waters, these fish can only access a portion of the Upper Tellico River watershed because waterfalls on the Tellico River, Tipton Creek, and Peckerwood Creek prevent them from accessing these areas.
Jumping barriers (culvert outlets) have been studied for salmonids (Coffman 2005). Culvert outlets causing a drop of more than 24 inches in vertical height are considered impassable to trout (Coffman 2005). Although other parameters (i.e. water velocity, length of fish, etc.) influence the jumping performance of fish, no salmonids are capable of jumping the >75 foot waterfalls on the Upper Tellico River or the falls on Tipton Creek and Peckerwood Creek. These falls present an insurmountable obstacle to any rainbow trout or brown trout stocked by TWRA. There are no effects to the Upper Tellico River brook trout upstream of the falls resulting from the TWRA stocking program. Rainbow trout and brown trout can negatively affect the abundance and distribution of the southern Appalachian brook trout. However, these effects do not occur where the rainbow trout and/or brown trout are absent. Removal of the rainbow trout and brown trout from the section of the Tellico River between the waterfalls and the state line would not affect brook trout populations within the headwaters because no fish can jump the waterfalls.

Based upon trout monitoring, NCWRC has determined that fishing pressure does not exert a measurable negative influence on trout populations. The Upper Tellico River watershed is managed by the NCWRC; therefore, no effects are anticipated from fishing pressure. No information exists to indicate that the Upper Tellico River watershed experiences higher fishing pressure than the streams surveyed for the Besler et al. (2007) report.

3-131.Public Comment: The OHV system is currently meeting the NC water quality standards.

3) **Response:** NC Division of Water Quality recently completed an assessment of habitat, benthic macroinvertebrates and water chemistry for streams in the upper Tellico area and reference streams. While the NCDWQ study resulted in a bioclassification of "excellent," **NCDWQ found there was clearly more sand, embeddedness, and in some cases silt in the streams adjacent to the OHV system than in the reference streams.** The streams adjacent to the OHV system displayed definite indicators of the effects of sedimentation in the array of macroinvertebrate species collected, even though those differences didn't reduce the bioclassification. An example of this was the reduced number of filter-feeding caddisflies (species especially susceptible to the adverse effects of sedimentation) in sites adjacent to the

OHV system. Also, in each case NCDWQ calculated lower scores for habitat characteristics for streams adjacent to the OHV system than calculated for the reference streams. In total, the NCDWQ data "suggest adverse impacts to many of the streams" in the area of the OHV system (NCDENR 2009).

The Caliber (2009) report correctly quotes the NCDWQ statement that aquatic macroinvertebrates (particularly EPT taxa richness) are not good indicators of ecosystem stress due to anthropogenic sedimentation. Therefore, the assertion that the macroinvertebrate data presented by Caliber (2009) indicate good water quality is a spurious conclusion.

3-132.Public Comment: The OHV system is not a source of sediment.

Response: The EA states (Section 3.1.1) the number of sediment sources located along the OHV trail system. Many of these sediment sources were tracked downslope to stream channels (i.e. they are hydrologically connected to the river system). The EA shows the number of nonfunctioning rolling dips, sediments leaving these non-functioning dips, sediments flowing into the streams, and sediment deposition within the stream channels.

While sedimentation from a particular activity can be perceived differently according to the individual's values and management objectives, the USFS, NCWRC, and NCDWQ have been charged with protecting and enhancing natural resource conditions. As such, the standards for habitat and water quality for the National Forests may exceed the standards of the general public. The elimination of OHV Trail derived sediments would reduce the effects of sedimentation within this watershed and improve habitats for the aquatic organisms. These improvements would reduce the impacts of the private inholdings upon the Tellico River by minimizing the cumulative effects of sedimentation within the watershed.

Caliber correctly states that the Tipton Creek development contributes sediments to Tipton Creek and part of the Tellico River. However, these sediments affect the stream below the development. None of these sediments are influencing the sediment load in Tipton Creek upstream of Trail 420-1 or upstream of the Tipton Creek-Tellico River confluence. The primary sediment sources within the Tellico River watershed are directly related to the OHV trail system.

The Jenks Branch Timber Sale was implemented according to the standards of the LRMP. As stated within the EA (Section 3.2.2) sedimentation and erosion are not typical for any timber harvest within the Nantahala-Pisgah National Forests. Caliber (2009) actually did not document any sources of sediment from the Jenks Branch timber harvest units. This report documented large sediment deposits within Jenks Branch and assumed that these sediments resulted from the timber operations. No sites of active erosion were located by Caliber or the USFS near these timber harvest areas. Furthermore, Jenks Branch is paralleled by Trail 2 for its entire length. The Aquatic Resource Analysis for the Jenks Branch Timber Sale (2002) indicated that Jenks

Branch was receiving sediments from Trail 2 prior to the timber harvest activities. The sediments that Caliber (2009) reports in Jenks Branch most likely resulted from erosion on Trail 2. The assertion that Jenks Branch has an abundance of fine sediments because the Jenks Branch timber sale caused erosion is a specious conclusion. This reality is further confirmed by trail condition surveys (presented in the EA in Table 3.1.1.2; Section 3.1.1) which found that 71% of the rolling dips in Trail 2 were not functioning and 13% of Trail 2 is hydrologically connected to the watershed (Table 3.1.1.2; Section 3.1.1).

3-133. Public Comment: The sediments within the Tellico River are derived from the Tipton Creek community and from the Jenks Branch Timber Sale.

Response: While the relative amount of sedimentation from the private developments is unknown, the exceedingly high levels of sedimentation from the OHV system demands that the USFS undertake the necessary measures to prevent the cumulative impacts of the OHV Area and the private developments from impairing aquatic habitats. Any effects of the sediments from private inholdings would only affect those habitats downstream of the inholdings – not the entire watershed. Section 3.1.1 of the EA shows that the OHV Trails are hydrologically connected to the streams within the Tellico River watershed.

3-134. Public Comment: The NC Sedimentation Pollution Control Act does not apply to the OHV system.

Response: OHV Trail use is an inherently ground disturbing activity which rearranges and redistributes trail surface materials by the vehicle actions. Trail use causes incision of the road surface and widening of the trail (defined by Caliber as "trail creep"). This widening causes undercutting of the vegetation, leading to the vegetation toppling into the incised road channel and mobilization of new sediments. Additionally, OHV users often drive partially up the incised road banks to maneuver around obstacles. This action causes addition soil disturbance and widening.
Removal of vegetation and construction of access roads/trails for human activities is part of the development process. New soil is being exposed by the OHV use.
The USFS must meet its obligations for providing suitable habitat for the selected Management Indicator Species and their habitats. Brook trout, rainbow trout, and brown trout are listed as project Management Indicator Species which require quality spawning gravels, resting and feeding habitats, and high water quality. These protections are required under NFMA regulations.

3-135. Public Comment: The validity and applicability of the pool analysis is questionable. Pool habitats are not important habitat elements for trout.

Response: The pool analysis simply shows that few pools exist within the surveyed reach. Pool filling data (Section 3.1.1 of the EA) show that the relatively few number of pools have more sediments than do the reference stream pools. Alexander and Hansen (1986) found a correlation between reduced brook trout numbers and habitat

following the introduction of large quantities of sands. These sands filled most pools and embedded larger substrates. Stoneman and Jones (2000) found that trout densities generally increased with an increase in percent pools within Canadian streams. Binns (1994) observed an increase in brook trout densities following fish habitat enhancements that increased the number of pools and the pool volumes. These studies indicated that pool habitats are important for trout populations. Raleigh (1982) stated that a 1:1 ratio of pools and riffles is optimal for brook trout habitat.

3-136.Public Comment: The USFS's habitat monitoring methods are inappropriate for the current application.

Response: All pebble count surveys were conducted using the same methods for the OHV affected area and the reference streams. Therefore, any biasing of the data toward fines would be consistent for all streams.

No pebble count data from the OHV impacted area are available prior to the evolution of the OHV area. In the absence of pre-disturbance data, reference stream data are used.

3-137.Public Comment: Turbidity levels are not a problem for the aquatic resources. These are "natural" conditions.

Response: "Moreover, many streams have been degraded for so long that degraded conditions have become associated with 'natural' or baseline conditions" (Rosgen 1996). The Upper Tellico River has been degraded by private timber operations and by OHV use for so long that its high turbidity levels have become associated with its natural conditions. Natural turbidity results from within channel mobilization of sediments and tannins. Caliber (2009) stated that the streams within the Tellico River watershed are not sediment producers. If the sediment and turbidity is not resulting from within channel sources, then the sediment and turbidity is being introduced from upland sources. The EA demonstrates that many of these sources are the OHV trails.

3-138.Public Comment: Caliber's aquatic insect monitoring indicates that no toxic substances have leached into the surface waters.

Response: Caliber (2009) macroinvertebrate data do not suggest that no petroleum products have entered the streams. Apparently no water samples were taken by Caliber, Inc. to assess the chemical content of the water. The data presented by Caliber (2009) suggest that either no petroleum products have entered the streams or the toxins have not reached sufficient levels to impair the aquatic insect community at the sites surveyed.

3-139.Public Comment: Tellico River watershed streams have good water quality (based upon NCIBI data provided by Caliber (2009).

Response: The Forest Service received two independent reviews of the Caliber stream assessment from individuals familiar with the NCDWQ protocols for collection and analysis of NCIBI data, including one from the NC Division of Water Quality. These are available in the project record. These commenters provided expert reviews indicating the proper protocols were not followed for the Caliber report, making the results unusable.

The State Division of Water Quality recently completed an assessment of habitat, benthic macroinvertebrates and water chemistry for streams in the upper Tellico area and reference streams. While the Caliber study did not follow the State protocols, the reported bioclassification results were similar to those reported by NCDWQ (all sites received a bioclassification of "excellent"). **However, NCDWQ found there was clearly more sand, embeddedness, and in some cases silt in the streams adjacent to the OHV system than in the reference streams.** Also, streams adjacent to the OHV system displayed definite indicators of the effects of sedimentation in the array of macroinvertebrate species collected, even though those differences didn't reduce the bioclassification. An example of this was the reduced number of filter-feeding caddisflies (species especially susceptible to the adverse effects of sedimentation) in sites adjacent to the OHV system. Also, in each case NCDWQ calculated lower scores for habitat characteristics for streams adjacent to the OHV system than calculated for the reference streams. In total, the NCDWQ data "suggest adverse impacts to many of the streams" in the area of the OHV system.

From personal experience, macroinvertebrates do not track low to moderate sedimentation all that well. You can show small to moderate upstream/downstream differences relative to a sediment source—particularly in small streams, but these difference do not always translate into changes in bioclassification (often, the differences in lightly sediment-impacted streams that you'll see are small differences in BI, EPTBI or taxa richness). However, once the sedimentation gets to the point of large-scale burial of substrates or significantly higher rates of embeddedness downstream relative to upstream, the inverts will demonstrate impacts.

3-140.<u>Public Comment:</u> The USFS should re-evaluate the proposed large woody debris enhancements.

Response: The large woody debris enhancement proposal will be evaluated as a separate decision. This statement fulfills, in part, the NEPA requirements for cumulative effects analyses.

3-141.<u>Public Comment:</u> The Tellico OHV system has caused environmental effects. The USFS should protect the Upper Tellico River watershed from further degradation.

Response: The USFS concurs.

3-142.<u>Public Comment:</u> Concern that the EA fails to adequately address the effects from acid deposition.

Response: The effects of acid deposition (acid rain) are regional – spanning the Southern Appalachian Mountains. While the OHV's combustion of fossil fuels adds to the atmospheric load of acidic compounds, the primary sources are in urban regions outside of the Upper Tellico River watershed. Acid deposition is one stressor upon the trout population, while sedimentation from the OHV system created an additive (cumulative) stressor upon the trout populations. The USFS is actively managing for the management indicator species (wild brook trout, wild rainbow trout, wild brown trout, and blacknose dace) by eliminating one of the stressors from the fish community

3-143.Public Comment: Concern that other recreational uses are having negative effects upon the aquatic resources.

Response: Camping along the Tellico River (Trail 1 and Trail 5) has been prohibited by Forest Supervisor Closure Order (December 8, 2005). Many of the sites have already begun to revegetate. The need for additional watershed rehabilitation will be evaluated as specific needs are identified.

3-144.Public Comment: "The real answer to this situation is to find new ways to help the trout, not hurting the human interest in the area"

Response: The Upper Tellico OHV Area has been operating under the joint management of the USFS and its partners. Under this system, the trail maintenance has been inadequate and ineffective due to the reasons stated within the EA (Section 3.1.1). Best management practices are not effective at controlling sedimentation from the OHV trail system.

3-145.Public Comment: "I would like to see additional regulations passed to help protect this valuable resource and fishery which OHV use is destroying"

Response: Fishing regulations are administered by the North Carolina Wildlife Resources Commission. The development of new fishing regulations is beyond the scope of this analysis.

3-146.Public Comment: Confused about why brook trout do not extend into the Tennessee portions of the Tellico River.

Response: The negative effects of rainbow and brown trout occupation are well documented within the scientific literature. Natural barriers (waterfalls) prevent the rainbow trout and brown trout from migrating into the headwaters of the Upper Tellico River watershed. The few brook trout that have occurred within the North Carolina portion of the Tellico River (Besler et al. 2007) have not persisted within the river where rainbow trout and brown trout are located.

3-147.Public Comment: Wild trout population monitoring in the Tellico River watershed between 1994 and 2006 documented substantially reduced survival of young fish

compared to 14 other North Carolina wild trout populations monitored from 1989-1996 (Besler et al. 2007). These recruitment failures appear to be due to density-independent factors such as storms or sedimentation. The susceptibility of trout eggs and larvae to sedimentation is well documented.

Response: USFS concurs.

3.3. Plants

3-148.<u>Public Comment</u>: A review of the NCNHP database of rare species and unique habitats shows the following listing of elements of natural diversity known to occur within the Upper Tellico River watershed: Necklace Sedge (*Carex projecta*), Clingman's Hedge-nettle (*Stachys clingmanii*), purple sedge (*Carex purpurifera*), and hornwort (*Megaceros aenigmaticus*). The plant species list analyzed in the EA is incorrect. The NCNHP database documents only two elements protected with federal classification of Endangered (E), Threatened (T), Proposed Endangered (PE), or Proposed Threatened (PT) which are protected under provisions of Section 7 and Section 9 of the Endangered Species Act of 1973, as amended. Neither of these will be affected by any of the proposed alternatives. The NCNHP County database of rare species and unique habitats was reviewed and showed no recorded occurrences of federally protected species within the project study area.

Federal Species of Concern (FSC) are not legally protected under the Endangered Species Act and are not subject to any of its provisions, including Section 7, until they are formally proposed or listed as Threatened or Endangered. The NCNHP County database of rare species and unique habitats was reviewed and showed no recorded occurrences of FSC species within the project study area.

Some of these species are listed as Endangered, Threatened, or Special Concern on the NCNHP list of Rare Plant and Animal Species and may be afforded state protection under the North Carolina Endangered Species Act of 1987 and the North Carolina Plant Protection and Conservation Act of 1979. However, none of the listed elements will be adversely affected by any of the proposed alternatives.

Alternatives A, B, D, E, and F will have no adverse effect on the plant communities, Federally listed species, or State listed species.

Response: We disagree with the comment that the incorrect species and plant communities were analyzed in the EA. The list of species and communities analyzed is based on three separate requirements: the Forest Plan, Regional Forest direction, and the ESA. The alternatives have varying effects on plant communities and species which are disclosed in the EA.

Querying the NCNHP database, the commenter lists four species of rare plants from the watershed: necklace sedge, Clingman's hedge-nettle, purple sedge and the [Tusquitee] hornwort (*Megaceros*). Two of the species, purple sedge and the hornwort, were located inside the project area during field surveys. Necklace sedge has a historic record on the banks of the Tellico River but was not relocated during the field survey

for the project. Clingman's hedge-nettle was relocated during the field survey for the project, but grew outside the project area.

As stated in the EA, the proposed treatment area contains a sensitive species (the hornwort) and a locally rare species (purple sedge). We agree that neither of the species is federally listed nor a federal species of concern and that federal species of concern are not legally protected under the ESA. However, Forest Service regulations extend viable population protection to species on the Regional Forester's Sensitive Species list, and the Forest Plan requires this plus project-level analysis of Forest listed species (locally rare). Therefore, these species are analyzed in the EA.

We disagree with the commenter regarding the effects of the project on the sensitive and forest concern species located in the proposed treatment areas. The Biological Evaluation clearly states that the alternatives **will** adversely affect listed species. For example, the analysis for *Megaceros* for Alternative A states:

Alternative A proposes no management activities. In the absence of management, habitat for *Megaceros aenigmaticus* should remain unchanged by Forest Service actions. Sedimentation from the existing trails may impact populations of the species both directly by burying the plants, and indirectly, by either scouring or altering stream flows through the populations. Plants near trail crossings may also be indirectly affected by pollution, primarily petroleum distillates, degrading the water quality of the streams. The relative effects to the hornwort from all alternative are summarized in Table 3.3.2.1

A similar analysis for purple sedge occurs in the EA. For Alternative B, the EA states:

Alternative B will extirpate the plants found growing in the tread of the proposed Trail 5 reroute. Reducing the number of plants in a population may also produce indirect effects to neighboring plants. These indirect effects may include both reductions in the gene pool as well as reductions in the gene flow among plants, potentially resulting in more inbreeding, decreased seed set, and less vigorous seedlings. Due to the small size of the population in the proposed treatment area, however, effects to gene flow should be minimal and unlikely to influence the viability of any surrounding populations. As a result, indirect effects from the proposed activities will not be considered further.

These effects are repeated for Alternatives D, E and F.

3.4 Terrestrial Wildlife

3-149.<u>Public Comment:</u> The analysis of effects by the Forest Service on the Tellico salamander and the Southern Appalachian salamander appears to be based on the perceived loss of habitat for these two species. However, this estimate may be based on inaccurate assessments of potential habitat and potential habitat modification. Alternatives B, D, and E reduce the total amount of OHV trails with no new trail construction. According to Table 3.4.3b.1 of the EA, these Alternatives would cause

significant reduction in the amount of potential habitat available for the two salamander species. Reduction of trails cannot reduce the available habitat. In addition, the preferred habitat of the salamanders is far more specific and any habitat infringement would be minimal. Therefore, the USFS analysis is incorrect. Modify the USFS analysis to include appropriate, correct information.

Response: All of the species listed in their table were addressed in the appropriate place in the EA (some are PETS, some are FC, some are aquatic) except the Smyth's green comma (a butterfly), which is not federally listed nor a R8 sensitive species, and does not meet our criteria to be identified as a Forest Concern species (State Rank of S1-S2 or Federal status of FSC).

EA Section 3.4.3a describes potential habitat loss to the Tellico salamander and the Southern Appalachian salamander (both R8 sensitive species). Specifically, the EA states: "Effects of the alternatives on these species were estimated according to the loss of habitat from trail construction and trails remaining open." The EA further clarifies exactly how net salamander habitat affected was estimated, using the formula:

Net habitat affected = total habitat available (i.e. existing condition for the appropriate parameter, as described above) - habitat lost from new trail construction + habitat gained from trail decommissioning

This formula integrates habitat lost along existing trails, future habitat losses to new construction or reroutes, as well as habitat gained through trail decommissioning.

In reference to Table 3.4.3b.1 and the significance of the potential effects on habitat for the Tellico and southern Appalachian salamanders, the EA states, "while potential effects do vary by alternative, the numbers represent only a tiny fraction of the habitats available within the Tellico OHV area and across the Forests, and would likely not be measurable on the ground." It is the commentor that gives "significance" to potential effects on the Tellico and Southern Appalachian salamanders. The Forest agrees with the commentor's statement that, "…the preferred habitat of the salamanders is far more specific and any habitat infringement would be minimal."

3-150. Public Comment: Alternative C would improve wildlife habitat by eliminating the disturbance caused by OHV use. Many species of wildlife such as black bear are sensitive to human disturbance and will avoid areas of intense activity. Moreover, wild turkey and other bird nesting are susceptible to disturbance. Our biological staff has consistently expressed concerns about the effects of the Upper Tellico OHV System on wildlife and chose not to pursue habitat management activities there. Implementing Alternative C allows resource agencies to apply habitat management strategies that can significantly benefit fish and wildlife habitats.

We compliment the Forest Service's resource staff for the analysis of impacts on terrestrial wildlife (pages 111-123) and on plants (pages 85-109). The analysis shows that two "management indicator species" selected, Ovenbird and black bear, would

benefit more from Alternative C than other alternatives. We expect that many other species would also benefit from Alternative C, as indicator species usually represent many other wildlife species similarly affected in the same ecosystem.

Response: Analysis of effects to wildlife is located in Chapter 3, section 3.4 of the EA.

The MIS process allows us to use potential effects on one species that represents an ecosystem (or part of an ecosystem) as an indicator of effects on wildlife communities rather than stating effects for individual species.

3-151. Public Comment: On page 112 of the Tellico EA it talks about Wildlife. Its choice of Black Bear is a little off. It is legal to hunt Black Bear on the North Carolina side of the Nantahala National Forrest, yet it is not on the Tennessee Side. The Tennessee side is a National Black Bear Reserve. Therefore the Black bear have more them enough land to thrive on. This info about the Tennessee side needs to be included in the EA. Also in the same paragraph is stats that the reason the 3 species were chosen was because of there need for old forest and lack of human contact. Why not chose a wild hog? There are more than enough of them to study in the NF. But that would mean that there might be an animal in the forest that is capable of tearing up more ground than any OHV ever thought about. Why is that not covered in the EA? I think this study needs to cover what wild hogs can do to cause erosion and the effects that they have on the land.

Response: Section 3.4.1a of the EA summarizes the management areas (MAs) within the OHV system in terms of wildlife habitats, and communicates the rationale for the selection of management indicator species for the analysis. This selection is based on wildlife habitats rather than management areas since none of the proposed alternatives contain activities that will alter forest stand composition or age class structure. The primary effect from any of the proposed changes to the trail system involves increases or decreases in the amount of noise and disturbance associated with use of the system. Black bear are sensitive to these potential effects, and were therefore selected as a management indicator species (MIS) for the terrestrial wildlife analysis. The MIS process allows us to use potential effects on black bear as an indicator of effects on wildlife communities rather than stating effects for individual species.

The Multiple-Use Sustained Yield Act of 1960, National Forest Management Act of 1976, and the National Environmental Policy Act of 1969, as well as the Endangered Species Act of 1973 and the Land and Resource Management Plan (LRMP) for the Nantahala and Pisgah National Forests, require that populations of all native wildlife species be maintained, enhanced, or restored where applicable. This applies to all Forest lands, including the OHV area. The fact that there is abundant habitat for black bear in Tennessee does not diminish our commitment to sustaining black bear habitat and populations on the Forest.

The commenters correctly state that it is legal to hunt black bear within the OHV system. They also correctly state that bear hunting is not allowed on adjacent lands in Tennessee. Issues with black bear within the upper Tellico area are associated with the

noise and disturbance resulting from high levels of motorized vehicle use, and not hunting.

In many states, wild hogs (*Sus scrofa*), including descendents of the introduced European boar and feral pigs, are managed as an invasive species in natural environments. Because the species is not native to mountain forest ecosystems, it is not identified by the Forest as a management indicator species.

Resource damage caused by wild hogs is widely recognized, and the Forest is actively pursuing control efforts across the National Forests in North Carolina (in cooperation with partners such as the North Carolina Wildlife Resources Commission). Additionally, the NCWRC recently adopted broader hunting restrictions on wild hogs in six western counties where the species is managed as a game animal (including Cherokee County) in efforts to reduce resource damage caused by the species.

While it is likely that wild hogs are present within the OHV area, there have been no reports of significant resource damage caused by swine that would lead the Forest to include wild hogs in the cumulative effects analysis.

3-152.<u>Public Comment:</u> EA doesn't consider the noise generated by these vehicles. This noise cause animals trauma and movement from their natural habitat that OHVs, dirt bikes and four wheel vehicles are capable of emitting.

Response: Section 3.4.1a of the EA summarizes the management areas (MAs) within the OHV system in terms of wildlife habitats, and communicates the rationale for the selection of management indicator species for the analysis. This selection is based on wildlife habitats rather than management areas since none of the proposed alternatives contain activities that will alter forest stand composition or age class structure. The primary effect from any of the proposed changes to the trail system involves increases or decreases in the amount of noise and disturbance associated with use of the system. Black bear are sensitive to these potential effects, and were therefore selected as a management indicator species (MIS) for the terrestrial wildlife analysis. The MIS process allows us to use potential effects on black bear as an indicator of effects on wildlife communities rather than stating effects for individual species.

3-153.<u>Public Comment:</u> The EA does not address riparian species such as herons that may be adversely affected by the excess sediment deposited in streams. Such information could strengthen the case for closing the sediment-producing trails.

Response: Section 3.4.1a of the EA summarizes the management areas (MAs) within the OHV system in terms of wildlife habitats, and communicates the rationale for the selection of management indicator species for the analysis. This selection is based on wildlife habitats rather than management areas since none of the proposed alternatives contain activities that will alter forest stand composition or age class structure. One effect from any of the proposed changes to the trail system involves increases or decreases in the amount of trail within 100 feet of perennial streams (i.e. riparian areas,

MA 18). The Acadian flycatcher is a species dependent on intact riparian ecosystems, including the stream channel itself, and was selected as a management indicator species (MIS) for the terrestrial wildlife analysis. Additionally, several aquatic MIS were selected to address the effects of sedimentation on wildlife (EA Section 3.2.2). The MIS process allows us to use potential effects on Acadian flycatcher and aquatic species as indicators of effects on wildlife communities rather than stating effects for individual species.

3-154.<u>Public Comment:</u> Route density is a crucial factor for wildlife and fish habitat. The current density at Tellico is 4.3 miles of ORV route per square mile. The Forest Plan prescribes a density no greater than 2 miles per square mile. Even that level means few places are left where a visitor can watch wildlife or go fishing in peace. Please keep the 2-mile standard

The density of open roads affects the safety and security of certain wildlife species such as black bear.

Response: Section 3.4.1a identifies three proposed activities that may affect MIS habitat (including black bear). Specifically, the EA states:

2. The area of concentrated recreation use (level of human disturbance, expressed as road or trail density) may affect habitat quality for black bear and ovenbird) by affecting the type and amount of noise and human use in the area; and…

Table 3.4.1b.1 of the EA summarizes potential effects of each alternative on road and trail density. Additionally, the discussion following this table emphasizes the importance of minimizing this density on maintaining stable wildlife populations, including black bear.

3.5 User Preferences

3-155.<u>Public Comment:</u> There are much fewer OHV opportunities than there are fishing opportunities. Closing yet another trail system will cause the few remaining trail systems to have increased visitation and will cause increased impacts on their surrounding ecosystems. If the USFS is concerned about the welfare of the forest ecosystem as a whole then it should consider the impacts that will be concentrated elsewhere from the closure of the Tellico trail system.

Response: The primary purpose of this project is to stem the flow of sediment entering the Upper Tellico River and its tributaries. Impacts to opportunities for OHV use in the region must be balanced with addressing the purpose and need for the project. The agency is not required to meet all of the demands for specific recreational uses, but provides them in context with other resource considerations. Effects of reducing OHV trail miles in the region are presented in Chapter 3.6.

3-156.<u>Public Comment:</u> The EA presents Table 3.5.1.4 on page 126 Perceived Impacts of OHV Use to Certain Resources.

- **This table presents incomplete data.**
- **The table states that trout anglers were not asked about their perception of OHV impacts to vegetation, soil or wildlife while OHV users including four wheel drive vehicles (trucks) and ATV5 were asked. Why were trout anglers not asked the same questions as all OHV users?**
- **Explain why trout anglers were not asked the same questions as OHV users or remove this table and all associated data from the EA.**

Response: The surveys were designed by a university research team. Sedimentation was identified as a concern of potential interest to both user groups; however, as shown in Table 3.5.2.2, sedimentation actually was likely to have little impact on angler behavior. Questions were tailored to the frame of reference of the user. For example, it would not have been relevant to ask anglers questions concerning OHV trail preference, as presented in Tables 3.5.2.4 though 3.5.2.9. As there were so few off-site responses from anglers, we cannot determine how many anglers no longer visit the area at all, their reasons for not visiting, or their views on sedimentation. The off-site responses received from OHV users were very helpful in discerning the preferences of a broad range of the OHV user population, so that data was incorporated into the analysis.

3-157. <u>Public Comment:</u> Table 3.5.2.1 on page 128 Summary of Trail Preference by User Type.
This table shows that the vast majority of full size OHV users prefer the harder trails at Tellico which contain the notable challenge areas. Closing the challenge areas would effectively take away the reason OHV users come to Tellico. This would not be part of providing an appropriate mixed use experience for users.

Response: We recognize the value of the challenge areas to the OHV community. Significant Issue #6 reflects this recognition (Chapter 1.4**)** Chapter 3.6 of the EA discusses the perceived unique features offered by the System. It also presents the direction for providing OHV trail experience discussed in the Forest Plan.

3-158.<u>Public Comment:</u> The EA states on pages 128 and 129 "Trout anglers' decisions as to whether to continue fishing in the Tellico River appear to be little affected by sedimentation levels. On the other hand, over half of the offsite OHV users who responded to the survey indicated they would ride in the area less often if there are trail closures." This is restated in Table 3.5.2.2 Summary of Recreation Choice Threshold by User Type which presents that 82.8% of anglers will fish the same due to sedimentation, 9.1% of anglers will fish less often due to sedimentation, and between 33.6% and 53.6 percent of OHV users will ride less with trail closures.

This data shows that the 42.4% of trout anglers who perceive OHV impacts to Water Quality in Table 3.5.1.4 do not feel strongly enough about the impacts of said sedimentation to reduce their trips to the area to fish. This is bolstered by the report quoted above from page 125 that trout anglers tend to live locally and travel less due to numerous other trout fishing opportunities in the area. To reiterate, trout fishermen do not feel strongly enough about any perceived sedimentation from OHV users to stop fishing the area or to even go to another local destination to fish.

Based on the above findings, why are trails being proposed for closure when the trout fishermen don't perceive much impact and on the reverse side OHV users will travel to the area much less if trails are closed?

Response: The primary purpose of this project is to stem the flow of sediment entering the Upper Tellico River and its tributaries. Impacts to recreation opportunities must be analyzed and mitigated if possible, without compromising the purpose of the project. Perceptions of the anglers do not form the base from which actions are proposed.

3-159.<u>Public Comment:</u> Tables 3.5.2.4 through 3.5.2.10 show that for the most part, OHV users will use the area less if any trails are closed. This will concentrate use elsewhere and cause additional impacts on other ecosystems. The carrying capacity of the land is finite and spreading any use over multiple areas will increase carrying capacity and decrease impacts.

Response: The agency is not required to meet all of the demand for specific recreational uses, but provides opportunities in context with other resource considerations. Effects of reducing OHV trail miles in the region are presented in Chapter 3.6. Due to the site specificity of this project, addressing impacts to other OHV trail systems is outside the scope of this project. Also, since predicting where users might go would be speculative, any predictions of damage would also be speculative.

3-160.Public Comment: The EA reports on page 134 a summary of results from an internet-based search of other OHV opportunities within an 8 hour drive of the Tellico trail system.

- **An 8 hour drive from Tellico is too large of an area to do a search for substitute trails. Some OHV users travel greater than 8 hours to attend Tellico but that is because Tellico offers a very unique area to participate in OHV activities that include a large enough area to support a multi-day ride along with several world class challenge areas. Revise the USFS's survey to adjust the 8 hour radius to 4 hours.**
- **This summary shows that there are very few trail systems with greater than 25 miles of trail within an 8 hour drive. (25 miles is the generally accepted length of trail needed to provide a full day of trail riding.) This bolsters the assertion that the Tellico trail system is a very unique place and should be maintained and not closed.**
- **Very few of the trails systems within an 8 hour drive provide challenge areas similar to those found at Tellico.**
- **This inventory includes Forest Service roads which do not provide anywhere near an appropriate substitute experience for the Tellico trails.**

Response: Of the 54 trail systems listed in Table Appendix A.1, 23 offer "Most difficult" trail experiences. Six listed trail systems are more extensive in terms of mileage than the OHV System. Characterization of the System as "unique" is subjective, and beyond the scope of available survey data.

3-161.Public Comment: Tellico is an historical touchstone. The trails have been used long before the NFS even considered managing them as a trail system.

Response: The Forest Service agrees that OHV use has been a popular activity in the area for many years. The Trail System was officially established in 1986 (EA, pg 1), following determination that "user conflict, user safety conditions, and damage to natural and cultural resources are at an acceptable level." OHV users have enjoyed the designated trails in the System for 22 years.

3-162.Public Comment: It is a family tradition. Grandfathers, fathers and children have a legacy of access to, maintenance, and love of this area. It serves as a means of family bonding. This place gives families time to spend together in the outdoors. Please don't take this treasure before I have a chance to show my family.

Response: Agree. This is discussed in Chapter 3.6.1, EA.

3-163.Public Comment: Long before I had a vehicle that could traverse the more challenging trails I enjoyed walking up the trails with my family and watching others attempt those obstacles

Response: Agree. This use is discussed in Road-Related Recreation (RR 4) of the Travel Analysis.

3-164.Public Comment: In the nineties, I was camping above Stateline in NC and saw some of the nasty treatment of Jeeps, and mud bog trucks and VW dune buggies mutilating the region and destroyed the entire area, afterwards, we all ceased going to the region due to land destruction, soil erosion, and mud slicks leaking into the river.

Response: Camping is the second most-preferred activity in the area for both OHV users and trout anglers (EA, Table 3.5.2.3). The area visitor survey discussed in Chapter 3.5 did not target area users outside these two user groups, as these were considered the two primary users of the area. Statistics on other uses of the area are not available.

3-165.Public Comment: 50% of All Americans enjoy some form of trail riding.

Response: This data is not substantiated.

3-166.Public Comment: More people use public lands for hiking, fishing, hunting, photography and similar activities than recreational ORV use.

Response: Visitors may enjoy several different types of activities when using National Forest lands (EA, Table 3.5.2.3).

3-167.Public Comment: I urge that more investigation into the popularity and the need for OHV is pursued.

Response: The Forest Service agrees that OHV riding is a popular activity. Investigation of the need for OHV use is beyond the scope of this analysis, but may be pursued in another process.

3-168.Public Comment: When I travel I typically bring my family and enjoy the local area in addition to the ORV parks and trails.

Response: Agree. Survey results indicate that visitors pursue several activities while in the area (EA, Table 3.5.2.3).

3-169.Public Comment: Closing the park may have negative impacts in forcing people to find other areas to go offroad, thus creating damage to otherwise unimpacted area.

Response: This comment implies use of OHVs in areas not designated for that use, which is inappropriate and/or illegal regardless of the management of the upper Tellico area. This comment is beyond the scope of this analysis as it would be speculative to anticipate where or if such use might occur..

3-170.<u>Public Comment:</u> You are not serving the people by taking away their use to public land. This trail area was donated for OHV use and is maintained by the tax payers, the dues from day passes and volunteer work from the people who use it.

Response: All of the land in the vicinity of the Upper Tellico OHV Trail System was acquired through purchase, not donation. The largest parcel associated with the System, 9,010 acres in size, was purchased from The Nature Conservancy in 1982 for $2,850,000. A 1979 letter to the Chief of the Forest Service identified four attributes making the area highly suitable for recreation use, including fishing, game and non-game wildlife species, unique natural features, existing roads which could serve as primitive trails, and a quality primitive recreation experience for hikers, campers, hunters and fishermen due to limited access and productive game habitat. The Forest Service agrees that the trail system has been managed in the past with a combination of fund sources, including appropriated funds, state grant funds, and user fees. Partner groups have provided both in-kind, non-monetary contributions, as well as paid services reimbursed by state grant funds. (Appendix C, EA)

3-171.<u>Public Comment:</u> Table 3.5.1.1 the figures do not add up. Biases toward the anglers since it states that all but 7 were on site. The math does not add up- 27+18+43=87%. Also, 192+123+296=612, not 702.

Response: Agree that there were 612 survey respondents. Percentages have been adjusted (Table 3.5.1.1, EA). The survey was designed to include data collected from users who were not on site during the survey period (May-July 2008) as well as those who were, and was made available on the Internet for use by offsite respondents. Therefore, the survey actually reflects a more balanced view of user perspectives, as portrayed in Tables 3.5.1.2, 3.5.1.5, and 3.5.2.1. The survey was distributed more actively via the Internet by OHV interest groups than by trout angler groups.

3.6 Recreation Opportunities

3-172.Representative Public Comments on the Challenge Level of Trails.

The EA states that the level of challenge is being exceeded. The EA does not define "easy" "moderate", or "high degree of challenge". Who set the standard for judging the difficulty of the trails and when (year) was the standard set? The advances in technology in the last 20yrs are tremendous. Much of this fame is due to the high-challenge areas such as Lower 2, Trail 9 (Slickrock) and trail 7 (Peckerwood).

"High Challenge" ORV trails should not be allowed. Those at Tellico were never approved in your Forest plan. They were created when abusive ORV traffic and the resulting erosion exposed boulders and craggy bedrock.

Response: The Forest Plan direction for all OHV trails on the National Forests in North Carolina calls for providing "easy to moderate levels of challenge." Several trails on the Tellico OHV System provide a high degree of challenge and therefore do not meet the Forest Plan direction. Many trails and challenge areas have become more difficult over time, as use impacts and erosion have caused entrenchment and exposed bedrock. The Nantahala Forest Plan was signed in 1994. At the time of Forest Plan analysis in the early 1990's, most of the Upper Tellico trails were moderately difficult and many were passable with unmodified 4WD vehicles or 2WD ATV.

Difficulty levels are defined in EA Ch. 3.6.1; these are standard definitions used agency-wide and are applicable to all trail use types. Trail difficulty is assessed by Forest Service recreation management specialists. These challenge levels are reevaluated periodically, and the reviewed during revision of OHV trail map.

To make any Alternative which retains high challenge trail features meet Forest Plan standards, a Forest Plan amendment would be required to modify the current standard of providing "easy to moderate levels of challenge" in Upper Tellico OHV System. The Preferred Alternative "C" proposes closure of the trail system, and does not retain any high challenge trail features.

3-173.Representative Public Comment Regarding Forest Plan Direction

Why after 20 years have the trail density and level of challenge suddenly violated the Forest Plan?

Please amend the forest plan keep the trail density and to allow for a variety of challenge levels.

We disagree with the notion of amending the Forest Plan to allow "high challenge" activities and to raise the route density standard. Keep the "easy to moderate levels of challenge" Keep the route density standard of 2 miles per square mile.

Any trail closures would violate this Dispersed Recreation Management Directive (ref to Table III-11 and Forestwide Direction in Plan).

Response: It was brought to the attention of the Forest Service in Notice of Intent to Commence Civil Action Under Sections 301, 401, 402,313 and 505 of the Clean Water Act, dated June 28, 2007, that OHV trail density exceeded the standards specified in the Forest Plan. Previous to this the Forest Service had not made this calculation.

Trail configurations with a range of difficulty levels and trail densities were analyzed under various Alternatives. The need for Forest Plan amendments were considered with each Alternative. See EA Chapter 2 for specifics. Any proposed action must comply with the Forest Plan, the action must be modified to comply, or the Plan must be amended to ensure compliance. Amending Forest Plans is a common occurrence. The Nantahala Forest Plan has been amended over 20 times.

3-174.<u>Representative Public Comments Regarding Disabled Access</u>

My wife is handicapped. I'm healthy, but my hiking days are over. The only way we can enjoy backcountry recreation is in our 4x4.

It is extremely disheartening to hear of the potential closure of the OHV trails at Tellico, particularly because, through responsible 4x4ing, I have found freedom to enjoy areas of our public wilderness that are otherwise 100% inaccessible for individuals with significant mobility issues.

There are NO PLACES set aside for me and others like me with physical limitations. Tellico at least is open to me on those trails that are not too difficult for me to enjoy.

Response: Motorized access to National Forests for recreation users (including those with mobility impairments) and other OHV trail opportunities are discussed in EA Ch. 3.6 and Appendix "B".

A range of trail/road configurations were analyzed in six alternatives. The Preferred Alternative "C" retains or converts all or part of Trail 2, 4, 5 & 6 to Forest Development Road, some of which would have seasonal closure. Therefore, continued access to the area is provided in all alternatives.

Additionally, there are approximately 297 miles of open FS roads on adjacent Tusquitee and Tellico Ranger Districts of the Nantahala and Cherokee National Forests. Though these roads require street-legal vehicles, they provide access to NF

lands for a broad range of recreational activities. And there are approximately 1053 miles of OHV trails on public lands within a day's drive of Murphy, NC. Status of these roads and trails will not be affected by a decision on Upper Tellico OHV Trail System.

3-175.Representative Public Comments Concerning Providing Opportunities for Families to Spend Time in the Outdoors

Closing Tellico OHV would limit these "family" outings, and by taking that opportunity away, it could possible contribute to the break-down of the family unit.

OHVing is the best way I know of to get my nephews away from the pavement and out into nature as they are too young for hikes. The closure of Tellico would mean one less place for my nephews and me to enjoy.

In today's time it's hard to find a good family sport that includes the outdoors [if it were closed] I would no longer be able to teach my grandchildren about the area or be able to share the outdoor experience in an area where I spent a lot of my own childhood.

Response: A range of trail/road configurations were analyzed in six Alternatives. The Preferred Alternative "C" retains or converts all or part of Trail 2, 4, 5 & 6 to Forest Development Road, some of which would have seasonal closure. Therefore continued access to the area is provided in all Alternatives.

Additionally, there are approximately 297 miles of open FS roads on adjacent Tusquitee and Tellico Ranger Districts of the Nantahala and Cherokee National Forests. Though these roads require street-legal vehicles, they provide access to NF lands for a broad range of recreational activities. And there are approximately 1053 miles of OHV trails on public lands within a day's drive of Murphy, NC. Status of these roads and trails will not be affected by a decision on Upper Tellico OHV Trail System.

3-176.Representative Public Comments Regarding Other Recreational User Groups

Closure of the OHV area benefits no one but hikers and a select group of fishermen. Hiking appeals to a limited number of people and I feel that the Southeast Region has more than enough trails for hikers to choose from.

Let the fisherman use other areas and let us keep our off road trails.

Camping areas and hiking trails are large contributors of the introduction of human wastes and garbage. The campers/hikers bath themselves and dump waste intentionally and unintentionally into these fragile trout waters. The introduction of these waste and cleaning products are not only a concern for the aquatic species and mammals that depend on these waters, it is also a public heath concern.

All terrain vehicles are not compatible with hiking, nature study, and other healthy, environmentally-friendly use of our public lands

I would hope that some consideration would be given in allowing horse back riding in the Upper Tellico area after the closing of trails for OHV use.

USFS statistics indicate that anglers surveyed will not utilize the Tellico River and its tributary streams for trout fishing more than they do currently.

Response: Though cross-country foot travel is allowed anywhere on Nantahala NF, no specific plans have been proposed to convert Upper Tellico OHV trails to hiking trails. Under the Nantahala and Pisgah Forest Plan OHV use is allowed on specific trail systems, and Upper Tellico OHV Trail System was designated for motorized use in the planning process. Two alternatives (C and D) would amend the Plan to remove Upper Tellico as one of the designated OHV systems. A range of trail/road configurations and potential effects were analyzed under various alternatives, including some that limited camping along the trail system (it was previously prohibited along the Tellico River). No conversion to horse trails is being considered to this time.

Fisheries resources are discussed in EA Ch. 3.2 Aquatic Wildlife.

3-177.<u>Representative Public Comments Regarding Illegal OHV Use</u>

The enthusiasts in the region will end up more concentrated in other areas, and unfortunately, due to lack of education, many will probably stray from existing routes leading to more environmental damage.

Closing Tellico will cause many other problems. For one thing, an increase in illegal OHV use can occur, because people are running out of places to use their vehicles. This can cause issues with safety, and pollution to protected areas.

When legitimate OHV areas are closed down to the public then there will most likely be an increase in the illegal OHV activity in closed areas.

Contrary to the beliefs of some, closure of existing OHV areas does not protect the environment, rather it increases the pressure as more and more users are pushed into a smaller and smaller area

Response: As acknowledged in the EA Ch. 3.6.2, OHV use would be displaced with a reduction or closure of Upper Tellico System trails. However, specific impacts associated with possible overuse and carrying capacity of other trail systems cannot be determined. If their use were to increase, carrying capacity, need for use limits, and maintenance requirements of other public and private OHV trail systems would be identified by managers of those trail systems. Enforcement of

OHV trail closures will be done by FS law enforcement officers, and violators will be cited.

3-178.<u>Representative Public Comments Regarding Other OHV Opportunities</u>

Closing any more of the difficult trails without adding new obstacles will cause me to travel to other parks.

There are increasing number of OHV users al the time, yet we are decreasing the public areas available to them.

The forest service must also include the data on the number of OHV users from within the area listed as with 8 hours of Murphy NC in the Environmental Assessment and show HOW the USFS is "meeting thier needs" The Environmental assessment must also find the number of trout fisherman, and list the estimated number of miles available to them to fish on with the "8 hour travel time from Murphy" area. Then this data between the two types of forest users needs to be compared in the document.

I would like to direct your attention to pages 190 and 191 of the Enviromental Impact Statement.The table on those pages lists public OHV systems within 8 hours of Murphy, NC.It also breaks down the data by most difficult or challenging. HOWEVER, how many of those routes are "most difficult and challenging" for 4x4 vehicles? Public lands open to OHV use on that table are in the following states: TN, NC, GA, KY, AL and SC.With that in mind, please reference this study from the Forest Service:
http://www.fs.fed.us/recreation/programs/ohv/OHV_final_report.pdf According to table 2 in that study, 18.6 of the entire US population over the age of 16 have participated in OHV recreation from 1999-2004 So in that area around Upper Tellico, there are an estimated 5,510,000 people over 16 that have participated in OHV recreation, and amounts to 14.4% of the entire US population that participates in OHV recreation in the United States.5,510,000 people in that area and 1,053 miles total of trails on public lands for them to use. That works out to 5,232.7 people per mile of trail available. THIS DATA NEEDS TO BE ADDED INTO THE ENVIROMENTAL IMPACT STATEMENT.

Response: As acknowledged in the EA Ch. 3.6.2, OHV use would be displaced with a reduction or closure of Upper Tellico System trails. However, specific impacts associated with possible overuse and carrying capacity of other trail systems cannot be determined. If their use were to increase, carrying capacity, need for use limits, and maintenance requirements of other public and private OHV trail systems would be identified by managers of those trail systems.

Other OHV trail opportunities are discussed in EA Ch. 3.6 and Appendix “B”, and available miles are broken out by use type and difficulty level. However, specific numbers of challenge features or miles of “most difficult” trails were not readily

available from websites used in this research. Additionally, this list only includes trail systems on public lands due to limited availability of web-based information on privately owned OHV trails; though a number of high-challenge opportunities appear to be in these private "OHV parks".

Southern Four Wheel Drive Association website and their quarterly "Trail Mix" newsletter mention several OHV systems with high challenge rock crawling opportunities in the southern region. Referenced public and private sites are in North Georgia, East Tennessee, Eastern Kentucky, and Central Alabama; all within a day's drive of Murphy, NC.

Although the referenced FS report titled "*Off-Highway Vehicle Recreation in theUnited States, Regions and States"* does indicate an overall increase in OHV use; it uses a broad interpretation of this recreational activity. On p.6 the report states, "For this report, we will refer to off-highway use to capture a broader band of uses including backcountry roads, trails and cross country riding"; and goes on to say that interviews asked about users "age 16 and older [who] participated one or more times in OHV recreation within the past year". So in essence, this group of positive respondents would have included users who may only have driven a "backcountry road" while recreating one time in the prior year. And since driving for pleasure is the most popular National Forest recreational activity, it seems there would be much overlap in these two user groups. Considering these factors, it would be difficult to conclude that 5.5 million people in the Upper Tellico area annually participate in OHV trail riding activities on the 1,053 miles of available public OHV trails within an 8-hour drive of Murphy, NC.

3-179. Representative Public Comments Regarding the Need for Other OHV Opportunities.

I have cleaned trails and was active in keeping the Rich Mountain trail open in Ellijay, GA... but it was closed, except for the portions that were graded and graveled, making it useless to the OHV community. I was involved in the Anderson Creek ORV trail clean up where we removed 2 dump trucks worth of trash and continual clean up, only to see it also closed. I have been involved in keeping the Beasley Knob OHV area maintained, only to see its months of allowed access to be closed. Now, I see that the premier OHV area in the South East US is possibly going to be closed from OHV usage.

Where will we go, out west?...you're killing a legend. Tellico is one of the most iconic OHV parks in North America.

Existing OHV trails and roads cover less than 1% of all the public land in this country. This is a very small number, and I feel it is important that as many available trails be saved and maintained so that we can continue to have access to these lands.

There's an increasing number of OHV users yet we (we as in YOU the NFS) are decreasing the public areas that are available to them.

Think that other areas which have suitable terrain should be developed for ORV use, not the Tellico.

If we must have ORV usage let it be in an area that is not as prone to this extreme erosion and water quality degradation.

If you close Upper Tellico, as you indicted was your intention with Alternative C, the displaced OHV users will go somewhere. That somewhere may be Brown Mountain, which is already over-used and which will suffer as a result. The Forest Supervisor for the Grandfather District will then come under increasing pressure to close Brown Mountain to all OHV use, just as you are with Upper Tellico.

My next concern is the lack of public land OHV opportunities similar to Tellico that are close enough to Murphy, NC to help with loss of the $4,500,000 dollars of yearly revenue that OHV users bring to the area. Most of the trails listed on page 191 of the EA report do not offer the same offroading experience as Tellico, nor do any of them have the same draw to 4x4 tourists.

When I reviewed section 3.6.2 Consequences, I was surprised to see that more than 1000 miles of OHV trails are located within an 8 hour drive of the Upper Tellico OHV Area. Upon further review of the table in Appendix B (Table Appendix A.1), I was only able to find 5 parks with a minimum trail mileage to justify a trip of up to 8 hours. As stated on Page 145 of the EA, "(t)he general consensus among OHV trail system planners and managers is that a minimum of 25 miles is necessary to provide a full day of trail riding opportunities." Of the 5 parks identified, only 1 is within 100 miles of Murphy. The "sufficiently sized" parks comprise 477 miles of the 584 miles of trails cited in the USFS EA for 4WD vehicles within an 8 hour drive.The majority of OHV users travel to the Upper Tellico OHV to enjoy the park. For many, especially those living in the coastal areas of South Carolina, Georgia, Florida, Alabama, and Mississippi, Tellico is the closest park to them with enough trails for a day's worth of riding. They may already travel up to 8 hours just to get to Tellico. Should the area be closed, they will be forced to travel even farther to enjoy their hobby, and spend their money.Another indicator of the importance of the Upper Tellico OHV area to the OHV community on the eastern seaboard can be seen on the BFGoodrich website (http: / /www. bfgoodrichtires. com / bfgapp/outstandingtrai Is! index.jsp). For the last 3 years, they have been identifying trails all around the country that exhibit exceptional trail riding opportunities for the 4WD user in particular. On September 30, 2006, they awarded an Outstanding Trail award to the Upper Tellico OHV Area, Trail 4 in particular.

The area is one of only 3 trails located on the east coast selected. Beasley Knob was also selected along with a trail located in Canada. For reference, there are 11 trails located in the western part of the country that have been selected for this award. In

my mind, this attests to the quality of the OHV area that is the Upper Tellico OHV area. While there are other OHV opportunities available, none compare to Tellico.

Response: The list of other OHV trail opportunities in EA Appendix "B" includes trails of all challenge levels. Where they exist, systems with "most difficult" trails or challenge areas are indicated in tables 3.6.2.4, and Appendix "B".

Specific numbers of challenge features or miles of "most difficult" trails were not readily available from websites used in this research. This list only includes trail systems on public lands due to limited availability of web-based information on privately owned OHV trails; though a number of high-challenge opportunities appear to be in these private "OHV parks".

Southern Four Wheel Drive Association website, their quarterly "Trail Mix" newsletter, and links from their website have articles and photographs of several OHV systems with high challenge rock crawling opportunities in the southern region. Many SFWDA events are held at these locations. Referenced public and private sites are in North Georgia, East Tennessee, Eastern Kentucky, and Central Alabama; all within a day's drive of Murphy, NC. In fact one web-link to Black Mountain ORV Park in Harlan County Kentucky is heralded as the "Moab of the East" by the "Kentucky Mountain Crawlers" 4x4 club.

No new OHV trail systems are identified in the Nantahala Forest Plan. Developing a new OHV trail system is beyond the scope of this analysis and decision.

3-180. <u>Representative Public Comments Regarding the Uniqueness of the Tellico Trail System</u>

The combination of challenging trails, unspoiled wilderness and scenic camping opportunities result in an area unmatched by any other in the Southeast.

Tellico accommodates that diversity among OHV users, and we enjoy and need the system. It provides trails from easy to moderate, and moderate to challenging trails that we all drive on hour after hour for enjoyment.

This area is the destination of thousands of off roaders each year because of its scenic location and wonderful trails.

Tellico is very well know to have something for all experience levels from easy, moderate and high challenge, which has added to the popularity of this park

The Tellico OHV area is arguably the most famous and popular off road destination on public lands in the Southeastern US. They come to be with others of the same interests and to see some of the most spectacular natural scenery this area has to offer. Most realize that they would never be able to see this diverse area if it wasn't for the ability to travel via motorized vehicles.

The unique terrain offers challenges not found in other areas of the country, and the scenery and local hospitality makes this a favorite destination.

Because of the unique high challenge areas, total length of OHV trail (not road) and the ability to host large group events, there are no alternatives within a day's drive from Murphy NC for a comparable OHV experience. The nearest comparable alternative is Superlift ORV Park in Hot Springs, AR, a ten hour drive from Murphy, NC.

The Tellico OHV area is arguably the most famous and popular off road destination on public lands in the Southeastern US. Visitors and their families visit this area from across the nation and from all walks of life. They come to be with others of the same interests and to see some of the most spectacular natural scenery this area has to offer. Most realize that they would never be able to see this diverse area if it wasn't for the ability to travel via motorized vehicles. While in these areas visitors are challenged by the same natural obstacles of beauty that other extreme enthusiast enjoy from their favorite past time like mountain climbers, hikers, bikers, rafters, canoe's, kayaking etc. The reason most enjoy these types of recreation is simply because most of the population can't get there and the self-fulfillment of accomplishment of conquering an obstacle. Tellico OHV is no different. It's unique terrain and natural beauty brings thousands to this area annually that would not ordinarily visit for any other reason. Though the Tellico OHV Park only gives a small glimpse of the vast area of the Nantahala National Forest, this is how the motorized enthusiast wishes to utilize their right to public lands.

Response: We recognize the value of the Upper Tellico OHV System to the OHV community and that it has unique features and scenic attributes not found in other locations. We must also acknowledge the existing erosion/sedimentation issues that exist that place the Forest Service in the position of not meeting state and federal water quality standards, and take actions to effectively deal with these issues.

In regard to group events: The Nantahala National Forest has regularly issued permits for group events at Upper Tellico OHV Trail System. However, the system incorporates no amenities specifically designed to accommodate these events. The area has two trailhead parking areas, a restroom, fee stations, trails, and nearby camping/lodging. There are no provisions made for observation areas, concessions, group camping, or non-OHV spectator access. In fact, unauthorized off-trail motorized use by spectators at Trail 9 "Slickrock" and Trail 2 "Rock Garden" has actually created disturbance areas many times wider than the original trails. This unauthorized use is one of the problems addressed in the Environmental Assessment.

Southern Four Wheel Drive Association website and their "Trail Mix" quarterly newsletter mention numerous group events held at other OHV trail systems in the southeast. These include events at "ORV Parks" in Alabama, Georgia, Tennessee,

and Kentucky. Therefore, Upper Tellico OHV System is not unique in its ability to "host" group events.

Also, see responses to the previous comments in this section.

Other Public Comments

3-181. The existing trail system is much lower in mileage than is allowed for the acreage. Some 38.5 thousand acres are designated as 1b lands in Upper Tellico. 1b lands are "managed to provide opportunities for Public enjoyment of the Forest though motorized recreation-driving for pleasure in conventional and four-wheel-drive vehicles as well as use of machines commonly classified as OHVs." Under the Forest and Resource Management Plan this acreage allows for an additional 80 miles of trail.

Response: Trail densities identified in the Forest Plan are discussed in the EA Chapter 3.6.2 and displayed in Table 3.6.2.1 for each alternative. Trail densities shown under Alternative A are for the existing trail system. Every effort was made to ensure accuracy in calculation of these figures, though use of 2D GIS data for trail miles and Management Area acres may yield slightly different results than other calculation methods.

3-182. I believe that the Forest Service has not considered the rapid, explosive growth of interest in motorized recreation

Response: Growth of OHV recreation was considered in the analysis. A reference to this and to supporting research has been added to EA Ch. 3.6.

3-183. Too many places are being closed off due to supposed environmental issues.

Closing a premier area like Tellico OHV area will force them onto other areas to recreate responsibly, and then the complaints there will be of "over-use".

To just close Upper Tellico will just put more pressure on other areas which will then be threatened of closure.

Response: Motorized access to National Forests for recreation users (including those with mobility impairments) and other OHV trail opportunities are discussed in EA Ch. 3.6 and Appendix "B".

A range of trail/road configurations were analyzed in six alternatives. The Preferred Alternative "C" retains or converts all or part of Trail 2, 4, 5 & 6 to Forest Development Road, some of which would have seasonal closure. Therefore continued access to the area is provided in all alternatives.

Additionally, there are approximately 297 miles of open FS roads on adjacent Tusquitee and Tellico Ranger Districts of the Nantahala and Cherokee National Forests. Though these roads require street-legal vehicles, they provide access to NF lands for a broad range of recreational activities. And there are approximately 1053 miles of OHV trails on public lands within a day's drive of Murphy, NC. Status of these roads and trails will not be affected by a decision on Upper Tellico OHV Trail System.

3-184. The EA needs to also state how many miles of brooks, streams and rivers that are within the same 8hrs for Murphy, NC. It also needs to state how many acres of lakes (to include the miles of shore line) are within the same 8hrs for Murphy, NC. Its also needs to state how many miles of coast line of the North Atlantic that are within the same 8hrs for Murphy, NC. Since this EA is personal against OHV users then it needs to be more unbiased and also include all the places that the anglers on to go fish. It makes it a point to say that OHV has other places to go, so lets get the real facts out there and let everyone know how much miles of water ways (just remember brooks streams and rivers will have to be multiplied by 2 since they have 2 shorelines) the fishermen have access too.

Response: This project is not about fishing versus off-roading. Its specific purpose is to stem the flow of sediment from the OHV trail system that is reaching the upper Tellico stream system. The amount of various waterbodies within 8 hours of Murphy is outside the scope of the analysis. Therefore the information you request is irrelevant to the disclosure of effects of the alternatives. The amount of OHV opportunities is analyzed since concern about the loss of such opportunities was identified as a Significant Issue during Scoping, based in input from the OHV community. The effects to the recreation resource are disclosed in Chapter 3.6 in the EA.

3-185. OHV recreation is a legitimate use of our national forests. There are millions of acres of national forest where other forms of recreation are allowed but there are only a limited number of areas that allow OHV recreation.

Response: Your comment is correct. Popularity of Upper Tellico OHV Trail System and the of attraction challenge features is discussed in EA Ch. 3.6.1 Affected Environment.

3-186. In those states containing OHV areas, there is an estimated 5,510,000 OHV users over the age of 16. That comes out to 14.4% of the total OHV population within the USA. (www.fs.fed.us/recreation/programs/ohv/OHV_final_report.pdf) This information needs to be added to the EA to show the size of the community that is being affected by the preferred Alt C.

Response: Although the referenced FS report titled "*Off-Highway Vehicle Recreation in the United States, Regions and States"* does indicate an overall increase in OHV use; it uses a broad interpretation of this recreational activity. On

p.6 the report states, “For this report, we will refer to off-highway use to capture a broader band of uses including backcountry roads, trails and cross country riding”; and goes on to say that interviews asked about users “age 16 and older [who] participated one or more times in OHV recreation within the past year”. So in essence, this group of positive respondents would have included users who may only have driven a “backcountry road” while recreating one time in the prior year. And since driving for pleasure is the most popular National Forest recreational activity, it seems there would be much overlap in these two user groups. Considering these factors, it would be difficult to conclude that 5.5 million people in the Upper Tellico area annually participate in OHV trail riding activities on the 1,053 miles of available public OHV trails within an 8-hour drive of Murphy, NC.

3-187. OHVs must be kept within the capability of the land. Your studies prove that OHVs have grossly exceeded that capability of the land. Your studies prove that OHVs have grossly exceeded that capability at Tellico, leading to sedimentation of what should be clear streams

Response: Under the Nantahala Forest Plan OHV use is allowed on specific trail systems, and Upper Tellico OHV Trail System was designated for motorized use in the planning process. Two alternatives, C and D-Modified propose to close the OHV System. The rationale for selection/non-selection of any alternative is in the Decision Notice.

3-188. Recreational facilities may be located in close proximity to the river only if they are located and designed to harmonize with their natural and cultural settings, protect identified river values including water quality, and be screened from view from the river to the extent possible.

Re. Wild and Scenic and River corridor. the Tellico ORV trails within the study corridor do not meet these standards. First, the trail system has degraded the outstanding fishery that qualified the river and its headwaters as eligible for designation. The ORV recreational facilities are neither located nor designed to harmonize with natural and cultural settings and are inadequately screened from the River.

Response: Effects to Tellico River WSR eligibility and Scenery are addressed in EA Ch. 3.7 & 3.8. The upper segment of Tellico River is eligible for WSR designation as a Recreation classification. Criteria for this classification states: “The river may have some development with substantial evidence of human activity. This development may include residential and commercial structures, a range of agricultural uses, and forest management with evidence of past and ongoing timber harvest. The river may be readily accessible by roads and the existence of parallel roads and bridge crossings within the river corridor is acceptable. Poor water quality does not preclude classification provided a water quality improvement plan exists or is being developed”.

3-189. This area has been made for the OHV community and should be kept that way.

Response: A range of alternatives is considered in the EA, only two of which (C and D-Modified) would close the system. The rationale for the selection/non-selection of an alternative is in the Decision Notice.

3-190. The EA fails to address, or improperly minimizes, the significant adverse effects to the "human environment" that will follow closure of the Area. The Forest Service Handbook requires that the agency consider and "integrate considerations of biological, physical, social, and economic factors and environmental design criteria in Travel Management." FSH 1909.1213.13f.3. The EA fails to properly analyze both adverse economic impacts, as well as impacts to desired visitor experience. As is detailed in the Caliber Engineering Consultants report, there are no comparable sites reasonably available in the region. This status has produced a unique market for Murphy and other communities in the locale, which will be lost if the Area is closed or its access significantly restricted. These impacts must be more fully analyzed in an EIS.

Response: An EA is used to evaluate whether or not there may be significant environmental impacts that would necessitate completion of an EIS. If a finding of no significant impact is made (a FONSI), an EIS is not required. 40 CFR 15008.14 states in part: "[T]his means that economic or social effects are not intended by themselves to require preparation of an environmental impacts statement."

While preparation of an EIS has numerous requirements, the baseline data that would be provided in such a document would be very similar, if not identical, to what is provided in the EA under discussion.

3.7 Scenery

3-191. <u>Public Comment:</u> The rest of the trail from junction UT 1and UT 4 should remain unimproved all the way to Davis Creek. It is not in the best interest of the Trout or the ATV Riders Association of America to construct a major highway in this area. Doing so would ruin the aesthetic beauty we all enjoy.

Response: The proposal to pave a section of Trail 1 maintains it as two lanes, it would not have the same appearance as a "major highway". Paving would change the character of the road and the experience, but would not detract from the scenery any more than the existing gravel surface. Opportunities to enjoy scenic views of the surrounding forest would not be diminished.

3-192. <u>Public Comment:</u> I have more fun watching the rigs up there, taking pictures and driving through and seeing things you can only see in the Tellico OHV area.

I also very much enjoy the beauty of the scenery in the areas that 4 wheeling takes me.

The natural beauty of the Tellico OHV area is second to none in this country OHV trails provide access for individuals who would otherwise be unable to enjoy the forest scenery.

Response: Under Alternatives C and D-Modified, portions of several trails/roads would be upgraded to seasonally open forest development roads. These roads will continue to provide access for street-legal vehicles and maintain opportunities for viewing scenery in the area. Alternatives A, B, E, and F-Modified retain various configurations of the OHV System. The rationale for the selected alternative is in the Decision Notice.

3.8 Wild and Scenic Rivers

3-193.Public Comment: Page 155 of the EA states "Appendix "A" of the DEIS contains the Wild and Scenic River Study Report which documents the findings of suitability for a Recreational River classification of the 5.8 mile Tellico River segment in North Carolina.

- **The above document was not made available with the EA. Provide this document.**
- **Page 156 of the EA quotes the Wild and Scenic River Study Report as saying "Current land uses and management on National Forest and private lands are compatible with potential river classifications.", and the EA states on page 156 "It is important to note that the trail system was in existence during the 1994 WSR study in essentially the same configuration as the current system."**
- **SFWDA agrees with the USFS and believes the current trail configuration does not have an impact on the Tellico River's eligibility under the Wild and Scenic River Report and therefore this should not be used as a reason to close trails.**

Response: The document you request is in the project file. We are not currently in possession of extra copies and it is not currently available electronically. The Tellico River's eligibility under the WSR report is *not* being used as justification to close trails.

3.9 Heritage Resources

3-194.Public Comment: The EA states on page 160 "In 2008 sample inventory and monitoring for the present project showed that this site and 2 additional prehistoric sites along Trails 4 and 11 have been impacted." Provide descriptive information of these sites and their impacts with documentation. Where are these sites located? Provide spatial information so Caliber can verify site impacts.

Response: The archaeological sites addressed are prehistoric sites that indicate past use of the area for hunting and other activities. The artifacts recovered to date are from exposed areas resulting from trail use, erosion and maintenance activities. The artifacts include stone tools and tool making debris or flakes. Several of the tools indicate use of the area for more than 5 thousand years. The limits of the sites

and their condition have not yet been fully determined. They are considered potentially eligible for listing in the National Register of Historic Places (National Historic Preservation Act of 1966, 36CFR800, Forest Service Manual 2360).

The sites are located along existing trails. Exact locations are kept confidential (Archaeological Resources Protection Act of 1979) to eliminate unauthorized artifact collection.

3.10 Human Health and Safety

3-195.<u>Public Comment:</u> The EA states on page 167 "Human health and safety is analyzed for two very different environments; conditions associated with Trail 1, and conditions associated with the remainder of the OHV System (Trails 2-12). From decades of combined experience at the Tellico trail system, more accidents (minor and major) occur on Trail 1 and not Trails 2-12. From a safety standpoint, attention should be directed to Trail 1 and not Trails 2-12. This is corroborated by the EA on page 168 where it states "The highest potential for serious accident or injury is on Trail 1, where there is mixed use of ATV's, non street legal 4WD's, OHV5 and standard street legal vehicles of all types.

Response: Reports from emergency service providers in Cherokee County NC and Monroe County TN differs somewhat in their reporting of accidents and injuries on Trail 1 as compared to Trails 2-12. Incident information and statistics provided by these agencies and organizations is discussed in the EA, section 3.10.1.

3-196.<u>Public Comment:</u> The EA states on page 167 "Low-speed vehicle rollovers are common, as regularly document on several Internet video websites such as..."

- **This statement is incorrect.**
- **Low-speed vehicle rollovers are not common but they do occur at times. Vehicles that are attempting routes that can lead to low-speed rollovers typically have full internal roll cages and sometimes even external roll cages. These low-speed rollovers typically do not result in any injury to persons and only damage to a vehicle's sheet metal body.**
- **Remove this statement from the EA.**

Response: Due to multiple possible definitions for "common," the wording in the EA is changed to, "Low-speed vehicle rollovers occur, as regularly documented on……" In addition, the EA discusses the experience of Monroe County TN Emergency Services, which historically has handled one accident or injury per month, associated with the OHV System. Monroe County EMS reports that victims are usually transported out to Trail 1 or downriver to Green Cove for evacuation and treatment. Injuries are generally to the operator, often being crush injuries to head, ribs, other lacerations when a body part is outside the vehicle or it contacts controls within the vehicle when it tips or rolls. Very few injuries are sustained by bystanders, passengers or children. Monroe County EMS reports minimal vehicle-ATV accidents on Trail 1. (Personal communication, Smith, 5/4/09)

3-197.<u>Public Comment:</u> The EA states on page 167 "During maintenance contract implementation in June 2008, certain segments of the trail system were found to be unsafe to work in.", and twice on page 169 "Maintenance of challenge areas on Trail 11, as identified in Table 3.10.1.2 would continue to present a safety hazard to contractors, employees, and partners.

- **This statement is incorrect.**
- **Competent contractors can safely reach all sections of trail and perform appropriate maintenance.**
- **Southern Four Wheel Drive Association (SFWDA) volunteers have successfully performed maintenance on every foot of trail (excluding trail 10 where they were not allowed to go), including all challenge areas, with the use of heavy equipment.**
- **Competent contractors who are trained to operate heavy equipment in mountainous and rocky settings are crucial to successful trail maintenance.**
- **Remove this statement and associated information from the EA.**

Response: Whether maintenance has been "successful" is addressed in various locations throughout the EA. Regarding safety, contractors must meet OSHA standards. According to their professional assessment, in consultation with agency engineering staff, the following segments were determined not to be assessable for effective maintenance, while also complying with all OSHA safety and other workplace standards.

Trail 2:0.38 miles
Upper 2 Challenge Area - Due to the slope and irregularities of the trail tread the excavator could not be maneuvered through this section of trail safely. Overhanging trees and the depth of entrenchment would not allow the excavator to dig without widening the trail width substantially. Access could not be gained from either side trail due to the steepness of the terrain.

Trail 7:0.07 miles
The Ledge Challenge Area – Due to the vertical distance of the ledge the excavator could not maneuver through this section of trail, station 18+00 to station 21+65.

Trail 8: 0.68 miles
Bridges - Due to the limited weight limits for each of the bridges access could not be gained between the 1st bridge at station 23+60 to last bridge at station 59+70. Bridge simply will not support maintenance equipment weight loadings safely.

Trail 9:0.09 mile
Slick Rock Challenge Area - Due to the slope and bed rock material of the slick rock area maintenance equipment could not traverse through the challenge area station 27+15 to station 31+90.

Trail 11: 0.67 mile

Challenge Area – Due to the travel way slope and amount of protruding bedrock the guard rail challenge area could not be traversed with maintenance equipment near station 52+00. Also the challenge area at the intersection of Trail 12 could not be traversed. These stopping points along the trail system leave a section of Trail 11 between the challenge areas that could not be maintained. The total length of this section is 3,540 feet.

Trail 12: 1.2 mile
Challenge Areas- Due to the school bus challenge area and the challenge areas on Trail 11 no part of Trail 12 could be maintained. A reference letter provided by Phillips and Jordon Construction Company is included in the project file.

3.11 Economics

3-198.<u>Public Comment:</u> Page 171 of the EA states "Businesses attributed the decline primarily to the general economy, gasoline prices and trail closures. The three campground owners or operators who responded listed the trail closures as the most important contributing factor to the sales decline; the other businesses listed the general economy and gasoline process (sp) as more important."

- **The three campground operators listed 'trail closures' as being the most important contributing factor because they deal with the OHV community on a daily basis and receive feedback directly from the driver's and their passengers.**
- **Rising fuel prices will have less of an impact on OHV drivers traveling to Tellico because Tellico is a prime destination for OHV users so they are more likely to forego traveling to other, less desirable destinations rather than Tellico. Tellico Cabins is already all but closed for business and Crawford's Campground is being significantly impacted by the trail closures. Closure of trails has led to and will likely lead to more business closures in the area.**

> **Response:** The influence of fuel costs is discussed in Chapter 3.11.1 and presented in Table 3.11.1.1. Most on- and off-site OHV survey respondents reported that they would ride in the System with the same frequency regardless of the fuel prices. Impact to the economy in the region and locally is discussed in Chapter 3.11.2. Since specific business closures were not referenced we cannot respond.

3-199. <u>Public Comment:</u> Page 172 of the EA states "OHV users generate roughly four times the economic impact to the region as trout anglers. Within the OHV user group, the "rock crawler" group generates four to five times the economic impact of ATV users."

- **Caliber agrees with this statement and believes that the USFS has largely overlooked this fact in their EA.**
- **Fewer trails or challenge areas will result in fewer revenues for the local communities. Total trail system closure will have a significant impact on the local economies.**

> **Response:** Economic information is analyzed and disclosed in Chapter 3.11 and Appendix D and as referenced by the commenter. Table 3.11.1.2 shows that within the three-county area studied, OHV use contributed $4,800,000 ($4.8 million) of the $4,273,800,000 ($ 4.2 billion) economy, or 0.1 percent (0.001). Although locally very important to specific businesses, it is not a major contributor to the Cherokee County economy. Even if all of the regional OHV economic impact was applied to just Cherokee County, it would contribute only 0.37 percent (.0037) of the total economy of Cherokee County.

3-200.<u>Public Comment:</u> The USFS spreads the economic impact of the Tellico trail system (stated on page 172 as 4.8 million) over a three county area.

- **This is an incorrect way to calculate the economic impact of the Tellico trail system.**

- **Economic impacts from the Tellico trail system should be applied to two different areas: 1) Areas immediately surrounding the trails (Tellico Cabins, Green Cove and Crawford's Campground) and 2) the Murphy, NC and Tellico Plains, TN surrounding areas.**
- **Economic impact from the Tellico trail system should not be spread over a three county area. This effectively dilutes the impact of OHV drivers the same way it would be diluted if their economic impact was spread over western North Carolina.**
- **$4.8 million in economic impact is HUGE for the immediate surrounding area. Nothing will replace that, especially in a time of economic recession.**
- **Modify this analysis to focus on the two areas described above.**

Response: The economic impact analysis was conducted by a university research group. The methods are described in detail in Appendix D. Comparative data for area subsets such as described is not available, and not helpful for analyzing economic trends for a community at large. Table 3.11.1.2 discloses the contribution of tourism in general to the economy of Cherokee County NC (3.4%), of which OHV use is a minor component (See response to 3-127 above). Effects to specific individual businesses are beyond the scope of the economic impact analysis. That said, 90 survey responses from businesses, 78 of which were in Cherokee County, were incorporated into the economic impact analysis.

OHV use contributes one-tenth of one percent of the total economy of the three-county area (Table 3.11.1.2).

3-201. Public Comment: 123.The EA states on page 174 "Economic data was collected in 2008, a year that has been atypical compared to impacts/benefits common in 2007 and before. Contributing factors include trail closures, public concern over future trail system management, and general economic conditions."

- **The visitor number used to calculate this economic impact was a "snapshot in time" as stated by the EA on page 174, and is low.**
- **Between 2000 and 2006 average vehicles visiting the Tellico OHV system averaged 26,700 per the USFS "Upper Tellico OHV Area Management and Operations Plan" dated June 2000. By using this revised and more realistic and accurate number the economic impact of OHV users increases to over 9 million dollars.**
- **Add the above information to the EA.**

Response: Use figures referenced in a report dated 2000 would not be the most current source of data for calculating actual use in subsequent years. Use figures were obtained from actual fee receipts, plus a factor applied for fee non-payment, as displayed in more detail in Appendix C. The detailed Financial Analysis shows a figure of 11,117 "utilized rider days" for 2007 (Alternative A), based on a combination of daily and annual passes purchased, plus a factor added for fee non-compliance.

3-202. Public Comment: The EA states on page 174 "Capital improvement expenses range from $468,750 for Alternative A to $5,545,794 for Alternative F."

- **Caliber's analysis documented 2.04 million in capital improvement needed to improve high challenge areas.**
- **Caliber provided full line item detail for improvement costs. The USFS only provided one lump sum for each of the six alternatives. This low level of documentation is insufficient.**
- **Provide full detail of capital improvement expenses for all alternatives and all work areas (break out separate challenge areas and trails) for each alternative.**

> **Response:** Trail–by-trail expenses are displayed in the Financial Analysis located on the forest website at http://www.cs.unca.edu/nfsnc/nepa/tusquitee/tellico.

3-203. Public Comment: The EA presents Table 3.11.2.1 "Summary of Impact/Benefit from OHV Use by Alternative" on page 175 that estimates total impact from OHV users by Alternative.

- **All numbers presented in this Table are low. The USFS first uses a "conservative estimate" of $308 per trip instead of $413 per trip along with lower user rates in a time when ridership at the Tellico trail system were down due to trail closures, a dwnturn in the economy, and higher gas prices.**
- **Revise this analysis to take into account a full economic impact per rider of $413 and true user numbers as outlined earlier in the Economics section.**

> **Response:** $308 and $413 are the calculated total economic impact per vehicle, not per trip. A full explanation of the distinction between expenditure per trip, economic impact per vehicle, individual vehicle and survey unit, is provided in Appendix D. The most recent use figures, based on actual fee receipts, were from 2007, before the economic downturn and increase in gas prices.
>
> To compare alternatives as suggested by the commenter, one needs to be able to make assumptions about future proportions of 4WD vs. ATV vehicles, by alternative. This is speculative, without further user survey data. However, based on the discussion on Page 8 of Appendix D, current direct expenditure proportions are approximately 77% 4WD, 23% ATVs, resulting in a weighted impact per vehicle of $389. This could be applied reasonably to Table 3.11.2.1, if one assumed proportions of vehicles used would stay the same. However, since the same figure (whether $308 or $389) is applied to all action alternatives in Table 3.11.2.1, it is not useful in discerning a difference in effects among alternatives.

3-204. Public Comment: The USFS is looking into creating a financially sustainable operation per their new directive. Many USFS operations do not produce a profit and are reliant on tax payer dollars as the USFS is a government operation. Will the USFS close down any of its operations that do not produce a profit?

> **Response:** Ability to meet water quality standards is the primary purpose of this project and the primary decision criteria. "Profit" is not a criteria used for providing recreation opportunities to the forest user. Appropriated federal funds, user levels, user fees collected, grant sources, volunteer and partner contributions,

and other resources all vary from year to year. A combination of resources is generally used to provide recreational opportunities.

4.1 Comment on Appendix A

Public Comment: Condition Survey Findings were not provided in Appendix A. Rather, details concerning trail closures for the Proposed Action (Alternative B) were provided. Provide complete documentation of Condition Survey Findings.

Response: Complete Condition Survey data is available for download onto a large external memory device to be provided by the requester.

4.2 Comment on the Graphics Supplement

Public Comment: Many of the photographs presented in this section show eroded sections of trail in challenge areas where bedrock has been exposed. Bedrock will not erode further like soil will. Since bedrock has been exposed most of the vertical erosion in these areas has already occurred. Horizontal erosion, otherwise known as 'trail creep' can be managed. Also, future erosion can be managed through implementation of BMPs addressed by Caliber.

Response: The statement that horizontal erosion can be managed does not supply enough information to evaluate how you would propose to do this. The only statement in the Caliber Plan is a restatement of what was in the Trails Unlimited Report: "To prevent continued widening of the trail in the extreme rock crawling site obstacle areas the trail needs to be restricted to the desired alignment and barriers placed to prevent use of the lateral/adjacent areas along the alignment." This statement does not provide specifics as to what "barriers" would be effective over a reasonable amount of time, available, able to be properly placed in the affected sites, and not be an increased safety hazard for OHV users. The EA discusses the difficulty of ensuring BMP effectiveness in this location.

4.3 Comments Concerning the Financial Analysis

4-1. Public Comment: The USFS Trails Unlimited report dated 9/13/07 suggests approximately $100,000 or less as an appropriate funding level for yearly maintenance for the Tellico trail system once the trail system has been redesigned where needed, and heavy maintenance and reconstruction projects have been completed. Was this figure used in any form or fashion for the calculations within the EA?

Response: The ID Team had access to condition survey results and other data that had not been collected at the time the Trails Unlimited (TU) personnel conducted their survey and completed their report. The maintenance costs calculated in the referenced TU Report are based on maintenance of the existing trail system, after

"minor" trail realignments and "heavy" reconstruction are completed. Initial maintenance is calculated at $199,020 annually, with potential for a reduction of 50%-70% over time (TU, page 7). Details on this reduced level of maintenance are not provided in the report. Additionally, the Trails Unlimited maintenance costs do not appear to be derived from a detailed and comprehensive unit cost approach, but from a more general costing approach.

The management recommendations in the TU report have not been fully incorporated into any single alternative in the current analysis. Therefore, comparison between the management recommended in the TU report and those in this analysis are not valid.

4-2. Public Comment: This assessment shows that it will only cost an extra $10,000 to keep the trails open when Alternative A is compared to Alternative C. This means that the USFS admits and knows that they plan to keep millions of dollars out of the local economy to save $10,000 a year. The motorized recreating public will not accept monetary constraints as an excuse for trail closures.

Response: According to the analysis of effects disclosed in Chapter 3 of the EA, with Alternative A (net average annual expense of $113,782) we cannot meet State and Federal standards for sediment control (Table 3.1.2.1.1), which is the purpose for this project (EA, page 1). Effects to be considered in making the final decision are described in detail by resource in Chapter 3. According to analysis in Chapter 3, Alternative C (net average annual expense of $218,784) has the highest likelihood of addressing the purpose of this project.

4-3. Public Comment: SITA costs for repair are nearly 60% less than the EA estimated costs. Why are the EA costs so huge? Can the EA numbers be justified?

Response: The EA Financial Analysis incorporated site-specific costs tailored to each alternative and generated by detailed, comprehensive engineering surveys, actual operations, maintenance, program management, monitoring and other costs provided to the modeler by the ranger district and forest staff. The Caliber renovation costs were, among other things: 1) based on a misinterpretation of water quality data and on an incomplete condition survey; 2) employed some techniques that would not be acceptable on National Forest System lands; 3) employed some techniques that have proven to fail in the past in Upper Tellico, and: 4) did not include the cost of paving Trail 1, bridging Fain Ford, or provided appropriate bridging on Trail 8.

4-4. Public Comment: None of the numbers for keeping the park open seem to be out of line with current cost of operations or the estimated cost with the park being closed. Granted, I am comparing the "Do Nothing" option, which we both know is not a good option.

Response: "Current cost of operations" (Alternative A) would have a net average annual average maintenance cost of $113,782 after revenue and other contributions.

"Closed" (Alternative C) would have a net average annual cost of $218,784. Other alternatives that "keep the park open" range from $961,847 to $1,500,880 annually (Table Appendix C.2, EA). The high annual cost of maintaining an open trail system is attributable largely to the extent and frequency of maintenance required on the extraordinary number of water runoff management and sediment control structures in the system.

4-5. Public Comment: The fees that have been charged in the past are not enough compared to what other areas charge us to use their facilities. An increase in trail use fees would help pay for maintenance and upgrades. I'd personally be more than wiling to pay increased daily fees to continue to use this area.

Response: Table Appendix C.2 compares alternatives with no fee increase. However, further analysis was completed to assess the benefits of increasing fees at various levels (Table Appendix C.4). Variable fees were used, depending on the alternative, due to the varying levels of service that would be provided by each alternative. Fee increases were calculated at $20 and $40 per day. At $40/day, the fee increase reduced annual net costs to $461,000 (Alternative E) or $1,054,908 (Alternative F Modified), after revenues and other contributions. The ability to increase fees should not be assumed: fee increases must be reviewed and approved by a regional Recreation Advisory Committee. In addition, the future of the agency's ability to collect fees is not guaranteed. A bill has been introduced in the Senate (Senate Bill 868) that would repeal the 2004 Federal Lands Recreational Enhancement Act and replace it with a 1965 policy limiting charges on public lands (http://thomas.loc.gov). This or similar proposals are brought forward on a regular basis for Congressional consideration.

4-6. Public Comment: On page 194 of the Tellico EA it talks about Revenue. There is nothing that breaks down the numbers and figures used. How much from grants? How much from non-monetary contributions? How much from TVA? How much from other agencies and groups? How much from volunteer hours (number of people and rate used)?

Response: The breakdown of these figures is shown in a detailed version of the Financial Analysis Model, posted at http://www.cs.unca.ed/nfsnc/tellico. Funds are itemized by alternative and type in several of the tabs in the spreadsheet.

4-7. Public Comment: It states that "It is assumed that less users will buy the annual pass due to the increased expense if fees are increased" This EA "ASSUMES" a lot. I thought it was supposed to be based on facts.

Response: We agree that it can be difficult to predict user behavior based on multiple variables. However, as portrayed in Table 3.5.1.5 (EA, Chapter 3.5), only 37.5% of on-site survey respondents supported fee increases. 72.8% of off-site respondents supported fee increases. There may not be an exact correlation

between user aversion to fees and their behavior, but it may be used as an indicator of a probable trend in response to fee increases.

4-8.<u>Public Comment:</u> In the past 10 years, OHV enthusiasts partnering with the USFS in the Upper Tellico OHV Trail System have donated over $558,000 to stabilize, repair, and maintain the trails. Over the past 10 years, enthusiasts have also contributed $1.6 million in user fees to offset agency maintenance costs. That represents a combined total of $2.1 million towards maintenance of the OHV trail system in Tellico. However, the USFS has spent only $2 million in maintenance during the same period. This equates to an annual expenditure by the USFS in maintenance costs of just $200,000 compared to the $202,000 contributed by OHV users in trail fees alone.

How can VOLUNTEER hours be used in your figures? It's our time used and no one pays for this. Did you get this information form Southern?

Response: A July 2008 letter from SFWDA documents $532,429.25 in contributions for the 10-year period from 1998-2007 (Parsons, 7/8/08). These figures are also reported in Table 5 of "Recommended Trail System Repair and Maintenance Plan" (Caliber, 1/23/09). USFS records of SFWDA contributions for the same period are incomplete, in part due to inconsistent past documentation and reporting. Therefore the agency is willing to accept SFWDA's recently provided summary of volunteer contributions as factual. Alternative A (current management as of 2007) shows that the average cost of operations, maintenance and program management is $419,077, with fees, grants and non-monetary contributions totaling $182,899. The contributions from SFWDA volunteers, and user fees paid, are included in this figure. This leaves $236,178 that the agency has funded from appropriated fund sources. Per the SFWDA letter, the organization has contributed an average of $53,243 if one includes the unusually high contribution of $131,062 in 2005. A rationale for using a lower typical annual contribution is explained elsewhere in the response to comments. In any case, the $53,243 comprises 12% of the cost of managing the existing system. With fees included ($87,255), this comprises 33.5 % of the cost of managing the existing system (data further discussed in Appendix C).

4-9.<u>Public Comment:</u> The off road community has sponsored cleanups, trail maintenance, etc. The USFS in my opinion needs to do a better job of utilizing and directing the free labor and resources offered for trail maintenance. The trails also need better enforcement; specifically, riders need to be held accountable for going off the trails. I support a slight increase in fees to do this.

Response: We recognize and appreciate the volunteer support the off-road community has provided. Increased operations and program management costs calculated for Alternatives B, D-modified E and F-modified include increases in staffing, oversight and law enforcement (Table Appendix C2). Our surveys indicate some support for increased user fees.

4-10.<u>Public Comment:</u> Ironically, it is the motorized community that has been successful in securing substantial funds for OHV management. There are several grant and volunteer programs available. Address any legitimate maintenance concerns by incorporating a training protocol into your plan that would train agency staff on how to apply for grants, use the available ICE-T money, effectively manage volunteer programs, and learn about and apply for other finding sources. Consider MOU's or other similar agreements with recreational groups such as SFWDA.

Response: The Tusquitee Ranger District has been applying for and utilizing Recreation Trails Program grants for managing the Upper Tellico OHV System since 1999. In-kind contributions from SFWDA have been used to help qualify for these grants.

4-11.<u>Public Comment:</u> The state of North Carolina has a State Trails Program that administers and awards grants each year under the federal Recreational Trails Program (RTP). The RTP is a grant program funded by Congress with money from the federal gas taxes paid on fuel used by off-highway vehicles. The Tusquitee District should be able to receive significant funds each year for Tellico.

Response: Since 1999, the Tusquitee Ranger District has been granted $566,550 from this program for managing the Upper Tellico OHV System (Personal Communication, Champion, 5/6/09).

4-12.<u>Public Comment:</u> Why can't the RTP funding in the stimulus package be used for the purpose of maintaining trails also?

Response: The forest is not aware that any funds in the stimulus package have been allocated to the RTP in North Carolina. There is potential that stimulus funds may be made available directly to support implementation of the final decision on future management of the trail system. However, stimulus funds are intended to be used over a two year period to stimulate the economy and create jobs. Stimulus funds are not intended to be available in future years to support long term sustainable trail system management.

4-13.<u>Public Comment:</u> As the family recreation continues to grow and more revenue is available through green sticker funding, proper management could keep up with the process.

Response: Establishing a "green sticker" program is under the jurisdiction of state agencies. To date, the State of North Carolina has not developed such a program. Assessing the effectiveness of "green sticker" programs in other states is beyond the scope of this analysis.

4-14.Public Comment: On page 201, you mention "User survey respondents indicated at least some support for increasing fees to help manage the System." However, you do not provide the survey results, or a definition of when it was taken; for how long it was taken; whom it was given to; or whether it was a rainy or dry season in Tellico.

Response: Further discussion of this survey is located in Chapter 3.5 of the EA. See also response to comment 4-5.

4-15.Public Comment: Another way to keep it open and keep down unnecessary visitors would be to initiate a fee.

Response: Further discussion of the survey from which this discussion is derived, is located in Chapter 3.5. See also response to comment 4-5.

4-16.Public Comment: For these measures to be considered "best management practices", data needs to be provided showing that the FS has taken any and all steps to properly maintain the OHV system. I believe data will show a systematic approach by the FS of closure and reduced spending in an effort to close the OHV park incrementally over the last 3-5 year period.

Response: Closure of the system was not a foregone conclusion at the outset of this analysis, as indicated by the Proposed Action issued in June 2007. The Proposed Action was designed to reduce sedimentation while attempting to retain an OHV trail system. Only after further analysis has it been determined that the likelihood of meeting water quality standards is low if an OHV trail system is retained in the Upper Tellico River watershed.

4-17.Public Comment: In the past, the Forest Service has relied on inadequately supervised volunteer labor to maintain the trail system which has resulted in substandard system performance and contributed to water quality degradation.

Response: Trail construction and maintenance has in the past been accomplished with a combination of volunteer labor, partners reimbursed for expenses through RTP grant funds, Fs employees and contractors hired by the agency. Agency maintenance records do not show the extent to which maintenance by volunteers was supervised by agency employees. Maintenance contract inspection records include documentation of agency oversight.

4-18.Public Comment: If Marisue Hilliard's recommendation is Alternative C, this should reduce the number of National Forest employees required for Ms. Hilliard to employ, and even negate the need for her position.

Response: Currently, the system is managed on the ground by 50% of one employee's time, roughly 15% of a second, and less of several other personnel. These individuals are also responsible for numerous other programs and sites,

including other developed recreation areas, trails, roads, and fire management. Selection of Alternative C would still require oversight of implementation of the decision, and long term monitoring to ensure that the agency achieved the results it intended. The Forest Supervisor (Marisue Hilliard) is responsible for overseeing the management of four national forests covering approximately 1.2 million acres and including 4 other OHV trail systems.

4-19. Public Comment: A full breakdown of trail repair and maintenance costs is not provided. These calculations and details need to be provided to the public for review. A single dollar amount does not suffice for each Alternative. For example, Table Appendix B.3 provides "One-time Capital Improvement/Closure Expense" for Alternatives A through F. Amounts provided are one monetary figure and do not list specifically what these funds will go towards.

Caliber provided full line item detail for improvement costs. The USFS only provided one lump sum for each of the six alternatives. Provide full detail of capital improvement expenses for all alternatives and all work areas (break out separate challenge areas and trails) for each alternative.

Response: Trail-by-trail expenses are displayed in the Financial Analysis located on the forest website, at http://www.cs.unca.edu/nfsnc/nepa/tusquitee/tellico.

Comments on Road and Trail Construction and Maintenance

4-20. Representative Public Comments on the Bridge at Rough Crossing

Bridge at trail 5 crossing is hundreds of times oversized and is an example of the gross mismanagement and wasteful practices of the USFS. Hundreds of thousands of taxpayer dollars were spent on this "bridge to nowhere" that would have been spent to maintain the trails.

While the forestry service waists money over doing projects, like the bridge on trail 5, a proper bridge could have been built and the money saved spent someplace else, like trail maintenance.

The bridge on trail 5 – a great idea but overbuilt – a management plan like that is not sustainable and seems excessive if not indulgent.

Also request that the FS step up and do there share in maintaining the OHV system and stop wasting money. Such as the vastly over sized bridge on trail 5. This shows the current FS Supervisor's inability to properly manage money, resources, and especially an OHV system. The bridge on trail 5 could have, and should have been, much smaller and cheaper, designed for the OHV traffic an OHV system

Response: The "rough crossing" bridge was constructed in 2006 by Phillips and Jordon Construction for the amount of $220,000. The project was funded with a combination of appropriated funds and grant funding awarded through an RTP Grant. The structure is designed in accordance with the *AASHTO Standard Specifications for Bridges*, 17th Edition. Bridge design live load - HS20 truck.

There are four standard classes of highway loading, H20, H15, HS 15 and HS 20. The rough crossing bridge was designed as a HS 20 bridge to accommodate construction equipment accessing the trail system. HS 20 is the standard bridge design class of loading for all bridges designed and constructed on National Forest Routes (Trail 5 is a dual designation Forest Road/Trail)..

The bridge is designed to pass Q100 flood flows and provide 2 feet of free board for debris moving downstream during a flood event. Q100 with two feet of free board is the bridge design standard used on the National Forests in North Carolina. The Tellico "rough crossing" is 69 feet 4 inches bearing to bearing in order to pass the flow estimates.

Construction of the new bridge on Trail 5 “Rough Crossing” focused to eliminate the existing ford across the Tellico River. Obliterating this ford and rehabilitating the stream, banks, and adjacent road approaches significantly improved water quality by eliminating a major sediment source. It also significantly reduced the potential for pollution of the water by petroleum products and other potential fluids from vehicles crossing this section of the Tellico River.

The Rough Crossing Bridge crossing the Tellico River, is an important component of the Upper Tellico Off-Road Vehicle (ORV) Area. It is located on Trail # 5, and provides access, either directly or indirectly, to Trails 4, 6, 7, 8, 9, 11 and 12. In all alternatives analyzed in the EA, Trail 5 remains on the Forest Road System and open at least until the far side the bridge so the public has access to the big flat near the river there. Under any management scenario the bridge remains available for use.

4-21.<u>Representative Public Comments Concerning the Entrenched Trails</u>

For Example, trail entrenchment is sited in the Forest Service report as a result of erosion caused by vehicle usage. From what I have been told, these "trenched trails" were constructed that way to control run off such as was common land management practice for the time. If this is the case, the "entrenchment due to erosion" conclusion is in error!

The fact that the majority of the soil missing from the areas leading the "high challenge" areas was removed intentionally by the forest service under the plan of water runoff control was never mentioned in your EA report and not taken in to consideration. This fact is undeniably a major contributor to "loss" of approximately 74000 tons of soil and the single largest reason the currant trails are

deeply entrenched, it was done by the forest service intentionally not by OHV use and now that the trails are down to bedrock erosion from continued use would be insignificant at best with normal control and maintenance.

Most of the trails were dug out the way they are to help with water runoff when the area was used for logging. In the EA report, they discuss how 74,000 tons of soil has been displaced, but it does not address how much of this was originally dug out by the FS in an attempt to "help" Tellico with erosion and water runoff.

Response: This soil was not "intentionally removed by the Forest Service under the plan of water runoff control." Most of the road and trail system was already in place when the Forest Service acquired ownership of the Upper Tellico River watershed. Most trails were historic logging roads and skid trails that had continued in use without proper maintenance resulting in road degradation and entrenched conditions. Some initial entrenchment may have been intentionally created to connect trails and/or make a desired experience, but nowhere near the degree that exists widely on the trail system today. We have heard that some of the newer trails were constructed with 2-3 foot entrenchments. If that were the case it would not have been in accordance with accepted engineering practices, and it would not explain the much deeper entrenchments that are widespread on the system today.

4-22.<u>Public Comments on the Difficulty of Meeting Water Quality Standards</u>

All the trails kept open under these two alternatives will be on the same soils, at "severe hazard' of erosion according to the Forest Service analysis, that the agency has been unable to maintain in the past. The Forest Service has documented recent experience indicating that even properly-maintained sediment control strategies are only 50% effective at keeping sediment out of trout streams in this highly erosive watershed. As a result, the Forest Service projects that these two alternatives would have only a "moderate", and thus unacceptable, likelihood of meeting water quality standards.

Management strategies to control sediment runoff in the Tellico ORV Area are ineffective due to highly erosive soils and heavy rainfall. ORV trails have deteriorated so far that ordinary management practices will no longer work. Less than half of sediment management practices are working properly. Management practices are ineffective at keeping sediment out of streams for the six miles of ORV trail that are within 100 feet of trout streams. Even trails that have been recently rehabbed with sediment control structures and gravel surfacing were only 50% effective at preventing sediment from reaching streams.

Response: The condition survey supports these statements. For example, condition surveys of 2007 and 2008 showed that existing improvements on Trail 1 (condition surveys stations 24+30 to 65+40), including gravel surfacing, rolling dips, and sediment traps, were only 49% effective at preventing trail-derived sediment from entering the stream". Due to the location of the trail system in relation to the wetted

perimeter of the stream course, BMP effectiveness is critical to preventing visible sediment from reaching the stream course.

4-23.<u>Public Comments on Expanding the Trail System</u>

The Forest Service has proposed to open trail segments #10 and #10A to the use of all off road vehicles. I agree with that proposal. I believe that most of the issue with the maintenance of the trail system could be less impacted with more trail riding opportunities. The addition of the above mentioned trails would create less trail congestion, less impact on other trails in the system, add to the intended off road users experience

Number of trails and trail miles needs to be expanded rather than reduced so there can be a rotation of use consider an Alternative to increase the number of trails at the OHV system. This would reduce the concentration of users. The impact of the visitors to the area would be spread out

Consider adding additional trails so trails already in place would receive less use.

Response: Alternatives E and F-modified in the EA reconstruct Trail 10 to allow full-sized OHVs. Expanding the trail system was not analyzed in detail as the Forest Service has never observed a situation where expanding the system results in less use per trail, and more trail would mean even more potential sediment sources. A rotational system was considered but not analyzed in detail. See Chapter 2 of the EA for more information.

4-24.<u>Public Comment:</u> Please protect our environment and restrict ATVs from crossing the river and streams anywhere. There is plenty of open land available for the ATVers to have hundreds of miles of terrain to make trails on without degrading the stream banks.

Response: The National Forests in North Carolina standard practice is to avoid low water fords on roads that are open to the public. Over the past several years we have been replacing low water ford crossings with bridges and bottomless culverts to provide passage and not potentially contaminate the stream. Alternatives A, B, D-modified, E, and F-modified would all allow for a new bridge at the Fain Ford Tellico River crossing, and would add or replace bridges as necessary on the remainder of the road/trail system.

4-25.Public Comment: USFS has not properly managed the land [trail system] I know there are problem spots in the trail system but why don't' the rangers patrol these areas and correct them.

Response: Maintenance efforts have been implemented every year to the extent practical with available funding and in-kind volunteer support, but these efforts have not been able to keep up with the maintenance needs. The road and trail

system was already in place when the Forest Service acquired ownership of the Upper Tellico River watershed, and current BMPs were not used in all cases, in the system's location and construction of the trail system. Factors such as soils sensitive to erosion, high precipitation amounts and intensity, a dense stream network, shallow groundwater, trails not within a design standard, native surfaced trails, a high degree of use year around use, modified vehicles types, inadequate maintenance and long-term severe erosion makes this trail system very difficult to maintain.

4-26.<u>Public Comments Concerning Meeting Standards</u>

ORV trails should meet the same test as foot trails and roads: a stable surface, good drainage, and no sediment production. The EA shows that the Tellico trails cannot meet that threshold.

We now have a complete understanding of the sensitive soils, badly-sited trails, and other characteristics in the Upper Tellico River watershed that explain why the Forest Service has been unable in the past decade to maintain the trail system to an acceptable standard.

I feel that modified BMPs are necessary for OHV trails.

Response: See Table 3.1.1.4 Summary of forestry Best Management Practices (BMPs) and discussion of effectiveness on the Upper Tellico OHV System. This table explains where and how BMPs should be installed and function.

4-27.<u>Public Comment:</u> All trail segments within ¼ mile of the Tellico River must be closed.

When a road is constructed within an SMZ, however, the road "shall have effective erosion control and sediment control structures or measures installed to restrain accelerated erosion and prevent visible sediment from entering intermittent or perennial streams or perennial waterbodies.

Response: OHV trails near streams was identified as a Significant Issue in Chapter 1 of the EA and is an evaluation criteria for the alternatives. Alternative C best addresses this issue. The EA states that trails within 100 feet of a stream require special attention to reduce sediment traveling to the stream, such as additional design and maintenance practices. Within the 100-foot zone, trail segments within 25 feet of water are at the very highest risk for contributing sediment, especially after storm events." trail condition surveys show that 643 locations are reaching the stream network. Of these 643 locations, 558 were coming from a trail segment within 100 feet of the stream course. Shorter distances between trail and streams allow greater opportunity for sediment to reach the stream due to the amount of vegetative filtering and trapping the sediment before it reaches the stream.

4-28.Public Comments Concerning the Suitability of the Site for OHV Use

Even if adequate funds to reengineer the trail system can be identified, they cannot be justified. …the Tellico ORV system is poorly designed and improperly sited. The extensive investment proposed to reengineer the system to maintain it as an ORV trail system can not be justified in light of the fundamental unsuitability of this area for such a use and the limited resources available to the Forest Service.

Furthermore, because these inherently unstable soils characterize the majority of the Upper Tellico River watershed, it is unlikely that even an expensive redesign of the trail system would succeed in rerouting ORV trails away from erosive soils, as required by Forest Service standards.

Develop strategies to bring these roads into compliance unless physical conditions preclude complete correction and the road cannot be legally closed.

Poorly designed, located, and maintained drainage features coupled with excessive use has resulted in significantly deteriorated travel-ways to the point that regular road or trail BMPs are no longer adequate to protect trails from erosion and stream channels from sedimentation.

Response: The EA states that sensitive soils, high precipitation amounts and intensity, a dense stream network, and shallow groundwater set up any land disturbing activity for failure unless erosion control measures are forefront in the design of the activity.

4-29.Public Comment: I believe that closing down Tellico would cause more damage from construction and all that.

Response: Alternative C would require installation of approximately 15 new culverts to cross ephemeral stream channels. Approximately 135 existing stream crossings would be decommissioned. There may be a short-term (approximately 2 days at each new, reconstructed, or decommissioned stream crossing) increase in sedimentation and turbidity in streams during construction where existing trails crossings are decommissioned and residual road crossings are repaired. These short-term effects would dissipate as the disturbed soil is stabilized by seeding and mulching. Effects of construction and reconstruction would be minimized by application of construction BMPs (e.g. silt fence, brush barriers, seeding, and mulching). Sediment traps within 25 feet of perennial streams may continue to release some sediment to streams during storm events exceeding 1 inch/day. Streams with trails and/or sediment traps within 25 feet are the most vulnerable to sedimentation because these locations have less surface area to filter sediments when sediment traps over-flow during storm events. Alternative C would eliminate 0.63 miles of these most vulnerable locations in the Tellico River Watershed.

4-30.Public Comment: The trails can be fixed in a way that seriously reduces the amount of sediment entering the creeks. I see it accomplished every day on large construction sites.

Response: Each of the alternatives developed address sediment entering the creeks.

4-31.Public Comment: I know the history of the Tellico OHV area and I am aware of the clear cutting operations and lack of management and proper maintenance by the Forest Service.

The damage from logging and construction is far worse than any OHV use. The OHV users as a whole are a very responsible group. I consider them to be the "true environmentalists".

Sediment in runoff from logging activities can remain in a stream system for many decades. Historic logging activities have introduced massive amounts of sediment into the Tellico stream system. There is no logical, scientific basis for the USFS to state that past logging activities such as the Trail 2 cut on Jenks Branch have not introduced any sediment into the river system. We found significant sediment deposits in Jenks Branch above the area where Rock Garden drainage flows into the creek.

Response: No erosion has been identified that can be traced to current logging activities under the jurisdiction of the Forest Service. We acknowledge that historic logging prior to Federal ownership that established most of the original roads and trails did contribute to sedimentation at that time. Many of these old roads were closed, stabilized and revegetated. The trails that remain part of the OHV system continue to contribute sediment to area streams with continued use.

4-32.Public Comment: The destructiveness of the terrain, flora, and fauna by OHVs is visible to anyone.

Response: Photographic and videographic documentation of the trail system documents the trail conditions.

4-33.Public Comment: Lack of proper maintenance is not a sufficient reason to close trail. Instead the FS should work to relocate trails if needed, and perform the proper maintenance.

The stated problems really lie in the fact that Forest Service maintenance of those roads has been lacking, despite the volunteer efforts of those of us in the OHV community.

Response: The inherent qualities of the terrain make relocation options limited. A few viable relocations were scouted and are included in various alternatives analyzed in the EA. Extensive and repeated maintenance has been performed on the

trail system but it has admittedly been insufficient to prevent accelerated erosion from taking place. Factors such as soils sensitive to erosion, high precipitation amounts and intensity, a dense stream network, shallow groundwater, trails not within a design standard, native surfaced trails, a high degree of use year around use, modified vehicles types, inadequate maintenance and long-term severe erosion, makes this trail system very difficult to maintain.

4-34.Public Comments Questioning Why the Forest Service has Failed to Properly Maintained the Trails

If everyone was aware of the problem at the USFS why was nothing done until now??!!!

The use of OHV's creates a huge maintenance burden on taxpayers and affects directly the rights of others that use the National Forest system in a manner that is compatible with the forest's ecosystem and the serenity of the forest experience.

One of the issues with the level of maintenance needed at the Tellico OHV area is due to amount of actual trail miles and lack of maintenance/management by the Forest Service.
The Forest Service has consistently underestimated the true cost of maintaining the Tellico ORV trail system, in part because it has failed to invest sufficient resources to maintain it to standard.

With proper forest service management these trails could be maintained.

The Forest Service has no hope of operating the Tellico ORV trail system in compliance with forest plan and state water quality standards without a substantial investment in reengineering the system and marked increase in maintenance expenditures for the trail system. Forest Service has no reasonable basis to believe that it can provide the necessary funds in the long term to prevent Tellico from again degenerating into a significant source of sediment pollution.

Managers of our public lands have indicated that they are not staffed and equipped to control environmental damage and safety issues posed by ORVs.

In the USFS Trails Unlimited report, maintenance costs are estimated at $100,000 annually after initial trail repair and reconstruction, yet your later EA in 2009 found maintenance costs in excess of $200,000. The SFWDA independent Caliber Engineering study found maintenance costs closer to $150,000 and that is without consideration of SFWDA volunteer efforts and contributions. On the subject of maintenance, it is imperative that an appropriate level of maintenance be performed each year on the Tellico OHV system. Why have maintenance levels been allowed to fall short for years with your implicit knowledge? It appears that closure has been a back room agenda for quite a long time if we are to observe current methods of maintenance (closure) and management as exhibited by the USFS.

This area has been marketed during the last several years by the USFS, user fees have been increased and trail maintenance and law enforcement has been minimal considering the amount of traffic.

Response: Road Maintenance- the National Forests in North Carolina manages approximately 1000 miles of open road system and an additional 1500 miles of closed roads throughout the National Forest. These roads are maintained with an annual road budget of $1,000,000 per year. With this limited road budget it is difficult to address all the needs of an OHV system the size of Upper Tellico OHV System. Fees are collected from the users to supplement the road and trail budgets to attempt to maintain the trail system. With over 2400 drainage features on 38.5 miles of trail system requires a substantial amount of time and equipment to keep sediment traps and culverts clean. The system is difficult to access for maintenance activities and trails are difficult to maintain due to the limited maintenance window. With additional monitoring of the trail system and maintenance activities complete, sediment runoff data showed that after two months following maintenance activities 50% of the drainage features needed cleaning. Given the existing soil conditions and the amount of rainfall within the watershed maintenance activities will vary from year to year based on the amount of rainfall within the watershed. With a minimum maintenance frequency of four times and even more frequent for trails within 100 feet of the stream course coupled with the distance that maintenance equipment has to travel in the trail system, it is very difficult to manage the trail system given the current funding sources.

4-35.Public Comment: You gain anywhere from 50-100 thousand dollars a year in trail fees. How come that money as well as other funds were not spent on the actual maintenance of the trail but instead on other things. That is why people pay the money. They feel as if it should go to keep the trails up. Both reports state that lack of maintenance and funds have contributed to the condition of the OHV area today. This falls on your hands. Had you actually spent the money on the trail instead of other areas we wouldn't be having this discussion.

Response: Fees collected from users of the Upper Tellico OHV System were spent in compliance with regulation and policy. Details of expenditures may be found in agency budget and program planning work plans. The response to Comment 4-8 provides more detail on the shortfall in total funding as compared to the need.

4-36.Public Comment: Forest Plan requires the Forest Service to "[d]esign and maintain all types of trails so no visible sediment reaches the stream channel." (Plan Amendment 5 at III-185.) Furthermore, the Forest Service must "[r]ehabilitate active sites that are contributing visible sediment to the stream channel."
EA documents inadequately sized sediment traps, too small to deal with runoff from a 1-inch storm, which cannot be expanded because of their proximity to streams or other topographical limitations.

Response: The Forest Plan and the EA support your comments.

Comments on the Travel Analysis Report

4-37. Public Comment: Page 2 of the Travel Analysis Report (TAR) states "The objective of the travel (roads) analysis is to provide decision makers with critical information to develop road systems that are...in balance with available funding for needed management actions."

- **Neither the EA nor the TAR state how much funding is available for capital improvements and yearly maintenance.**
- **How much funding is available for capital improvements and yearly maintenance?**

Response: In 2007, the entire NFsNC received$2,298,886 in appropriated funds for road and trail maintenance. Appropriated funds for managing roads and trails in the National Forests in North Carolina have been as follows:

Recent Forestwide Road and Trail Funding

Funding Code	FY 2006	FY 2007
CMRD (Roads)	$ 1,472,438	$ 1,941,448
CMTL (Trails)	$ 384,828	$ 357,438
Total	$1,857,266	$2,298,886

This funding is allocated for managing all roads and trails throughout the 1,251,710 acres of the Nantahala, Pisgah, Uwharrie and Croatan National Forests. Capital improvement funds vary widely depending on the needs of competing projects.

4-38. Public Comment: The USFS does not sufficiently differentiate between OHV trails and challenge areas located within these trails. These areas should be separated clearly within the report due to varying levels and types of maintenance and capital improvements needed, types of user groups, needs of user groups, and economic impacts from users on trails versus challenge areas of trails.
Modify the EA to clearly differentiate between the OHV trails and challenge areas located within these trails.

Response: The six alternatives developed and analyzed vary significantly in their incorporation (or lack) of challenge areas, in part for the very reasons listed by the commenter. It is not realistic to separate the capital improvement and maintenance of each challenge area separate from the trail, as in most cases the trail cannot be used without traversing the challenge area. Incorporation of both challenge areas and challenge area bypasses in a given trail were considered by the ID Team.

4-39. Public Comment: The TAR provides on pages 8 and 9 a listing of "unauthorized roads" and states on page 9 "The roads and trails in the project area are in the Nantahala GIS database."

- **These "unauthorized roads" are important to the EA, TAR and independent analysis yet a map has not been provided of their locations**
- **Provide digital GIS data, including complete metadata, for these roads as part of the Nantahala GIS database.**

Response: A map that displays the unauthorized roads is included in the project file.

4-40. Public Comment: The TAR states on page 18 "During June 2008, in-slope correction and other maintenance actions were implemented on all but approximately 3.29 miles of the System. The segments not maintained were deemed by the agency to require work beyond the scope of technical or economic feasibility, or were considered unsafe within the parameters of a maintenance project (Satterfield, 2008)."

- **Provide a full copy of the supporting documentation (Satterfield, 2008).**
- **Provide exact information as to which sections of trail were not worked and a specific reason for each section.**
- **Provide complete information as to what types of maintenance was completed on each section of trail. Provide all information available.**
- **All areas of the Tellico trail system are accessible and workable as this has been done in the past by SFWDA volunteers.**

Response: Contractors, agency personnel **and** volunteers must meet OSHA standards. According to a contractor's professional assessment, in consultation with agency engineering staff, the following segments were determined not to be accessible for effective maintenance, while also complying with all safety and other workplace standards: Trail 2: 0.38 mile, Trail 7: 0.07 mile, Trail 8:0.68 mile, Trail 9: 0.09 mile, Trail 11: 0.87 mile, Trail 12: 1.2 mile.

Further clarification of the trail segments inaccessible for maintenance may be found in response to Comment 3-125.

4-41. Public Comment: The TAR states on page 18 "The transportation system in the project area has the greatest potential to generate surface erosion at stream crossings, where it runs parallel to streams, and where grade exceeds standard design standards."

- **Culverts can be replaced or upsized relatively easy as needed.**
- **Modified Best Management Practices, as recommended by Caliber, can be used in areas where grade exceeds standard design standards.**

Take both of these statements fully into account.

Response: In regard to Caliber's trail assessment and recommendations: We acknowledge that professional engineers may differ in their approaches to road and trail construction, reconstruction, and maintenance. Professional Forest Service engineers must also comply with accepted agency policies and practices in regard to

managing a natural resource. The Caliber trail assessment and recommendations were made assuming "Excellent" water quality exists in the Tellico watershed which we do not agree with.

A number of recommendations in the Caliber report are similar or identical to components already included in various alternatives analyzed in the predecisional EA. In response to comments, several other of the Caliber recommendations are incorporated into Alternative F-modified in the EA. Other recommendations were determined to be inadvisable or unreasonable and are not included in an alternative.

4-42. Public Comment: The TAR states on page 19 "Numerous sediment basins, usually associated with water bars or broad-based dips, provide an opportunity for water-borne sediment to settle out before the water continues out of the road profile."

- **This statement is incorrect.**
- **This statement should read "Numerous sediment traps, usually associated..."**
- **Sediment traps are much smaller in volume than sediment basins.**

Correct this statement.

Response: We agree: sediment traps are used in a drainage area of 5 acres or less, while sediment basins are used in drainage areas of 100 acres or less (Erosion and Sediment Control Planning and Design Manual, NCDENR, pp 6.60.1 and 6.61.1). The Travel Management Report has been edited to reflect this.

4-43. Public Comment: The TAR states on page 19 "The extent of potential and actual pollutant deliver is unknown at this time." in reference to the delivery of chemical spills, oils, de-icing salts, or herbicides to surface waters. The USFS wishes to close the Tellico trail system due to impacts to surface waters including petroleum products. If the USFS wishes to close the Tellico trail system due to pollution issues then the USFS should have a full understanding about pollution sources and not attribute all pollution solely to the trail system and not other sources including surface roads.

Response: The pollutant of most importance in the Upper Tellico watershed is sediment, and over 600 sediment sources have been identified on the OHV trail system. Neither the EA nor the Travel Management Report make a statement that the trail system is the sole source of pollution.

4-44. Public Comment: The TAR states on page 20 "It is likely that if water quality and habitat conditions improve, recreational fishing activity would increase over current levels."

- **This is incorrect.**
- **Table 3.5.2.2 on page 129 of the EA states that 82.8% of anglers will fish the same amount due to sedimentation and 9.1 will fish less due to sedimentation. This does not equate to a significant increase in angling.**

- **Remove this assumption from the EA. This government document, which the USFS proposes as a basis for complete closure of the Tellico trail system, is no place for assumptions and generalizations.**

> **Response:** The EA discusses potential decreases in angling, The survey did not ask whether they would fish more often. We agree that the statement may be speculative. However, new information received from NCWRC March 30, 2009 states "Our biological staff has consistently expressed concerns abut the effects of the Upper Tellico OHV System on wildlife and chose not to pursue habitat management activities there. Implementing Alternative C allows resource agencies to apply habitat management strategies that can significantly benefit fish and wildlife habitats."

4-45. <u>Public Comment:</u> The TAR states on page 21 "Most road and trail corridors within the project area that are within riparian areas are narrow and not measurably affecting the amount of sunlight reaching streams, except at stream crossings."

- **Caliber agrees with this statement**
- **Based on this statement, Caliber does not suggest adding a bridge at Fain's Ford as it will be very expensive and introduce additional thermal pollution and energy to the stream at this location.**
- **Additionally, Caliber has recommended an engineered approach that will stabilize the approach and exit at this location and forgoes the need for an expensive bridge.**

> **Response:** The National Forests in North Carolina standard practice is to avoid low water fords on roads that are open to the public. Over the past several years we have been replacing low water ford crossings with bridges and bottomless culverts to provide passage and not potentially contaminate the stream. Alternatives A, B, D-modified, E, and F-modified would all allow for a new bridge at the Fain Ford Tellico River crossing, and would add or replace bridges as necessary on the remainder of the road/trail system.

4-46. <u>Public Comment</u>: The TAR states on page 23 in reference to the University of Tennessee study "In context, this ($4.8 million per year economic impact) is a small but locally significant portion of the total $4,369 million contributed by all forms of tourism."

- **Caliber agrees that $4.8 million per year of economic impact by OHV users is extremely important to the local economy.**
- **Why then does the USFS EA gloss over this and water down the economic impact by spreading the impact over a 3 county area?**

> **Response:** Selection of a study region is an important step in conducting economic impact analysis." In most cases, a larger study region (three counties) Compared to a small study region (one county) has a larger economic multiplier resulting in larger economic impacts. This is because there is less leakage in a larger study region compared to a smaller one. A smaller study region, such as Cherokee County does not

provide the needed goods and services, and/or consumers' spending patterns do not reside in the study area. As a result, a lower level of economic activity results a reflection of the smaller multiplier. (Personal communication, Menard, 5/13/09)

4-47. Public Comment: The TAR states on page 25 "The presence of "high challenge" areas in the System is currently the primary draw for these organized, nationally-advertised events."

- **Caliber agrees with this statement.**
- **Additionally, closure of these "high challenge" areas will continue to have a significant impact on the local economy. Closure of the two key high challenge areas Rock Garden and Slickrock have already had a devastating impact on the local economy which has led to significant monetary losses and pending business closures.**

Response: The impact of the OHV system on the economy is addressed in Chapter 3.11. Reports of perceived economic losses are discussed in Chapter 3.11, Section 3.11.1. Detailed results of the business survey are located in the project record.

4-48. Public Comment: The TAR states on page 29 "While a range of opportunities are available, there are not any very challenging areas in this system comparable to the difficulty levels provided by the Upper Tellico OHV System."

- **Caliber agrees with this statement.**
- **Based on this statement, why does the USFS try to discount the opportunities available in the Tellico trail system by stating on page 145 "Under Alternative C, a loss of approximately 39 miles of Upper Tellico OHV trail represents 4% of total available OHV trail miles within a one-day drive."?**
- **With the closure of the Tellico trail system to gain a comparable trail experience one would have to travel much farther than a day's drive. The nearest comparable off road experience is Superlift ORV Park in Hot Springs, AR which is a ten hour drive from Murphy, NC.**

Response: Other OHV trail opportunities are discussed in EA Ch. 3.6 and Appendix "B", and available miles are broken out by use type and difficulty level. However, specific numbers of challenge features or miles of "most difficult" trails were not readily available from websites used in this research. Additionally, this list only includes trail systems on public lands due to limited availability of web-based information on privately owned OHV trails; though a number of high-challenge opportunities appear to be in these private "OHV parks".

Southern Four Wheel Drive Association website and their quarterly "Trail Mix" newsletter mention several OHV systems with high challenge rock crawling opportunities in the southern region. Referenced public and private sites are in North Georgia, East Tennessee, Eastern Kentucky, and Central Alabama; all within a day's drive of Murphy, NC.

4-49. Public Comment: The TAR states on page 31 "There are no unique natural features, or threatened or endangered species, in the project area."

- **Caliber agrees with this statement and adds that the most unique features are the OHV challenge areas and trails.**

Response: Comment noted.

4-50. <u>Public Comment:</u> The EA states on page 4 "In 2005 a Travel Management Rule was promulgated that addresses the administration of motorized vehicle use and travel on National Forest System lands. On January 8, 2009, directives which provide specific direction on implementation of the Rule went into effect. While directing that the agency provide "a variety of trail opportunities, settings, and modes of travel consistent with the applicable land management plan", the directives also charge the agency with emphasizing long-term cost-effectiveness and need when developing or rehabilitating trails, and providing a trail system that is environmentally, socially and financially sustainable (FSM 2353.03)."

- **When was the directive that went into effect on January 8, 2009 made known to the USFS?**
- **Was this why the USFS kept repeatedly delaying release of the EA?**

Response: The amendment to Chapter 2350 of the Forest Service Manual, including directives for implementing the Travel Management Rule, was approved by Charles Myers, Associate Deputy Chief for the National Forest System, on October 26, 2008, and went into effect January 8, 2009.

The agency had originally planned to release the predecisional EA for public notice and comment in the fall of 2008. However, an additional alternative, "Alternative F", was developed in late summer in an effort to be more responsive to public concerns that trail miles were too limited in the proposed action. This required additional field surveys and analysis. Additional review was also triggered by a change in administration. Changes in the release date from the original were not prompted by the effective date of the travel management directives.

4-51.<u>Public Comment:</u> Long-term cost effectiveness should take the local economy into consideration and if it does not then numerous other USFS operations should comply with the same directive and be shut down.

Response: The cost-effectiveness of "other Forest Service operations" is beyond the scope of this analysis. The Economic Impact discussed in Chapter 3.11 does disclose the effects to the local economy.

4-52.<u>Public Comment:</u> Does "socially sustainable" mean that there can never be any user conflicts?

By nature, mixed-use areas will always have some level of user conflicts. These conflicts can be greatly mitigated but effectively banning use by one of the groups is not an appropriate method to make an area more "socially sustainable." Actions such as these are often termed "arbitrary and capricious."

Response: Being "socially sustainable" does not require us to eliminate all conflicting uses. The responsible official "shall consider effects on the following, with the objective of minimizing….(3) Conflicts between motor vehicle use and existing or proposed recreational uses of National Forest Systems lands…" (36 CFR 55).

4-53.<u>Public Comment:</u> By definition "a variety of trail opportunities" should include mixed-use. Where are OHV accounted for within the closure plan if all trails are closed? No trails equals no opportunities for OHVs. With the Tellico trail system being the premier area for OHV use in the southeastern United States; it seems that this would be the best place to provide an OHV experience instead of opening new trails elsewhere.

Response: Providing "a variety of trail opportunities" does not mean that the complete spectrum of trail opportunities must be provided on every ranger district or national forest. That said, Chapter 3.6 and Appendix B of the EA disclose other OHV opportunities on public land in the region. The agency has not established criteria for, nor made an evaluation of, the "uniqueness" of the Upper Tellico OHV Trail System compared to other opportunities in the region.

Literature Cited

Binns, N.A. 1994. Long-term responses of trout and macroinvertebrates to habitat management in a Wyoming headwater stream. North American Journal of Fisheries Management. 14: 87-98.

Bonner, W.R. 1983. Survey and classification of state-managed trout streams. North Carolina Wildlife Resources Commission. Raleigh, North Carolina. 313 pages.

Caliber Engineering Consultants, LLC. 2009. Recommended trail system repair and maintenance plan. 56 pp.

Clinton, B. D. and J. M. Vose. 2003. Differences in Surface Water Quality Draining Four Road Surface Types in the Southern Appalachians. Southern Journal of Applied Forestry. 27: 100-106.

Coffman, J.S. 2005. Evaluation of a predictive model for upstream fish passage through culverts. Master of Science Thesis, James Madison University, Harrisonburg, Virginia.

NC DENR. 2009. Results of benthic macroinvertebrate special study: Upper Tellico Off-Highway Vehicle (OHV) System. Division of Water Quality. Raleigh, North Carolina. Pp. 31.

North Carolina Wildlife Resources Commission (NCWRC). 3/30/09. Letter received in response to 30-Day Notice and Comment period for the project "Transportation System and Related Recreation Management Actions for the Upper Tellico Off-Highway Vehicle System."

Raleigh, R.F. 1982. Habitat suitability index models: Brook trout. U.S. Dept. Int., Fish and Wildlife Service. FWS/OBS-82/10.24. 42 pages.

Stoneman, C.L. and M.L. Jones. 2000. The influence of habitat features on the biomass and distribution of three species of southern Ontario stream salmonines. Transactions of the American Fisheries Society. 129: 639-657.