

## Appendix G

### Texas Wind Event Project

### 30-day Notice and Comment Period Responses

Comment Period Start: May 30, 2013

Comment Period End: June 29, 2013

#### Responses:

Name	Organization(s)	Date Received	Form (e-mail, mail, oral)
1 – Karen Hardin	Texas Parks and Wildlife Department	06/13/2013	e-mail
2 – John Stine	Stine Timber Management, Inc.	06/29/2013	e-mail
3 – Lisa Baker	The United Keetoowah Band of Cherokee Indians in Oklahoma	06/12/2013	e-mail
4 – Brandt Mannchen	Sierra Club – Houston Regional Group	06/17/2013 postmarked 06/15/2013 (Received mail 06/17/2013)	mail
5- Larry Shelton	Texas Conservation Alliance	06/26/2013	email

#### Response Summary

**1 - Texas Parks and Wildlife Department** – expressed support for the project, but recommended that there be no yearly cap on the acres to be treated.

**2 – John Stine** – expressed support for the project, but is concerned that the limit of 10,000 acres per year would restrict the timely removal of sound commercial timber.

**3 – Lisa Baker** – has no issues or concerns, but in the event that human remains are discovered we are to notify them immediately.

**4 - The Houston Sierra Club (HSC) - Brandt Mannchen** – The HSC commented on the EA. Where possible, the comments have been entered as they appear in the HSC letter of 06/17/2013. Some have been paraphrased or otherwise edited. The following summarizes these comments:

**1) This salvage logging proposal is based on making money, not ecological management, to allow for more logging (HSC letter, page 1)?**

Existing fuel conditions indicate the potential for intense fire behavior. The potential cannot be based solely on past wildfire data, as it may not be a reliable indicator of future fire occurrence or intensity. One of the objectives of this project is to reduce fuel loads and moderate fire intensity and behavior.

**2) An EIS is needed due to the magnitude and intensity of the proposal which proposes salvage logging up to 100,000 acres in 10 years (HSC letter, page 1).**

The Decision Notice/FONSI (Finding of no Significant Impact) that is prepared makes the determination about the need for an EIS. The analysis from the EA is used to prepare a FONSI.

**3) The FS fails to provide the public involvement process and the time schedule that it will be implemented in the EA. Because of this the public has no way of knowing how much time it will have to respond to windstorm analysis and site specific environmental documentation when a windstorm event occurs (HSC letter, page 1).**

This has been clarified in the EA in 1.5.1. Public involvement after a wind event would be handled similarly to previous wind events. The NFT Public Affairs Office would develop an Information Operation Plan that outlines how information will be shared with the public. Once initial assessments of the damage have been completed and mapped, the public would have the opportunity to provide comment. Public input would be gathered either during a public meeting and/or a field visit of the wind damaged areas. This would occur after areas have been deemed safe or with a FS escort into damaged areas.

**4) The EA lacks the level of site specific environmental analysis that is needed for the public to be able to review, comment on, and understands all the potential environmental impacts of the proposal (HSC letter, page 1).**

The FS disagrees that the EA lacks the level of site specific analysis needed.

**5) The proposal fails to address the need to leave some coarse woody debris on the acres of NFT that will be salvage logged by creating a standard that will adhere to during logging (HSC letter, page 2).**

The EA addresses the need to leave CWD on pages 36-37.

**6) The EA allows for the salvage logging of most of the sensitive areas in the NFT MA-4, stream-side zones, MA-8. The Sierra Club opposes the logging of streamside management zones (MA-4), major aquatic ecosystems around lakes (MA-5), research natural areas (MA-8a), protected river and stream corridors (MA-8b), scenic areas (MA-8c), natural heritage areas (MA-8d), special bottomland areas (MA-8e) and MA-8f, cultural heritage areas (HSC letter, page 2).**

Alternatives 3 and 4 were developed to address this concern about salvage logging in sensitive areas. Alternative 3 does not propose any treatments in MA 8. Alternative 4 only proposes to treat 451 acres in MA8d Foxhunter's Hill which has numerous Red-cockaded Woodpecker (RCW) clusters. This area would only be treated at the direction of the district wildlife biologist. Alternatives 3 and 4 do not propose any treatments in MA 4 and MA 5. Table 2-4 compares the action alternatives and shows the treatments acres proposed for each Management Area by alternative.

**7) The EA lacks an adaptive management (AM) plan (HSC letter, page 2).**

Comment noted. Adaptive Management was discussed on pages 5-6.

**8) The Sierra Club supports a modified Alternative 3, which allow salvage logging in MA-2, along roads, administrative facilities, boundaries, and recreational areas and does not salvage log streamside management zones (MA-4), major aquatic ecosystems around lakes (MA-5), research natural areas (MA-8a), protected river and stream corridors (MA-8b), scenic areas (MA-8c), natural heritage areas (MA-8d), special bottomland areas (MA-8e) and MA-8f, cultural heritage areas (HSC letter, page 2).**

Alternatives 3 and 4 do not allow logging in MA-4 or MA-5. Alternative 3 does not propose any treatments in MA 8. Alternative 4 only proposes to treat 451 acres in MA8d Foxhunter's Hill which has numerous Red-cockaded Woodpecker (RCW) clusters. This area would only be treated at the direction of the district wildlife biologist.

**1) Page1, 1.1 Purpose and Need for Action, the reason the FS want to commercially log downed wood from wind storms is to make money so that other timber sales and activities will be funded. This is not a legitimate reason for departing from ecosystem management and appropriate management of ecological processes. The FS attempts to hurry the public review and comment process by salvage logging within 90-120 days after the windstorm occurs. This ensures that there will be little opportunity for public review and comment. This also ensures that there will be a lack of site specific environmental analysis because very little is presented in the EA, there will be less time to go out into the field to view the results of the windstorm, and because the FS closes the forest while it cuts to open administrative facilities the public cannot go out and view the results of the windstorm. An EIS is needed (HSC letter, page 2).**

This has been clarified in the EA in 1.5.1. Public involvement after a wind event would be handled similarly to previous wind events. The NFT Public Affairs Office would develop an Information Operation Plan that outlines how information will be shared with the public. Once initial assessments of the damage have been completed and mapped,

the public would have the opportunity to provide comment. Public input would be gathered either during a public meeting and/or a field visit of the wind damaged areas. This would occur after areas have been deemed safe or with a FS escort into damaged areas.

**2) Page 2, Drought 2010-2013, the FS states that “extreme fire conditions have occurred on the forest. Usually, at some time during each year, there are extreme fire conditions somewhere in the NFT. How many days of additional extreme fire conditions would occur due to the aftermath of a hurricane (HSC letter, page 2)?**

The number of additional extreme fire condition days would depend on the amount of damage that occurred and the weather conditions after a wind event. No two events will produce the same results.

**3) Page 3, 1.2.2, Desired Condition Forest Vegetation, when the FS talks about desired future conditions with regard to “open pine forest” it should state clearly which management area (MA) it is talking about. The Sierra Club believes the FS is talking about MA 1 and 2 but should not have to make such assumptions. The FS should state this clearly (HSC letter, page 3)?**

On page 35 the EA states “The majority of the Forest is in MA 1, MA 2 and MA 6. The DFCs for these MAs are primarily open upland pine and pine-hardwood communities with varying amounts of understory grasses, shrubs and small trees and maintained by short-interval, low-intensity fire regimes.”

**Page 3, when the FS states it wants to “maintain, improve, or restore unique ecosystems” and then mentioned “longleaf and shortleaf pine” specifically, to be fair and unbiased, the FS should also mention the other unique ecosystems it want to protect using the Ecological Classification System (ECS) and restoration of ecological processes.**

Comment noted.

**Page 4, when the FS states it wants to “Manage riparian areas” as vital corridors for biological exchange and connecting mature forests... to protect and enhance soils, water, and vegetation” what does the FS mean by manage?**

The Forest Plan states (Plan, page 145) these areas will be managed to maintain the role and function of aquatic, riparian, and wetland ecosystems while providing opportunities for compatible multiple uses.

**Page 4, the FS states “Manage fire-dependent ecosystems and communities...providing resource protection and ecological management needs”. What specific “ecological management needs” does the FS provide for fire-dependent ecosystems and communities?**

The FS has been completing vegetation management projects such thinning and mulching and introducing prescribed fire back into these fire-dependent ecosystems.

**Page 4, what does “upgrading, replacing or closing administrative facilities to ensure the health and safety of user” have to do with salvage logging?**

Because the EA isn’t just focused on salvage logging, but also safety issues that arise as a result of a wind event this objective was added.

**Page 4, how does the FS define “sound Ecosystem Management practices”?**

Practices that are sustainable would be sound EM practices. Sustainable refers to using a resource so that it isn’t depleted or permanently destroyed.

**Page 4, how does the FS define “healthy, productive and sustainable forest... ecosystems”?**

Sustainable refers to using a resource so that it isn’t depleted or permanently destroyed.

**Page 4, the FS has not emphasized “hardwood sawtimber” in any of the timber sales that the Sierra Club has covered for the past several years. What has changed?**

The timber sale is a tool to meet the objectives of Forest projects. Most of the NFT projects propose to improve forest health, improve RCW habitat, and reduce hazardous fuels. This is accomplished through timber sales that focus primarily on pine timber removal and not hardwood removal.

**Page 4, since insects and diseases are natural parts of forest ecological processes and agents of forest succession and change how does minimizing the death of trees from insects and disease fit in with allowing natural ecosystem processes to function as it normally does?**

Even though insects and diseases are natural processes, the forest can still manage the Forest to minimize their occurrence. Some insect such as the southern pine beetle can be devastating to species like the RCW and its habitat.

**4) Page 4, 1.3 The Proposed Action, the Sierra Club recommends in SHNF that several vegetation plots off Forest Road (FR) 204, Compartment 35, be protected from windstorm salvage logging so that monitoring of herbaceous vegetation can continue and provide information on what happened to the ground cover after various treatments occur to the forest (HSC letter, page 4).**

Comment noted. Through discussion with personnel on the Sam Houston National Forest (SHNF), it has been determined that the plots mentioned by the Sierra Club were installed by Jeff Glitzenstein of Tall Timbers Research in 2006. Mr. Glitzenstein was contacted to determine if he has been collecting data on the plots and whether they still have any value to him. In a response dated 8/23/13, Mr. Glitzenstein responded that he has not returned to Texas to collect data on the plots. He felt like the plots were of no value any more. However, there is one plot that he still would like to collect data on a plot that had fire only. This plot has not been burned. The Forest will continue to have discussion with Mr. Glitzenstein about these plots. If a wind event would happen to occur in Compartment 35 on the SHNF, the Forest would consult Mr. Glitzenstein and discuss any planned treatments with him.

**5) Page 4, 1.3 The Proposed Action, the removal of large diameter trees will remove the least flammable part of trees and the most important part of coarse woody debris. The Sierra Club opposes the logging of streamside management zones (MA-4), major aquatic ecosystems around lakes (MA-5), research natural areas (MA-8a), protected river and stream corridors (MA-8b), scenic areas (MA-8c), natural heritage areas (MA-8d), special bottomland areas (MA-8e) and MA-8f, cultural heritage areas (HSC letter, page 5)**

Alternatives 3 and 4 were developed to address this concern about salvage logging in sensitive areas. Alternative 3 does not propose any treatments in MA 8. Alternative 4 only proposes to treat 451 acres in MA8d Foxhunter's Hill which has numerous Red-cockaded Woodpecker (RCW) clusters. This area would only be treated at the direction of the district wildlife biologist. Alternatives 3 and 4 do not propose any treatments in MA 4 and MA 5. Table 2-4 compares the action alternatives and shows the treatments acres proposed for each Management Area by alternative.

**6) Pages 5 and 6, Adaptive Management, the FS does not fully utilize "Adaptive Management of Natural Resources: Theory, Concepts, and Management Institutions" by George H. Stankey, Roger N. Clark and Bernard T. Bormann, that was presented to the Sierra Club in 2011 at a collaborative meeting Appendix I (HSC letter, page 5).**

The NFT has used the basic concepts from this resource to develop the adaptive component of the Proposed Action. Adaptive Management is discussed in Chapter 1(pages 5-6) of the EA.

**7) Page 7, 1.6 Issues, the FS states that "some vegetation management could be necessary to protect the resources that the SMAs were designed to protect." The FS does not provide site specific environmental analysis to state how it defines "some vegetation management" and give specific examples in each of the specific SMAs of what resources it will protect by salvage logging, use of roads, log landings, vegetative trampling and crushing, mulching, lop and scatter, prescribed fire, etc (HSC letter, page 8).**

"Some vegetation management" could simply entail lop and scatter of materials left in a SMA after a wind event.

**8) Page 8, 2.1 The Proposed Action, the FS states that "Only existing or temporary roads" will be used. If the FS is going to deal with site specific environmental analysis the public must know which existing roads the FS will use and their locations. The Sierra Club requests from the FS a map that shows all existing and temporary roads that may be used for this proposal (HSC letter, page 9).**

A map of all Forest Service system roads is provided in Appendix F. Until and event occurs, the FS cannot know where temporary roads are needed.

**9) Page 9, Table 2.1, the FS does not state during a typical windstorm or during a specific windstorm that has occurred in the past how much damage is found to be less than 0.5 tons/acre, less 1 ton/acre, how much is 1-3 tons/acre and much is over 3 tons/acre. What happens if the damage is 0.5 tons/acre to 1 ton/acre (HSC letter, page 9).**

After previous wind event the FS has categorized damage in the following manner rather than in tons/acres:

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Severe: roughly 60% of volume or area has received some type of disturbance

20-50% of original total inventory volume is lost due to **mortality** of sound wood

Dead or alive, trees won't be able to retain sound wood.

In rare cases, this can be slightly higher.

This is the core number that is presented for volume damage loss for each zone.

33-75% of original total inventory volume has some type of **form damage**

There is some current and future volume loss in the merchantable bole of live trees, which is not enumerated within the above mortality value.

In rare cases, this can be slightly higher.

This is a secondary number that will boost the volume impacted by the storm by presenting this volume as an amount of live volume affected. This value for each zone can be 50-100% of the mortality volume, and can be described as associated damage.

Note that the sum of mortality and form damage cannot be greater than 100%.

50-99% **canopy disturbance**

Wind-stripped of leaves, twigs, and small limbs

Easily visible from aerial observation

Moderate: roughly 45% of volume or area has received some type of disturbance

5-20% volume mortality

25-67% form damage

25-75% canopy disturbance

Light: roughly 15% of volume or area has received some type of disturbance

1-5% volume mortality

1-25% form damage

1-33% canopy disturbance

If the damage is .5 tons/acre to 1 ton/acre (which may be equated to Light Damage), there may not be enough timber volume to remove with a salvage sale, but other treatments such as prescribed burning, mulching or lop and scatter could be used to treat damaged areas.

**10) Page 9, 2.1 The Proposed Action, the FS fails to state what will happen with the secondary zone. The Sierra Club does not support any logging of the primary and secondary zone in streamside management zones in MA-4 (HSC letter, page 9).**

The following language was included in the EA (Chapter 2, page9) to clarify how SMZs would be handled after a wind event:

Streamside Management Zones (SMZ) associated with Management Area 4 (MA-4) - Pine trees falling across the 50-foot edge of the primary zone would be cut off. Only that portion of the tree outside of the primary zone would be removed. Leaners, snaps, root sprung, or dead trees that originate within the primary zone would not be removed. Trees outside the primary zone that are leaning into the primary zone could be removed. The secondary zone will be delineated from the primary zone outward to the extent of the streamside management zone, and will vary depending on biological and physical factors within the landtype association, historical use, and topographical position. Delineation of the secondary zone will use one or more of the seven criteria listed on page 152 of the *Plan*.

Alternatives 3 and 4 do not propose any logging in MA 4.

**11) Page 10, the Sierra Club favors in any alternative that is approved that treatments are dropped except for prescribed burning, from any area where damage is less than 30% (HSC letter, page 9).**

Alternatives 3 and 4 do not propose any treatments other than prescribed burning in areas that sustained damage less than 30%.

**12) Pages 10-12, Table 2-4, The Sierra Club is opposed to Alternatives 2 and 4 because they salvage log MA-4 and other sensitive areas (HSC letter, page 10).**

Alternatives 3 and 4 were developed to address this concern about salvage logging in sensitive areas. Alternative 3 does not propose any treatments in MA 8. Alternative 4 only proposes to treat 451 acres in MA8d Foxhunter's Hill which

has numerous Red-cockaded Woodpecker (RCW) clusters. This area would only be treated at the direction of the district wildlife biologist. Alternatives 3 and 4 do not propose any treatments in MA 4 and MA 5. Table 2-4 compares the action alternatives and shows the treatments acres proposed for each Management Area by alternative.

**13) Pages 11 and 12, Table 2-4, Comparison of Alternatives as they relate to the issues from scoping, Alternative 3 states that “RCW clusters and recruitment stands would be treated but Alternative 4 states that only “RCW clusters” will be treated. The FS should explain the difference between these alternatives and why neither protects RCW cluster, replacement stands, recruitment stands, and foraging habitat as required by the U.S. Fish and Wildlife Service (HSC letter, page 10).**

Alternative 4 proposes treatments in RCW clusters and in all of MA 2 which would include replacement and recruitment stands and foraging habitat.

**14) Page 12, 2.6.2 Monitoring, the FS does not state if all inactive cavity trees and clusters will be protected. The Sierra Club supports protection of all inactive cavity trees and clusters for future expansion of RCW populations (HSC letter, page 10).**

All cavity trees will be protected during treatments.

**15) Page 12, 2.6.2 Monitoring, 3, the FS states “timber Sale Administrator will inspect operation regularly.” The FS should state clearly what “regularly” means with respect to how often the Timber Sale Administrator will inspect operation (HSC letter, page 10).**

Timber Sale Administrator check timber sales every day that contractors are operating.

**16) Page 13, 2.6.2 Monitoring, the FS fails to provide any snag or coarse woody debris (CWD) standards and only requires monitoring which is not defined. All the FS states “treatments could be modified to leave or remove more cwd” (HSC letter, page 11).**

The FS would leave an average of 0.5 tons per acre of CWD per treatment area as a starting point. After evaluating the stand conditions, the district wildlife biologist would determine if additional CWD is needed. Future treatments would be coordinated with the fuels specialist and modified to leave more CWD in other damaged areas based upon the wildlife biologist’s assessment.

**17) Page 14, 3.1 Introduction, the FS states “Effects to recreation are negligible except for the safety effects.” This makes no sense. The effects on recreation will be severe (HSC letter, page 11).**

Comment noted. As has been done after previous wind events, the Forest would be closed to the public until safety issues can be addressed then the area can be opened back up to the public. This is why it was felt that the impacts to recreation would be negligible. Also, Design Criteria #20 (Appendix E) addresses how Developed, Dispersed Recreation Areas, trails, and roads are treated during activities.

**18) Page 14, 3.2 Water Resources, Wetlands, Floodplains, Affected Environment, the FS fails to state clearly what the project area is. The FS states that “all of the streams flow into the major tributaries of the Neches, Trinity and Sabine River.” This is an untrue statement, For the SHNF, most of the forest is drained by tributaries of the San Jacinto River (HSC letter, page 11).**

Comment noted. The watershed analysis looked at the 6<sup>th</sup> level HUCs for the Forests. Those are the Neches, Trinity, and Sabine Rivers.

**19) Page 14, 3.2 Water Resources, Wetlands, Floodplains, Affected Environment, the 2.2 million acres for the cumulative effects area is too large to mean anything when reviewing cumulative effects (HSC letter, page 11).**

Comment noted.

**20) Page 15, Alternative 1 – No Action, Cumulative Effects, the FS states that prescribed burning is planned throughout the Forest on a two to three year cycle. The FS should state what the actual burning cycle is and not he planned burning cycle. Due to drought and other factors the actual burning cycle may be different than the planned burning cycle (HSC letter, page 11).**

Since the prescribed burning accomplishment varies from year to year based on weather conditions, we want to base our analysis on the planned burning cycle and not the actual burning cycle. This discloses to the decision maker and the public the most intensive burning cycle possible.

**21) Page 15, Table 3-1, Treatment options based on damage severity and impacts in MAs 4 and 5, the Sierra Club has not seen the FS advocate the use of mulching within streamside zones before or the use of herbicides. The FS should explain what the reasons are for mulching and herbicide use in streamside zones within 200 feet of the property boundary. The Sierra Club does not support mulching and herbicide use in streamside zones in connection with salvage logging (HSC letter, page 12).**

This will be corrected in the EA. The use of herbicides is not proposed in any of the alternatives.

Mulching would only be conducted along boundary lines in MA 4 and MA 5 to reduce fuel loads or to correct a safety issue.

**22) Page 15, Alternative 2- Proposed Action, the FS states “Establishment of stream protection zones, water-barring and seeding and fertilizing of bare soils areas would mitigate the potential for sediment delivery to streams. The FS may salvage log in streamside zones and other sensitive areas and cause compaction, erosion, sedimentation, rutting, and other damage to soil (HSC letter, page 12).**

The FS would still be following the Forest Plan standards and guidelines (pages 153-161) associated with MA 4 when implementing any treatments that are proposed.

Alternatives 3 and 4 do not propose any treatments in streamside zones.

**23) Page 15, Alternative 2- Proposed Action, the FS should define “underburns” and stream course zones in the glossary (HSC letter, page 12).**

Streamside zone is defined in the Glossary of Terms. This is the same as a stream course zone.

The term “underburn” has been added to the Glossary of Terms.

**24) Pages 15 and 16, Alternative 2- Proposed Action and Page 22 Alternative – Proposed Alternative, the FS states “temporary road improvements would disturb soil....sediment produced by the road system would be reduced.” It is not clear why the FS believes after opening up temporary roads that are not used currently that there would be less sediment created (HSC letter, page 12).**

Temporary roads would be obliterated after use. This would prevent sediment from being created. This has been clarified in the EA on page 9.

**25) Pages 16, Cumulative Effects, the FS uses cumulative impacts from the past three years. This is not long enough, for instance, for temporary roads that have been obliterated to go back to forest. When logging occurs, the vegetation that is killed due to the scraping of bark and crushing can take considerably longer than 3 years to recover. The FS insists that it needs to commercially log but then states “Commercial removal and fuels reduction activities... would be implemented over a one to three year period” (HSC letter, page 13).**

Cumulative effects looks at the amount of time it takes for resources to recover from the effects of the proposed action. For the resources analyzed, this time period is three years. Any commercial removal would be completed within a year of the wind event occurring since the value of the timber is lost soon afterwards. However, there may be other treatments proposed to further reduce fuel loads such as mulching or prescribed burning that may happen two or three years after the wind event. A temporary road would return to the state it was in before being opened within 2-3 years. None of the roads that would be utilized are in a completely forested condition and would not be expected to return to that condition.

**26) Pages 16, Alternative 4 – Modified Alternative 3, the FS states “No treatments would occur in MA 4 (Streamside management zones), except along boundary lines.” The Sierra Club does not understand why treatments, other than some manual chainsaw sectioning and moving would need to be done in riparian areas on the boundaries. The FS must state clearly what specific actions it intends to take in riparian areas along the boundary and what impacts these actions will have (HSC letter, page 13).**

After Hurricane Rita some mulching of material was done along boundary lines to reduce fuel loads and this treatment may need to be utilized again. Some material could be removed using chainsaws and lop and scattering the material. The FS needs to have the option to utilize mulching and lop and scatter if necessary.

**27) Pages 17, 3.3. Soil, Affected Environment, the alluvial floodplain and terrace LTA, the SHNF and Davy Crockett National Forest (DCNF) have this type of LTA and should be included in this description of the LTA (HSC letter, page 13).**

This LTA is listed on page 19.

**28) Pages 21, Alternative 1- No Action, the FS states that “Some areas have a severe potential fire damage hazard... would result in a greater probability of soil damage.” The FS should explain what “severe potential fire damage hazard” is and the probability for soil damage. The FS should state how many such fires have occurred in the past three years and what the actual risk (probability) for such a fire is (HSC letter, page 14).**

Table 3-5 shows the fire behavior for the various fuel models on the Forest pre-hurricane and post hurricane. The table shows the predicted fire intensity, flame lengths, and overstory mortality.

**29) Pages 21 and 22, Alternative 2 – Proposed Action, the FS states “Only existing or temporary roads would be used for access.” The FS should describe where each of these existing and temporary roads are, what is the current condition of each road, and whether they are in reality closed right now. The FS mentions the “degree of compaction.” The FS should explain what the different degrees of compaction are and what degree of compaction is expected due to salvage logging, mulching, lop and scatter, and prescribed burning. The FS states that “Limiting operation to dry periods and the relatively infrequent entries into stands.” In an earlier comment in this letter, the FS did not commit to stopping logging during wet weather. The FS mentions that “The soils would have time to recover from the effects of compaction prior to the next timber harvest”. However, the citation used is from 1989, 24 years ago. Since more soils will be uncovered, temporary roads will be reopened, skidder roads will lace the areas to be salvaged logged, log landing will be created, and large machines like feller bunchers will be used, the Sierra Club is not convinced that more sediment long-term will not be created (HSC letter, page 14).**

The map in Appendix F shows all the roads on the current Forest Service transportation system. These roads are all open for public use. Temporary roads would be located on a case-by-case basis. Their location would not be known until the time of an actual event.

**30) Pages 22 and 23, Cumulative Effects, the FS states “would result in some risk to soil productivity.” The FS should state what the risk is (probability) (HSC letter, page 15).**

The risk for lost soil productivity would depend on the soil type as displayed in Table 3-2.

**31) Pages 23- Alternative 3- High Priority Areas Only, the FS states “the number of acres treated would be so small that there would be no impact to soil resources.” This statement is untrue (HSC letter, page 15).**

Comment noted.

**32) Pages 23 and 24, Fuels, the FS states “most of the storm damage on the Forest was classified as only minimal or light; however, there were many scattered pockets with moderate to extensive damage particularly in open, mature stands such as RCW habitat and stands adjacent to pastures and young timber.” The Sierra Club urges the FS not to reduce basal area as much as it has because stands that are too open suffer from more blow down (HSC letter, page 15).**

Comment noted. The FS is also concerned about subsequent blow down of residual standing trees if basal areas are reduced too low.

**33) Pages 24 and 25, Fuel Models Used in the Analysis, the FS does not explain well what FM2, FM8, and FM9, etc. are for the public. The FS states the only areas that represent FM2 are MA-2 and MA-6. The Sierra Club believes that some MA-1 may also meet FM2. The FS should define what “hazardous fuel loadings” are and state how many years these conditions last, rather than say “for several years”. The FS should state what the probability is that a “hazardous fuel loading area” will actually catch fire in a year (HSC letter, page 15).**

This is described in the EA on pages 27-28 and in Table 3-3.

**34) Pages 26-28, Predicted Fire Behavior, the FS states “low to moderate rates of spread and low flame lengths are predicted, representing only a slight change in fire behavior.” The FS should define what “Slight change” means with regard to fire behavior (HSC letter, page 15).**

Table 3-5 shows the changes in fire behavior after a wind event. It is also explained on page 30 in the narrative following the table.

**36) Pages 28-30, Alternative 1 – No Action, the FS states “there would be an increased risk of spotting and escape posing significant threats to adjacent human communities.” The FS should state where these communities are, where possible hotspots would be, and provide an analysis of the risk of spotting (HSC letter, page 16).**



Hotspots and the risk of spotting would depend on the fuel load after a wind event. There would be no way to assess this until after an event occurred and the fuel specialist was able to assess the fuel load on site. All four national forests have seen an increase in human communities adjacent to the Forest.

**37) Pages 31 and 32, Cumulative effects, the FS states “damaging wind events have the potential to substantially increase the amount of fine fuel.” The FS does not state that this occurs for two years, a relatively short period of time. The FS fails to mention that private landowners have a responsibility to fire-proof their property and the FS must not assume all the responsibility (HSC letter, page 17).**

Comment noted.

**38) Page 32, Direct and indirect effects of the Proposed Action, the FS states “These risks may be exacerbated.” The FS should state what risks are using a probability analysis (HSC letter, page 17).**

These risks may be exacerbated by the persistent drought and dry fuel conditions that currently exist and are predicted to continue on the Forest. Because the conditions on the Forest are highly variable, it would be difficult to analyze the risk using a probability analysis.

**39) Page 33, 3.5 Vegetation, Affected Environment, the Sierra Club opposes salvage logging and mulching in Management Areas (MA) -4, Streamside Management Zone, MA-5, Major Aquatic Ecosystems and MA-8 Research Natural Areas, Scenic Areas, Natural Heritage Areas, Special Bottomland Areas and Cultural Heritage Areas because the damage, degradation, and destruction will significantly impact the very purpose these area were set aside for or given additional protection as well as their values and benefits (HSC letter, page 17).**

Alternatives 3 and 4 were developed to address this concern about salvage logging in sensitive areas. Alternative 3 does not propose any treatments in MA 8. Alternative 4 only proposes to treat 451 acres in MA8d Foxhunter’s Hill which has numerous Red-cockaded Woodpecker (RCW) clusters. This area would only be treated at the direction of the district wildlife biologist. Alternatives 3 and 4 do not propose any treatments in MA 4 and MA 5. Table 2-4 compares the action alternatives and shows the treatments acres proposed for each Management Area by alternative.

**40) Page 33, Affected Environment, the FS should explain what “natural fire regime” and historical range of variability” is for all landtype phases that will be affected by this proposal in the NFT. The fire intervals that the FS states are natural in Wade et al. 2000 are different than the ones in the ECS (HSC letter, page 18).**

The fire intervals in Wade et al. and the ECS are very similar.

**41) Page 33, Forest Vegetation, Alternative 1 – No Action, the FS should state what the probability of bark beetles attack is now and in the near future. There have been no or few southern pine beetles found in the NFT for the past 20 years (HSC letter, page 18).**

The NFT has been fortunate that there have been no southern pine beetle (SPB) infestations within the last 20 years. There is a concern that the drought may have weakened and stressed residual stands. This could increase the incidence of SPB infestations here in Texas. SPB infestations increased in Mississippi in 2012 (Steve Clarke, pers. comm.).

**42) Page 34, Alternative 2 – Proposed Action, the FS refers to “creating more opportunities for natural pine regeneration.” However, the FS does not state that its prescribed burning kills pine seedlings and therefore any increased pine regeneration is mooted by the prescribed burning that the FS does (HSC letter, page 18).**

Fire can kill loblolly pine seedlings, but longleaf pine seedlings are more resistant to the effects of fire.

**43) Page 34 and 35, Coarse Woody Debris, the Sierra Club is disappointed about the lack of analysis about CWD in this EA. Instead of discussing how important CWD is and what the FS can do to protect some CWD on the acres that will be logged the FS simply dismisses the issue by saying “overall on the Forest there are more snags and coarse woody debris being created” does (HSC letter, page 18).**

The Plan standard of 2 snags per acre will be left after any treatments if there are available snags to be left. The wind event may take down any snags that were in the area to begin with.

The FS would leave an average of 0.5 tons per acre of CWD per treatment area initially. After evaluating the stand conditions, the district wildlife biologist would determine if additional CWD is needed. Future treatments would be coordinated with the fuels specialist and modified to leave more CWD in other damaged areas based upon the wildlife biologist’s assessment.

**44) Page 35, Old Growth, the FS offers no mitigation measures to protect old growth. CEQ NEPA regulations require that mitigation measures be considered. The FS should document what mitigation measures are possible in old growth areas and which it will use to protect old growth forests and CWD (HSC letter, page 19).**

The FS would still be following the Forest Plan standards and guidelines (pages 153-161) associated with MA 4 when implementing any treatments that are proposed. Alternatives 3 and 4 do not propose any treatments in MA 4. Old growth and CWD are discussed on pages 36-37 of the EA.

**45) Pages 38-41, Air Quality, there is a new annual National Ambient Air Quality Standard for fine particulate of 12 micrograms/cubic meter. This standard should be discussed in the air quality section. The FS should state what is the probability or risk for “These large wildfires” (HSC letter, page 19).**

Figure 3.1 on page 41 has been updated to reflect that 12 micrograms/cubic meter is the new standard for PM<sub>2.5</sub>. The risk of large wildfires would depend on the amount of fuel on site along with weather conditions after a wind event.

**46) Pages 41-42, Public Health and Safety, the FS should calculate the “risk of smoke” and provide this to the public. The FS states that “conditions would worsen and time passes.” The FS should state how downed trees will be a greater risk to firefighter when they are decaying and becoming less of an obstacle (HSC letter, page 19).**

The risk of smoke would depend on the amount of fuel on site. As stated in the EA, as time passes the material remaining on the ground becomes punky and produces more smoke.

**47) Pages 44-46, RCW, Alternative 1, the FS states “Bark beetles...could also become a problem if excessive numbers of snags are left...fuels would cause prescribed fires or even wildfire to burn much more intensely over longer durations. There would be a strong possibility that some trees within clusters would be killed, including cavity trees. The FS should state what an “excessive number of snags” are and what is the percent risk or probability that cavity trees would be killed. Since mulching and salvage logging would be allowed in clusters, replacement stands, recruitment stands, and foraging habitat there would be the possibility of direct effects because skidders and feller-bunchers could either scrape the bark off trees or in maneuvering hit a tree with another tree and damage it obstacle (HSC letter, page 19).**

The probability of cavity trees being killed would depend on the fuel load within the cluster.

**48) Page 50, Rafinesque’s Big-eared bat, Alternative 2- Proposed action, the FS states “There may be minimal indirect effects since tree removal activities may destroy some snags or hollow trees that may serve as roosting habitat for this species. However, these effects should be minor because of the abundance of snags across the NFT.” The FS provides no documentation that there are and abundance of snags (HSC letter, page 20).**

The MIS discussion talks about the number of snags on the Forest. Figure 3-6 shows the increase in the number of snags in recent years.

**49) Page 51, Rafinesque’s Big-eared bat, Alternative 3, the FS states “The day roost sites most often used by this bat ...are large diameter hardwoods (Often black gum genus Nyssa)... Such trees are restricted to mature bottomland hardwood forest, where no tree removal would occur.” This statement is untrue. Some tree removal will occur from streamside zones in Alternative 2 (HSC letter, page 20).**

The FS would still be following the Forest Plan standards and guidelines (pages 153-161) associated with MA 4 when implementing any treatments that are proposed.

**50) Page 54, Texas Emerald Dragonfly, the FS states “This species does not have a high potential to occupy proposed treatment areas because these areas do not include high potential habitat as described above for larvae. Treatment areas have been delineated to exclude streams...and their associated protection zones...Site specific surveys are not feasible and would not improve effects analyses or allow improved project design. The Sierra Club disagrees with this assessment. There are areas of large, mature, pine trees that this dragonfly uses for foraging and seepage areas where larvae may live that may be impacted due to salvage logging since MA-4 will be logged and since site specific surveys have not been done in the EA and therefore areas could be inadvertently logged (HSC letter, page 20).**

The FS would still be following the Forest Plan standards and guidelines (pages 153-161) associated with MA 4 when implementing any treatments that are proposed.

**51) Page 63, Cumulative Effects for Sensitive Plant, the FS states “There are likely to be few cumulative effects to TES plants over time as a result of implementing the proposed alternatives given that the proper mitigations are followed.” The FS does not state what those mitigation measures are (HSC letter, page 20).**  
Mitigations measures or Design Criteria are listed in Appendix E.

**52) Page 62, 66, 68, 70-75, 78, and 82, Alternative 2- Proposed Action, the FS states “Resources protection ensures that required adherence to MA-4 guidelines, site-specific surveys prior to implementing treatments...would allow this project to be implemented without having negative direct effects on this species.” According to page 152 of the 1996 Revised Land Resource Management Plan, Standards and Guidelines, MA-4 has an Area Identification not guidelines. The Area Identification is mandatory to conduct and is not optional as guidelines would be. The FS states “A Primary Zone and a Secondary Zone will be identified within the SMZ.” Note the word “will”. This makes the Area Identification mandatory and not optional. The FS must remove guidelines from the EA when referring to MA-4 and the primary and secondary zones. It is also very bad to put the FS biologists under pressure to look for sensitive plants or areas because of the hurry-up process that the FS has imposed on itself (essentially the finish of salvage logging 90-120 days after the windstorm (HSC letter, page 21).**

The FS would still be following the Forest Plan standards and guidelines (pages 153-161) associated with MA 4 when implementing any treatments that are proposed. The FS would not begin any treatments until all biological and archeological surveys are completed.

**53) Page 86, B. Louisiana Squarehead, the FS fails to mention the population of Louisiana Squarehead in SHNF that was found two years ago in Compartment 37, along Forest Road 204A (HSC letter, page 21).**  
Comment noted. This was discussed with the Forest Botanist.

**54) Page 88 and 89, C. Shortleaf-Oak Forest, D. Longleaf-Bluestem series, and E. Loblolly-Oak forest, the FS should state clearly when it says “If heavy fuels are not reduced, excessive tree mortality could occur.” what excessive tree mortality is and what is the risk or probability that this will occur. The FS should also clarify what risk or probability will be reduced when it states “the project would have beneficial indirect effects by reducing fire hazards associated with heavy fuels.” Since there are very few “fire hazards” associated with heavy fuels other than smoke, as the FS has stated in this EA, the FS should be very clear about what it is talking. The FS does not acknowledge that salvage logging also results in scraping the bark off of trees which can act as an attractant for Ips and southern pine beetles which may attack injured and uninjured trees (HSC letter, page 21). The Predicted Fire Behavior discussion on pages 28-34 addresses the fire hazards associated with heavy fuels.**

**55) Page 90, G. Little Bluestem- Rayless Golden rod series, Alternative 2- Proposed Action, the FS states “Most equipment would be restricted from operating within the Black Branch Barren areas.” The FS should state specifically what equipment will and will not be allowed in the Black Branch Barren area (HSC letter, page 22).**  
Design Criteria #28. Any trees falling into Catahoula pine barrens should be removed manually by a chainsaw crew. No dragging or cutting by heavy machinery is allowed within these areas. Trees must be lopped and scattered outside the barren boundaries.

**56) Page 91-92, J. Eastern Wild Turkey, the FS should discuss that the SHNF apparently has few or no turkeys. The Sierra Club is not convinced that there would be “minimal effects” on turkeys when they nest because there are so few turkeys in the forest and any nest losses would be significant (HSC letter, page 22).**  
Comment noted. The biologist preparing the effects analysis for wildlife determined that the effects on Eastern Wild Turkey would be minimal.

**57) Page 93, K. White-tailed deer, Alternative 2- Proposed Action, the FS has stated that White-tailed deer is not suitable as an indicator species. The FS states that “The proposed project would have minimal direct effects to white-tailed deer” but fails to mention the killing of fawns by equipment that is used during salvage logging (HSC letter, page 22).**  
Comment noted.

**58) Page 95, Yellow-breasted Chat, Alternative 2- Proposed Action, the FS should state that chats and their nests may be killed by salvage logging equipment (HSC letter, page 22).**  
Comment noted.

59) Page 95-97, M. Pileated Woodpecker, the FS states that “Pileated Woodpecker numbers appear to be stable.” However the data shown in Figure 3-5 do not show stability. In addition the FS does not breakout Pileated Woodpecker numbers for each of the four national forests (HSC letter, page 22).

Comment noted.

60) Page 97-99, N. Snags, the data for 2011 in Figure 3-6 was obviously affected by the drought that occurred that year. The problem with the data is that the drought did not affect all areas or all areas equally and that the points used may have been placed in the areas most affected by the drought. The data does not show the size distribution of snags (HSC letter, page 23).

Figure 3-6 shows snags 12-20 inches dbh (blue bars) and snags greater than 20 inches dbh (red bars) as stated on page 99. The following table from the 2011 Monitoring and Evaluation report shows the distribution of snags monitored on the NFGT.

Table 8. Average # of snags 12"-20" at each sampling point by unit				
	2008	2009	2010	2011
<i>ANF</i>	1.00	2.00	1.66	1.47
<i>SNF</i>	0.84	1.69	2.28	2.21
<i>DCNF</i>	1.25	2.39	4.37	7.79
<i>SHNF</i>	1.54	2.83	1.76	3.33
<i>Caddo</i>	--	2.73	4.12	8.75
<i>LBJ</i>	--	--	5.96	7.66
<i>Total</i>	1.16	2.33	3.36	5.20
Table 9. Average # of snags >20" at each sampling point by unit				
	2008	2009	2010	2011
<i>ANF</i>	0.07	0.09	0.27	0.21
<i>SNF</i>	0.11	0.25	0.14	0.17
<i>DCNF</i>	0.26	0.30	0.87	1.31
<i>SHNF</i>	0.08	0.17	0.47	0.22
<i>Caddo</i>	--	0.43	0.50	0.12
<i>LBJ</i>	--	--	0.07	0.00
<i>Total</i>	0.13	0.25	0.38	0.34

61) Page 100, O. Gray and Fox Squirrels, Alternative 2 – Proposed Action, the FS fails to state that direct impacts could include squirrels killed or their dens destroyed during salvage logging (HSC letter, page 23).

The biologist preparing the effects analysis for wildlife determined that the effects on squirrels would be minimal.

62) Pages 100-102, 3.12, Biological Diversity, the Sierra Club oppose the salvage logging of MA8a, Mill Creek Cove which is unsuitable for timber production; MA8b, Protected River and Stream Corridors, Winters Bayou and Neches River which are unsuitable for timber production... These areas will be harmed by salvage logging and they will not be better off by being logged (HSC letter, page 23).

The FS would still be following the Forest Plan standards and guidelines (pages 153-161) associated with MA 4 when implementing any treatments that are proposed. Alternatives 3 and 4 do not propose any logging in Mill Creek Cove, Winters Bayou or the Neches River.

63) Pages 102-106, 3.13 Climate Change, the FS is not doing what it should for climate change. The FS must prepare and include in this draft EA a climate change ecological resilience and resistance plan (CERRP) (HSC letter, page 24).

Comment noted. While a CERRP has not been prepared for this project, the National Forests in Texas are responding to climate change at the local level by responding to the Forest Service Strategic Framework for Responding to Climate Change (October 2008), and the National Roadmap for Responding to Climate Change (February 2011). These

documents establish expectations that start with short-term climate change initiatives and lead to longer-term investments, while meeting agency goals. The Roadmap provides a strategic path forward, integrating land management, public outreach, and sustainable operations to ensure that national forests and grasslands are conserved, restored, and made more resilient to climate change.

The Climate Change Performance Scorecard (initiated in 2011) tracks implementation of the Roadmap on an annual basis, ensures compliance with the USDA Strategic Plan, and facilitates a balanced, integrated response to climate change through existing programs and initiatives. Additional information on agency-wide climate change response may be found at <http://www.fs.fed.us/climatechange/advisor/>. Despite technical and scientific complexity associated with specific climate change effects at local scales, the Forest Service is already considering climate change in its planning and management actions. Guidance was provided in 2009 for Forest Service managers to use in land management and project planning ([http://www.fs.fed.us/emc/nepa/climate\\_change/index.htm](http://www.fs.fed.us/emc/nepa/climate_change/index.htm)). Reinforcing the approaches and guidance in the Roadmap and Scorecard, the new Planning Rule (<http://www.fs.usda.gov/detail/planningrule/home/?cid=stelprdb5359471>) contains requirements for addressing climate change in each phase of the land management planning framework, including in the assessment, plan, and monitoring phases. Agency-wide guidance for land management decision-making subject to the National Environmental Policy Act is provided in *Climate Change Considerations in Project level NEPA Analysis* ([http://www.fs.fed.us/emc/nepa/climate\\_change/includes/cc\\_nepa\\_guidance.pdf](http://www.fs.fed.us/emc/nepa/climate_change/includes/cc_nepa_guidance.pdf)).

Due to local and regional variability of ecosystems, current and projected climate change effects on these systems, and the interaction with other stressors, a one-size-fits-all analysis and management response is not appropriate. The Agency is working to provide additional tools and information for land managers on incorporating climate change into planning and decision-making. More information can be found on the Climate Change Resource Center web site: <http://www.fs.fed.us/ccrc/>.

**64) Pages 105, 3.14 Economics, if the FS suggest s that greater than 90% of dead trees from a windstorm are left in the NFT when salvage logging occurs then other than RCW clusters, and specific areas like roads, where the trees must be moved there is no point in logging the area (HSC letter, page 25).**

Comment noted. Other factors would be considered aside from economics when deciding to commercially remove timber from an area including reducing the fuel load, protecting RCW habitat, and improving public and firefighter safety.

**65) Appendix E, Design Criteria, 4. Temporary roads should be defined in the glossary. The description that is given, “Roads would be seeded, fertilized and water-barred after use to prevent unauthorized access”, does not constitute “obliteration”. The road bed should be made unusable, trees should be planted on the roadbed, road-side ditches should be filled in and local hydrology reestablished (HSC letter, page 25).**

Temporary roads are defined in the Glossary of Terms. The road bed of temporary roads would be pulled up so that the road is no longer useable. Following timber removal, temporary roads would be obliterated, seeded, water barred, and the entrances would be blocked. This has been clarified in the EA on page 9.

**66) Appendix E, Design Criteria, 10, the FS states that if any Regional Forester’s Sensitive species are found that the district wildlife biologist will be notified. The FS should explain how it will ensure that the logging contractors know how to identify any RFSS and their responsibility to contact the district wildlife biologist (HSC letter, page 26).**

During times when logging is occurring near sensitive plant habitat, the Forest Botanist would be notified and would be available to look for new sensitive plant occurrences.

**67) Appendix E, Design Criteria, 14, the FS states that a timber sale will be shut down “when erosion and soil compaction will be unacceptable”. The FS should define clearly “when erosion and soil compaction is unacceptable” (HSC letter, page 26).**

Timber Sale Administrators have criteria to follow to determine when erosion and soil compaction are unacceptable.

**68) Appendix E, Design Criteria, 18, the FS states that only the primary zone will be protected. There is also a secondary zone that the FS must take into account with regard to protection of streamside zones (HSC letter, page 26).**

The FS would still be following the Forest Plan standards and guidelines (pages 153-161) associated with MA 4 when implementing any treatments that are proposed. The FS would not begin any treatments until all biological and archeological surveys are completed.

**69) Appendix E, Design Criteria, 23 and 49, the FS states that sensitive plant habitats like baygalls will be protected from equipment. However, the Sierra Club met with the Forest Botanist in February 2013 to show him and contractor several baygalls that they did not know existed. The FS should state how it will ensure that its list of sensitive plant habitats in complete (HSC letter, page 26).**

Areas impacted by a wind event will be looked at before any treatments can begin. If damage areas can be safely surveyed by a botanist before any work can begin, then this will happen. If surveys cannot be conducted safely then areas may have to be surveyed after treatments.

**70) Appendix E, Design Criteria, 24 and 25, the Sierra Club supports all requirements that require that equipment brought onto the NFT has been cleaned to prevent the spread of NNIPS (HSC letter, page 26). Comment noted.**

**71) Appendix E, Design Criteria, Pages 44-48, the FS provides no design criteria that reduce, eliminates or mitigate the negative environmental impacts of salvage logging on the Lone Star Hiking Trail and other trails. The Sierra Club supports a 50 foot on each side protective corridor where no salvage logging will be done (HSC letter, page 26).**

The following language was added to Chapter 2 of the EA to clarify how trails will be treated:

Recreation trails occur on all NFT units. Hazard trees along the trail routes or at the trailheads present a safety issue due to high use by the general public. Tree removal methods may include standard logging equipment in some situations while the use of smaller equipment better suited to operation along a trail route may be needed.

Operations stipulations - Removal of hazard trees occurring within 200 feet of either side of an existing designated recreation trail may be conducted with standard logging equipment limited to operation from the existing trail tread only. Use of smaller vehicular rubber tired equipment may also be used provided no new ground disturbance occurs and is confined to the existing trail tread. Log staging areas and/or landings and decks will be confined to existing hardened parking surfaces and roads.

As stated in the Design Criteria #20 Highways, state and county roads and primary National Forest System Roads (NFSR) and trails, Dispersed Recreation Areas have a VQO of Partial Retention. Areas with a VQO of Partial Retention for salvage or sanitation cuts the following guidelines apply: I. Direct felling cuts away from travelway or lake within 200 foot lop and scatter zone; K. Lop to lie within 2 foot of ground or chip or remove slash visible within 200 foot from edge of travelway (Plan, page 76).

**72) Cumulative Effects Documentation, Coarse woody debris, snags, the FS does not address the issue the Sierra Club brought up (Starting in December 2011) about the need to leave CWD on each acre of the NFT that is salvaged logged because CWD is a biological legacy that enhances the recovery and restoration of the forest on that acre after a windstorm (HSC letter, page 27).**

The FS would leave an average of 0.5 tons per acre of CWD per treatment area as a starting point. After evaluating the stand conditions, the district wildlife biologist would determine if additional CWD should be left. Future treatments would be coordinated with the fuels specialist and modified to leave more CWD in other damaged areas based upon the wildlife biologist's assessment.

**73) Cumulative Effects Documentation, Air Quality, the FS states that "the No Action would have more smoke" The FS should state how much more smoke would the No Action Alternative have and for how long (HSC letter, page 27).**

The No Action alternative would have more smoke because the fuel load after a wind event would not be reduced through any treatments. It is hard to say how much more smoke because we do not know what the fuel load would be like under the other alternatives.

**74) Comments and Response Matrix, Texas Conservation Alliance 4, the FS states that "problems that occurred during past salvage logging were implementation problems that will be corrected." The FS should state clearly**

what it has done to change the implementation problems. What mitigation measures are now in place that were not in the past and why does the FS believe that these new measure will work (HSC letter, page 27)?

The Forest Supervisor is aware of the issues that have occurred during implementation of the 2012 salvage sales and is committed to ensuring that these issues do not occur in the future. Streamside management zone training was held in November 2012 for all field going personnel including timber markers, timber sale administrators, engineers and dozer operators. The training was also attended by the Forest Supervisor who expressed the importance of the training to those in attendance. This training was coordinated by the Forest Planner, Forest Botanist and Forest Fisheries Biologist. Training should be held every 2-3 years to remind employees about the importance of streamside management zones.

**75) Comments and Response Matrix, Texas Conservation Alliance 9 and Sierra Club 34, the FS states “Roads would be seeded, fertilized and water-barred after use.” These methods do not prevent illegal ORV use. The FS should state clearly what it will do to specifically discourage illegal ORV use on temporary roads after use by the proposal (HSC letter, page 27).**

The following language was added to Chapter 2 of the EA to clarify how roads will be obliterated and illegal OHV use prevented:

The road bed of temporary roads would be pulled up so that the road is no longer useable. Following timber removal, temporary roads would be obliterated, seeded, water bars installed and entrances blocked.

**76) Comments and Response Matrix, Sierra Club 11, the FS states “The preparation of the EA would determine whether there is a need to prepare an EIS.” The EA makes no determination about whether an EIS is needed and therefore the public cannot respond to any FS reasoning that an EIS is not needed (HSC letter, page 28).**

The Decision Notice/FONSI (Finding of no Significant Impact) that is prepared makes the determination about the need for an EIS. The analysis from the EA is used to prepare a FONSI.

77) Comments and Response Matrix, Sierra Club 14, the FS states “Adaptive management will be described in Chapter 1 of the EA.” The FS says almost nothing about adaptive management. The FS has not addressed the comments the Sierra Club submitted about an adaptive management document the FS gave the Sierra Club (HSC letter, page 28).

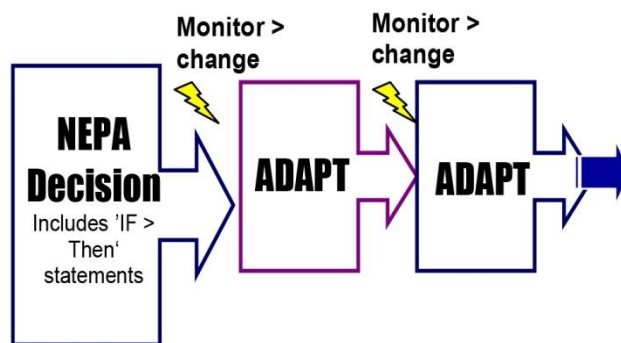
The following is from Chapter 1 of the EA and describes the adaptive component of the EA.

## Adaptive Management Monitoring

After completion of the initial fuel treatment, a fuels specialist will evaluate the treated areas to determine if further fuel reduction is needed. A wildlife biologist would monitor RCW clusters and foraging habitat to determine if further treatment is needed to reduce impacts to RCW cavity trees or foraging habitat from excessive fuel loads. Fuels within 200 feet of a RCW cavity tree would need to be removed to prevent fire damage.

## Adaptive Management

The NFT plans to use an adaptive management approach for reducing hazardous fuels and restoring RCW habitat after a wind event. Figure 1-3 below illustrates the adaptive management framework and how it will be incorporated into the design of the project. Adaptive management would allow NFT specialists to prescribe the right treatment based on the conditions on the ground. The least intensive treatment to accomplish the objectives would be utilized.



**Figure 1-3. Adaptive Management Framework**

Adaptive management is a concept for dealing with uncertainty in environmental management. Projects with built-in continuous assessment (monitoring- “If X happened”) and processes for improvement (“Then the next action will be taken”). It allows managers the latitude to treat successive portions of the project based on local conditions, and to assess and monitor these activities while staying within the range of anticipated impacts described in this document. Adaptive management is used where managers are uncertain of any outcome but fairly certain of the direction they would pursue if a change were necessary. Adaptive management would allow the decision maker to select one alternative but then switch to another alternative if the desired results are not being achieved, to provide additional resource protections, or if a trigger point indicates that additional treatments would be needed.

#### **Adaptive Management Use of Trigger Points**

Under Alternative 4, not all MAs would be treated. However, if fuel loads are above 3 tons per acre within an untreated MA, then those areas could be treated. Also, if fuel loads are greater than 3 tons per acre and begin to cause smoke management issues, then those areas could be treated. Effects on fuels, vegetation, coarse woody debris, air quality, Special Management Areas, RCW, and public health and safety would be similar in nature, but less than those disclosed for Alternative 2 because fewer areas would be treated.

**78) Comments and Response Matrix, Sierra Club 16, 42, and 62, the FS states “There are no standards or guidelines in the Forest Plan or even FS policy that states the amount of large CWD that should be left on every acres that is logged.” The Sierra Club never portrayed that eh FS had any such standards. What the Sierra Club did say was that the best sound science documents that standards for CWD should be set (HSC letter, page 28).** The FS would leave an average of 0.5 tons per acre of CWD per treatment area as a starting point. After evaluating the stand conditions, the district wildlife biologist would determine if additional CWD should be left. Future treatments would be coordinated with the fuels specialist and modified to leave more CWD in other damaged areas based upon the wildlife biologist’s assessment.

**79) Comments and Response Matrix, Sierra Club, 19, the FS does not address the question asked. The Sierra Club asked about significant differences between the original estimates of acres damaged and the revised estimate of acres damaged and not a comparison between the original acres impacted and the total acres treated (HSC letter, page 29).**

The 1998 windstorm that impacted the Angelina and Sabine National Forests was approximately 103,000 acres. Only 2,700 acres on the Angelina NF and 24,050 on the Sabine NF meet the criteria for consideration of treatments to promote regeneration to meet the desired future conditions of The Plan. The original damage estimates after Hurricane Ike on the Sam Houston NF were 163,030 acres. This includes scattered light damage throughout the Forest. As Table 3-13 (EA) shows, the final damage estimate was 2,540 acres. These figures were not available for all previous wind events.

**80) Comments and Response Matrix, Sierra Club, 20, the FS does not address the Sierra Club’s concern. All the FS states is what the standards are that allow salvage logging in scenic areas, research natural areas, Lone Star Hiking trail and other sensitive areas. The FS does not address the damage that will be done adequately, the mitigation measures that reduce the damage , the mitigation measures that will be applied, and why these areas must be logged when the very features the sensitive areas protect will be damage, degraded, and destroyed (HSC letter, page 29).**

Appendix E Design Criteria lists how these various areas would be treated after a wind event.

**81) Comments and Response Matrix, Sierra Club 22 and 37, the FS states that the secondary zone will be included with the primary zone when designating a stream-side zone boundary. The EA does not state this. The FS must document that both the primary and secondary zones will be created in the EA if MA-4 is entered for salvage logging. The Sierra Club does not support logging in the secondary zone which the standard and guideline allow and which the FS prints in it response (HSC letter, page 29).**

The following language was added to Chapter 2 of the EA to clarify how SMZ will be handled after a wind event: Streamside Management Zones (SMZ) associated with Management Area 4 (MA-4) - Pine trees falling across the 50-foot edge of the primary zone would be cut off. Only that portion of the tree outside of the primary zone would be removed. Leaners, snaps, root sprung, or dead trees that originate within the primary zone would not be removed. Trees outside the primary zone that are leaning into the primary zone could be removed. The secondary zone will be delineated from the primary zone outward to the extent of the streamside management zone, and will vary depending on



biological and physical factors within the landtype association, historical use, and topographical position. Delineation of the secondary zone will use one or more of the seven criteria listed on page 152 of the *Plan*.

The FS would still be following the Forest Plan standards and guidelines (pages 153-161) associated with MA 4 when implementing any treatments that are proposed. The FS would not begin any treatments until all biological and archeological surveys are completed.

**82) Comments and Response Matrix, Sierra Club, 24, the FS refers to a “Fuels Assessment by the Forest Fire Ecologist.” The Sierra Club did not see such an assessment in the EA, appendices, or on the website. The Sierra Club requests a copy of this document (HSC letter, page 30).**

The Fuels Assessment is in Appendix C.

**83) Comments and Response Matrix, Sierra Club, 27, 31, and 32, the FS states “Recovering the economic value of timber is a side benefit for restoring the ecosystem after a wind event.” The FS argues here that a natural disturbance event which is one of the ecological processes that function to maintain a forest and allow ecological diversity and succession is bad and that the FS must take the restoration role away from Nature and restore the forest in spite of Nature (HSC letter, page 30).**

Comment noted.

**84) Comments and Response Matrix, Sierra Club, 40, the FS does not, under cumulative impacts, address regeneration of impacted stands and does not address the Sierra Club’s concern (HSC letter, page 30).**

The EA addresses dealing with the impacts of a wind event and did not consider any future stand regeneration. Any future needs for regeneration would be analyzed at a later date.

**85) Comments and Response Matrix, Sierra Club, 42, the FS does not address the Sierra Club concern about pre-disturbance planning with a list of types and location of areas that will not be salvaged logged. There should be site specific analysis for this and the FS provides none except in the most general way, by saying, for example “baygalls” (HSC letter, page 30).**

All known sites are in the Geographic Information Systems (GIS) database for the NFT. These sites would be mapped after an event to document that sites either have or have not been affected by the wind event. The Forest Botanist, Biologists and Archeologists would all be involved in the planning process for treating damage areas after a wind event. If any new botanical sites, RCW clusters, or archeological sites are encountered during treatments operations would be stopped and the area would be inspected by the appropriate resource specialist and mitigation measures would be put in place.

**86) Comments and Response Matrix, Sierra Club, 45, the FS fails to answer the Sierra Club question, “The FS must state what it believes is restorative about logging after a wind disturbance” (HSC letter, page 30).**

What is being restored can be found in the Purpose and Need. The proposed treatments would restore RCW habitat and fuel loads to pre-event conditions.

**87) Comments and Response Matrix, Sierra Club, 46, the FS states “The Forest is committed to allowing public involvement after an event but before any treatments occur.” The FS does not state what his public involvement will consist of. The FS already said that it wants to log so that the trees are merchantable and the trees are not merchantable with 90-120 days after the windstorm. Will there be a public meeting (HSC letter, page 30)?**

This has been clarified in the EA in 1.5.1 Public involvement after a wind event would be handled similarly to previous wind events. The NFT Public Affairs Office would develop an Information Operation Plan that outlines how information will be shared with the public. Once initial assessments of the damage have been completed and mapped, the public would have the opportunity to provide comment. Public input would be gathered either during a public meeting and/or a field visit of the wind damaged areas. This would occur after areas have been deemed safe or with a FS escort into damaged areas.

**88) Comments and Response Matrix, Sierra Club, 48, the FS states “There are contract provisions that prevent trees from being damaged by logging activities. Purchasers can be fined for excessive residual tree damage” The FS should state how often it fines purchasers, what the standard is for how many trees can be damaged before fines or mitigation measures are required, and what mitigation measures will be required if the standard is exceeded (HSC letter, page 31).**

Damage is considered negligent or non-negligent. Non-negligent damage the contractor pays liquidated damages (single stumpage), but the tree is not removed. If the tree is removed, then the purchaser also pays current contract rate rates for the product (double stumpage).

There is no actual written standard for the number of trees that can be damaged before action is taken against a purchaser. This would be done on a case-by-case basis and depends on the stand, the basal area, tree size, etc.

The mitigation for excessive damage could be having the contractor directionally fell cut trees, reducing the length of the skidded material, change logging contractors or equipment operators.

The NFT has no current record on how often this happens, but according to the Contract Officer it does not happen very frequently.

**89) Comments and Response Matrix, Sierra Club, 51, the FS states “A literature search has been conducted as part of the analysis process.” If this is so the FS should give a summary of that analysis and what it says about the benefits of dead wood. The FS should also state how this analysis has changed this windstorm EA with regard to CWD (HSC letter, page 31).**

The literature used in this analysis is listed in Chapter 5 of the EA. There was a great amount of literature reviewed for the CWD analysis. None of the literature gave a minimum amount of CWD that should remain on a site that has been commercially logged. The IDT decided that .5 tons/acre would be a starting place for leaving CWD. If biologists felt that this was not a sufficient amount, then direction could be given to leave more on subsequent sites. This would be part of the Adaptive Management.

**90) Comments and Response Matrix, Sierra Club, 57, the FS does not address the Sierra Club concern that trees along hiking trails should not be removed but should be cut and rolled out of the way. Will the FS protect hiking trails in this manner or not (HSC letter, page 31).**

The following language was added to Chapter 2 of the EA to clarify how trails will be treated:

Recreation trails occur on all NFT units. Hazard trees along the trail routes or at the trailheads present a safety issue due to high use by the general public. Tree removal methods may include standard logging equipment in some situations while the use of smaller equipment better suited to operation along a trail route may be needed.

Operations stipulations - Removal of hazard trees occurring within 200 feet of either side of an existing designated recreation trail may be conducted with standard logging equipment limited to operation from the existing trail tread only. Use of smaller vehicular rubber tired equipment may also be used provided no new ground disturbance occurs and is confined to the existing trail tread. Log staging areas and/or landings and decks will be confined to existing hardened parking surfaces and roads.

As stated in the Design Criteria #20 Highways, state and county roads and primary National Forest System Roads (NFSR) and trails, Dispersed Recreation Areas have a VQO of Partial Retention. Areas with a VQO of Partial Retention for salvage or sanitation cuts the following guidelines apply: I. Direct felling cuts away from travelway or lake within 200 foot lop and scatter zone; K. Lop to lie within 2 foot of ground or chip or remove slash visible within 200 foot from edge of travelway (Plan, page 76).

**91) Comments and Response Matrix, Sierra Club, 59, the FS states “There are no plans to salvage any hardwood trees.” The EA does not make this statement. So what happens if plans change? (HSC letter, page 31).**

The NFT does not plan to sell hardwood after a wind event. Standing or downed hardwoods that are contributing to a fuel problem or are a safety hazard, could be mulched, lopped and scattered, or sold to the public for personal use firewood. There may be rare occasions when a logging contractor may remove hardwoods in order to assist with general forest clean up where the contractor is already on site. This would only be done on a case-by-case basis and is the exception rather than the rule. Hardwoods that are not contributing to the fuel load and are not a safety hazard would be left on site as coarse woody debris. This distinction will be clarified in the EA.

**92) Comments and Response Matrix, Sierra Club, 60, the FS states “There is no scientific evidence that salvage logging contributed to these conditions” which refers to the creation of areas with more briars and other vegetation growth which makes it harder to hike, creates a hotter climate for recreation and increases the habitat for ticks, chiggers, fire ants, and other recreational pests. Apparently, the FS has not hiked the LSHT and has not ridden other trails after logging. The removal of downed trees and destruction of other trees and vegetation via crushing with large machines results in shade removal which increase the temperature and allows for more dew berries, green briars, and other vegetation to grow across trails and inhibit access along the trails and thus**

**creates more vegetation and contact with vegetation which exposes this who use trails to more chigger, tick, or fire ant interactions (HSC letter, page 31).**

Comment noted.

**93) Comments and Response Matrix, Sierra Club, 66, the FS states “The FS will implement recommendations from this book where they are appropriate.” That being said, the FS has an obligation to the public to spell out in the EA which recommendations from the “Salvage Logging and its Ecological Consequents” book are appropriate and will be implemented (HSC letter, page 32).**

The FS incorporated information about Pre-disturbance planning, adaptive management, and biological legacies from “Salvage logging and its Ecological Consequences.”

**93) Exhibit 2, Definitions for Damage Categories, the Sierra Club is concerned about the lack of quantitative definitions rather than a qualitative definitions about damage categories. The following words or phrases are used which have no quantitative definitions: (HSC letter, page 32).**

Comment noted.

**5 – Texas Conservation Alliance (TCA) – Larry Shelton** – TCA commented on the EA. Where possible, the comments have been entered as they appear in the TCA letter of 06/26/2013. Some have been paraphrased or otherwise edited. The following summarizes these comments:

**1) General Comments, The Proposed Action (PA, also the Preferred Alternative) would give the FS “carte blanche” to preform salvage logging, non-commercial wood removal, mulching, lop and scatter and prescribed burning to treat any level of wind damage or fuel buildup on nearly every acre of the NFs except Wilderness. The FS would be authorized to use every road on the NF as well as construct new temporary roads to facilitate these treatments. The Proposed Action would allow the F up to 10 years to repeat and expand these treatments up to 10,000 acres per wind event, at their discretion (TCA letter, page 1).**

Comment noted. Table 2-1 through Table 2-3 show under what conditions treatments could occur. The Area Condition Description and the Damage Classes put limits on where and when treatments can be utilized.

**2) General Comments, The goals that the EA seeks to achieve can be accomplished with a much more modest proposal that focuses mechanical treatments on burn until boundaries and just the moderate to heavy damage classes of interior areas rather than the entire forest and all damage classes. By scaling back the proposal the FS could meet its goals for protection of public safety and protection of NF resources with fewer environmental impacts (TCA letter, page 1).**

Comment noted.

**3) Specific Comments, Public Involvement, full public collaboration on treatment options for each wind event project should be initiated before any decision are reached by the FS (TCA letter, page 1-2).**

This has been clarified in the EA in 1.5.1. Public involvement after a wind event would be handled similarly to previous wind events. The NFT Public Affairs Office would develop an Information Operation Plan that outlines how information will be shared with the public. Once initial assessments of the damage have been completed and mapped, the public would have the opportunity to provide comment. Public input would be gathered either during a public meeting and/or a field visit of the wind damaged areas. This would occur after areas have been deemed safe or with a FS escort into damaged areas.

**4) Specific Comments, prescribed burning should not be included as part of the Proposed Action. The EA should be modified to include only the treatments of removal, mulching, and lop and scatter. Prescribed burning (PB) should be dropped from the EA and implemented independently as it has been in the past (TCA letter, page 2).**

The NFT would continue to implement its prescribed burning on 100,000 acres per year, weather permitting. The prescribed burning conducted as a result of a wind storm would be additional burning to achieve a desired objective. Once an area has been impacted by a wind event, environmental conditions have changed and the objectives for prescribed burning have therefore changed. Any previous environmental analysis may no longer be applicable based on these changed conditions.

**5) Specific Comments, Recommend Modifications to the Proposed Action, TCA endorses a modified version of Alternative 3 presented in the EA. Hazardous fuels should be treated with removal, mulching, and/or lop and**

scatter along roads and boundaries as needed to facilitate fire containment activities. Areas of moderate and heavy damage only could also be treated in MA1 and MA2, pending acceptable access and demonstrable need. All interior damage areas that are remote, roadless, or that require crossing of intermittent or large streams to access should be left as is or treated with lop and scatter only. There should be no removal of light damage from interior areas (TCA letter, page 2).

Alternative 4 more closely resembles what TCA is proposing.

**6) Specific Comments, Recommend Modifications to the Proposed Action, MA-4 – the PA would authorize removal of wood within the secondary boundaries of SMZs. The secondary SMZ is important for protecting riparian vegetation, floodplain structure (sloughs, and abandoned stream channels), steep slopes, water quality and other sensitive resources. Since the entire SMZ is not normally entered during planned green sales, no part of SMZs should be entered during salvage operations either. No treatments should be carried out in primary or secondary zones except as needed to secure roads, boundaries, and administrative and recreational sites. Lop and scatter is the preferred treatment for these instances (TCA letter, page 3).**

Alternatives 3 and 4 do not propose logging in MA-4.

**7) Specific Comments, Recommend Modifications to the Proposed Action, MA-5 – Major Aquatic Ecosystems, these areas should not be subject to artificial fuels treatments (TCA letter, page 3).**

Alternatives 3 and 4 do not propose logging in MA-5.

**8) Specific Comments, Recommend Modifications to the Proposed Action, MA-6, treat uplands the same as MA2. Do not enter the fragile or MA8 areas with equipment; treat with lop and scatter is necessary (TCA letter, page 3).**

MA 6 uplands would be treated the same as MA 2. Under Alternative 4, the only treatments proposed in MA 8 would be those in MA 8d- Foxhunter's Hill because of the RCW clusters located here.

**9) Specific Comments, Recommend Modifications to the Proposed Action, MA-8a, b, c, d, e, f- Natural Heritage areas and Scenic Areas are generally managed to preclude overt signs of anthropogenic activities and preserve natural process. Many of these sites are lower landscape, non-pyric communities. Many sensitive and rare plant communities are present in MA8. TCA is concerned that the EA seeks to treat these Special Management Areas even for light or insignificant damage (TCA letter, page 3).**

Alternatives 3 and 4 were developed to address this concern about salvage logging in sensitive areas. Alternative 3 does not propose any treatments in MA 8. Alternative 4 only proposes to treat 451 acres in MA8d Foxhunter's Hill which has numerous Red-cockaded Woodpecker (RCW) clusters. This area would only be treated at the direction of the district wildlife biologist. Table 2-4 compares the action alternatives and shows the treatments acres proposed for each Management Area by alternative.

**10) Specific Comments, Recommend Modifications to the Proposed Action, The Research Natural Area (RNA) Mill Creek Cove has no need for fuel treatments since it is a hardwood climax forest that borders on a lakeshore. Mill Creek Cove should not be subject to artificial fuels treatments (TCA letter, page 3).**

Alternatives 3 and 4 were developed to address this concern about salvage logging in sensitive areas. Alternative 3 does not propose any treatments in MA 8. Alternative 4 only proposes to treat 451 acres in MA8d Foxhunter's Hill which has numerous Red-cockaded Woodpecker (RCW) clusters. This area would only be treated at the direction of the district wildlife biologist. Table 2-4 compares the action alternatives and shows the treatments acres proposed for each Management Area by alternative.

**11) Specific Comments, Recommend Modifications to the Proposed Action, MA 11 – Treat boundaries, roads, and uplands the same as for MA 1. No salvage should occur in riparian areas or the Angelina River bottoms (TCA letter, page 3).**

Alternatives 3 and 4 do not propose logging in MA -11.

**12) Specific Comments, Recommend Modifications to the Proposed Action, TCA recommends that only pine sawlogs should be salvaged from interior areas of moderate and heavy damage (TCA letter, page 3).**

Comment noted. It cannot be guaranteed that only pine sawlogs are removed from the interior areas of moderate and heavy damage.

**13) Specific Comments, Recommend Modifications to the Proposed Action, TCA agrees with the provisions in the EA that require on-the-ground assessments by resource specialists and that the least impactful treatments are prescribed (TCA letter, page 3).**

Comment noted.

**14) Specific Comments, The EA does not Present a Compelling Purpose and Need for Forest Wide Salvage Logging, the purpose of the project as stated on page 1 is to utilize fuels management to address issues relating to: public and firefighter safety, fuel loading, RCW habitat management, smoke management. Page 5 of the EA states that damage would be treated in all Management Areas (except Wilderness). The EA does not articulate a compelling need to fuel treatments in all of these MAs on the Forest. Treating fuels in many areas of the Forest would have no bearing whatsoever on the purpose of the treatments stated on page 1. The PA should be modified as stated in the above Recommended Modifications to focus only on those areas which directly contribute towards attainment of the stated goals (TCA letter, page 4).**

All action alternatives meet the Purpose and Need.

**15) Specific Comments, Removal Activities should be Complete within 2 years, The EA stipulates a 10 year period in which to carry out the Proposed Action per wind event. TCA finds this time frame too long. The time frame for salvage logging should be no more than 12 months and harvesting a particular unit should be limited to a single entry, with allowances for weather delay (TCA letter, page 4).**

Most salvage sales are completed within 1 year after being sold because the value of the wood decreases. Salvage sale contract terms will be limited to one year or less from the contract award date. Monitoring would occur to determine if additional treatment is needed to further reduce the fuel load. Additional treatment would be done in the subsequent years following the wind event. The 10 year span refers to the fact that the analysis in this EA could be used to treat any wind event that occurs within the 10 year period after this decision is signed.

**16) Specific Comments, The Proposed Action will not result in Attainment of Cited LRMP Goals, The Future Desired Condition (FDC) for uplands (MAs 1, 2, and 6) is described on page 3 of the EA as “open pine forest... The understory would be dominated by grasses...” This condition is also described at Fuel Model 2. It is not likely that this management model will ever be achieved at the landscape scale desired by the LRMP. Implementation of the EA itself (excluding PB), applicable to 10,000 acres annually, will NOT directly result in Forest wide vegetation and fuel changes. Implementation of the EA would only have a minor role in bringing about the desired Fuel Model 2 conditions on the ground because it could only treat up to 2% of the Forest annually for 10 years (TCA letter, page 5).**

Comment noted.

**17) Specific Comments, NF Fuel Treatment Provide Primarily Local Benefits, Fuel treatments on the NFT do not have an effect on reducing the potential for hazardous wildfires at the regional level (TCA letter, page 5).**

Comment noted.

**18) Specific Comments, The merits of the Proposed Action are Overstated, The EA vastly overstates its potential merits on pages 3 and 4 under “The proposed Action responds to the following Forest Plan Goals and Objectives:” (TCA letter, page 6).**

Comment noted.

**19) Specific Comments, Economic information is lacking, it is probable that under all scenarios the FS would spend more money on recovery and restoration than it would receive in salvaged timber receipts. There is no discussion about past salvage sales and how they compare to green timber prices. There is no mention that payments to counties could be dictated by participation in the Secure Rural Schools and Communities Program. It is possible that no salvage receipts would be returned to counties (TCA letter, page 6).**

Section 3.14 does discuss Economics and that funds from salvage sales could be returned to local county governments for schools and roads.

**20) Specific Comments, The Impacts from Road Construction and Usage Must be Constrained, The EA stipulates on page 4 that only existing and temporary roads would be used for accessing damaged areas. Page 12 identifies 2,396 miles of road that could be treated or used for access during treatment. Opening up any area of the Forest and making it passable to heavy equipment traffic constitutes building a new road regardless of its**

level of improvement or future status pertaining to the Motor Vehicle Use Map. TCA is concerned about the unlimited authority this EA would grant to build new roads to access areas that are presently remote, inaccessible or harbor sensitive resources. There must be specific constraints to limit the escalation of road impacts associated with salvage logging (TCA letter, pages 6-7).

Table 2-1 shows under what conditions certain treatments could occur. In areas that are not accessible to logging equipment, treatments would be limited to prescribed burning, mulching, and lop and scatter.

**21) Specific Comments, The Proposed Action is controversial, past salvage from SPB, wind and drought have resulted in on-the-ground impacts that are prohibited in the LRMP and specific project design criteria. The repetitive nature of these incidents affirms that the FS has been unsuccessful in maintaining control over its own personnel and private contractors working on the Forest. These past actions are not mentioned in the EA, which suggests that there will be repeat violations with each salvage episode (TCA letter, page 7).**

Comment noted.

**22) Specific Comments, Trail Maintenance, The EA sites a figure of 843 miles of trails on the Forest and the need to protect public safety on these trails. TCA endorses a cut and leave only action along trails for hazard trees. Removal may be warranted within certain recreation sites (TCA letter, page 7).**

The following language was added to Chapter 2 of the EA to clarify how trails will be treated:

Recreation trails occur on all NFT units. Hazard trees along the trail routes or at the trailheads present a safety issue due to high use by the general public. Tree removal methods may include standard logging equipment in some situations while the use of smaller equipment better suited to operation along a trail route may be needed.

Operations stipulations - Removal of hazard trees occurring within 200 feet of either side of an existing designated recreation trail may be conducted with standard logging equipment limited to operation from the existing trail tread only. Use of smaller vehicular rubber tired equipment may also be used provided no new ground disturbance occurs and is confined to the existing trail tread. Log staging areas and/or landings and decks will be confined to existing hardened parking surfaces and roads.

**23) Specific Comments, Smoke Management Concerns, Page 7 identifies hazardous fuels and smoke management as issues of concern. SMAs and other remote areas of the NF could be entered for the removal of even this small amount of wind damage, resulting in significant negative impacts. TCA does not support fuels treatments that emphasize forest product removal at the expense of mandated resources protection. TCA does not support the pervasive removal of downed wood from remote NF areas when there is little to no likelihood that the downed wood will create smoke management problems (TCA letter, pages 7-8).**

Table 2-1 shows under what conditions certain treatments could occur. In areas that are not accessible and there is low commercial merchantability, treatments would be limited to prescribed fire, mulching, and lop and scatter.

**24) Specific Comments, Salvage Logging Facilitates Illegal Motor Vehicle Use, Illegal use of ORVs and even street registered vehicles is wide spread across the NFT. Thick vegetation along NF boundaries normally provides an impediment to illegal motor vehicle use; salvage logging removes this impediment (TCA letter, page 8).**

Comment noted.

**25) Specific Comments, Fuel Model Predictions Do Not Reflect PB and Natural Decay, There are many factors that will influence the fire behavior following a wind event. The EA acknowledges that fine fuels decompose rapidly and that post-wind event expected fire behavior is moderated within 1 to 2 years. The FS already has the authority to use PB to reduce fuels following a wind event. TCA supports fuel treatments (TCA letter, page 9).**

Comment noted. The following statement was added to the EA to describe what will happen to roads after treatments are completed: "Following timber removal, temporary roads would be obliterated, seeded, water barred, and the entrances would be blocked."

**26) Specific Comments, Potential Treatment Acres are Not Clearly Defined, What criteria will be used to define wind impacts? If trees die outside of the initial 216 acre treatment areas of the DNCF Christmas Day Tornado, will those be salvaged the next year? The EA does not stipulate whether the 10,000 acre treatment areas pre event is static or whether the treatment acreage can be shifted (TCA letter, page 10).**

## **Texas Wind Event Project 30-day Notice and Comment Period Responses**

Only those trees that are impacted by the initial wind event would be treated. If trees continue to die after the initial event, they could not be treated with this document.