

US EPA ARCHIVE DOCUMENT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

September 17, 2014

Neil Bosworth
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2324 E. McDowell Road
Phoenix, Arizona 85006

Subject: Draft Environmental Impact Statement for Travel Management on the Tonto National Forest, Gila, Maricopa, Pinal, and Yavapai Counties, Arizona (CEQ# 20140183)

Dear Mr. Bosworth:

The U.S. Environmental Protection Agency (EPA) has reviewed the above-referenced document pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act.

EPA recognizes the many challenges inherent in developing a balanced Travel Management Plan that responds to both recreational and resource management demand. We appreciate the Forest Service's efforts to reduce impacts on Tonto National Forest resources from off-highway vehicle use. While the Travel Management Plan process is a positive step in addressing resource impacts from motorized uses, EPA has significant concerns associated with off highway vehicle use on TNF and some of the approaches taken by the Forest Service in this DEIS. In particular, we are concerned with the continuing air impacts associated with OHV travel on unpaved roads and routes. We are also concerned about the impacts of user-created routes on hydrology and aquatic habitats.

Tonto National Forest spans 5 air quality standards non-attainment areas, 4 of which are in non-attainment for particulate matter of 10 microns or less and one of which is non-attainment for ozone. Particulate matter and ozone precursors are some of the most prevalent air emissions associated with OHV use. While the DEIS and the referenced Air Quality Report (available online) attempt to consider the change in emissions associated with the project alternatives for these non-attainment areas, a number of the assumptions underpinning this analysis appear flawed and require further examination. In addition, although the Forest's action is not a direct source of emissions, the proposed policy changes would enable the continued emission of criteria pollutants by off highway vehicles across the Forest. It is not clear whether the applicable State Implementation Plans anticipate OHV management actions and how this project does or does not conform to any such expectations.

We are also concerned that the DEIS does not describe the specific actions that would be undertaken to implement the proposed project. The document contains only very limited site

specific information in the analysis both of impacts and possible mitigation. As a consequence, it is difficult to assess the potential for localized impacts or determine what high-risk areas might warrant special attention and management. Although EPA understands the logistical challenge of managing motorized travel across a forest as large as Tonto, this generalized approach would be more appropriate in a programmatic document than a project-level one. We understand that site specific data were used in the development of the project alternatives, and recommend that more of such information be incorporated into the Final EIS.

Based on our review, we have rated the DEIS as Environmental Concerns – Insufficient Information (EC-2) (see enclosed “*Summary of Rating Definitions*”). In our attached Detailed Comments, we describe in greater depth our concerns and our recommendations for addressing these matters.

We appreciate the opportunity to review this DEIS. Please send one hard copy of the FEIS and one CD to the address above (mail code: ENF 4-2). If you have any questions, please contact me at (415) 972-3521, or contact Carter Jessop, the lead reviewer for this project. Mr. Jessop can be reached at (415) 972-3815 or jessop.carter@epa.gov.

Sincerely,

/s/

Kathleen Martyn Goforth, Manager
Environmental Review Section

Enclosures: Summary of EPA Ratings Definitions
EPA’s Detailed Comments on the DEIS

EPA's Detailed Comments on the Draft Environmental Impact Statement for Travel Management on the Tonto National Forest, Arizona (CEQ# 20140138), September, 2014

Air Quality

It is unclear, based upon the information in the DEIS and the referenced Air Quality Report (2014), whether Tonto National Forest has consulted with Arizona Department of Environmental Quality (ADEQ) or the responsible county agencies with delegated Clean Air Act authority, regarding the proposed project's potential effects upon air quality. According to the DEIS, fugitive dust from unpaved roads, which would include emissions from OHV recreation, is one of the primary emission sources of particulate matter of 10 microns or smaller across Tonto National Forest. It is not clear whether the applicable State Implementation Plans (SIPs) anticipate the management of OHV travel or the implementation of emissions controls for these vehicles and how the Forest's plan conforms to or conflicts with any such expectations.

Recommendations: The authorities responsible for implementation of the applicable SIPs for each Planning Area (Phoenix PM₁₀, Miami PM₁₀, Hayden PM₁₀, Payson PM₁₀, Maricopa Ozone) should be contacted to ensure that the proposed project conforms to the goals and requirements contained in those SIPs. We recommend the FEIS include a more detailed discussion of how the project conforms to the guidelines of applicable SIPs and a description of the status of any consultation with the responsible agencies associated with those SIPs.

Emissions Inventory Calculation

Page 9 of the Air Quality Report states that, while the SIP emissions inventories are revised every 3 years, they are estimated by county for OHV sources and don't provide the level of detail necessary to determine forest-specific emissions estimates. The report goes on to develop its own emissions estimates for General Conformity purposes, but does not indicate whether the planning assumptions made in doing so are consistent with the assumptions made by the applicable planning agencies responsible for SIP implementation.

Three key assumptions made in the emissions inventory calculation warrant further consideration. First, the OHV use growth factor used in the Air Quality Report calculation relies upon a USEPA nonroad engine growth factor, (EPA420-P-04-008, April 2004). The DEIS does not explain why this growth factor is the most appropriate available value nor does it indicate whether it is the value supported by the SIP. The Law Enforcement section of Chapter 3 (page 233) indicates that sales of off-highway motorcycles and all-terrain vehicles in Arizona increased approximated 623 percent between 1995 and 2006, a growth rate of 52% per year. Second, the Air Quality Report makes "conservative" assumptions regarding the silt content and moisture content of unpaved Forest roadways and unauthorized routes. The document does not explain how these values were determined, whether they are reflective of the values supported by the SIPs, or whether they are the most appropriate values for this project. Finally, in estimating the average number of miles traveled per off-road vehicle on the Forest, the Air Quality Report refers first to a November 2000 EPA memorandum (EPA420-F-00-051) and then to an "unsubstantiated" value from a 2004 Arizona State University and ADEQ study performed on

Tonto National Forest. Once again, it is unclear whether either of these values is reflective of the approach recommended by the appropriate regulatory bodies. Given the enormous growth in OHV use in the past decade in Arizona, it seems worthwhile to consider whether a more recent value might be available and provide greater accuracy.

Recommendations: Consult with the responsible planning agencies for specific recommendations regarding emissions calculation assumptions. Any consultation should be described in the FEIS. Where this is infeasible or the planning agencies have no specific recommendations, the FEIS should more clearly discuss and support the assumptions made in the emissions inventory calculation. The most current available data should be used where appropriate.

General Conformity Determination and NAAQS Compliance

Page 488 of the DEIS states that all action alternatives would result in a net decrease in emissions over the “no action” alternative. Neither the Air Quality Report nor the DEIS provide information to substantiate this conclusion. In fact, the analysis performed in the Air Quality Report fundamentally assumes that the emissions inventory would remain constant for all alternatives. The calculated emissions inventory value was multiplied by the proportion of motorized routes within the identified non-attainment and wilderness areas to provide the emissions for each area. For the action alternatives, the revised percent of motorized routes within these areas following project implementation was multiplied by the total emissions once again and the difference between this value and the baseline was taken as the change in emissions in each area resulting from the project. Therefore, all apparent emissions reductions reported in this document are only relative reductions. Under the assumptions of this analysis, reductions in emissions in one area would be equally offset by increases in emissions in others.

Recommendation: The FEIS should be revised to appropriately characterize the results of the air quality analysis performed.

The approach taken for the air quality analysis was underpinned by a number of unsupported or under-supported assumptions: first, that OHV use is dispersed evenly across all Forest roadways; second, that the proportion of roadways in a given area is a sound indicator of OHV traffic; third, that a reduction in the number of miles of authorized OHV routes in an area would produce a proportional and corresponding reduction in OHV travel within that area; and fourth, that the project actions would have no effect on the aforementioned assumptions. None of these assumptions is supported with data. It seems likely that OHV use across the Forest has high spatial variability according to user preferences, ease of access, and the availability of additional recreational opportunities. The proposed actions would likely affect spatial use patterns and could result in an intensification of OHV recreation in certain areas, particularly those where motorized cross country (off road) travel is authorized, while decreasing use in others. This would likely result in similar changes in the spatial distribution of air quality impacts associated with OHV use.

In addition, the DEIS states that, if emissions within nonattainment or maintenance areas are below de minimis thresholds, then the proposed action will not cause or contribute to a NAAQS

violation (p. 488). This is incorrect. Tonto National Forest spans numerous airsheds. General Conformity compliance alone does not determine whether an action might cause or contribute to a NAAQS violation. The analysis performed only applies to the nonattainment or maintenance areas examined. For NEPA purposes, the General Conformity determination is not the most appropriate tool for demonstrating NAAQS compliance Forest-wide.

Recommendations: Additional air quality analysis should be performed and included in the FEIS to more clearly demonstrate that the project would not negatively affect air quality, exceed de minimis thresholds or contribute to an exceedance of the NAAQS. Consideration should be given to the spatial distribution of OHV use before and after the proposed actions and any potential consequences thereof upon local air quality.

The FEIS should include a separate NAAQS analysis. If dispersion modeling is deemed infeasible, the FEIS should discuss alternative approaches. For example, does an appropriate analog site exist where air quality monitoring has occurred in proximity to OHV recreation?

Because the cross country OHV areas proposed under the preferred alternative are concentrated in the southwestern area of the Forest, consideration should be given to whether they may impact air quality in the Phoenix PM₁₀ non-attainment area.

Cumulative Impacts

The cumulative impacts analysis on page 488 of the DEIS does not discuss the extent to which existing OHV use in the Forest has contributed and might continue to contribute to the poor air quality of the non-attainment areas that the Forest overlaps. In addition, the DEIS states that “it is expected that present activities and their air emissions will persist in the reasonably foreseeable future.” It is unclear how this statement conforms to the assumption, inherent in the air quality analysis, of a 25% annual growth rate in OHV recreation, or the statistic provided in the Enforcement chapter that indicates an approximate 52% annual growth in OHV sales in the State of Arizona (p. 233).

Recommendations: The cumulative impacts section should consider the extent to which current and past OHV activity on the Forest affects air quality in the region. This section should also thoroughly discuss the anticipated future trends in OHV use and the potential air quality impacts associated with continued growth in this form of recreation.

Lack of Site Specific Information

The Transportation Specialist Report contained in the project record (available online) provides the detailed, rationalized analysis performed for identifying the preferred transportation route system and alternatives. We understand that this process involved a team of TNF specialists analyzing the available site specific data to determine which roadways should remain open and which should be decommissioned so as to best meet the Forest’s various multiuse and resource protection goals. Little to none of the site specific information considered in this process was carried through into the DEIS. The Transportation Specialist Report was not summarized in

sufficient detail to demonstrate the extent of available route specific information or give the public a clear understanding of how this process took place. Accordingly, most resource sections of Chapter 3 consider the Forest-wide environmental consequences of the action, with little granular detail. In the case of some resource areas, this approach is appropriate, but in others, site specific data would contribute greatly to an understanding and assessment of the project's potential effects. For example, page 454 discusses the hydrological resource impacts of the project. Although the number of stream miles in proximity to waterways is provided, it is impossible to determine where localized negative effects may occur or where Best Management Practices would be advisable to offset impacts to particularly sensitive resources because the specific location of roadways is not provided.

Recommendations: Summarize the analysis contained in the Transportation Specialist Report in greater detail in the FEIS. We recommend including a series of maps displaying all existing and proposed motorized travel routes for each project alternative. To the extent that site specific data are available for each affected resource area, that information should be included on the corresponding pages of the Transportation Specialist Report should be cited.

Hydrologic Resources

The DEIS states that, according to the assessments completed to date, only approximately 19% of Forest streams are stable, while the remaining 81% of streams are either impaired or unstable (p. 458). Where roads are near or cross streams, they can significantly affect the physical dynamics of channels, destabilizing banks and degrading the aquatic ecosystem. The DEIS states that unauthorized motorized routes have a greater impact upon stream hydrology than do authorized routes in some cases due to a lack of roadway design and failure to include Best Management Practices (p. 463). Although the action alternatives are anticipated to reduce the proliferation of unauthorized routes and, thereby, have a net positive affect on hydrologic resources in the Forest relative to the No Action alternative, the DEIS lacks sufficient discussion of actions TNF could or would take to reduce the impact of existing roadways. The DEIS does not identify mitigation or BMPs that would be applied to unauthorized routes that may have been inappropriately designed such that they disproportionately affect water quality. The Salt River is identified as the only water body within TNF that is impaired with suspended sediment, however even waterways that are not officially designated may warrant management to avoid continued degradation. The DEIS indicates that ADEQ will initiate a Total Maximum Daily Load analysis for the Salt River in 2015. It is unclear what action the Forest might take if OHV recreation is found to be a major contributor of sediment to this water body.

Recommendations: Describe, in the FEIS, the BMPs and other mitigation measures that could be implemented where unauthorized routes proposed for inclusion into the National Forest Transportation System are having disproportionate impacts upon hydrologic and aquatic resources, and explain how the Forest Service will determine where and when to apply such measures. Describe the actions that the Forest Service will take should OHV travel be found as a major contributor to the impaired designation of the Salt River between the confluence with Pinal Creek and Roosevelt Lake.

Project Implementation

The discussion of the proposed project and alternatives in Chapter 2 of the DEIS is vague, focusing only on policy-level changes. The DEIS does not describe in detail what specific actions the Forest would take at the time of project implementation. For example, the DEIS does not describe what measures would be taken to ensure successful closure of identified routes, programs that would be put into place for rider education and enforcement, nor planned reclamation activities for decommissioned routes. There is no description or summary of how newly added routes would be brought into compliance with applicable Forest road standards.

Recommendations: Chapter 2 of the FEIS should describe the actions that would be taken to implement the project. These actions might include placement of physical barriers at key locations, rider education programs, increased patrol of newly closed areas, and mitigation activities on newly authorized routes.

Funding

The action alternatives discussed in the DEIS have potential benefits to water quality, aquatic resources, wildlife, and other resources as compared to the no action alternative; however, the DEIS does not discuss the potential impact of the proposed action upon the existing road maintenance obligations. Based upon our review of Travel Management Plans for other National Forests, we understand that a substantial backlog and funding deficit exists throughout the National Forest Transportation System such that insufficient funds are available to perform scheduled maintenance. In some Forests, many roadways cannot be maintained at USFS mandated standards. The possible maintenance backlog and funding deficit on Tonto National Forest is not discussed nor is the effect that the addition of unauthorized routes may have upon any such backlog or deficit.

Recommendations: Discuss, in the FEIS, the effect of project implementation upon any existing Forest maintenance backlog. To the extent that the anticipated environmental outcomes are predicated on available funding, the FEIS should describe the potential consequences should insufficient funds be available for required maintenance.

Clean Water Act Section 404

Discharge of material into waters of the U.S. requires a permit from the United States Army Corps of Engineers pursuant to Section 404 of the Clean Water Act. The DEIS does not discuss Clean Water Act compliance in relation to this project. It is unclear whether the project or any connected actions might require a Clean Water Act permit.

Recommendations: EPA recommends that the TNF consult with the USACE regarding the extent of jurisdictional waters on the project site and the potential impacts to such waters from Travel Management related actions. Describe, in the FEIS, the status of such consultation, and provide the acres of waters that would be affected by the proposed action. Include, in the FEIS, a description of road improvements needed to bring

previously unclassified roads into the National Forest Transportation System, such as resurfacing, ditching, culverts, and vegetation removal. Descriptions should include the total length of each road and the number of stream crossings that are expected to need improvements.