United States Department of Agriculture | Forest Service | Washington Office | 14th & Independence SW
P.O. Box 96090
Washington, DC 20090-6090

File Code: 1300
Date: JAN 8 2004

Mr. William K. Olsen
W.K. Olsen & Associates, L.L.C.
247 Falls Creek Drive
Bellvue, CO 80512

Dear Mr. Olsen:

This letter provides our determination in response to your Request for Reconsideration filed under the United States Department of Agriculture (USDA) Information Quality Guidelines (IQG) and Data Quality Act (DQA) (Pub. L. No. 106-554 §515). You originally sought correction of information in General Technical Report 217 (GTR-RM-217), which is about management recommendations for the northern goshawk.

We have given your Requests for Reconsideration careful examination and thoroughly reviewed your concerns. According to USDA Information Quality Guidelines, the review of your Request for Reconsideration was based on the explanation and evidence you provided. In order to determine whether panels would be effective and necessary, USDA did convene a panel to review your Request for Reconsideration even though GTR-RM-217 is considered non-influential information by the Forest Service. I understand that this request would not normally be paneled in the future under USDA IQG. Nonetheless, this panel was formed because your Request for Reconsideration was one of the first received by USDA.

The panel was charged to determine whether the initial agency review of the Request for Correction was conducted with due diligence. The panel reviewed your request for conformity to both Office of Management and Budget and USDA information quality guidance. Panelists examined the original request, response document, information provided by Forest Service and USDA websites, and the information provided in your Request for Reconsideration. Panel members included USDA employees familiar with the DQA, and who assisted in development of Departmental guidance in this area. In order to formulate an independent review, the panel comprised two employees from other USDA agencies and a Forest Service representative.

The reconsideration panel affirmed the Forest Service response and found no compelling evidence to support retraction or amendment of the original agency response dated July 25, 2003. The panel determined the initial agency response was conducted with a great deal of care and due diligence, resulting in identification of eight technical errors unrelated to your request for reconsideration, which will be corrected by the agency. In addition, extensive scientific review was conducted by the agency in examination of the claims of the requestor.

The panel found that GTR-RM-217 was the product of extensive peer review in the scientific community qualified to produce the specified data and recommendations. The panel thought the request was developed as a surrogate "peer comment" on the overall document and request was based upon a directed policy outcome rather than identifying a clear informational deficiency. The panel determined that such requests, while appropriate input for reviewers while the document is under development, are problematic for review under USDA IQG . Forest Service policy-makers must rely upon the whole of scientific and public input in a coordinated and concerted effort. The agency cannot be expected to consider larger policy questions outside of this context. The fact that the Forest Service discovered eight errors that were technical in nature in their review demonstrates the kind of diligence that the panel found throughout their review. The errors will be corrected with an errata sheet in future references.

In conclusion, the information you provided was carefully considered. However, after full consideration and careful, thorough review, I conclude there is no substantive merit to your claims. The information you provided does not demonstrate that GTR-RM-217 is inconsistent with USDA's IQG. A copy of the panel's recommendation along with the attachment and a copy of the errata sheet are enclosed for your information.

Sincerely,

Bov B. Eav

BOV B. EAV
Acting Deputy Chief for Research & Development

Enclosures

USDA Quality of Information
Request for Reconsideration Review Panel

Review Panel Participants:

Douglas J. McKalip, Director of Legislative Affairs,
USDA Natural Resources Conservation Service
Gary S. Becker, Economist, Food Safety Inspection Service
Glen Contreras, Wildlife, Fish, Watershed and Air Research Staff

RFC#3001
RFC#3002
RFC#3003
RFC#3004
RFC#3005

Subject of Review:

The subject of the Reconsideration Panel was Requests for Correction Numbers 3001-3005. These requests collectively dealt with Management Recommendations for the Northern Goshawk in the Southwestern United States. The individual requests were consolidated and considered as a single request.
The request for reconsideration and original request for correction were submitted by:

Mr. William K. Olsen
W.K. Olsen and Associates, L.L.C.
247 Falls Creek Drive
Bellevue, CO 80521

The document under review is a General Technical Report (**GTR-RM-217**) issued by the Forest Service Rocky Mountain Research Station in 1992. The document was developed by the Goshawk Scientific Committee in order to establish appropriate bases and parameters for management decisions involving goshawks in the Southwestern United States. The document is relevant in that it influences Forest Plans in the western U.S. and serves as a component of rulemaking and National Environmental Policy Act processes for numerous Forest Service Activities.

Legal Authority for Request:

The request was submitted under the Data Quality Act (Pub. L. No. 106-554, Sec. 515) and subsequent USDA Information Quality Guidelines.

Timeline of Requests:

January 21, 2003 -- Original request for correction received by the USDA Forest Service.

July 25, 2003 -- Agency response provided to requestor, indicating request to retract information denied.

September 4, 2003 -- Request for reconsideration submitted to agency.

October 29, 2003 -- Reconsideration Panel convened.

Summary of Request: The requestor asserts substandard quality issues throughout GTR-RM-217 with respect to processes used to develop the information, specific items such as recommended nest habitat requirements, and also compliance by the Forest Service with processes within the Office of Management and Budget and USDA on information quality.

Summary of the Reconsideration Panel charge and deliberations:

The reconsideration panel on GTR-RM-217 began action on October 20, 2003, by collecting background on the request. The charge of the reconsideration panel was to determine whether the initial agency review of the Request for Correction was conducted with due diligence. The panel on GTR-RM-217 first convened on October 29, 2003. Extensive background was provided by Forest Service personnel. Panelists outside the original agency of request performed subsequent examination of the original request, response document, and additional background information provided by Forest Service staff. Panel Members included USDA employees intimately familiar with the Data Quality Act, and who assisted in development of Departmental guidance in this area. Consideration of the request was conducted by panelists outside the original agency of request in order to formulate an independent review.

Review of Potential Disqualification of Request

The Reconsideration Panel first examined whether the initial request adhered to the requirements for review under the Data Quality Act. In this case, GTR-RM-217, was examined to determine whether the document was subject to review. The panel considered the following:

- **Was information intended exclusively for use by government employees, contractors, grantees?**

The Reconsideration Panel determined that the information had a broad application including input into development of future management plans.

- **Was information intended exclusively for intra-agency or interagency use?**

The Reconsideration Panel determined that since the information would be utilized in cases where public comment is solicited it was not determined to be exclusively for intra-agency or interagency use.

- **Did the requestor follow and include all required items?**

The Reconsideration Panel determined that all required components and documentation had been submitted by the requestor.

- **Was the request frivolous, submitted in bad faith, the subject of prior complaints that have been resolved, or related to stale information?**

The Reconsideration Panel determined that the request was valid and had not received prior review. Panelists determined that information under review met several other criteria under the USDA information guidelines, including:

1. support for a regulation, guidance, or other decision
2. implications or a broad range of parties or have an intense impact

The Reconsideration Panel determined that the information in question was not "stale" under USDA information quality guidelines in that it is still an important component of USDA Forest Service policy development. However panelists questioned whether data formulated before enactment of the Data Quality Act were subject to review under the newly issued guidelines. Panel Members on this case did not arrive at a conclusion on this question and gave the Request for Reconsideration a full review.

Findings:

The Reconsideration Panel found no compelling evidence to support retraction or amendment of the original agency response dated July 25, 2003. Development of the initial agency response was conducted with a great deal of care and due diligence, resulting in identification of eight unrelated technical errors unrelated to the request for reconsideration, which will be corrected by the agency. In addition, extensive scientific review was conducted by the agency in examination of the claims of the requestor.

The Reconsideration Panel found that GTR-RM-217 was the product of extensive peer review in the scientific community qualified to produce the specified data and policy recommendations. In this case the requestor lacked a pointed claim of deficiency in a specific instance. Instead, the request was developed as a surrogate "peer comment" on the overall document. The request was also based upon a directed policy outcome rather than identifying a clear informational deficiency. Such requests, while appropriate input for reviewers while the document is under development, are problematic for review under USDA guidelines. Forest Service policy-makers must rely upon the whole of scientific and public input in a coordinated and concerted effort. (In this case the Goshawk

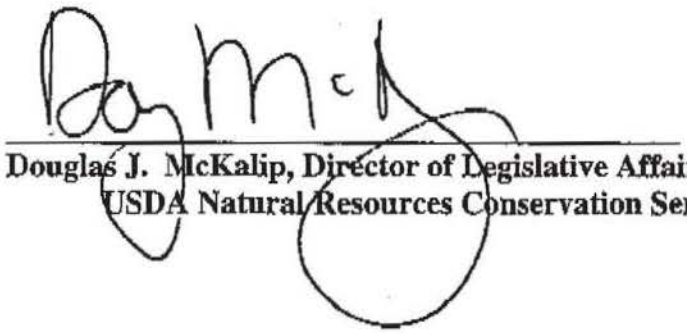
Scientific Committee) The agency cannot be expected to consider larger policy questions outside of this context. Future development of Goshawk technical reports may serve as an appropriate forum for this discussion. The fact that the Forest Service incidentally discovered eight errors that were technical in nature in their review demonstrates the kind of diligence that the Reconsideration Panel found throughout the study. The errors will be corrected with an errata in future references.

While the Reconsideration Panel did determine that the initial agency action was conducted with due diligence, the Panel also determined that documentation provided back to the requestor did not reflect all relevant background information. In fact the agency developed a more descriptive response on an itemized basis that addressed the claims of the requestor and would have served as a more appropriate response to the original request. The Reconsideration Panel has included that additional documentation in this report.

Recommended Agency Action:

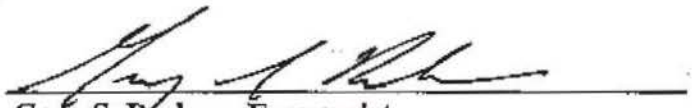
The panel recommends affirming the Forest Service response dated July 25, 2003 and rejecting the Request for Reconsideration. The Reconsideration Panel recommends that the Forest Service provide to the extent practicable a more complete response (similar to that attached) to future requests. Beyond this item, the Reconsideration Panel does not believe further recommended agency actions are warranted.

Signatures of Panelists:



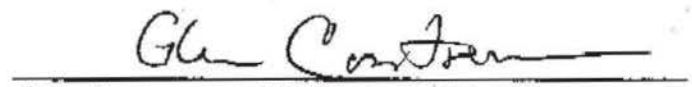
Douglas J. McKalip, Director of Legislative Affairs,
USDA Natural Resources Conservation Service

12/15/03
Date



Gary S. Becker, Economist,
Food Safety Inspection Service

12/15/03
Date



Glen Contreras, Wildlife, Fish, Watershed
and Air Research Staff USDA Forest Service

12/17/03
Date

Review of the
Request to Correct Information Disseminated
By USDA Forest Service
In
MANAGEMENT RECOMMENDATIONS FOR THE NORTHERN GOSHAWK IN THE SOUTHWESTERN UNITED STATES. General Technical Report 217. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station. 90 pp. 1992.

By
USDA Forest Service
Rocky Mountain Research Station

Requestors:
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Introduction: In January 2003, a Request for Correction (Request) was filed under provisions of the Federal Data Quality Act by W.K. Olsen & Associates, L.L.C., and others to correct information disseminated by the United States Government in a USDA-Forest Service research General Technical Report (Rocky Mountain Research Station, GTR RM-217, 90 pp.). This report was prepared by the Goshawk Scientific Committee in 1992 to develop habitat management recommendations that would sustain goshawks in the southwestern United States. Forest Service land managers have amended numerous Forest Plans in the western United States to incorporate these innovative recommendations. This review addresses the Requestors' assertions, reviews the RM-217 statements and citations, and either supported or refuted the Requestors' assertions.

This review found that the Requestors: 1) failed to carefully read and understand RM-217, 2) misinterpreted RM-217, conducted analyses to support their misinterpretations, and then inappropriately attributed them to RM-217, 3) claimed that RM-217 restricted forest management when in fact RM-217 recommends active management, and 4) discovered eight minor errors that did not affect the recommendations.

Summary: In 1990, the USDA Forest Service established the Goshawk Scientific Committee (GSC) to recommend habitat management strategies to conserve goshawks. Over a two year period, the GSC developed and synthesized the best information available on goshawk ecology and habitats.

After extensive peer review by 19 scientists and managers from universities, museums, and government organizations, the Rocky Mountain Research Station published, in 1992, the "Management Recommendation for the Northern Goshawk in the Southwestern United States" as General Technical Report RM-217.

In the late 1980s, factors limiting goshawk populations were poorly known. The literature of the time showed goshawks lived in a variety of forests and that some populations were affected by fluctuations in food abundance. The GSC included members with an intimate knowledge of goshawks and they noted that because of the goshawk's large size, sub-canopy foraging behavior, and trophic position (top level predator) they were likely to be limited by both food and habitat structure. The GSC, therefore, used a food web approach to specify desired forest habitat conditions for the goshawk and important prey species.

The GSC assembled and synthesized information on goshawks, their prey, and the development patterns of southwestern forests. This data synthesis used specific habitat information on 15 bird and mammal species along with concepts of forest ecology to produce a general set of desired forest conditions that will likely sustain populations of goshawks and their prey. Three home range components were identified (nest area, post-fledging family area, and foraging area) and different recommendations were developed for each component.

The GSC used the native composition, structure, landscape pattern, and patch dynamics of the forests in the southwest as templates for assembling goshawk and prey habitats. This approach increased the likelihood that the desired forest conditions could be sustained through time and space. To facilitate an understanding of these forest dynamics, the GSC used a Vegetation Structural Stage (VSS) classification to describe these forests. The recommendations in RM-217 mimicked the effects of natural disturbances that shaped southwestern forests. Most importantly RM-217 assumed active management could replicate these native conditions and disturbances and a "reserve" approach for sustaining goshawks would not be necessary. In addition to benefiting goshawks, this approach would produce forests resilient to non-lethal surface fires and resistant to catastrophic crown fires. These forests would also provide an array of other goods and services including forest products.

After publication, four independent reviews demonstrated RM-217's significance and high quality. In 1994, The Wildlife Society and American Ornithologists' Union completed a Technical Review and determined the "scope and the review of the biology of northern goshawks in RM-217 is excellent," and that "...the recommendations represented an innovative approach to forest management because they encourage forest managers to consider forest ecosystems as assemblages of interacting species of plants and animals" (Braun et al. 1994). In a 1995 Journal of Forestry article, Dewhurst, Covington, and Wood declared RM-217 "as a forest management plan with explicit assumptions and hypotheses about system structures and processes, clear articulations of management goals, objectives, and specific actions were identified" (Dewhurst et al. 1995). In 1999, the USDA committee of scientists in their report "Sustaining the People's Land: Recommendations for Stewardship of the National Forests and Grasslands into the Next Century" recommended RM-217 as an example of a "bioregional assessment for a large-scale conservation strategy that was collaboratively developed." In 2000, RM-217 was reviewed by Long and Smith in the Journal of Forestry, concluding that RM-217 "while superficially another example of narrow, single species focus, is in fact a coarse filter

approach that includes a mosaic of age and structural classes to provide habitats and food chains for a broad spectrum of wildlife species including goshawk prey species... approximating the composition, structure, and landscape patterns existing in southwestern ponderosa pine forests before fundamental changes in natural disturbance regimes and forest structure"(Long and Smith 2000).

In 1991, the USDA Forest Service Regional Forester (Southwestern Region -3) issued Interim Directives providing Region-wide management direction (following RM-217 concepts) for goshawk habitat. Almost immediately, timber harvest activities were appealed and law suits were filed by the environmental community opposed to using these novel habitat recommendations, but the court ruled in favor of the Forest Service. In 1996, a Record of Decision (ROD) formally amended all Forest Plans in Region-3. The ROD implemented standards and guidelines for managing goshawk habitat. Similarly, the Forest Service in Alaska, Intermountain Region, Rocky Mountain Region, and Pacific Northwest Region relied heavily on RM-217 for developing goshawk habitat management strategies.

In January 2003, a Request for Correction (Request) was filed under the Federal Data Quality Act by W.K. Olsen & Associates, L.L.C., and others to correct information disseminated in RM-217. The Requestors alleged that the GSC relied on "preconceived notions and non-transparent qualitative decision models" to develop RM-217; this is not true. The Requestors discovered a few minor errors in RM-217. However, after more than 10 years, RM-217 remains applicable for sustaining habitats of goshawk and their prey, and continues to be a robust and fitting template for addressing forest health and wildfire concerns in western forests.

The following is a listing of the main Request topics and responses to the alleged errors in RM-217: *Requestors' statements are in italics.*

I. Nest area size, quantity and stand structure: The Requestors challenge the determination of the recommended size, number, and structure of goshawk nest areas.

Nest area size: Southwestern forests have widely varying capacities for producing desired forest conditions and it was prudent to minimize the possibility of immediate loss of goshawk habitat. In the opinion of the GSC (e.g., based on literature, experience, deliberation) 30 acre nest areas were recommended to provide for uncertainty associated with correctly incorporating requisite habitat structure and landform in both suitable and replacement nest areas. This was paramount in the Southwest where there is considerable variation in site-specific tree growth potential. "Sites have widely varying capabilities to produce the desired conditions; on certain sites desired conditions cannot be attained, while on others the conditions can be exceeded" (RM 217, p. 21).

Nest area quantity: Many pairs of goshawks have two to four alternate nest areas within their home range. Additionally, replacement nest areas are required because nest stands are subject to loss from catastrophic events and natural decline and trees and forests require many years to grow (RM- 217, p. 13).

Nest area structure (Request, p. 19): *Even-aged goshawk nest area and nest stand structure is recommended in RM-217.* RM-217 does not recommend even-aged nest

area structure as the Requestors claim. The Requestors failed to read and understand RM-217 (RM-217, p. 14, Table 5) that allows for many nest area structures (footnote 1: The entire nest area may not support all of the attributes displayed in the table).

The pertinent literature was properly cited and synthesized to develop a set of "desired conditions" for nest areas that in the best estimate of the GSC will sustain goshawk populations in the Southwestern Region (RM-217, p. 9). The result is that RM-217 is correct in the way that nest area size, quantity and stand structure were determined and the rationale was complete and fully revealed in RM-217 (p. 13).

II. Post-fledging family area (PFAs): The Requestors claim that the (Request, p. 29) *PFA existence is based on biased, speculation and arbitrary procedures. The concept of the post-fledging family area (PFA) was arbitrarily created by the GSC*

Young goshawks (fledglings) must learn to hunt, survive, and fend for themselves. Radio-telemetry research of the movements of adult nesting female goshawks and their young after fledging (leave the nest) detected core areas of concentrated use by the adult female goshawk and her fledglings that averaged 415 ac. This core area is an important part of the breeding home range of goshawks as it includes perches, roosts, preferred hunting areas near the nest, and training areas for the fledglings. Because the female core area included the fledgling dependency area, the GSC coined the term "post-fledging family area" (PFA). Therefore the concept of a PFA was not arbitrarily created by GSC (RM-217, p. 13).

The result is that RM-217 is correct in the way that PFAs were determined and the rationale was complete and fully revealed in RM-217 (p. 13).

III. Nest tree buffer: The Requestors' allege that (Request, p. 39): *the arbitrary creation of PFAs was incorrectly used as justification by the GSC to capriciously expand the nest area buffer:* As discussed above in Section II of this review, the PFA was not arbitrarily created nor incorrectly used as a justification for expanding the nest area by the GSC. As a result, the PFA had different desired forest conditions than the nest area and the foraging area. The desired forest conditions were not fabricated as alleged by the Requestors. Moreover, active management is recommended in PFAs to develop and maintain the desired structure in contrast to the concept of a nest area buffer. The process is fully explained and documented in RM-217 (pp. 13, 15).

The result is that RM-217 is correct in the way that PFAs were determined and the rationale was complete and fully revealed in RM-217.

IV. Canopy cover: The Requestors allege that the definitions and methods of estimating canopy cover in RM-217 are biased.

RM-217 properly defines canopy cover (RM-217, pp. 87, 89). Both are proper definitions and disclose how the GSC intended canopy cover to be estimated and all recommendations in RM-217 are based on these definitions and measurement

methods.

Canopy cover was defined according to standard scientific practice to ensure that it would not be misinterpreted. Because of the many ways it can be measured the GSC chose to base their recommendations on the most simple and easily applied method, the vertical canopy projection method. The definitions and the recommended method of measuring canopy cover are accurate. The estimates are quick and efficient and provide good estimates within the VSS structural stages in which canopy cover recommendations are provided. The entire argument and discussion by the Requestors as to the merits of using densiometers vs. the vertical projection are moot if the estimates are made according to the recommendations. RM-217 recommends classifying the vegetation (VSS) in clumps, groups, stands or over any spatial scale and then estimate canopy cover.

The result is that RM-217 is correct in the way that canopy cover was defined and measured and the rationale was complete and fully revealed in RM-217.

V. Goshawk prey species and desired foraging area conditions: The Requestors allege that the methodology used to select prey and define forage area conditions was flawed.

Requestors claim that the GSC had a preconceived notion of desired forest conditions and then searched for supporting evidence. This is a fallacious claim. The Requestors incorrectly interpreted the purpose of Tables 6 and 7 (RM-217, pp. 17, 19). The purpose of the tables was to show the importance of habitat attributes (e.g., snags, openings, VSS) and not the importance of prey. As a result, the Requestors' influence analysis was unwarranted and the inferences made from the analysis irrelevant. These tables were used to develop the desired conditions for the foraging area which are fully documented on pages 17-19 RM-217.

The result is that RM-217 is correct in the way that the desired foraging area conditions were developed and the rationale was complete and fully revealed in RM-217.

VI. Vegetation structural stage: The Requestors' claim (Request, p. 76) VSS inadequately supported *by documentation and lacks theoretical basis. The Vegetation Structural Stage classification scheme for forest development is poorly conceived, using only an inadequate and misrepresented citation as a theoretical basis, and is readily shown to be impossible to apply to uneven-aged stand conditions.*

The GSC recognized there were numerous ways to classify vegetation ranging from potential vegetation to forest type. These classification systems were not readily adaptable for describing the structure of southwestern forests. In reviewing the literature on vegetation classifications and those applicable to describing wildlife habitat, the GSC chose to develop their vegetation structural classification after those used to describe vegetation in northeastern Oregon. The GSC developed the

vegetation structural stage classification that was used in RM-217 (Figure 1 p. 2, p. 15, Appendix 5 p. 90) with 6 structural stages ranging from grass-forb-shrub to old forest. Most importantly these classifications can be used to classify vegetation of any size, age, or composition and at any spatial scale. RM-217 advocates that they be used to classify the groups and clumps of vegetation outlined in RM-217 but similar classifications have been used to classify the entire interior Columbia River Basin in the northwestern United States. The Requestors, through arguments on Request pages 82-84 claim that the VSS, as defined by RM-217, classification can only be applied to even-aged "stands" which is untrue.

The result is that RM-217 is correct in the way the vegetation structural stages were developed and used, and the rationale was complete and fully revealed in RM-217.

VII. Extrapolation from targeted populations (Request, p. 87): *In RM-217, the GSC failed to identify target populations for the sources of its own presented data, as well as for data and conclusions originating from cited references.*

The Requestors argue that goshawk nest site vegetation data, collected in plots centered on goshawk nests, cannot not be extrapolated from the sample plots to entire nest stands. RM-217 Table 5 (structural attributes for suitable northern goshawk nest stands in the southwest) allows for within-stand variation. Footnote 1 in table 5 clearly states that structural attributes in table 5 may not be supported in the entire nest area.

The GSC extrapolated the structural conditions identified in Table 5 to only that portion of the nest stand within the 30-acre nest area. The synthesis of prey habitats resulted in generalized landscape habitats. Specific habitats derived from the literature for each species were not extrapolated to landscapes as claimed by the Requestors.

The Requestors incorrectly assumed that Table 5 (RM-217, p. 14) presented even-aged conditions. The Requestors' resulting analysis and inferences as the result of this error were irrelevant. Also in this section the Requestors argue that RM-217 recommends (Request, p. 108) *the canopy cover requirements for foraging areas in RM-217 apply at the landscape level* but they only apply to the clumps and groups of VSS 4, 5,or 6 shown in Table 1 (RM-217, p. 7).

The result is that RM-217 did not inappropriately extrapolate data incorrectly. The alleged error was the result of the Requestors misinterpreting Table 5 (RM-217).

VIII. Grazing/forage utilization (Request, p. 111): *The restrictions on forage utilization are poorly referenced and, subsequently, incorrect and unjustifiably restrictive.*

To attain the recommended forage utilization, the desired herbaceous and shrubby conditions included plants with sufficiently large leaf surfaces to produce quality forage, abundant inflorescences and seed production, and sufficient plant height to provide cover for these species. The recommended understories in addition to

providing habitat for prey also provides hiding and protection cover for fledglings as they learn to hunt and fend for themselves.

The photo guides cited in RM-217, are an invaluable aid in correlating prey habitat needs of individual species considered in RM-217 with the levels of range use (by weight) by ungulates and other grazers or browsers. By combining and synthesizing information from separate habitat users (grazers vs. prey species) the ability to make recommendations was possible.

The result is that RM-217 is correct in the way the forage utilization recommendations were developed and the rationale was complete and fully revealed in RM-217.

IX. Road densities (Request, p. 112: *Though the GSC repeatedly required and recommended that roads be "minimized", no supporting citations or other information were provided to support the mandate.*

Roads are an important component of forested landscapes that influence goshawk habitat quality. One could not attain the desired forest conditions in nest areas with a high road density. The GSC's intent in recommending minimum densities of roads was made in the recognition that to create and maintain the desired forest conditions throughout a goshawk home range, active forest management was needed and recommended. In addition, the minimum road recommendation allowed local managers the utmost flexibility in creating the desired forest conditions (RM-217, pp. 22, 23, 28). The GSC recognized that closing of roads was extremely difficult in the gentle terrain that occurs in much of the southwest.

The result is that RM-217 is correct in recommending minimum road densities when developing the desired forest conditions.

X. RM-217 Citations

The issues raised in this section are the same as those that appear in Appendix 3. Rather than repeating responses to Appendix 3 here, the reader is referred to the responses located in Appendix 3 of this document.

XI. Inherent bias reveals lack of objectivity for whole publication (Request, p. 122): *Collectively, the errors and biases revealed in Sections I-X above suggest that RM-217 was conceived, written and published with the intent to achieve preconceived and desired outcomes.*

The outcome of the broad-based approach used in RM-217 was initially unknown and, therefore, could not have been preconceived. There was sufficient published empirical evidence (RM-217, p. 11, and the literature cited therein) to support the food web approach and that a "perception" on part of the GSC did not supercede the empirical evidence.

Bias is ubiquitous in human endeavors. Nonetheless, internal bias within the GSC was minimized by continuous, often contentious, interactions among committee members with diverse knowledge bases. Bias was further minimized by the broad-based approach used in RM-217. That is, the diverse habitats of multiple species were incorporated into sustaining landscapes whose compositions, structures, and patterns that were constrained by the biology and ecology of the dominant vegetation in the targeted forest types. Thus, other than a directed focus on home range components (nest area, PFA, foraging area) of goshawks, the habitats of no one species dominated the desired landscapes. Furthermore, the draft RM-217 was peer reviewed by 19 scientists and mangers, and, after it was published, it was favorably reviewed by an independent (non-Forest Service) committee of scientists appointed by two professional wildlife societies, The Wildlife Society and American Ornithologists' Union (Braun et al. 1996). In addition, RM-217 was favorably reviewed for its potential for successful implementation in southwestern ponderosa pine forests in a Journal of Forestry article (Long and Smith 2000).

In none of the components of a goshawk home range do the recommendations in RM-217 preclude timber management activities. In fact, RM-217 when implemented, RM-217 (p. 32) suggests intensive management through understory treatments of forests to produce large trees quickly. These intermediate treatments provide small saw-logs and wood material for small product and fiber-based industries. In addition to providing goshawk habitat, large trees will make excellent saw-logs

The result is that RM-217 is correct and most importantly neither this review nor the one performed by the Requestors revealed any substantive errors in RM-217.

XII. Technical reviews (Request, p. 125):*...the review and discussion of technical reviews in this section (XII), in conjunction with presented discussion and materials in the previous sections, shows that the technical review process used for RM-217 was inadequate for ensuring objectivity standards were met.*

The Requestors under the Freedom of Information Act requested and received copies of 13 memos from peer reviewers of RM-217. Contrary to the Requestors' claim their review comments were reconciled and included in the final document. In addition to these reviews RM-217 was orally defended in front of a panel of Rocky Mountain Scientists chaired by an Assistant Director. Moreover, the workings of the GSC were continually reviewed by a Task Force made up of private citizens, individuals from nongovernmental organizations (e.g., Audubon Society), University of Arizona, New Mexico and Arizona State organizations, USDI Fish and Wildlife Service, industry representatives, and Forest Service Managers. This review of RM 217 during its development and prior to publication made the document receive the highest scrutiny above and beyond what would be termed normal in the scientific peer review process.

The GSC reviewed all comments received and made appropriate changes where needed in the RM-217 and retained important observations when it was helpful for

the discussion. The Requestors' allegation that the reviews supported their thesis that RM-217 was inherently biased and reveals lack of objectivity for whole publication is wrong. These reviewers provided an invaluable service to the GSC and their comments were an integral part of the final RM-217. RM-217 is a recommended habitat management hypothesis designed to sustain goshawks, the food web, and the major forested communities that species depend upon for their long-term survival. The habitat recommendations were developed with considerable thought. A vast body of knowledge was synthesized in order to develop the recommendations—not a simple task. No competing habitat management recommendations exist that provide for the long-term sustainability of goshawks. Those who seek to openly detract from the important GSC contribution and advancement of the management of forested landscapes, fail in particular by not providing alternative management recommendations. The GSC has yet to see another set of habitat management recommendations that challenge the veracity of RM-217.

Appendix 3: Over 350 citations were used in the preparation of RM-217 supporting 100s of statements. The Requestors found 26 statements and citations they allege were improper. Of these 26 alleged errors the Requestors misinterpreted RM-217 6 times, misinterpreted the citation in RM-217 once, were wrong in claiming RM-217 in error 9 times, prefers one statistic over another once, erred on inference of data location once, mislead reader once, and found 7 minor errors. These errors include omitting a personal communication (letter), citing the wrong work of the same author, and transposing a data column in the final printing of RM-217. These 7 errors (causing no need for substantive changes) all occurred in supporting material found in Appendix 3 of RM-217 and none in the body of RM-217.

In summary, this review of the Request to correct RM-217 found no errors requiring substantive change. In addition to the errors revealed in Appendix 3, RM-217 erred on page 14 by stating PFAs vary in size from 300 to 600 acres. The correct range was 84 to 812 acres. RM-217 presents the available (1992) information on both goshawk and goshawk prey habitat in an accurate, clear, complete, and unbiased manner. This information was synthesized into desired forest conditions that in the view of the GSC would sustain goshawks and subsequent research has affirmed RM-217. The Request and the review of the Request reinforced the strength and robustness of the recommendations in RM-217 for sustaining goshawk habitat in the Southwest. Its combination of forest ecology, goshawk habitat, and goshawk prey habitat synthesized to produce a template for sustaining forested landscapes in the Southwest is still sound. This Request is only another challenge to RM-217 and the decisions it has informed over the last 13 years.

ERRATA, October 2003: The following corrections are hereby made to "Management Recommendations for the Northern Goshawk in the Southwestern United States," General Technical Report, RM-217, USDA Forest Service, Rocky Mountain Research Station, Fort Collins, CO. 1992:

Page 13, paragraph 8: PFAs vary in size from 300 to 600 acres (mean = 415 acres) and may correspond to the territory (a defended area) of a pair of goshawks (Kennedy 1989). **Should read:** PFAs vary in size from 84 to 812 acres (mean = 415 acres) and may correspond to the territory (a defended area) of a pair of goshawks (Kennedy 1989).

Appendix 2, pages 51-52: Appendix 2 contains counting, rounding, and transposition errors. **A corrected Appendix 2 is attached.**

Appendix 3, page 53, paragraph 9: Citation (Stauffer and Best 1986) **should read** (Stauffer and Best 1980).

Appendix 3, page 54, paragraph 4: Sites that were clearcut had the lowest densities of breeding birds, 0.5 birds per 100 acres (Haldeman 1968, Szaro and Balda 1979). **Should read:** Of sites silviculturaliy treated, clearcuts had the lowest density of breeding birds, 0.5 birds per 100 acres (Haldeman 1968, Szaro and Balda 1979b).

Appendix 3, page 57, paragraph 9: Citation (Stauffer 1983; Zwickel and Bendell 1985) **should read** (Stauffer 1983).

Appendix 3, page 71, paragraph 1: Canopy cover in a 33-foot-radius plot centered on primary middens averaged 89% (n=144) for Mount Graham red squirrels (Mannan and Smith 1991). **Should read:** Canopy cover in a 33-foot-radius plot centered on primary middens averaged over 90% (n=144) for Mount Graham red squirrels (Mannan and Smith 1991).

Appendix 3, page 75, paragraph 4: Mature trees often produce the most cones (Larson and Schubert 1970), and abundant truffle foods are often associated with young pine stands with canopy cover greater than 65% (States 1985). **Should read:** Mature trees often produce the most cones (Larson and Schubert 1970), and abundant truffle foods are often associated with young pine stands with canopy cover greater than 60% (J. States, personal communication).

Appendix 3, page 54, paragraph 6: Citation (Szaro and Balda 1979) **should read** (Szaro and Balda 1979b).

Corrected: Appendix 2. Vertebrates in the diets of nesting northern goshawks from various locations in North America.

Species are listed in approximate order of decreasing size and potential contribution to the biomass consumed by the goshawks.

Species[1]	Number of Prey (% in Diet)				
	Schnell 1958[2]	Meng 1959[3]	Reynolds & Meslow 1984[4]	Mannan & Boal 1990[5]	Kennedy 1991[6]
Great-horned owl			1 (0.4)		
Mallard	3 (3.4)		2 (0.9)		
Cat (*Felis* spp.)					1 (1.0)
Black-tailed jackrabbit				2 (1.6)	
Snowshoe hare	1 (1.1)		24 (10.6)		
Blue grouse			5 (2.2)		
Unknown grouse			1 (0.4)		
Cottontails		7 (3.8)	3 (1.3)	16 (12.5)	21 (20.0)
Gray squirrel		4 (2.2)	5 (2.2)		
Common raven					3 (2.9)
Prairie falcon					1 (1.0)
Ruffed grouse		5 (2.7)	2 (0.9)		
Pigeon (Columbia spp.)	1 (1.1)				2 (1.9)
Common crow		83 (44.9)			
Tassel-eared squirrel				7 (5.5)	9 (8.6)
Cooper's hawk			1 (0.4)		2 (1.9)
Bushy-tailed woodrat			1 (0.4)		
Pileated woodpecker			1 (0.4)		
Rock squirrel				3 (2.3)	
Tree squirrel spp.					7 (6.7)
Belding's ground squirrel	3 (3.4)		4 (1.8)		
Woodrat spp.			1 (0.4)		

Continued on next page (back of this sheet)

Mountain quail	1 (1.1)		10 (4.4)		
Disky footed woodrat			1 (0.4)		
Squirrel (Tamiasciurus spp.)	5 (5.7)	58 (31.4)	13 (5.8)	2 (1.6)	3 (2.9)
Black-billed magpie			1 (0.4)		
Screech owl			1 (0.4)		
Northern flying squirrel			15 (6.6)		
Mantled ground squirrel	6 (6.8)		17 (7.5)	21 (16.4)	2 (1.9)
Northern flicker			15 (6.6)	5 (3.9)	15 (14.3)
Townsend's ground squirrel			2 (0.9)		
Mourning dove			7 (3.1)	1 (0.8)	
American kestrel		3 (1.6)			1 (1.0)
Stellar's jay	22 (25.0)		29 (12.8)	7 (5.5)	9 (8.6)
Scrub jay					1 (1.0)
Clark's nutcracker					3 (2.9)
Belted kingfisher					2 (1.9)
Blue jay		7 (3.8)			
Lewis' woodpecker			1 (0.4)		
Unknown mammal	5 (5.7)		6 (2.7)	28 (21.9)	5 (4.8)
Townsend chipmunk			3 (1.3)		
Meadowlark			2 (0.9)		
Unknown jay			1 (0.4)		2 (1.9)
Northern saw-whet owl			1 (0.4)		
Norhtern pygmy-owl					1 (1.0)
American robin	27 (30.7)		20 (8.8)		7 (6.7)
Varied thrush			4 (1.8)		
Gray jay			5 (2.2)		
Hairy woodpecker			1 (0.4)	3 (2.3)	
Blackbird spp.		15 (8.1)			
Unknown bird	1 (1.1)			14 (10.9)	1 (1.0)
California mole	1 (1.1)				
Chipmunks (Tamias spp.)	5 (5.7)	3 (1.6)	7 (3.1)		2 (1.9)
Williamson's sapsucker	1 (1.1)		2 (0.9)		1 (1.0)
Weasel	1 (1.1)				
Woodpecker spp.			1 (0.4)		
Red-naped sapsucker			1 (0.4)		
Black-headed grosbeak			1 (0.4)		
Evening grosbeak					1 (1.0)
Least chipmunk			1 (0.4)	18 (14.1)	
Western bluebird					2 (1.9)
Western tanager	4 (4.5)		2 (0.9)		
Hermit thrush					1 (1.0)
Dark-eyed junco			2 (0.9)	1 (0.8)	
Unknown sparrow			3 (1.3)		
Yellow-rumped warbler	1 (1.1)				
Totals	88	185	226	128	105

[1] highlighted species = selected prey of the northern goshawk.

[2] California

[3] New York and Pennsylvania

[4] Oregon

[5] Arizona

[6] New Mexico