



File Code: 1570-1
#06-04-00-0050-A217
Date: April 2, 2007

Louisa Willcox
Wild Bears Project Director
Natural Resources Defense Council
P.O. Box 70
Livingston, MT 59047

Dear Ms. Willcox:

In accordance with 36 CFR 217.16, this letter documents my decision on your appeal of the Record of Decision (ROD) and Final Environmental Impact Statement (FEIS) for the Forest Plan Amendment for Grizzly Bear Habitat Conservation for the Greater Yellowstone Area National Forests.

Bruce Ramsey, Forest Supervisor Beaverhead-Deerlodge National Forest (NF); Kniffy Hamilton, Forest Supervisor Bridger-Teton NF; Larry Timchak, Forest Supervisor Caribou-Targhee NF; Nancy Curriden, Forest Supervisor Custer NF; Rebecca Heath, Forest Supervisor Gallatin NF; and Rebecca Aus, Forest Supervisor Shoshone NF approved the decision. There were two appeals, including yours. I combined my review of the appeals, since appellants raised similar issues. My review focused on the project documentation, the planning record and the objections raised in the appeals. This letter, including the attachment, constitutes my decision.

APPEAL DECISION

I am affirming the decision by the Forest Supervisors on all issues in your appeal. I find that the ROD, FEIS, and the documentation in the planning record, comply with applicable laws, regulations, and policy.

This decision represents the final administrative determination by the U.S. Department of Agriculture, unless the Chief, on her own initiative, elects to review the decision within 15 days of receipt (36 CFR 217.7 (d)(1)).

Sincerely,

/s/ Jack G. Troyer
JACK G. TROYER
Appeal Reviewing Officer

Enclosure



**Grizzly Bear Habitat Conservation Forest Plan Amendment
for the Greater Yellowstone Area Forests**

**Appellants: 1) Natural Resources Defense Council #06-04-00-0050-A217 (50)
2) Greater Yellowstone Coalition; Jackson Hole Conservation Alliance; Natural Resources
Defense Council; Sierra Club, and Western Watersheds Project #06-04-00-0051-A217 (51)**

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

APPEAL ISSUE 1: There is an inadequate Range of Alternatives. (50, 51)

RESPONSE: The National Environmental Policy Act (NEPA) requires an analysis of alternatives in order to display a range of environmental consequences sufficient to support an informed decision (Forest Service Handbook (FSH) 1909.15, Chap. 10, Sec. 12.33, FSH 1909.15 65.12, Council on Environmental Quality (CEQ)-40 Most Asked Questions 1a, 2a.). There is no requirement to analyze an infinite range of slightly different alternatives (FSH 1909.15 – 65.12 - CEQ 40 Most Asked Questions, 1a and 1b).

Forest Service regulations and policy provide guidance on development of issues and alternatives including direction to focus on issues that are truly significant to the action and using those issues to drive the formulation of alternatives (40 CFR 1500.1(b); 1501.2 (c)).

Issues were identified through scoping and were used to develop a range of alternatives that met the project’s purpose and need (Final Environmental Impact Statement (FEIS), p. 16). The alternative development process is described in the FEIS including alternative descriptions and a comparison of each (FEIS, pp. 22-62). The Forests considered five alternatives including the no action and proposed action. Two of the alternatives were developed in response to issues raised by public scoping and the preferred alternative was developed in response to comments received on the Draft Environmental Statement (DEIS) (FEIS, p. 22).

The Environmental Impact Statement (EIS) artificially confined its analysis to only two different geographic areas and ignored “an alternative that provides habitat protections in the bears’ current range.”

Many public comments suggested providing additional habitat protection for the grizzly bear (grizzly) by extending the habitat standards beyond the Primary Conservation Area (PCA). These suggestions were combined and are represented by Alternative 4 (Record of Decision (ROD), p. 32). Alternative 4 increases the size of the area where management direction would favor the grizzly. The boundary outside of the PCA and the standards and guidelines were developed using information obtained during scoping. The boundary was again reviewed after receipt of comments on the DEIS to expand it. Due to high agricultural use, it was determined that the expanded boundary was unlikely to be effectively occupied by the grizzly (FEIS, p. 40).

The selected alternative’s standards and some of the guidelines apply only to the PCA. Other guidelines will apply to areas determined to be socially and biologically suitable for grizzlies, which could include an additional 50% of the planning area outside of the PCA (ROD, p. 33).

Alternative 4 represents extending the habitat standards outside of the PCA. In addition, guidelines under the selected alternative do apply to areas determined to be socially and biologically suitable for grizzlies.

Even within its own framework, the EIS ignores an obvious alternative (looking at a larger geographic area, but with less strict standards and guidelines than analyzed in Alternative 4).

Appellants requested an alternative that would protect a larger area of grizzly habitat, but would not contain some of the strict provisions of Alternative 4 that make Alternative 4 so unpalatable to some publics.

Popularity or “palatability” with the public is not the reason to create alternatives. Alternatives are the heart of the analysis. The FEIS should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decision-maker and the public (40 CFR 1502.14). In addition, alternatives should address significant issues (40 CFR 1501.2 (c)).

Alternative 5 was initially considered, but dismissed from further consideration. It proposed protocols similar to Alternative 2, but with less restrictive habitat direction for areas outside the PCA, similar to Alternative 4. Alternative 5 would seem to be the “weak-protection/large area alternative requested by the Appellants. A complete analysis of Alternative 5 was unnecessary because the range of effects would have been considered in Alternatives 2 and 4 (FEIS, p. 46).

Therefore, the “obvious alternative” was not ignored because its effects were considered in the detailed effects analysis of Alternatives 2 and 4 (FSH 1909.15 – 65.12; CEQ 40 Most Asked Question, No. 29b).

The EIS does not consider any alternative that would establish road density standards for non-secure habitat.

Please see the response to Appeal Issues 3 and 4 for a discussion regarding road density standards for non-secure habitat.

The EIS only considers alternatives that implement the habitat standards if the population is delisted.

The purpose and need for the proposal is to ensure the adequacy of regulatory mechanisms for grizzly habitat protection upon delisting as identified in the Recovery Plan (FEIS, p. 9). As stated in the response to Appeal Issue 8, defining the ‘Purpose and Need’ is the responsibility of the agency and must follow regulation and policy. An agency has considerable discretion to define the purpose and need for a project (*Westlands Water District v. United States Department of the Interior*, 376 F.3d 853 9th Cir. 2004). Project alternatives derive from the purpose and need statements.

Since the purpose and need was written to ensure that regulatory mechanisms are in place upon delisting, it is appropriate for the Agency to use the delisting process as a trigger to implement the decision.

In conclusion, a reasonable range of alternatives was provided in the FEIS. There is a logical connection between the identified significant issues and the development of the alternatives that meet the project's stated purpose and need.

APPEAL ISSUE 2: The Forest Service's assumption that Information and Education (I&E) efforts will be implemented is unjustified. (50)

RESPONSE: NEPA requires that the agency take a hard look at the environmental impacts of the alternatives including the proposed action (40 CFR 1502.16).

It is evident from a record review that I&E has been occurring and will continue to occur under this decision. Recreation activities and grizzly/human interactions have been monitored and evaluated over the last 25 years by the various land management agencies, research scientists, the Interagency Grizzly Bear Committee (IGBC), and non-governmental organizations. Particular efforts deemed effective in managing grizzly/human interactions are:

- I&E regarding recreating and living in bear country.
- Ensuring that unnatural food sources are secure from bear use.
- Limiting human development and access within bear areas.
- Responding to grizzly bear/human conflicts (ROD, p. 18).

Substantial information and educational materials such as pamphlets, brochures, signs, videos, and programs have been provided to the public at all Greater Yellowstone Area (GYA) Forest Service offices. Signs and brochures are available at campgrounds, trailheads, dispersed recreation sites, and picnic areas. Forests contributed financing for the production of the educational film "Living in Grizzly Country." Forests have cooperated with state wildlife management agencies and other cooperating institutions and individuals in giving "Living in Bear Country Workshops," which include bear identification, safe camping, hiking, hunting, and working procedures to use in bear country, and the proper use of bear deterrent pepper spray. Wilderness rangers and backcountry patrols have been used to inform, educate and monitor the public on food storage. Field patrols have been used during hunting seasons to reduce hunter-caused conflicts and grizzly mortalities (FEIS, p. 4).

The decision reflects the importance of continued I&E activities. Food storage orders and clauses in special use permits have been effective in solving many conflict issues at developed sites. Alternative 2-Modified includes direction for continuing these efforts inside the PCA. Bear populations have recovered with the existing level of developed sites and the number of bears continues to increase (ROD, p. 15). The decision also emphasizes proper sanitation techniques and other forms of I&E and working with local governments and other agencies (ROD, p. 18).

It is clear that the I&E efforts have been occurring and will continue to occur under this decision. As discussed in the response to Issue 13, the Forest Service will continue to work cooperatively with other agencies including participation in the Yellowstone Grizzly Conservation Committee (YGCC), where activities include identifying management, research and financial needs to successfully implement the Strategy. Based on past history as discussed above and activities planned after the delisting, the assumption in the ROD that Information and Education efforts will be implemented is justified.

ROADS AND TRAILS

APPEAL ISSUE 3: The Forest Service fails to justify its decision to weaken roads standards. (50)

RESPONSE: NEPA requires that the agency take a hard look at the environmental impacts of the alternatives including the proposed action (40 CFR 1502.16). In 2005, the Department revised regulations regarding travel management and off-highway vehicle use on National Forest System lands (36 CFR Parts 212, 251, 261 and 295). The new travel management regulations require each National Forest to clearly designate all authorized roads, trails, and areas for motor vehicle use. The use of motor vehicles off designated routes is prohibited. Unauthorized routes may not be added to the designated travel system without completing the NEPA process (FEIS, p. 190).

The U.S. Fish and Wildlife Service (FWS) reviewed the status of the grizzly population under the Endangered Species Act (ESA) and the Proposed Rule to delist. The Status Review determined that adequate regulatory mechanisms are in place to delist if the habitat standards in the Strategy are incorporated into the current forest plans for each of the six GYA national forests (ROD, p. 2). Road management is addressed on all National Forest System lands in the 2005 Travel Management Rule.

The decision addresses road management and the effects on grizzly habitat by inclusion and monitoring of the secure habitat standard and motorized access (ROD, pp. 5, 10). Monitoring for secure habitat and motorized access inside the PCA includes monitoring and comparison to the 1998 baseline, and annually submitting for inclusion in the Interagency Grizzly Bear Study Team Annual Report items including: secure habitat, open motorized access route density greater than one mile per square mile, and total motorized access route density greater than two miles per square mile in each Bear Management Unit subunit on the national forests (ROD, p. 6). The overall goal for habitat management in the PCA is to maintain or improve habitat conditions as of 1998 because the grizzly population had achieved all demographic recovery goals by 1998 (Strategy, pp. 38-39).

The selected alternative will not change access, current use, traffic patterns, and road standards from current management (ROD, p. 22). The Forest Plan direction for Transportation Management in the PCA shows that most GYE forests have not adopted road density standards. The Beaverhead has not adopted road density standards because motorized use is prohibited throughout their PCA. The Bridger-Teton has variable road density management prescriptions

from 0.25 to 1.25 miles per square mile on some of the non-wilderness areas in the PCA and does not contain a specific forest-wide or PCA access standard. The Custer discourages road development in the non-wilderness portion of the PCA and has a mineral management area standard that states, “road densities will average about two miles per square mile during initial development. Secondary and tertiary recovery could increase this mileage to five or six miles per square mile.” The Gallatin Forest Plan precludes increasing open motorized access route density (OMARD) or total motorized access route density (TMARD) from the current level (1995), but does not list any particular density standard. The Shoshone plan has a standard for no net increase in roads, but does not include any specific road density standard. The Targhee is the only forest in the Greater Yellowstone Ecosystem (GYE) to adopt clear and consistent standards to achieve specific maximum road densities in bear management units (FEIS, pp. 200-201). Thus, road density standards in the six national forests are variable.

The decision outlines direction for sustaining grizzly habitat, including direction on road management. It is programmatic and guides the implementation of site-specific projects that will tier to forest plans. Additional NEPA compliance will be required on a site-specific project basis (ROD, p. 4). The Forest Service Roads Analysis process requires that the Forest Service examine road networks. This policy is complementary to access management objectives in grizzly bear habitat and will continue to be used in access management decisions (FEIS, p. 259).

The Strategy and FEIS contain ample and consistent direction regarding baseline road and trail identification, monitoring, and reporting. The decision does not weaken road standards and will not change access. As stated above, the decision is programmatic and guides the implementation of site-specific projects that will tier to forest plans, which will require additional NEPA analysis.

APPEAL ISSUE 4: The Forest Service fails to include accurate baseline data of current conditions, especially regarding roads and trails. (50)

RESPONSE: NEPA requires that that an EIS succinctly describe the environment of the area to be affected, which establishes the baseline conditions. Data and analyses in a statement shall be commensurate with the importance of the impact, with less important material summarized, consolidated, or simply referenced (40 CFR 1502.15).

In Chapter 3 of the FEIS (Affected Environment and Environmental Consequences), data sources for acreage information are presented in the tables, figures, and maps and were generated from a variety of sources. Each forest provided data sets about various activities on the six GYA forests. Data sets have varying degrees of accuracy and the acreage figures from the various sources do not match exactly. However, when added, all acres (regardless of the source) are within 1% of the official land status (FEIS, pp. 63-274).

The 1998 habitat baseline is considered adequate for grizzly bear management because by 1998 all demographic recovery criteria were met and the population was increasing in size and distribution (FEIS, p. 30). The level of habitat security and other habitat conditions in 1998 provided the base environment that led to the growth of the bear population (FEIS, p. 329).

The 1998 baseline of habitat effectiveness and motorized access route densities allowed for grizzly populations to expand and reach recovery. The only model of habitat quality and effectiveness developed is the Cumulative Effects Model (CEM). The IGBST has a contract with Montana State University to evaluate the model's content and a funded project to link components of demographics (reproduction and survival) to output from the CEM in an effort to determine if links exist. A section of the FEIS discusses what is known regarding the relationships between habitat and grizzly bear demographics. Access management improvements for the Gallatin National Forest subunits are being addressed through a travel management planning process (FEIS, p. 336).

Implementation of the secure habitat standard requires comparison to baseline data established in 1998. The Forest Service identified, analyzed, and reported road conditions by bear management subunit, for each forest in the GYE. These conditions were incorporated in previous recovery plans and conservation strategies and are reiterated in the analysis (FEIS, pp. 197-202).

The decision outlines direction for sustaining grizzly bear habitat, including direction on road management. As a programmatic document, the FEIS contains ample and consistent direction regarding baseline road and trail identification, monitoring, and reporting.

PUBLIC PARTICIPATION PROCESS

APPEAL ISSUE 5: The FEIS misrepresents public sentiment regarding the amendment. (50, 51)

RESPONSE: NEPA requires diligent efforts to involve the public in preparing and implementing NEPA procedures; providing public notice of NEPA-related hearings, public meetings, and the availability of environmental documents so as to inform those who may be interested or affected; holding or sponsoring public hearings or public meetings whenever appropriate or in accordance with statutory requirements applicable to the agency; soliciting appropriate information from the public; explaining availability of information on NEPA documents; and making NEPA documents, comments received, and related documents available to the public pursuant to provisions of the Freedom of Information Act (FOIA) (40 CFR 1506.6 (a-f)). Further, the agency is required to assess and consider comments and to respond by one or more stated means and to state its response in the FEIS (40 CFR 1503.4 (a) (1) to (5)).

It is important to recognize that the consideration of public comment is not a vote-counting process in which the outcome is determined by majority opinion. It is the appropriateness, specificity, and factual accuracy of comment content that serves to provide the basis for modifications to planning documents and decisions. Because respondents are self-selected, they do not constitute a random or representative public sample. Every substantive comment and suggestion has value, whether expressed by one respondent or many. All input is read and evaluated and the team attempts to capture all relevant public concerns in the analysis process (Summary of Public Comment, DEIS, p. A-1). The Forest Service does not count the numbers of respondents as numbers of votes, but rather considers the content of responses in modifying or

adding alternatives (FEIS, p. 295). Form letters are given full consideration and used in the document for sample statements if the information presented is noteworthy, carries scientific or other pertinent data, or otherwise represents some element that can contribute to the analysis. Many forms were statements of support or denial with either no requested action or rationale (Steering Team Briefing Paper, 2/15-16/2005).

The responsible officials evidenced that they were well informed about the number of comments received when they noted thanks to the more than the 55,000 people, who provided comments during the development of the amendment (ROD, p. vi).

Appellants suggest that the Forest Service should have assigned percentages to the types of comments received such as “one out of ten comments supported Alternative 2 as the best option.” The content analysis deliberately avoided this approach in order to place the emphasis on the substance of the comments (DEIS, p. A-1). While the summary of the content analysis may not reflect the sentiments of the appellants, it does accurately portray the range of opinions and comments received (FEIS, p. 290; ROD, p. 28).

The project record shows that the public was encouraged to participate and played an important role in developing the amendment to the forest plans and that this involvement took place throughout the entire plan amendment process (ROD, p. 27).

The responsible officials balanced key issues and weighted them within the capabilities of the land, and concluded that Alternative 2-Modified provides a balance between competing demands expressed by many people: a sustainable, recovered grizzly bear population in the GYA balanced with public enjoyment and economic reliance on these public lands (ROD, p. 4).

APPEAL ISSUE 6: The delisting process gives precedence to pro-development interests, and fails to provide a meaningful way to engage citizens with differing perspectives. (50)

RESPONSE: Agencies are required to make “diligent efforts” to involve the public by providing notice of availability of environmental documents, holding or sponsoring public meetings and hearings when appropriate and asking for input from the public (40 CFR Sec 1506.6).

The scoping period began when a Notice of Intent (NOI) to prepare an EIS was published in the Federal Register on July 16, 2003. The NOI asked for public comment on the proposal from July 16 through August 15, 2003. On August 12, 2003, a revised NOI was published, extending the comment period to September 2, 2003 (ROD, p. 27).

Additionally, as part of the public involvement process, a description of the proposed action was:

- Mailed to 3,577 individuals, organizations, and agencies in July 2003
- Published in news releases in local GYA newspapers
- Posted on the Web at:
http://www.fs.fed.us/r1/wildlife/igbc/Subcommittee/yes/YEamend/gb_internet.htm

- Listed on each forest's quarterly Schedule of Proposed Actions report beginning in the summer of 2003

Briefings were held with individuals and organizations, as requested. An email address was established to receive comments electronically. Nearly 55,000 responses were received, including 396 original responses and 54,505 organized campaign responses (ROD, p. 27).

The Notice of Availability of the DEIS was published in the Federal Register on August 13, 2004. The DEIS was available on the Web and was mailed to 872 individuals, organizations, and agencies. Five open houses were held throughout the GYA. The 90-day comment period ended November 12, 2004. The Forest Service received 675 original responses and 44,984 organized campaign responses (ROD, p. 27).

The IGBST is the science team focused on research and monitoring of the Yellowstone grizzly population and its habitat. It is comprised of individuals from various state and federal agencies in the GYA. Individuals from non-governmental organizations have not been included, partly because of the advisory nature of the study team to federal land management agencies. The Federal Advisory Committee Act of 1972 requires such committees to be comprised of government agency employees unless legislatively authorized to include non-agency members (FEIS, p. 296). Collaborative processes, such as suggested by the appellants and demonstrated by the IGBST, are only one valuable form of involving the public.

Not only did the Forest Service provide many as well as diverse opportunities for the public to be involved in the process, it met the statutory requirements of 40 CFR 1500. While the management direction in the amendment provides a firm foundation for grizzly management, the Forest Service recognizes that new information is constantly being developed. Therefore, the amendment embraces adaptive management so that as conditions change, so will management direction. When the future dictates change, the public will have an opportunity to be involved in the collaborative process (ROD, p. A-2).

APPEAL ISSUE 7: The Forest Services fails to accurately reflect the truth about public opinion in the comments received in the EIS process. (50)

RESPONSE: See Response 5.

APPEAL ISSUE 8: The selected alternative was predetermined because of the Forest Service's commitment to implement the Conservation Strategy (Strategy). (51)

RESPONSE: An EIS must briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action (40 CFR 1502.13). Defining the 'Purpose and Need' is the responsibility of the agency and must follow regulation and policy. Project alternatives derive from the purpose and need statements. An agency has considerable discretion to define the purpose and need for a project (*Westlands Water District v. United States Department of the Interior*, 376 F.3d 853 9th Cir. 2004).

One of the purposes of the proposal is to update the management and monitoring of grizzly habitat to incorporate interagency agreements and recommendations that are described in the Strategy (FEIS, p. 8). The selected Alternative 2-Modified meets the requirements of the Strategy. Alternatives 2, 3, and 4 also meet the requirements of the Strategy, thus any could have been selected. The purpose of Alternative 2 is to implement the appropriate habitat standards and monitoring protocols as documented in the Strategy. Alternative 3 was developed in response to comments suggesting the Forest Service provide more restrictive habitat protection for the grizzly bear inside the PCA, and Alternative 4 extends the grizzly bear habitat protection beyond the Primary Strategy.

Evidence that the decision was not pre-determined is reflected in the change of the preferred alternative between the DEIS and the FEIS. Alternative 2-Modified represents a substantial change from the draft to the FEIS and was developed in response to comments received on the DEIS. In response to a key public concern about the lack of direction and guidance outside the PCA, the Forest Service modified Alternative 2 to add additional direction and guidance for management of the grizzly, including a goal for accommodating the bears outside the PCA (FEIS, p. 34). Any of the alternatives could have been selected and met the purpose and need (ROD, pp. 30-31).

There is no evidence that the selected alternative was predetermined due to the commitment to implement the Strategy. The preferred alternative was modified between the DEIS and the EIS due to public comments received after the DEIS was published. Additionally, three of the alternatives considered were also consistent with implementation of the Strategy.

SOCIAL/ECONOMIC

APPEAL ISSUE 9: The FEIS fails to evaluate the impacts of current human population growth and private land development on bears in adjacent forest lands. (50)

RESPONSE: Indirect effects are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems (40 CFR 1508.8b). The EIS must identify all the indirect effects that are known, and make a good faith effort to explain the effects that are not known but are "reasonably foreseeable" (FSH 1909.15-93-1 65.12; CEQ 40 Most Asked Questions). Cumulative impacts result from the incremental effect of the proposed action plus other past, present, or reasonably foreseeable future actions (40 CFR 1507.7). The analysis of the potential impacts must be supported by credible scientific evidence, not based on pure conjecture, and be within the rule of reason (40 CFR 1502.22).

The Forest Service lacks legal authority over private lands, but is required to evaluate the effects of activities on lands adjacent to national forests regardless of the agency or person who undertakes the activity (40 CFR 1508.7).

Impacts to grizzly bears from activities on private land were considered in the FEIS primarily under cumulative impacts (FEIS, pp. 227, 259-260). The analysis recognized that development on adjacent private lands could have a great impact on grizzlies including higher mortality (FEIS, p. 259). The Strategy also acknowledges and discloses these impacts (Strategy, p. 55). However, even with a high level of conflict and mortality on private lands, the grizzly population has reached recovery levels and continues to grow (FEIS, p. 259).

Population projections to 2010 are presented and discussed (FEIS, pp. 227-229). Population change is generally considered a foundation for other changes, such as land use and development. A study on the dynamics of GYA ranchlands offers numerous insights on the future of private land ownership and land use in the area (Travis, et al 2002; FEIS, p. 260). Future development scenarios using a computer simulation model to predict the impact of various development strategies were also considered (*Yellowstone 2020*, Sonoran Institute and the University of Montana, Patricia Gude). Impacts on bears resulting from these reasonably foreseeable changes in population and private land development were discussed at length (FEIS, pp. 259-260).

Recognizing the uncertainty inherent in forecasting private land development, the FEIS cites the Strategy as a way to proceed: “As private lands are developed and as secure habitat on private lands declines, state and federal agencies will work together to explore options that address impacts from private land development” (FEIS, p. 26; Strategy, p. 55).

The analysis appropriately evaluates the impacts of current human population growth and private land development on grizzly bears in adjacent forestlands, and through adaptive management practices will change management direction as conditions warrant.

APPEAL ISSUE 10: The Forest Service mistakenly assumes that social acceptance will be built for grizzlies if bears are delisted and minimal protections are applied. (50)

RESPONSE: Delisting is the responsibility of the FWS and, therefore, is not part of this decision (FEIS, p. 8). However, NEPA requires that the agency take a hard look at the environmental impacts of the alternatives including the proposed action (40 CFR 1502.16).

The FEIS discusses social acceptance for grizzly bears in two main sections and references state plans and the Strategy, which outline social effects and ways to build acceptance for the bears (FEIS, pp. 118-124; 234-237).

“The future of the Yellowstone grizzly bear lies in our ability to learn to coexist with the grizzly and to accept this animal as a cohabitant of the land” (Strategy For The GYA, 2003, p. 61). A myriad of activities are listed in the Strategy, which are aimed at helping people learn to coexist with bears. A few of the activities include: developing a coordinated educational campaign that cultivates an appreciation and value of the grizzly, conducting seminars for target groups such as hunters and back-country recreationists, news releases, mailings, state and federal volunteer programs will be encouraged to identify and provide opportunities for public participation in

grizzly information outreach and management, school education programs, and citizens will be encouraged to participate in land management decisions at the project level on state and federal lands affecting bear habitat and management (Strategy, p. 61).

The management plan for Montana mentions that societal acceptance of grizzlies is based on the measure of faith people have in managers and that the acceptance is alterable. The State plans to employ an adaptive learning process to develop innovative, on-the-ground management. It is believed that grizzly conservation can be integrated with broad social goals, that public faith in management can be enhanced and that human tolerance of the bears can be increased. This approach has been successful in northwestern Montana along the Rocky Mountain front, where bear population has increased and reoccupied habitats that were not habituated for decades (*Grizzly Bear Management Plan for Southwestern Montana*, Montana Fish, Wildlife & Parks, 2002-2012, p. 4).

In 2001, the State of Wyoming conducted a phone survey during the development of the Wyoming Grizzly Bear Management Plan, and, as expected, encountered varying attitudes toward the grizzly (WY Grizzly Bear Occupancy Guidelines (WY Guidelines), 7/15/05). The plans are to continue outreach, education and to assist the federal agencies in preventing and minimizing human-bear conflicts in the ecosystems where grizzlies exist. The Strategy and WY Guidelines outline specific programs that will be used to achieve these objectives (WY Guidelines, 7/15/05, p. 9).

The plan developed for Idaho stresses maintaining existing resource management and recreational use and developing a process so that local publics can respond to problems with management actions. By maintaining existing uses, people will feel less threatened both economically and from a lifestyle perspective. The key to successful management of grizzly bears lies in bears utilizing lands that are not managed solely for them, but in which their needs are considered along with other uses (*Grizzly Bear Management Plan*, State of Idaho, 3/02, p. 8).

Knowledge about bears and acceptance of grizzly bears by people and groups that live, work, and recreate in grizzly bear country are key to the long-term conservation of a healthy grizzly bear population. Continuing specific outreach messages and techniques tailored to the needs of these groups is essential. Some of these groups include landowners, mining industry, timber industry, firewood gatherers, ranchers, outfitters, anglers, hunters, front country visitors, backcountry visitors, summer homeowners, local business owners, developers, county planners, and school children (Strategy, p. 62).

In Idaho's 2002 management plan, the Governors of Idaho, Montana, and Wyoming recommended that the Yellowstone Grizzly Bear Committee be expanded to include nine non-voting, governor-appointed members in order to provide local citizen perspectives to management (*Grizzly Bear Management Plan*, State of Idaho, 3/02, p. 8).

While delisting is the responsibility of the FWS and is not part of this decision, the FEIS does make reasoned conclusions about the trends of social acceptance for the bears in each alternative. As demonstrated throughout the discussion in various plans and studies, the analysis relied on social science research, surveys, and other work to document the effects of the human-bear

dimension, noting that there are numerous plans in place to develop strategies to minimize human-bear conflict.

APPEAL ISSUE 11: The FEIS fails to look at the effects of Wyoming laws banning grizzlies in four counties, and to critically evaluate whether or not Forest Service efforts to placate these counties will be effective. (50)

RESPONSE: NEPA requires that the agency take a hard look at the environmental impacts of the alternatives including the proposed action (40 CFR 1502.16).

The FEIS identified social and economic effects as significant issues. It acknowledged that some counties have passed resolutions banning the grizzly because of social and economic issues such as effects on income, employment, and lifestyle changes related to livestock operation, ranches, timber industry, and recreation (FEIS, p. 17). These issues are analyzed in the Social Environment and Economic Environment sections (FEIS, pp. 224-256).

While it is acknowledged that some of the communities will not favor additional grizzly bear management guidance outside the PCA, the guidance is responsive to managing bear habitat where bears are already present. Alternative 2-Modified is recognized as doing the best job of managing habitat for the bears while ensuring close coordination with the states and local communities. The ROD states: “We recognize the importance of public acceptance of grizzly bears as a key component in the ultimate success in perpetuating the bear’s recovery, public safety, and ease to which agencies can effectively manage for the bear. A continued dialogue with the public, including local communities and environmental organizations, will be essential as grizzlies occupy lands outside the PCA. Alternative 2-Modified includes guidance outside the PCA based upon the states’ definitions of socially acceptable and biologically suitable lands for the grizzly bear” (ROD, p. 20).

Each state has signed a Memorandum of Understanding agreeing to implement the Strategy and has developed grizzly bear plans. The plans are listed and summarized in the FEIS (pp. 6-7).

The FWS has determined that there is adequate habitat and adequate regulatory mechanisms to continue supporting a viable grizzly bear population (Federal Register, 11/17/05, p. 69872).

“In addition to the Strategy, National Park Superintendent’s Plans, USFS Plans, and State grizzly bear management plans, there are more than seventy State and Federal laws, regulations, rules, and guidelines currently in place. We are confident that these documents provide an adequate regulatory framework within which the Yellowstone grizzly bear population will continue to experience population stability, as well as protocols for future management, I&E programs, and monitoring. In summary, these documents provide reasonable assurance to the Service and regulatory certainty that potential future threats to the Yellowstone grizzly bear population will not jeopardize its long-term viability” (Federal Register, 11/17/05, pp. 69877-69880).

The FEIS acknowledged that some counties have passed resolutions banning the presence of grizzly bears because of social and economic concerns. The responsible officials also recognized

the importance of public acceptance of grizzly bears as a key component in the ultimate success in perpetuating the bear's recovery. The FWS stated the belief that there is adequate habitat and regulatory mechanisms to continue supporting a viable grizzly population. The FEIS appropriately completed an effects analysis on social and the related economic acceptance.

APPEAL ISSUE 12: The Forest Service fails to fairly and objectively evaluate the economic impacts of grizzly bear protections. (50)

RESPONSE: NEPA regulations, and the Forest Service Manuals (FSM) and FSH all give guidance on how and when to consider the impacts of Forest Service proposed actions on the economic aspect of the human environment (40 CFR 1500, FSM 1900-92-2, Chapter 1970, FSM 1950 and FSH 1909.15).

Economic considerations are discussed in the FEIS (pp. 17, 22, 61, 62, 159-160, 171, 174, 192-193, 195-197, 225-227, 231, 235-237, 242-254, 271).

The analysis relied on numerous publications for the economic analysis in the FEIS, most of which are cited in "Appendix H- Sources Cited" (FEIS, pp. 462-477).

Changes in recreation and tourism are difficult to estimate in relation to grizzly presence or absence. No data or studies are available that indicate recreation and tourism would decline or increase because bears are present in an area. According to a survey of Wyoming residents conducted by Wyoming Game and Fish, there is an almost equal division between Wyoming residents who think they would continue to use (48%) and those residents who would discontinue using (44%) the outdoor areas where they currently recreate in those areas occupied by grizzly bears" (FEIS, Section 3.13.2, p. 247). "Effects on communities below the county level are also difficult to estimate" (FEIS, p. 244).

The responsible officials state in the ROD: "Our decision strikes a balance that sustains a recovered grizzly bear population in the GYA, while retaining public enjoyment and economic uses of these public lands" (ROD, p. vi). They recognize "the public highly values their opportunities to recreate and enjoy wildlife viewing" and that Alternative 2- Modified will continue "the allure that attracts recreation visitors" (ROD, p. 18). They also discuss and summarize the "social and economic impacts on local communities" (ROD, p. 20).

The appellants also contend that the Forest Service ignored "other kinds of values." The FEIS, Chapter 5, addresses these values adequately in non-monetary terms.

The Forest Service adequately analyzed impacts in the FEIS.

APPEAL ISSUE 13: The Forest Service failed to assess the implications of the proposed budget for implementation of the plan. (50)

RESPONSE: NEPA requires that the agency take a hard look at the environmental impacts of the alternatives including the proposed action (40 CFR 1502.16).

The FEIS discloses costs for monitoring, implementation, restricting road access, law enforcement, and sanitation for the various alternatives. The FEIS is not a mechanism to secure funding (FEIS, p. 325). Budgets in the Forest Service vary year to year and are funded by Congress. It would be speculative to analyze the implication of not receiving the funding to implement the amendment. However, interagency monitoring is in place to assess the success of the amendment (ROD, pp. 24-25).

Under all alternatives, the Forest Service would continue to work cooperatively with other agencies in the management of the grizzly bear and its habitat. Participation in YGCC activities includes identifying management, research, and financial needs to successfully implement the Strategy (FEIS, pp. 254-256). The Strategy documents the regulatory and legal authorities, policies, and management and monitoring programs that exist to maintain a recovered grizzly population (ROD, p. 6). As part of the YGCC, the six Forest Supervisors have agreed to adapt to changing conditions and new science. They have agreed to take part in revising or amending the Strategy subject to public review and comment (ROD, p. 24).

Participation in the YGCC related to adaptive management includes ensuring population and habitat data is collected annually and evaluated to assess the current status of the population, sharing information and implementing management actions, identifying management, research, and financial needs, and implementing a biology and monitoring review as necessary and submitting a petition for relisting, if appropriate (ROD, p. 24).

The amendment does discuss the budget needed for implementation of the alternatives. It is outside the scope of the FEIS to analyze the implication of not receiving the funding to implement the amendment. However, the Forest Service will continue to work cooperatively with other agencies including participation in the YGCC, which includes an evaluation of financial needs. The YGCC will also review and submit a petition for relisting, if appropriate.

APPEAL ISSUE 14: The ROD and the FEIS rely on adaptive management practices to replace the current ESA approach—practices which have no proven track record. (50)

RESPONSE: Forest Service policy directs the amending of forest plans when conditions and trends of social, economic, and ecological systems point to a need for change (FSH 1909.12 Section 22). Agencies may provide for monitoring to assure that their decisions are carried out and should do so in important cases (40 CFR 1505.3). A monitoring and enforcement program shall be adopted and summarized where applicable for any mitigation (40 CFR 1505.2c).

While the Forest Service believes that direction in the amendment provides a firm foundation for grizzly habitat management, it also recognizes that habitat management is dynamic and management direction must change as do conditions (ROD, p. A-2). The Strategy recognizes “the best way to ensure a healthy population of grizzly bears is to monitor population and habitat closely and respond when necessary with adaptive management” (Strategy for the Grizzly Bear

in the GYA, pp. 20; 66-67, (citing Walters and Holling 1990)). Agencies have committed to be responsive to the needs of the grizzly bear through adaptive management actions based on results of annual population and habitat monitoring (Federal Register, 11/17/05, p. 69882). Also, see response to appeal issue 13.

The six Forest Supervisors are members of the Yellowstone Grizzly Coordinating Committee and, as part of that committee, the Strategy will be revised or amended based on biological data and the best available science (ROD, p. 24).

Monitoring requirements and adaptive management are discussed throughout the FEIS and ROD. As part of adaptive management, the Forest Service recognizes that its management direction may change as a result of monitoring and evaluation or amending the Strategy, which strategy suggests the best way to ensure a healthy population of grizzly bears is to respond with adaptive management.

APPEAL ISSUE 15: The Forest Service plan failed to include mechanisms to correct problems as they arise. (50)

RESPONSE: See Response to appeal issue 14.

WILDLIFE

APPEAL ISSUE 16: The selected amendment will not sufficiently protect bear habitat. (51)

RESPONSE: Regulations direct the Forest Service to insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements (40 CFR 1502.24). NEPA requires that the agency take a hard look at the environmental impacts of the alternatives including the proposed action (40 CFR 1502.16).

The appellants identify this broader issue based on several specific comments included in other issues, therefore, please see the specific responses for elaboration on the broader question of bear habitat:

- The ROD fails to ensure necessary improvement in degraded bear management sub-units on the Gallatin Forest (See Response 18).
- The PCA was never intended to provide sufficient habitat for 500-600 bears (See Response 21).
- The standards and guidelines that apply inside the PCA do not protect the bear's habitat (See Response 22).
- The standards and guidelines that apply outside the PCA do not protect the bear's habitat (Response 24).
- The Forest Service habitat standards are erroneously based on an allegedly increasing and recovered Yellowstone grizzly bear population (Response 26).

- The amendment's habitat standards depart from established habitat access standards (Response 35).

APPEAL ISSUE 17: The FEIS fails to evaluate the foreseeable threats to grizzly bear habitat. The FEIS primarily focuses on past, rather than future trends and their implications. These threats include:

- Indirect effects of private land development (See Response 9);
- The rapid increase in mountain pine beetle infestation (See Response 28);
- Direct and indirect impacts of oil and gas development (See Response 30);
- Mounting ATV and late snowmobile uses (See Response 31); and
- The likelihood of an increase across the ecosystem in timber cutting levels. (50)

RESPONSE: Cumulative impacts result from the incremental effect of the proposed action plus other past, present, or reasonably foreseeable future actions (40 CFR 1507.7).

The EIS addresses the cumulative effects of logging on grizzly bears. Road construction and associated timber harvest have been limited in recent years and most of the short-term secure habitat is managed under direction in existing forest plans that limits the development of new motorized access routes. This direction will continue. Logging and reaction activities would continue at 1998 levels (FEIS, p. 263).

Figure 50 displays the acres of timber harvested from 1986 to 2002 for areas both inside and outside the PCA for each of the national forests. The average acres treated per year by timber harvesting inside and outside the PCA are generally on a downward trend (FEIS, p. 156).

The analysis indicates that almost all harvesting activities that have taken place in the last 15 years could still take place within the secure habitat standard. During the last decade, the rate of road decommissioning has been greater than the rate of road construction both inside and outside the PCA, indicating the past level of harvesting activities would be consistent with the 1% temporary change in secure habitat (ROD, p. 21).

Within the suitable timber base and based on historical harvest rates in the past 17 years, about 6% of the area would be treated in one decade (about 98,000 acres out of the 1,500,000 acres in the suitable timber base). This can help improve conditions for some of the key forest types, such as aspen and lodgepole pine (ROD, p. 22).

The FEIS and ROD addressed cumulative effects of timber harvesting on grizzly bear habitat based on well documented past timber sale activities and their comparison to the secure habitat standard. Present and future effects were estimated based on the expected harvest trends and the best available information. Past logging activities would have been consistent with the secure habitat standard and all future activities within the PCA will be consistent with the secure habitat standard.

“Similarly, the average acres treated per year by timber harvest outside the PCA have been on a downward trend (Figure 50). Road construction and associated timber harvest have been limited in recent years in part due to the roadless policies in place from 2000 through 2005 (FEIS, p. 81).

Vegetation, fuels, and access timber management

Since implementation of the IGBG, vegetation management has been limited to those activities that did not adversely affect grizzly bears. For all six GYA national forests, nearly 10,000 acres have been treated each year through timber harvesting since 1986; although in the three-year period from 2000 through 2002, only 1,400 acres were treated annually. The 10,000 acres represent 0.1% of the area of national forest system lands in the GYA and 1% of the suitable acres. Review of five-year vegetation treatment plans indicates this number may have increased from the past three years, but is expected to be within the 17-year average, with vegetation treatment expected to be around 5,000 to 10,000 acres per year in order to address insect, disease, and hazardous fuels concerns (ROD, p. 21).

Targhee National Forest

The Targhee has the most land suitable for timber harvest in the PCA. During the 1980s, harvest levels were high to address the mountain pine beetle epidemic. The Forest is harvesting much less timber in recent years—from 1,600 acres per year down to around 100 acres per year inside the PCA. Timber harvest is allowed only under conditions that maintain the grizzly habitat as first priority. Grizzly bear coordination requirements may not make it feasible to remove the timber (FEIS, pp. 153-154).

Based on direction in the National Fire Plan, the Healthy Forests Initiative, and the Healthy Forests Restoration Act of 2003, the Forest Service has initiated proposals for maintaining or restoring healthy forests and lands by reducing heavy fuel loading and insect and disease risks. Management of vegetation and reduction of fuel loading is generally emphasized around wildland urban interface areas. This initiative has the potential to increase timber harvest over past levels in some areas. All projects would be subject to the habitat standards identified for each alternative. Because most harvest activities would occur near structures, which is not considered important grizzly bear habitat, impacts to the bear would be minimal. Standards for grizzly bear cover were not developed for the Strategy or for this proposal because changes in the distribution and quantity and quality of cover are not necessarily detrimental to grizzly bears (FEIS, pp. 258-259).

APPEAL ISSUE 18: The ROD fails to ensure necessary improvement in degraded bear management sub-units on the Gallatin Forest. (50)

RESPONSE: NEPA requires that the agency take a hard look at the environmental impacts of the alternatives including the proposed action (40 CFR 1502.16).

The purpose of the Forest Plan Amendment for Grizzly Bear Habitat Conservation for the GYA forests (2006) is to:

- Ensure conservation of habitat to sustain the recovered Yellowstone grizzly population,

- Update the management and monitoring of grizzly bear habitat to incorporate recent interagency recommendations and agreements, as described in the Strategy,
- Improve consistency among GYA national forests in managing grizzly bear habitat, and
- Ensure the adequacy of regulatory mechanisms for grizzly habitat protection upon delisting as identified in the Recovery Plan.

The selected Alternative 2-Modified incorporates the habitat standards and monitoring protocols as documented in the Strategy, as well as additional direction and guidance for grizzly management related to livestock allotments, food storage, and accommodation of grizzly bears outside the PCA (ROD, p. 34). The percent of secure habitat within each bear management subunit must be maintained at or above levels that existed in 1998 (Strategy, p. 39). The application rules in the Strategy set governing implementation of this standard and acknowledge several subunits with the potential for improvement on the Gallatin NF - Henrys Lake #2, Gallatin #3, and Madison #2 (Strategy, pp. 43-44). These subunits were identified as needing improvement in access parameters due to low levels of secure habitat. Although the area with potential for improvement in these subunits is within the boundaries of the Gallatin, a large percentage of the OMARD and TMARD values and secures habitat loss in these subunits is due to motorized access features on private land. The Strategy recognized the Forest's efforts in facilitating land exchanges with private parties in these subunits to allow management of the roads on these private parcels and increase the secure habitat in these subunits (Strategy, p. 44). Since 2003, recent land exchanges (Gallatin #3 and Hilgard #1 subunits) on the Gallatin have been completed to improve land patterns for management of grizzly bear habitat (FEIS, p. 203). Further improvements in secure habitat in the subunits referenced above will be addressed through current travel management planning efforts on the Gallatin (DEIS, Gallatin NF Travel Management Plan).

The secure habitat standards in the Strategy were incorporated into the ROD, as were the elements to ensure necessary improvement in bear management sub-units on the Gallatin NF.

APPEAL ISSUE 19: The FEIS fails to connect population viability to habitat trends, in its assessment of risks to the future of the population. The appellants suggest that the Forest Service should develop a predictive model that ties potential habitat changes to likely demographic responses, which could be used to set thresholds and standards to trigger management responses to future changes. (50)

RESPONSE: Regulations direct agencies to “insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements. [The Agency] shall identify any methodologies used and shall make explicit reference by footnote to the scientific and other sources relied upon for conclusions in the statement” (40 CFR 1502.24).

The FEIS discusses studies that have examined the relationship of certain demographic parameters and patterns in food abundance (particularly white bark pine) (FEIS, pp. 71-72).

There is some level of uncertainty associated with the results of all studies of grizzly bears and their habitat in the GYA. Uncertainty is inherent to science (FEIS, p. 264). A habitat-based

population viability analysis has not been attempted. Although there are a number of studies linking the demographic performance of the GYA grizzly bear population to components of habitat, particularly the foods, it is difficult to estimate precisely how many bears are needed to maintain a recovered grizzly bear population and how much and what kind of habitat is required to support that population (FEIS, pp. 264-265).

The Cumulative Effects Model (CEM) was originally assumed to be a tool that could be used to determine a minimum habitat effectiveness threshold for each Bear Management Unit (BMU) and subunit in the GYA. Efforts have not been successful in determining the threshold values. The Idaho Grizzly Bear Steering Team (IGBST) currently has a contract with Montana State University to evaluate the model's content, and a funded project to link components of the demographics (reproduction and survival) to output from the model in an effort to determine if links exist (FEIS, p. 265).

The FWS has stated that there is no known way to deductively calculate minimum habitat values. Consequently, they are applying habitat standards that reflect the 1998 situation because these appeared to have supported an increasing population throughout the 1990s. Additionally, FWS developed four general habitat-based parameters to monitor and relate to population information: (1) productivity of the four major foods, (2) habitat effectiveness as measured by the CEM, (3) grizzly bear mortality numbers, locations, and causes: grizzly bear/human conflicts, nuisance bear management actions, bear/hunter conflicts, and bear/livestock conflicts and (4) development on private lands (Federal Register, 11/15/2005, p. 69858).

Grizzly mortality is almost solely attributable to grizzly bear/human conflicts with a common outcome of bear mortality by interagency bear managers or by other humans (ROD, p. 17). Alternative 2- Modified incorporates monitoring to track changes in grizzly mortality numbers, locations, and causes, and food availability and distribution, as well as an adaptive management approach that will allow changes in management to be responsive to such changes as determined necessary to sustain a recovered population (ROD, pp. A-2 to A-5).

The analysis correctly identified the methodology used relative to population viability and habitat trends and disclosed why habitat-based population viability analysis was not used.

APPEAL ISSUE 20: The EIS does not discuss the utility of "restored" secure habitat for bears. It ignores the length of time for damaged habitat to recover and does not contain a critical evaluation of the consequences of the 1% rule, which rule does not consider whether road decommissioning is effective in deterring illegal use. (51)

RESPONSE: NEPA requires that the agency take a hard look at the environmental impacts of the alternatives including the proposed action (40 CFR 1502.16).

Since 1998, all demographic recovery criteria for grizzly bear have been met, and the population has been increasing between 3% and 7% annually. The main assumption is that the levels of habitat security and other habitat conditions in 1998 provided the base environment that led to

this on-going growth of the bear population. Secure habitat changed little during the previous 10 years (FEIS, p. 30).

Within the PCA, there are 2.8 million acres of secure habitat on National Forest System lands. Of this land, 83% is secure with 87% of that considered long-term secure. Only 13% or 369,000 acres allow for management activities that may temporarily or permanently reduce the amount of secure habitat. Alternative 2-Modified allows changes in the secure habitat according to the 1% rule (FEIS, p. 103; ROD, p. 11).

The 1% rule was designed to continue the level of forest management activities that existed during the period in which the grizzly bear population reached recovery. A 1% change in secure habitat means, on average, about 2,000 acres of secure habitat could be temporarily changed in a BMU (ROD, p. 21). Even if all subunits had simultaneous projects on lands inside the PCA, which is unlikely, only 29,500 acres of secure habitat could be temporarily affected at any one time. This means that 82% of the habitat on National Forest System lands inside the PCA would always be secure (FEIS, p. 103; ROD p. 11).

All alternatives provide secure habitat for the grizzly bear both inside and outside of the PCA. Alternative 2-Modified would allow varying amounts of management activities within portions of the existing secure habitat that could temporarily or permanently decrease the amount of secure habitat. Any secure habitat affected by the 1% rule would be restored after project completion and is still considered long-term secure habitat for the analysis (FEIS, p. 101). The effects on secure habitat, including the effects of the 1% rule, are analyzed in the FEIS (pp. 101-113).

Road decommissioning will occur within one year after project completion (ROD, p. 21). One component of evaluating “restored” secure habitat is to use a biologically sound and consistent definition of what constitutes an open road and a closed road (FEIS, p. 23). The FEIS discusses approaches to ensuring that decommissioning of roads is more effective, including recontouring to original slope, placement of debris, and planting of shrubs or trees (FEIS, p. 198). These approaches are also recommended in the Recovery Plan to improve effectiveness of road decommissioning (FWS 1998, Appendix B, p. 148). Gated roads are not considered effective closures. The intent of restricting roads with permanent barriers is to effectively preclude motorized access. Monitoring secure habitat both within and outside the PCA is part of the selected alternative. Road barriers that may become ineffective in precluding motorized access would result in a decrease in secure habitat and a change from the 1998 baseline. This would be a violation of Standard 1 for secure habitat and would have to be corrected (FEIS, p. 340). In the past 17 years, there has been a net reduction of 1,000 miles of road in the GYA National Forests (FEIS, p. 198).

The Forest Service Roads Analysis process requires the Forest Service to examine their road networks and give priority to decommissioning unneeded roads. This policy is complementary to access management objectives in grizzly bear habitat (FEIS, p. 259). In addition, the Travel Management Rule requires that each national forest identify and designate the roads, trails, and areas open to motorized use (FEIS, p. 258). After each forest publishes their Motor Vehicle Use Map (MVUM), use on roads not shown on the MVUM is illegal.

Standard 1 in Alternative 2-Modified is to maintain inside the PCA the percent of secure habitat in BMU subunits at or above 1998 levels (ROD, p. 5). Temporary reductions in secure habitat is permitted, however, they are subject to specific conditions being met. The selected alternative includes direction for concentrating project activities that affect secure habitat in time and space to the extent feasible and limiting project implementation to a maximum of three years. These measures have been commonly used to minimize disturbance to grizzly bears from project activities (FEIS, p. 121). Secure habitat would be restored within one year after completion of the project (FEIS, p. 32; Strategy, Appendix A, pp. 145-149).

Evaluation and monitoring of restored secure habitat is planned. Secure habitat, OMARD and TMARD would be monitored and compared to the 1998 baseline. Because of public input on the DEIS, additional monitoring was added to Alternative 2-Modified. Outside the PCA in areas identified in state management plans as biologically suitable and socially acceptable for grizzly bear occupancy, changes in secure habitat will be monitored every two years (FEIS, pp. 44-45; 52).

The secure habitat standard in Alternative 2-Modified requires maintaining secure habitat at 1998 levels. The decision sets forth monitoring elements to measure secure habitat levels and ensure that the secure habitat component is effective.

APPEAL ISSUE 21: The PCA was never intended to provide sufficient habitat for 500-600 bears. (51)

RESPONSE: The 2005 Interagency Grizzly Bear Study Team (IGBST) report estimated the total population of grizzly bears in the GYA as 500-600, with 10-14% inhabiting areas outside the PCA (FEIS, p. 81). The population standards identified in the preferred alternative and the Strategy do not assume that the PCA alone would provide sufficient habitat for 500-600 bears. Further, the demographic recovery criteria outlined in the Recovery Plan do not include maintaining sufficient habitat within the recovery zone (now the PCA) to support 500-600 bears. Rather, the Recovery Plan identified the recovery zone/PCA as the area where grizzly bears and their habitat would be managed to achieve recovery *while recognizing that grizzly bears would occur outside the recovery zone* (ROD, p. 10). The Yellowstone grizzly population met all demographic recovery criteria under the recovery zone designation (Federal Register, 11/17/2005, pp. 69858-69859). As such, the Strategy identifies the PCA as the area adequate to sustain a recovered grizzly bear population, which does not require a minimum population of 500-600 bears, and *allows grizzly bear occupancy in biologically suitable and socially acceptable habitats*, as identified by the states outside the PCA (ROD, p. 10).

Specific population standards in the Strategy incorporate the Recovery Plan demographic targets and include an additional target of maintaining a total population of no less than 400 bears throughout the ecosystem to ensure a minimum loss of genetic diversity (FEIS, p. 93; Final Strategy 2003, pp. 26-27). Through consistency with these standards, the goal of the implementing agencies is to manage the Yellowstone grizzly population in the entire GYA at or above 500 total grizzly bears. This goal is to be pursued by meeting management objectives

inside and outside the PCA, where suitable and acceptable, as outlined in the conservation area (Strategy 2003, p. 26).

The FWS estimates there is approximately 17,774 sq. mi. of suitable grizzly bear habitat within the distinct population segment (DPS) boundaries, with the grizzly currently occupying about 68% of that suitable habitat (12,155 sq. mi.). An additional 5,619 sq. mi. of suitable habitat is currently unoccupied by grizzly bears. This should allow for the continued growth and expansion of the population within the proposed Yellowstone DPS since grizzly bears naturally recolonize themselves in the next few decades (Federal Register, 11/17/2005, p. 69870 citing Pyare, et al 2004).

There were no assumptions or goals identified in the FEIS regarding grizzly bear populations solely within the PCA. A grizzly bear population target was identified throughout the ecosystem. The assumptions used in the analysis for population demographics were appropriately identified.

APPEAL ISSUE 22: The standards and guidelines that apply inside the PCA do not protect the bear's habitat and can invoke the temporary changes exception, which allows road building in previously secure habitat. The amendment's rules with respect to livestock grazing in the PCA are also inadequate. (51) (Please see Response 29 for a livestock grazing discussion.)

RESPONSE: Standards and guidelines for the protection of grizzly habitat were developed over many years of interagency effort and public participation. The 1993 Recovery Plan established habitat criteria for the GYA and sought public input in 1999. A draft Strategy was then developed and released for public comment in 2000. Public comments from both documents, in addition to new information, were used to develop habitat standards in the final Strategy (Strategy, p. 38). A total of 18 BMUs were identified, and broken up into 40 subunits to better monitor and manage habitat (Strategy, p. 38). The BMUs approximate the lifetime size of a female's home range, whereas the subunits approximate the annual size of the home range for an adult female (Federal Register, 11/15/2005, p. 69858). Both types of units were designed to provide bears with well-distributed, quality habitat across the recovery area.

It was determined that secure habitat must be maintained at or above the levels that existed in 1998 for each subunit (Strategy, p. 39). The 1998 baseline level was chosen because several studies concluded that the Yellowstone grizzly population was increasing by 4-7% per year between 1983 and 2001. Not only did 1998 fall between those years, but also the 10 years preceding 1998 had relatively stable levels of secure habitat (Federal Register, 11/17/2005, p. 69866). Secure habitat for grizzlies supports reproduction and survival, allows natural recolonization, and has a low risk of mortality from grizzly/human conflicts (Federal Register, 11/17/2005, p. 69866).

Within the PCA, permanent changes can occur in secure habitat only if replaced with habitat of equal value in the same subunit. Replacement habitat must be in place before the project begins or as part of the project plan (Strategy, p. 39). Temporary changes to secure habitat can occur one project at a time per subunit. Active projects within a BMU must not exceed a total acreage

of 1% of the largest subunit in that BMU. The acreage that counts against the 1% limit is associated with the 500-meter buffer around any motorized access route that extends into secure habitat. Secure habitat must be restored within one year after the project is completed. All of these conditions must be met for temporary changes to occur (Strategy, p. 40).

The appellants are concerned about the effectiveness of decommissioned roads as secure habitat is restored in the PCA. Roads would be decommissioned after construction, not just gated and closed (FEIS, p. 158). Monitoring will alert land managers to problems and allow flexibility for a solution. National Forests across the GYA, over the last 17 years, have constructed approximately 400 new miles of road and decommissioned over 1400 miles, for a net reduction of over 1000 miles of road, 630 miles of which occurred inside the PCA (FEIS, p. 198).

The appellants are also concerned that the 1% loophole would likely never constrain any project, unless the roads associated with that project exceeded 29,500 acres at a time. To put these concerns in perspective, roads associated with timber harvest over the last 10 years can be used as an example. Rates of decommissioning these roads have been greater than rates of construction (both inside and outside the PCA) indicating past levels of timber harvest would be consistent with the 1% temporary change in secure habitat (FEIS, p. 158).

Within the PCA, established habitat criteria will be carefully monitored and any deviations will be reported annually (Federal Register, 11/17/2005, p. 69882). In accordance with Strategy protocol, secure habitat, road densities, developed sites, and livestock allotments will not be allowed to deviate from the 1998 baseline. Major foods, habitat value and effectiveness, and human impacts to grizzlies will be monitored as well (Federal Register, 11/17/2005, p. 69882). If monitoring reports indicate otherwise, actions by land management agencies would be taken.

Another good indicator that standards and guidelines protect bear habitat inside the PCA is that most habitats inside the PCA are at carrying capacity (FEIS, p. 118). Agencies will maintain or improve habitat conditions within subunits inside the PCA at 1998 levels, and retain options for projects to occur at that same 1998 baseline. This management strategy allowed grizzlies to achieve all demographic recovery goals by 1998 (Strategy, p. 39).

Grizzly bear habitat parameters and rules to protect habitat have evolved over time, under the guidance of dedicated resource experts and the general public. Temporary changes to secure habitat and livestock grazing impacts would be monitored carefully to ensure that habitat values and grizzly populations are not negatively impacted.

APPEAL ISSUE 23: The Forest Service underestimates the significance of habitat threats to grizzlies outside the PCA under current Forest Plans. Seventy-five percent of forest land in occupied habitat is available for timber harvest, surface occupancy for oil and gas development or suspended decision on oil and gas leasing, and road construction. There are underestimates of potential loss of habitat outside of the PCA and a thorough evaluation of the vulnerability of occupied and suitable habitat under current Forest Plans must be included in the FEIS. (50)

RESPONSE: Cumulative impacts result from the incremental effect of the proposed action plus other past, present, or reasonably foreseeable future actions (40 CFR 1507.7).

The Forest Service is aware of the threats to grizzly habitat outside the PCA under current forest plans, and analyzes the significance of these effects on both suitable and occupied habitat outside the PCA for each of the alternatives by individual forests (FEIS, pp. 106-112).

Appellant is concerned that the Forest Service has underestimated the potential loss of habitat outside the PCA. National Forest lands outside the PCA are divided into two types of habitats for grizzlies – the first is the Best Estimate of Biologically Suitable (BEBS) habitat. BEBS habitat is comprised of known suitable habitat and linkage areas. It covers 96% of the area occupied by grizzlies on National Forest System lands outside the PCA as of 2000. The second type of habitat is considered unsuitable habitat and is everything outside of BEBS. Although some of this habitat may actually be suitable for bears, the types of human use that exist strongly discourage bear occupancy (Final BA, pp. 44-45). If the amount of secure habitat available between 1990-2000, allowed bears to reach a population level of 500-550, it makes logical sense that the same amount of habitat and more is needed to maintain or increase the grizzly population today. Inside the PCA, habitat levels and projects will remain at 1998 levels. But, outside the PCA, compared to the years when the bear was increasing in population, there are approximately 3 ½ million more acres of secure habitat (2 million acres of which is long-term secure). Although it is recognized that some of the secure habitat may be lost due to project activities, such as those mentioned by the appellant, the abundance of both long and short-term secure habitat in the adjacent biologically suitable habitat would allow bear expansion into new areas. In addition, although it is generally labeled as “unsuitable” there are 800,000 acres of long-term secure habitat in the unsuitable habitat areas, which bears could use. Finally, habitats outside the PCA may be below carrying capacity, and could probably support more bears, even with the loss of some secure habitat (Final BA, p. 75).

To help evaluate the vulnerability of suitable habitat, past trends can be used to predict the future for the 1,242,000 acres of short-term secure habitat in the BEBS outside the PCA. It is expected that the number of road miles will decrease and secure habitat will increase. Since 1980, there has been a net reduction of over 1000 miles of roads, which has contributed almost 3% to the level of secure habitat in areas outside the PCA. Timber sales and associated road building have been on a downward trend, partly due to the roadless policies in place from 2000 to 2003. Although the appellant is concerned about land allocations under the Forest Plans that may threaten grizzly habitat, there are many current and draft proposals that support grizzly habitat. As forest plans are revised, many of the roadless areas are likely to remain roadless. In addition, approximately 30% of the short-term secure habitat in the BEBS outside the PCA occurs on the Shoshone National Forest, and that forest plan has a standard for no net increase in road miles. The Targhee Forest Plan has standards that allow for only small changes in road density for the 236,000 acres that occur outside the PCA in the BEBS area on their forest. The Gallatin Forest is in the draft stages of developing the EIS for their forest plan, and it proposes to gate roads during temporary use and permanently and effectively close and vegetate roads once projects are complete (Final BA, p. 76).

As the appellant points out, a portion of Forest Service lands in the GYA (in BEBS habitat) is designated as wilderness (and, therefore, the habitat is secure) but much of the remaining lands is available for project use, such as timber harvest, oil and gas development, and have the potential to threaten grizzly habitat. It is important to remember that all project activities, whether they occur in or out of secure habitat, require the preparation of a biological evaluation. If the bear is delisted, it will become a Sensitive Species under each forest plan. When implementing any project, the Forest Service must sustain a sensitive species' population and prevent federal listing under the ESA (Final BA, p. 74). For the grizzly bear, secure habitat would be considered in the evaluation.

As a continued safeguard for protection of bear habitat, the Forest Service will submit a report to the IGBC documenting changes in secure habitat outside the PCA every two years (Final BA, p. 77). The Study Team is directed by the Strategy to monitor and map all grizzly mortalities (both inside and outside the PCA), determine the cause of death, and alter management to maintain a recovered population and prevent the need to relist the species. The FWS concluded in their delisting proposal that if Strategy standards for populations and habitat are adopted by National Forests and Parks, a viable grizzly population is supported and will continue to expand into adjacent areas of public land in the GYA (Federal Register, 11/17/2005, pp. 69870-69872).

More secure habitat is available today for bears than during the recovering period of 1990 to 2000. This "extra" habitat may help offset impacts to grizzly habitat outside the PCA. In addition, the Forest Service analyzes threats to bear habitat outside the PCA through site-specific biological evaluations and forest-wide monitoring reports that would pin-point problem areas for bears and identify declines in population or habitat. In accordance with the Strategy guidance, the Forest Service would monitor grizzly populations and habitat security and respond to problems with a dynamic management approach.

For additional discussion, please see:

- Timber harvest (Response 17);
- Direct and indirect impacts of oil and gas development (Response 30);
- Road construction (Response 3 and 4); and
- Sheep grazing (Response 29).

APPEAL ISSUE 24: The standards and guidelines that apply outside the PCA do not protect the bear's habitat. (51)

RESPONSE: The standards and guidelines outside the PCA do protect the bear's habitat, but not as fully as habitat found inside the PCA because the goals for protecting habitat in each area are different. Inside the PCA, habitat protection is focused more in favor of the bear. Outside the PCA, management actions allow room for multiple-use and are not always solely bear-focused (FEIS, pp. 34-37).

The vision of the Strategy (in part) states:

The PCA will be a secure area for grizzly bears, with population and habitat conditions maintained that have allowed the grizzly bear population to achieve recovery and expand

outside the PCA; Outside of the PCA, grizzly bears will be allowed to expand into biologically suitable and socially acceptable areas; Outside of the PCA, the objective is to maintain existing resource management and recreational uses and to allow agencies to respond to demonstrated problems with appropriate management actions; Outside of the PCA, the key to successful management of grizzly bears lies in bears utilizing lands that are not managed solely for bears but in which their needs are considered along with other uses (Strategy, p. 15).

Habitat protections outside the PCA are included as part of the decision. Actions are summarized that will occur outside the PCA, most of which favor continued bear recovery in areas that are considered socially and biologically acceptable (Grizzly Bear Final Biological Assessment, pp. 62-65). They include direction in forest plans for habitat protection, retirement of cattle/sheep allotments with willing permittees in areas of reoccurring livestock/bear conflicts, maintenance of the four main food types where feasible (particularly whitebark pine), emphasis on sanitation, and submittal of changes in secure habitat to the IGBST every two years.

Appellants suggest that the same forces that led to the bear's initial listing in 1975 (excessive roading, hunting, vandal killing, conflicts with livestock) are likely to resume full-force outside the PCA once the bear is delisted. Many of the forces existing prior to 1975 that led to federal listing of the grizzly have changed over time due to new scientific data, greater public awareness, and adaptive management actions by state and federal land agencies. Monitoring inside and outside the PCA will alert managers to trends before they become problems. Monitoring will occur for changes in secure habitat every two years outside the PCA, and for recurring conflicts with livestock both inside and outside the PCA (FEIS, p. 45). These are two of many monitoring requirements found in the selected alternative. The selected alternative also provides bears with 3 million more acres of secure habitat outside the PCA than what bears used during the years when they were recovering (ROD, p. 13).

Although bears need habitat outside the PCA in which to expand, the Grizzly Bear Recovery Plan states that the Recovery Zone (now the PCA) was defined on the best available scientific information. The mere presence of bears outside the Recovery Zone (PCA) is not a good enough reason to change the boundary (Grizzly Bear Recovery Plan, p. 52). The area added must be of significant biological value demonstrated by habitat mapping and bear movement data. The proposed rule to delist the grizzly states the PCA boundaries correspond to those of the Yellowstone Recovery Zone and will replace Recovery Zones should the bear become delisted (Federal Register, 11/17/2005, p. 69860). Rules apply differently inside and outside the PCA with 90% of the females with cubs living inside the PCA, and 10% outside the PCA. In the spirit of emphasizing mixed use and flexible management to encourage better communication and tolerance among local communities, stricter protections are in place for areas that support more bears (inside the PCA) and more relaxed rules are in areas where bears are less common outside the PCA (Federal Register, 11/17/2005, pp. 69860-69861).

The Forest Service used the guidance in the Strategy because it incorporates the best scientific information available on the grizzly bear and was developed by wildlife experts from the National Park Service, Forest Service, FWS, IGBST, and State Fish and Game Departments from Idaho, Wyoming, and Montana over a 9-year period of intensive research and analysis.

Habitat protections exist but are less stringent outside the PCA to allow flexibility for the advancement of some management actions and to encourage the support of states and local communities to the concept of continued grizzly bear recovery. Together the selected alternative and the Strategy provide a way to monitor declines in habitat security and food availability and to respond to those declines, if needed. The standards inside and outside the PCA rely on past successes that have recovered the grizzly (Strategy, p. 20). The standards and guidelines that apply outside the PCA do protect grizzly bear habitat.

APPEAL ISSUE 25: The EIS does not discuss the implications of the 2005 bear population estimate, or reveal that the female mortality recovery standards were exceeded in 2004 and 2005. (51)

RESPONSE: To ensure compliance with the ESA the agency must be able to sustain habitat for the recovered grizzly bear population. To do so, it must ensure conservation of habitat, update the management and monitoring of grizzly bear habitat, and ensure the adequacy of regulatory mechanisms for grizzly bear protection upon delisting as identified in the Grizzly Bear Recovery Plan. Primary monitoring protocols for this population will focus on being able to assess whether the demographic standards for the Recovery Plan and the Strategy are being achieved. Additional monitoring or research may be conducted as determined by the IGBST (Strategy, p. 25).

The Yellowstone grizzly bear population has increased over the past 25 years to the point where all established demographic recovery targets have been met or exceeded since 1998 and the Yellowstone grizzly bear population is in the process of being delisted. The Yellowstone Ecosystem Subcommittee has approved new analysis protocols, developed by the IGBST for estimating total population and mortality limits from all causes (ROD, p. 2).

The Recovery Plan established three demographic (population) recovery targets that must be achieved for a recovered grizzly bear population, and defined a recovered grizzly bear population as one that could sustain a defined level of mortality and is well distributed throughout the PCA. The three demographic recovery targets include: maintaining a minimum of 15 unduplicated females with cubs of the year over a six-year average both inside the PCA and within a 10-mile area immediately surrounding the PCA; sixteen of 18 BMUs within the PCA must be occupied by females with young, and the running six-year average of total known, human-caused grizzly bear mortality is not to exceed 4 % of the minimum population estimate (FEIS, pp. 93-94). At the end of 2004, the minimum population estimate of 431 bears, the running six-year average of total known and probable, human caused grizzly bear mortality was 13.3, and the running-six-year average of known, human-caused female grizzly bear mortality was 6.0. The total mortality is under the mortality threshold set in the Recovery Plan, but the female mortality exceeds the mortality threshold set in the Recovery Plan. Beginning in 2000, the number of mortalities counted each year includes known and probable mortalities, but the mortality thresholds are set using only the minimum population thresholds. New population and mortality monitoring systems using the best available science are now in place. Applying the new methods to 1999 through 2004 data, mortality limits have not been exceeded for consecutive years for any bear class (FEIS, pp. 94-95).

It is clear the grizzly bear population and effects of mortality, especially in female bears, was a major consideration throughout the analysis. Chapter 2 of the Strategy is based entirely on population standards and monitoring. The most recent grizzly bear population data was considered in the analysis (IGBST 2005 Annual Report). The population monitoring techniques used were based on the best available science.

APPEAL ISSUE 26: The Forest Service habitat standards are erroneously based on an allegedly increasing and recovered Yellowstone grizzly bear population. The Forest Service fails to consider a time lag in grizzly bear demographic response to habitat quality and quantity by assuming habitat conditions that existed in 1998 were sufficient to support an increasing grizzly bear population at a rate of 4-7% per year. The Forest Service has not yet provided sufficient habitat to maintain grizzly bears at or above the goal population of 500 bears given that the 2005 population estimate (350 bears) does not meet this goal. (51)

RESPONSE: The FEIS recognized the need to consider time lags in grizzly bear population responses to loss or degradation of habitat (FEIS, p. 265). The habitat standards proposed in the FEIS are part of the larger package (the Strategy) developed through a cooperative effort with biologists and scientists from the FWS, U.S. Geological Survey, Forest Service, Bureau of Land Management (BLM), and the Idaho, Montana, and Wyoming state wildlife management agencies (FEIS, pp. 296-297).

The 1998 baseline for habitat standards was selected because recent population studies indicated that the Yellowstone grizzly bear population was increasing at a rate of 4 to 7 % per year between 1983 and 2001, and 1998 fell within the timeframe during which this rate of increase was occurring. Levels of secure habitat and developed sites had remained relatively constant in the 10 years preceding 1998, accounting for potential time lags in grizzly bear population responses to existing levels of habitat quantity and quality (Federal Register, 11/17/2005, p. 69866; FEIS, p. 30). Consequently, selection of 1998 as a baseline assured that the habitat conditions that allowed this rate of population increase would be maintained

The decision and analysis appropriately considers a time lag in grizzly bear demographic response to habitat quality and quantity. The assumption of habitat conditions that existed in 1998 was sufficient to support an increasing grizzly bear population at a rate of 4-7% per year is based on several studies and documented in the Federal Register.

The FEIS presents a comprehensive summary of research conducted over the last decade examining grizzly bear population trends in the GYA (FEIS, p. 73). This consolidated review indicates that the grizzly population has increased in the number of bears and in the geographic area they occupy, although there is some debate regarding the actual increase that has occurred since the bear was listed in 1975 (FEIS, pp. 98-101).

The Yellowstone Ecosystem Subcommittee approved a new analysis protocol, developed by the IGBST in 2005, for estimating total population and mortality limits from all causes. This new method is a more comprehensive mortality management approach and is derived from a more

accurate model for establishing sustainable mortality limits for grizzly bear populations (ROD, p. 2). Revised estimates of total population size from 2000-2004 did not fall below 500 individuals, including females ≥ 2 years old, males ≥ 2 years old, and dependent young (IGBST 2005, p. 10).

Decades of interagency management efforts resulted in the grizzly bear population increasing from an estimated 200 bears to current estimates of 500 to 600 bears (ROD, p. 2). Sufficient habitat is being provided to maintain grizzly bears at or above the goal population of 500 bears even with the 2005 population estimate.

APPEAL ISSUE 27: The Forest Service failed to examine alternative hypotheses to explain the apparent shifts in bear distribution over the last twenty years. The FEIS claims that the growth in the grizzly population is due to “decades of interagency management efforts.” However, the agency fails to examine other possible reasons for these changes. (50)

RESPONSE: The FEIS and supporting documents, based on extensive research, examined multiple factors that could possibly effect grizzly bear populations over the past two decades. The FEIS describes in detail the characterization of grizzly bear habitat to support the determination that the available habitat for bears is largely determined by human activities. The issue of how many grizzlies can live in any specific area is a function of overall productivity, annual production, availability of important foods (including army cutworm moths and whitebark pine seeds), and the levels and types of human activities. The FEIS concludes that from the mid 1980s, the Yellowstone grizzly population has grown at approximately 3 to 4% or more per year (Strategy, p. 20).

A summary of grizzly bear population research is provided in the FEIS (pp. 98-100). One prominent researcher (Knight, 1996) concluded that the turning point appeared to occur in the mid 1980's, when the policy of preventing adult female mortalities whenever feasible began to be widely observed. A high adult female survival rate is essential to maintain large mammal populations having low reproductive rates (FEIS, p. 99).

To further understand the bear distribution over the past twenty years, the FEIS used a substantial supporting document: “Temporal, Spatial, and Environmental Influences on the Demographics of Grizzly Bears in the Greater Yellowstone Area Ecosystem.” The report was based on recent data from radio marked bears to estimate reproduction (1983-2002) and survival (1983-2001); these were combined into models to evaluate demographic vigor. (Temporal, Spatial, and Environmental Influences on the Demographics of Grizzly Bears in the GYA Ecosystem, p. 1).

The IGBST studied the effects of the 1988 wildfires on grizzlies. It was found that the bears used the burned habitats in proportion to their availability within individual ranges from 1989 to 1992. It was found that movement and annual range sizes after the fires were not statistically different from the 1975 and 1987 averages (Strategy, p. 21; FEIS, p. 70).

Decades of interagency management efforts resulted in the bear population increasing from an estimated 200 bears to current estimates of 500-600 bears. The FWS reviewed the status of the Yellowstone grizzly bear population under the ESA and the Proposed Rule to delist the Yellowstone grizzly bear population. The FWS determined adequate regulatory mechanisms are in place to delist the grizzly bear if the habitat standards in the Strategy are incorporated into the current forest plans for each of the six GYA National Forests.

APPEAL ISSUE 28: The EIS does not discuss the implications of the collapse of whitebark pine on bear habitat and fails to combine data on current levels of mountain beetle pine infestation in the GYA into an analysis that considers subsequent effects on grizzly bear habitat. The EIS does not support the contention that grizzly bears will be able to compensate for the loss of whitebark pine by shifting foraging to other foods. It fails to evaluate whether additional habitat should be secured to offset effects of reductions in whitebark pine. The EIS fails to take a hard look at its guideline assuring the public and the decision-makers that it will “emphasize maintaining and restoring whitebark pine stands inside and outside the PCA.” (51)

RESPONSE: The FEIS recognizes the importance of whitebark pine to grizzly bear population in the Yellowstone ecosystem. The relationship between whitebark pine seed production and grizzly bear reproduction, survival, and grizzly bear/human conflicts, and spatial variation observed in this relationship is also discussed (FEIS, pp. 69, 71, 85, 99-100, 266). The FEIS also discusses current estimates of mortality to whitebark pine due to blister rust and the pine beetle in the GYA. Recent data analyzed by Gibson (2006) and the Greater Yellowstone Whitebark Pine Monitoring Working Group (2006) examines whitebark pine mortality within the context of historical outbreaks and the potential role of global warming, and describes options for restoring whitebark pine and preventing future outbreaks (FEIS, pp. 148-151, 265, 269).

Although recent declines observed in whitebark pine within the GYA have been observed, the FEIS acknowledges recent scientific discussions on the uncertainty with respect to future trends in the long-term persistence and availability of this resource (FEIS, p. 265; Climate Change and Effects on Vegetation and Aquatics in the GYA). The FEIS also discusses the uncertainty in how grizzly bears might respond to declines in any of the primary food sources (FEIS, p. 269). The FWS suggest that if reductions in primary foods do occur, these reductions will likely occur gradually over several decades, and spanning generations of grizzly bears, making adjustment of bears to other foods gradual (Federal Register, p. 69829). In other areas where grizzly bears have relied on white bark pine seeds like the Northern Continental Divide Ecosystem, these populations have thrived in spite of severe declines in whitebark pine communities. The FEIS recognizes the potential for increases in grizzly bear mortality should whitebark pine experience declines (FEIS, pp. 98-101).

The likelihood and extent of potential future declines in key grizzly bear foods, especially whitebark pine, as well as grizzly bear responses to such possible declines, are difficult to ascertain at this time. Consequently, special interagency monitoring systems have been developed to monitor possible changes in these foods. These monitoring efforts would continue under the Strategy. If problems should occur, management strategies would be modified through appropriate interagency cooperative effort (FEIS, p. 70). The signatories to the Strategy have agreed that in the event of deviations from any population goal and habitat standard as outlined

by the FWS (Federal Register, 11/17/2005, p. 69877), a Biology and Monitoring Review would be carried out by the IGBST. The Biology and Monitoring review would seek to identify the source or cause of failing to meet the standard or goal, and to provide management recommendations to address the deviation(s).

The selected alternative goes beyond that of existing management in terms of conserving and restoring whitebark pine by including direction and guidance for maintenance and enhancement of foods such as whitebark pine (FEIS, pp. 151, 269). The Forest Service believes employing an adaptive management framework is the best approach for addressing the current uncertainty with respect to potential habitat changes due to climate change, fluctuations in annual food availability, and associated dynamics of grizzly bear social structure at various bear densities (ROD, p. 23). This approach is consistent with recommendations made by Schwartz et al. (*Temporal, Spatial and Environmental Influences on the Demographics of Grizzly bears in the GYE*, Wildlife Monographs 161), that bear management should be designed to respond to changes in resources like whitebark pine seeds.

Alternatives 3 and 4 were developed in response to comments suggesting that the FS should provide more habitat protection inside, and outside the PCA, respectively, in order to further address the potential future loss of major bear foods, which would include possible declines in whitebark pine (FEIS, pp. 37-43, 317-320). The FEIS indicates that additional secure habitat that would result from implementation of Alternative 4 might allow the GYA to support bears throughout a larger area, and acknowledges the potential for reduced public support given the other social and economic impacts (FEIS, p. 319).

The ROD provides a detailed rationale for the reasons Alternative 2-Modified was selected over alternatives 3 and 4, with respect to addressing future declines in primary food sources. The selected alternative provides additional guidance for maintaining the productivity of the four key grizzly bear foods with an emphasis on maintaining and restoring whitebark pine. Alternative 2-Modified provides secure habitat both inside and outside the PCA in sufficient quantity to allow an increase in grizzly bear numbers even if some foods decline (ROD, p. 14).

The FEIS describes both long and short-term approaches for restoring whitebark pine and preventing future occurrences of white pine blister rust and mountain pine beetle outbreaks (FEIS, pp. 5, 148-151, 265, 269). Current work on whitebark pine includes planting of whitebark pine in several areas of the GYA to provide long-term habitat improvement, cone collection from healthy superior trees, silvicultural treatments to improve growth and establishment, prescribed burning to encourage whitebark pine seedling establishment, and inventories to locate superior trees that appear resistant to blister rust (FEIS, p. 5). The Greater Yellowstone Whitebark Pine Subcommittee is currently developing restoration guidelines for whitebark pine in the GYA that will be designed to help managers evaluate the condition of whitebark pine and identify feasible options for restoration (FEIS, p. 150).

The FEIS acknowledges that whitebark pine is one of the four primary food sources for the grizzly bear. Recent declines in whitebark pine have been observed, but there remains scientific uncertainty with respect to future trends and the relationship to the grizzly bear populations should this occur. The selected alternative provides additional guidance on maintaining and

restoring whitebark pine. There are special interagency monitoring systems developed to monitor possible changes in whitebark pine and both long and short-term approaches are discussed for restoring whitebark pine.

APPEAL ISSUE 29: The EIS does not discuss the effects of livestock grazing on bears. (51)

RESPONSE: The Strategy has a “Livestock Allotment Standard,” which is to be met by no new active commercial livestock grazing allotments created inside the PCA and no increases in permitted sheep Animal Months from the identified 1998 baseline. Existing sheep allotments will be monitored, evaluated, and phased out as the opportunity arises (Strategy, p. 43). This standard is carried through into the FEIS as a primary issue indicator for potential conflicts with sheep and cattle (number of allotments) (FEIS, p. 16).

Grizzly bear/livestock interactions were identified in the FEIS and extensive data collected on the issue from 1975 to 2004 (FEIS, pp. 87, 91). “Most, if not all, grizzly bears that come in contact with domestic sheep prey on sheep and conflicts are inevitable. Within the PCA, 40 % of the sheep allotments active in 2003 have had documented grizzly bear conflicts. Several sheep allotments that have had conflicts with grizzly bears have been closed” (FEIS, p. 92). Many of the conflicts with grizzly bears and sheep have been resolved inside the PCA due to the closure of many of the affected allotments. For example, the Shoshone no longer has any sheep allotments in the PCA, and only two sheep allotments outside the PCA (FEIS, p. 169). In 2003, there were 70 active cattle allotments and seven active sheep allotments inside the PCA (FEIS, p. 117). The effects of permitted livestock use on grizzly bears and the potential for conflicts are fully disclosed in the FEIS (pp. 117-118).

The Strategy and the FEIS include a standard for livestock management within the PCA, a primary issue was identified tied to this concern, extensive data collected over the period 1975-2004, alternatives were developed to address the issue, and the selected alternative includes the standard and other management options to continue to minimize the effects of permitted livestock grazing on grizzly bear habitat.

APPEAL ISSUE 30: The FEIS fails to evaluate the potential impacts of oil and gas development on grizzly bears. (50)

RESPONSE: A discussion of oil and gas development on all six affected forests as well as the effects on all alternatives including the preferred alternative is included in Chapter 3.12 (FEIS, pp. 204-224). Inside the PCA, impacts would be mitigated where possible according to the Application Rules for Standard 2, but if leases were developed, conflicts and displacement of grizzly bears could occur. Outside the PCA, the number and capacity of developed sites (including oil and gas) would likely increase at a faster rate than inside the PCA, further increase the potential for conflicts and displacement of bears (FEIS, pp. 115-116). Threats to grizzlies from oil and gas development include increases in road density and site disturbance, increase in human access, grizzly/human encounters, and human-caused grizzly mortalities (Questions and Answers Proposal to Delist the Yellowstone Ecosystem Population of Grizzly Bears, p. 2).

Appellants suggest that the FEIS does not evaluate the increased poaching potential found in oil and gas boomtowns should an oil and gas sites be developed. The Forest Service does not have the authority to regulate oil and gas development on private or BLM lands. Boomtowns on Forest Service lands would not spring up, due to the federal nature of the ownership. The effects of boomtowns created on private lands would be “checked” in several ways. Although the Forest Service does not control activities on private lands, grizzly bear mortalities on private lands would be monitored by state wildlife agencies and applied toward the total allowable mortality limits (FEIS, p. 259). Habitat monitoring would occur and reports made to the IGBST annually as required by the Strategy. If concerns regarding either population or habitat arise, a Biology and Monitoring Review completed by IGBST could result. The YGCC will meet twice a year to evaluate the need for changes in management direction (FEIS, p. 44). Additional monitoring items were added to the selected alternative. One item includes secure habitat outside the PCA in biologically and socially acceptable areas that would be reported to IGBST every two years. Used together, these monitoring requirements would target areas where grizzly bear numbers or habitat security was declining. The Strategy includes direction to monitor actions on private lands (boom towns included) and state and federal agencies will work together to explore options that address these impacts (FEIS, p. 260). The Forest Service would consider all relevant studies, including those cited by the appellants (Horesji 1998 and Berger and Daneke 1988), if they applied to the situation.

Appellants are concerned that if food sources decline, the suitable habitat outside the PCA will become increasingly important to the bear and, therefore, the impacts from oil and gas development more acute. Overall, the probability of developing oil and gas sites is low. Approximately 37% of the short-term secure habitat outside the PCA is open to leasing for oil and gas where surface occupancy is allowed, but much of the area has a very low to moderate level of occurrence (FEIS, p. 263). Outside the PCA, the likelihood for oil and gas development is basically the same as current management (ROD, p. 23). The grizzly has recovered under the current management regime and there are now three million “extra” acres above the acreage bears used between 1998 and 2004 that may allow for range expansion, if gas and oil sites are developed.

The selected alternative does not prohibit development of oil and gas inside the PCA, but increases the amount of mitigation needed to the point where it may be cost-prohibitive or not feasible if mitigation options are limited (FEIS, p. 219). Inside the PCA, other site developments must be “traded” or closed for a new site to open, so that the total number of sites is the same as 1998 levels. Mitigation for Mining Law site impacts must follow standard developed site mitigation to offset any increases in human capacity, habitat loss, and increased access to surrounding habitats (ROD, p. A-4).

As a point of clarification, the Appellants suggest that according to Figure 90, nine oil and gas parcels are currently under lease inside the PCA (FEIS, p. 209). The table appears to be missing headings along the top, but regardless, inside the PCA there are eight inactive leases on the Gallatin and zero active leases across all forests.

The Forest Service determined that increases in development could lead to an increase in conflicts and displacement of bears (more so outside the PCA than inside). However, due to the inactive status of sites inside the PCA and mitigation requirements that would likely limit or preclude new sites, the risk of development is low. Outside the PCA, multiple reporting requirements would serve as a check-and-balance system to identify problem areas on private or other land ownerships. Should oil and gas sites move forward to completion, a staged lease process, NEPA analysis, and required coordination with state and federal agencies would further address impacts to the bear.

APPEAL ISSUE 31: The EIS does not discuss the effects of all terrain vehicles (ATVs) use on grizzlies. The FEIS fails to evaluate the effects of the growing trend in late season snowmobile use and the sophistication of snowmobiles and ATVs that allows them to penetrate further into wild country. (50)

RESPONSE: The Final 2005 Travel Management Rule for National Forests (Travel Rule) requires each national forest to identify and designate roads, trails, and areas that are open to motor vehicle use. All national forests are expected to comply with the Travel Rule within the next four years. Off-road vehicle use has already been restricted to designated routes in the Montana GYA national forests and with few exceptions; all other forests in the GYA restrict use to designated routes (FEIS, p. 264).

Secure habitat for grizzly bears is defined as areas more than 500 meters from an open or gated motorized access route or recurring helicopter flight line and greater than or equal to 10 acres in size. Secure habitat in the FEIS did not include areas open to cross country, off-highway vehicle (OHV) travel. ATVs are considered off-highway vehicles. Secure habitat is one of the three habitat standards for measuring grizzly bear habitat, and any road or trail open to motorized use, including ATVs, would be considered in the analysis of secure habitat. Maintaining acres of secure habitat within the PCA is tied to Primary Issue 1 in the FEIS (p. 16). The action alternatives considered in detail, Alternative 2 – 4 include secure habitat standards.

The Strategy describes denning habitat requirements for bears. Dens are usually dug on steep slopes in forest cover where wind and topography cause an accumulation of deep snow. Dens are found at higher elevations well away from development or human activity (Strategy, p. 22). Over the snow use is an allowed activity in secure habitat until research identifies a concern (Strategy, p. 41).

Effects on denning habitat are described in the FEIS. Within the PCA, 68% of the grizzly bear denning habitat would be closed to snow machine use in the selected alternative. Outside the PCA, 35% of the grizzly bear denning habitat would be closed (FEIS, p. 113). The FEIS finds that bears tend to den in remote areas with characteristics that are not conducive to snow machining (steep, forested habitats). A large proportion of known dens in the Yellowstone area (88%) are located in areas where snow machine use does not occur and suitable denning habitat is well distributed on the forests. The FWS issued a Biological Opinion stating that current authorized snow machine activity is not likely to jeopardize the continued existence of the grizzly bear (FEIS, p. 92).

The FEIS considers the effects of motorized use on secure habitat including the effects of ATV and snow machine use. It is acknowledged that motorized use, including ATVs, is increasing and must be managed. The purpose of the new Travel Final Rule is to provide that management direction. Within the GYE, the effect of ATVs will be considered as roads and trails are identified as being opened or closed. The overall effects of snow machine use is very minimal because denning locations are either not accessible or are closed to snow machine use. The decision in the ROD is to maintain secure habitat based on the 1998 levels.

APPEAL ISSUE 32: The FEIS fails to adequately disclose the impacts of hunters on grizzly mortality. (50)

RESPONSE: The Appellants suggest that the FEIS does not fully disclose the impacts of black bear and big game hunters on grizzlies, and may not recognize that hunters play a significant role in grizzly mortality. The Forest Service agrees that hunters have been one of the greatest sources of bear deaths in recent years and discusses hunter-related issues throughout in the FEIS.

It is Forest Service policy to leave the regulation of game “baiting” on national forest system lands to the states in which the Forests are located (Federal Register, 11/17/2005, pp. 14720-14723). However, the Forest Service is permitted to work cooperatively with state agencies. Forest officials in Montana, Idaho, and Wyoming have worked with their state agencies to eliminate black bear baiting within the PCA and help educate hunters on identifying grizzly bears (FEIS, p. 5). Successful negotiations in Montana have also resulted in bans on black bear hunting not just within the PCA, but also statewide. Although black bear baiting is prohibited in the PCA, the Forest Service would continue to work with Wyoming and Idaho to close black bear baiting outside the PCA (some areas in Wyoming are already closed). The analysis recognizes that black bear baiting may condition grizzlies to human foods and cause deaths due to mistaken identity (FEIS, p. 123). Depending on the bait used, some grizzly bears could become conditioned to human foods. Human food-conditioned bears have a higher potential for conflicts with humans, often resulting in lethal removal from the population for those bears (Haroldson, et al, 2004). Backcountry rangers patrol the forests during hunting seasons to reduce hunter/bear conflicts and bear mortalities (FEIS, p. 4).

The Strategy addresses big game hunters and states, “The highest source of grizzly bear mortality in the GYA has been due to interactions with hunters. While the number of hunters using the PCA has not increased significantly, the number of grizzly bear known and probable mortalities due to interactions with hunters increased in the last decade. Possibilities for why this occurred include bears learning to seek hunter-killed game, and bear distribution shifting to elk hunting units that open early. Nearly all known and probable bear mortalities occur as surprise encounters, at big game carcasses, or at hunter camps” (Strategy, p. 53). Recent research conducted by Haroldson and others in 2004 demonstrates that grizzly bears seek hunter-killed carcasses and gut piles (FEIS, p. 69 citing Haroldson, et al, 2004)). The FEIS mentions that elk hunting is a primary use of the GYA and is a source of high probability for grizzly/human conflicts since bears are attracted to elk kills and gut piles (FEIS, p. 186). Hunting is one of the top four recreation activities on the Bearhead, Custer, Gallatin, and Targhee National Forests,

although between 1991 and 2001 hunting in the PCA declined by 26 %. Haroldson and others concluded that the selected alternative could reduce hunter conflicts by enforcement of food storage orders and the closure of some areas where grizzly-human conflicts reoccur (Haroldson, et al, 2004).

Hunters kill grizzlies on purpose, in self-defense, or because they mistake them for black bears. “Reducing hunter related mortalities could increase the probability of long-term persistence of grizzlies in the GYE” (FEIS, p. 99).

Elk hunting can reduce the availability of elk calves and winter-killed elk as one of the four primary food sources for grizzlies (FEIS, p. 257). Although most GYA elk herds are above population objectives, several herd units are on a downward trend, possibly due to drought conditions. On the flip side, fall hunting may provide the bear with additional foods critically needed before hibernation in the form of gut piles and carcass remains. Although bears may benefit from hunter-provided elk remains, the conflicts between bears and humans increase when both use the same habitat in close proximity (Haroldson, et al, 2004).

Actions the Forest Service has taken to minimize grizzly deaths related to hunters include conducting workshops, running TV ads, mailing pamphlets, installing trailhead signs, and encouraging the use of bear spray (FEIS, pp. 360-361). “Management of bear attractants and adherence to other forest requirements during the hunting season, along with enforcement of road closures and travel restrictions, have always been important *in the recovery efforts for grizzly bears on the GYA forests*” (FEIS, p. 339).

Appellants are concerned that the Forest Service does not require hunters in the GYE to carry and use bear pepper spray. The IGBC endorses the use of bear spray, and has considered making it a mandatory requirement, but has opted for now to wait and see how effective the voluntary use of bear spray becomes (FEIS, p. 360).

The Appellants are concerned that future law enforcement levels will not be effective if they remain the same as they are today. The costs associated with law enforcement are discussed in Section 3.14 (FEIS, 242-356). Law enforcement levels will remain the same as they were while bears achieved their recovery goals (FEIS, p. 298). Grant money through the State and Private Forestry Division of the Forest Service is available to local communities to assist in resolving grizzly/human conflicts (FEIS, p. 298).

The FEIS adequately discusses impacts to grizzlies from hunter-related issues, including black bear and big game hunters, baiting, pepper spray use, and law enforcement levels.

APPEAL ISSUE 33: The Forest Service fails to acknowledge the implications of the buffalo population on grizzly bear. (50)

RESPONSE: Appellants suggest that the Gallatin Forest allows cattle to graze in buffalo winter range, which exacerbates conflicts related to brucellosis and contributed to the killing of 933

buffalo in 2006, which means that fewer bison means less biomass for bears to feed on and that buffalo are an important food source to the grizzly bear, particularly if other sources fail.

The FEIS for The Interagency Bison Management Plan for The State of Montana and Yellowstone National Park was completed in 2000 (IBMP, 2000). Yellowstone National Park, Gallatin National Forest, APHIS Veterinary Services, and the State of Montana jointly developed this document. The Montana Department of Livestock and the Montana Department of Fish, Wildlife and Parks also provided input. Bison are managed differently, depending on where they occur on the landscape. Inside the Park, they are minimally controlled. Once they leave the Park boundary and move onto state lands in Montana, federal and state health officials manage them, primarily because they may be carriers of brucellosis. Although transmission of this disease between buffalo and domestic cattle has never been documented, transmission is possible and threatens Montana's status as a brucellosis-free state (IBMP, 2000).

Objectives of the bison management plan are to reduce the risk of transmission of brucellosis from bison to livestock, assure veterinarians in other states and countries that the risk is preventable, reduce the level of brucellosis in bison, reduce personal property damage, reduce threats to human safety, and describe conditions where bison may remain outside the Park (IBMP, 2000).

Bison (combined with elk) are considered as one of the four primary food types for grizzlies (Federal Register, 11/17/2005, p. 69865). Population management, predation, habitat and weather conditions, and disease influence bison availability. When primary foods (such as bison) are in short supply, grizzly bears learn to use alternative foods (FEIS, p. 266).

The IBMP states that the bison population will continue to grow and other cumulative mortality factors will have little influence on numbers. The long-term integrity or genetic viability of the bison herd will not be compromised. Bison will continue to occupy all areas available to them since the establishment of YNP. When populations exceed 3,000 animals, particularly during severe winter weather, large removals are likely to occur as herds move to lower elevations. Based on the 1996-97 winters and the history of this population, up to 1,100 buffalo may be removed and the herd would still recover because when population levels drop, few bison leave the Park (IBMP, 2000).

Bison management could have minor negative impacts on grizzly bears by altering the distribution of bison carcasses and reducing numbers of carcasses available to bears (IBMP, 2000). However, since the population will not drop below 2,000 animals and would recover quickly, the effects to grizzlies are expected to be short-term. Actual impacts to grizzly bears from declines in their four primary foods are debatable. The annual availability fluctuates widely, but bears have learned to utilize alternative foods when short supply exists (FEIS, p. 266).

The National Park Service controls bison inside the Park. Bison that leave the Park are controlled by state and federal health officials, due to the possibility of brucellosis transmission to domestic cattle. The number of cattle allotments on the Gallatin National Forest will not increase over time. If buffalo are killed outside the Park boundary (thereby, decreasing available

winter-killed carcasses for grizzlies to feed on), the effects to grizzlies will be short-term because buffalo populations rebound quickly (as evidenced in the past). Grizzlies switch to alternate food supplies when one supply becomes temporarily scarce. Finally, grizzlies have managed to increase in population size with the current number of cattle allotments in place and under the current management strategy for buffalo.

NATIONAL FOREST MANAGEMENT ACT/ADMINISTRATIVE PROCEDURES ACT

APPEAL ISSUE 34: The Forest Service fails to evaluate the effects of grizzlies related to the recently revised forest planning rules and does not discuss the effect of grizzlies related to other planning and rulemaking efforts. (50)

RESPONSE: The amendments are drafted under the 1982 National Forest Management Act (NFMA) regulations as allowed for by the 2005 NFMA regulations (36 CFR 219.14(d)(2)).

Under future revisions of forest plans using the 2005 regulations, it will be determined how the management direction developed in the amendment will be transferred to the new planning format. As stated in the ROD, the grizzly bear is expected to be designated a species of concern (FSH 1909.12.43.22b (5)). This will ensure that components of the revised land management plans provide appropriate ecological conditions necessary to continue providing for a recovered population (FSM 1921.76c). The intent of the habitat standards in the Strategy and the amended land management plans will be perpetuated in the future plans as they are revised (ROD, p.26).

The amendments are drafted using the 1982 NFMA. As land management plans are revised in the future under the 2005 regulations, the amendment will be transferred to the new planning components and will provide for a recovered population.

APPEAL ISSUE 35: The amendment's habitat standards depart from established habitat access standards. (51)

RESPONSE: The Interagency Grizzly Bear Committee (IGBC) Taskforce Report identified three access parameters for measuring motorized access and its effect on habitat security for grizzly bears: TMARD, OMARD, and secure habitat or core areas (FEIS, p. 90). OMARD and TMARD values vary depending upon the number and lengths of roads and motorized trails in an area (IGBC, p. 4).

In the process of development of the Strategy and the FEIS, it was determined that development of habitat standards for all three access parameters was unnecessary and somewhat redundant in meeting the grizzly bear management objectives. Secure habitat is more straightforward for analysis, monitoring and discussion (FEIS, p. 90).

However, annual monitoring will include secure habitat, TMARD and OMARD. These will be compared to the 1998 baseline and annually submitted for inclusion in the IGBST Annual Report (FEIS, p. 44). This decision does not require that threshold values be used as road density

standards. The 1993 recovery Plan does not list specific road density standards for any GYE forest (Grizzly Bear Recovery Plan, 1993, p. 147). The 1998 IGBC Report suggests road density be included in analysis and defines the methodology to be used in calculating route density, but does not recommend any particular road density standards (IGBC, 1998). A significant effort has been made on many of the GYE forests to reduce road densities within bear habitat, but few standards for OMARD and TMARD have been adopted. Only a few forests within the GYE have adopted road density standards within their respective forest plans. For elaboration, please see Response 3.

A basic output of the CEM model is habitat effectiveness. This output reflects the area's ability to support bears given the quality of habitat and the cumulative human disturbances imposed on the area. This output will still be important to biologists and managers in the preparation of biological analyses. The recommendation that the additional parameters (OMARD and TMARD) be measured will allow managers to take a more refined look at how motorized activities are affecting grizzly bear habitat (IGBC Report – Grizzly Bear Motorized Access Management, p. 5).

The decision outlines direction for sustaining grizzly bear habitat, including direction on road management. It is programmatic and guides the implementation of site-specific projects that will tier to forest plans. Additional NEPA compliance will be required on a site-specific project basis (ROD, p. 4). The Strategy and FEIS contain ample and consistent direction regarding baseline road and trail identification, monitoring, and reporting. The selected alternative will not change access, current use, traffic patterns, and road standards from current management (ROD, p. 22).

The habitat standard in the amendment refers to secure habitat. Annual monitoring includes secure habitat, OMARD and TMARD and a comparison against the 1998 baseline values. No new road density standards are implemented by this decision, nor are any existing road density standards revoked by this decision.

APPEAL ISSUE 36: The Forest Service violated the Administrative Procedures Act (APA) by failing to take a “hard look” at the environmental consequences of their actions. (51)

RESPONSE: NEPA requires that the agency take a hard look at the environmental impacts of the alternatives including the proposed action (40 CFR 1502.16). The APA requires that agency actions have a rational foundation and not be arbitrary, capricious, or abuse its discretion.

As discussed in the preceding responses, the documentation for the project complied with NEPA and the National Forest Management Act. The FEIS and ROD clearly explain the rationale for the decision. Therefore, the decision complies with APA.