



File Code: 1570-1
#08-04-17-0009 A215
Date: December 3, 2007

Katie Fite
Biodiversity Director
Western Watersheds Project
PO Box 2863
Boise, ID 83701

CERTIFIED MAIL – RETURN
RECEIPT REQUESTED

Dear Ms. Fite:

In accordance with 36 CFR 215.18, I have reviewed the appeal record, Final Environmental Impact Statement (FEIS) and the Record of Decision (ROD) for the White Pine and Grant-Quinn Oil and Gas Leasing project on the Ely Ranger District on the Humboldt-Toiyabe National Forest.

My review focused on the project documentation and the issues raised in the appeal you filed on behalf of Western Watersheds Project. In reviewing your appeal, I also considered the recommendations of the Appeal Reviewing Officer (copy enclosed).

APPEAL DECISION

I am affirming the decision by Humboldt-Toiyabe National Forest Supervisor Ed Monnig.

I find that the activities documented in the FEIS, ROD, and the project record are in compliance with applicable laws, regulations, and policy. A more detailed response to the appeal issues is enclosed.

This constitutes the final administrative determination of the United States Department of Agriculture under 36 CFR 215.18 (c).

Sincerely,

/s/ Cathrine L. Beaty
CATHRINE L. BEATY
Appeal Deciding Officer

Enclosures



White Pine & Grant-Quinn Oil and Gas Leasing Project
Humboldt-Toiyabe NF
#08-04-17-0009 A215

APPEAL ISSUE 1: The Reasonably Foreseeable Development (RFD) scenario is based on outdated and inaccurate information and thereby underestimates the amount of actual disturbance that can be expected to occur in the project area. This flawed RFD leads to a flawed analysis on which the Forest based its decision.

RESPONSE: Regulation requires the leasing analysis to project the type and amount of post-leasing activity that is reasonably foreseeable as a consequence of conducting a leasing program 36 CFR 228.102(c)(3). The Interagency Reference Guide (IRG) provides guidance on projecting post-leasing activity (Bureau of Land Management (BLM), Fish and Wildlife Services (FWS), National Park Services (NPS), Environmental Protection Act (EPA), and Forest Service (FS), June 2003). The RFD scenario contained in the Final Environmental Impact Statement (FEIS) projects the amount of exploration and development activity within the project area and bases the projection of surface disturbance on Great Basin geology, oil and gas potential maps, oil and gas development history in Railroad Valley, and two wildcat wells drilled in the project area in the early 1990's (FEIS, pp. 1-9 - 1-12).

Additional information on area geology, and oil and gas exploration, development and potential is discussed in Appendices C and E (FEIS, pp. C-1 - C-8; E-3 - E-34). The project record identifies additional information sources that were consulted in preparing the FEIS, a number of them date from 2005 to 2007 (Project Record Index, pp. 31, 33, 35, 38). The project record index indicates that more current information was consulted than what was referenced in the FEIS, but it did not give rise to change the projections contained in the RFD.

The appellant asserts that the increase in Nevada leasing activity was not factored into the RFD. The IRG emphasizes past and present activity, rather than existing leases as a factor in making RFD projections (IRG, p. 10). Because leasing does not authorize any ground-disturbing activity, it is difficult to project what impact the amount of acreage currently under lease in Nevada will have on the projected surface disturbance.

The RFD projects exploration activity of up to 20 total wells drilled and 100 total miles of seismic surveys, disturbing 360 acres over a 10 to 20 year period. For production activity, the RFD projects one field consisting of 8 wells disturbing 34 acres. The FEIS draws from both historic oil and gas disturbance and current permitting activity to make its projection of disturbance in the project area. Information in the project record shows that for all of Nevada, the State permitted only seven wells in 2005 and 16 wells in 2006 (Nevada Oil Patch Briefings, Commission on Mineral Resources, Nevada Division of Minerals, November 2005 through February 2007). While there may be other interpretations of what might occur, there is nothing to suggest that the RFD projection is not reasonable.

From the information presented in the FEIS and the project record, it can be concluded that the amount of oil and gas disturbance projected in the RFD is a reasonable technical and scientific approximation of anticipated activity and is based upon the best available information.

APPEAL ISSUE 2: The FEIS and ROD fail to provide any limits or caps on the amount of exploration and development that could occur in the project area. The RFD is only an estimate of activity that can be exceeded once leases are issued.

RESPONSE: The RFD provides information necessary to adequately assess potential effects from oil and gas activity that could reasonably occur as a result of leasing. It is not possible for the RFD to predict the exact number of wells necessary to efficiently develop any oil and gas resource within the project area prior to hydrocarbons being discovered. Therefore, the RFD does not establish a threshold, or cap, on the number of wells that can be drilled in the project area (IRG: Reasonably Foreseeable development Scenarios and Cumulative Effects Analysis, Rocky Mountain Federal Leadership Forum on Oil and Gas, National Environmental Policy Act (NEPA), and Air Quality, p.10, June 2003). Attempting to cap the number of wells in a relatively unexplored area would also conflict with Bureau of Land Management's (BLM) requirements to minimize waste of oil and gas resources (43 CFR 3161.2). Underestimating the number of wells would likely result in bypassing, and wasting, of any energy resource that would be discovered.

Regulations require that the FEIS analyze the reasonable foreseeable impacts based on the RFD projected activity for each of the alternatives (36 CFR 228.102(c) (4)). A goal of oil and gas leasing on NFS lands is to develop lease stipulations that are only as restrictive as necessary to protect the resource(s) for which they are applied (Memorandum of Understanding (MOU) between BLM and FS, Agreement No. 06-SU-11132428-052, p. 2, 9/14/2006). Mitigation, such as No Surface Occupancy (NSO), Timing Limitations, and Controlled Surface Use (CSU), developed for the FEIS preferred alternative was determined to be adequate to protect surface resources (FEIS, pp. 2-23 - 2-34). Application of the NSO lease stipulation will, in effect, limit the amount of exploration and development that could occur within specific portions of the project area.

The Record of Decision (ROD) reflects the analysis conducted in the FEIS and chooses to apply specific mitigation to prospective leases where it is needed to protect surface resources rather than imposing an arbitrary limit on how many wells can be drilled within the project area (ROD, pp. 2-11).

It was not necessary to cap the number of wells in the project area because applying the mitigation developed in the FEIS to prospective leases will satisfy the goal of protecting surface resources without being overly restrictive.

APPEAL ISSUE 3: The FEIS provides no information on location and existing elements of fragmentation in important and sensitive species habitats – ranging from number and location of spring developments that may have reduced, altered or killed all perennial surface flows in sage grouse wet meadow areas to the location and effects of livestock fences on sage grouse, big game or pygmy rabbit habitat. Nowhere is an analysis of the scale and severity of existing and foreseeable fragmentation, loss of connectivity, and genetic isolation of populations and population declines and effects on important, sensitive and Management Indicator Species (MIS).

RESPONSE: The Council on Environmental Quality (CEQ) requires a succinct description of the environment of the area to be affected or created by the alternatives under consideration (40 CFR 1502.15). CEQ requires discussion of environmental impacts, including direct effects and their significance and indirect effects and their significance (40 CFR 1502.16(a) and (b)).

The FEIS provides information on the current distribution and status within the project area of threatened, endangered, and sensitive (TES) species, raptors, big game species, and neotropical migratory birds (FEIS, pp. 3-5 - 3-22). Three of the Forest's MIS, goshawk, sage grouse, and mule deer, are included in these descriptions (FEIS, pp. 3-8 - 3-10 - 3-18). The Wildlife Report (WR) provides the distribution for the fourth MIS, trout, and the FEIS provides the determination that due to the No Surface Occupancy riparian area stipulation, no habitat features that are important to trout would be affected, and no negative impacts are expected (WR, p. 4, FEIS, pp. 3-12).

The FEIS discusses the significance of fragmentation on habitat and loss of connectivity for population interaction (FEIS, pp. 3-4). The FEIS discusses the potential for fragmentation and loss of connectivity, their relationship to increased disturbance, and the relationship of the disturbance to the project activity of road density (FEIS, pp. 4-3 - 4-4). For big game species, including mule deer, the FEIS discusses that under all alternatives CSU stipulations and standard lease terms could result in fragmentation of habitat from the construction of roads, well pads and pipelines (FEIS, pp. 4-11). Fragmentation is discussed as a potential cumulative effect for wildlife from past, present, and future livestock grazing, wild horse management, recreation uses, off-highway vehicle use, and dispersed camping, fuel wood harvest, road construction and maintenance, mineral exploration, and the proposed oil and gas exploration (FEIS, pp. 4-9).

In discussing general effects to wildlife, the FEIS states that the extent of impact is difficult to predict because of site-specific variables, such as visibility and hiding cover, tolerance of the individual animals, timing and type of disturbance, time of day, and other factors (FEIS, pp. 4-10). The FEIS addresses only the leasing analysis, with subsequent requirement of reviewing and verifying leasing proposals (FEIS, p. I-6). This subsequent requirement includes verifying that oil and gas leasing of specific lands has been adequately addressed in a NEPA document and is consistent with the Forest land and resource management plan (FEIS, p. I-6; Appendix F, p. F-7; 36 CFR 228.102(e)(1)). An opportunity for site-specific environmental analysis would be completed when surface use plans are submitted for review and approval (FEIS, pp. 2-8).

Chapter 3 of the FEIS provides existing condition information on the wildlife species, including the Forest's MIS, and discusses the effects of fragmentation on wildlife. Chapter 4 of the FEIS describes those project-related activities that could cause fragmentation.

The Forest has met the CEQ requirements regarding describing the environment and impacts associated with the project activities.

APPEAL ISSUE 4a: The FEIS fails to provide sufficient analysis for critical wildlife species-sage grouse, pygmy rabbit, elk, mule deer, raptors, bighorn sheep, neotropical migratory birds and bat species.

RESPONSE: CEQ requires discussion of environmental impacts, including direct effects and their significance and indirect effects and their significance (40 CFR 1502.16(a) and (b)).

TES species include sage grouse, pigmy rabbit, peregrine falcon, flammulated owl, northern goshawk, spotted bat and Townsend's bit-eared bat. General habitat requirements were defined. Known habitat locations and habitat use along with potential habitat were identified for these species. Mitigation measures specific to each species were identified and analyzed. A determination of "may impact but will not lead to a trend towards federal listing or cause a loss of viability" was made for each species (Biological Evaluation (BE), pp. 6-11).

MIS include elk, deer, and bighorn sheep (Humboldt National Forest Land and Resource Management Plan (LRMP), pp. 11-10 - 11-11). Population numbers and habitat locations were discussed and conditions were analyzed. The effects to these species were discussed in general and it was stated that "the extent of impact is difficult to predict because of site-specific variable such as visibility and hiding cover, tolerances of individual animals, timing and type of distances, time of day, and other factors" (Wildlife Report (WR), pp. 6-7).

Neotropical migratory birds associated with this project were identified and mitigation measures were discussed. "The combination of Standard Lease Terms, Forest Plan direction, and NSO/CSU protection for other resources offers adequate protection from direct impacts of oil and gas exploration activities. Exploration is expected to directly impact up to 360 acres and the projected disturbance from development is estimated at 34 acres. These activities may result in some unintentional impacts to neotropical migratory bird species. Site-specific mitigation of known nesting areas may limit some of the direct impacts (WR, pp. 11-12).

The FEIS identifies general habitat requirements, known habitat location and use, potential habitat and an effects determination for all TES species. MIS and neotropical migratory birds are discussed and the effects are analyzed. The Forest met CEQ requirements.

APPEAL ISSUE 4b: The FEIS does not provide adequate baseline data on current populations and habitats for sage grouse, pygmy rabbit, elk, raptors, and bat species; does not provide detailed mapping information critical species; does not address habitat fragmentation that would result from direct and cumulative impacts; does not consider the best available science in its analysis of the above mentioned species; the Forest relies upon a Draft Ely BLM Resource Management Plan (RMP) for its analysis of sage grouse.

RESPONSE: CEQ requires discussion of environmental impacts, including direct effects and their significance and indirect effects and their significance (40 CFR 1502.16(a) and (b)).

Baseline Data: TES species include sage grouse, pigmy rabbit, peregrine falcon, flammulated owl, northern goshawk, spotted bat and Townsend's bit-eared bat. General habitat requirements were defined. Known habitat locations and habitat use along with potential habitat were identified for all these species (BE, pp. 6-11). Elk population numbers, both current and historic were discussed and year round habitat identified (WR, pp. 6-7).

Maps: The FEIS includes a map showing sage grouse leks, nesting and early brooding, and summer habitat, elk winter calving grounds and winter range, and raptor nesting (FEIS, Figure 3-1 - 3-3, 3-8).

Cumulative Effects Analysis: Cumulative effects discussions are found for wildlife, TES and fragmentation (FEIS 1.3.4; 1.2.2.6; p. 4-9).

Best Available Science: The Forest Service reviewed the Nevada Greater Sage-Grouse Conservation Plan and incorporated the guidance where appropriate. Other sources were also included (Draft Resource Management Plan for the Ely District of the BLM (May 2006); FEIS, Appendix J: Public Comment and Agency Response, p. J-10).

Species Habitat Analysis: For general species habitat requirement, a qualitative analysis based on the current available research was used. It included using the Remote Sensing Application Center satellite imagery vegetation mapping, current literature, personnel communication with local experts, and the Nevada Sage Grouse Conservation Strategy. The Nevada Natural Heritage Program Data Base was queried in September 2006. Personnel communications with Joanne Baggs, USFS and Jason Williams, Chris Crookshanks, Mike Podborny, and Curt Baughman with the Nevada Department of Wildlife (NDOW).

The Forest reviewed relevant scientific information, considered responsible opposing views, and acknowledged incomplete or unavailable information, scientific uncertainty, and risk (WR, p. 3).

The FEIS does provide baseline data on current population where the data is available. Maps identify habitat for sage grouse, elk and raptors. A cumulative effects analysis is included. The FEIS includes a discussion on the best available science defining what was used and the reasoning. The Forest met CEQ requirements.

APPEAL ISSUE 5: The FEIS fails to provide sufficient mitigation and protective measures for the protection of wildlife species. Failure to provide adequate protection is a violation for the National Forest Management Act (NFMA) and the Humboldt LRMP. Specifically the FEIS does not provide adequate protection for sage grouse, pigmy rabbit, elk, bighorn sheep, mule deer, pinion jays, migratory birds, bat species, and raptors (including flammulated owls and northern goshawks). In addition, the FEIS and ROD do not require that intensive site-specific surveys and radio tracking work be done on sage grouse populations prior to exploration or leasing activity.

RESPONSE: CEQ requires discussion of environmental impacts, including direct effects and their significance and indirect effects and their significance (40 CFR 1502.16(a) and (b)).

The following list of stipulations (mitigation measures) for wildlife is found in the ROD.

Greater Sage-Grouse – Leks

Stipulation: No Surface Occupancy - 3 km radius buffer around leks

Objective: To preclude disturbance to all leks

Waiver: None

Exception: None

Modification: A modification of the Stipulation/Lease Restriction may be granted if field studies show that a lek is not active (has not been used in the last 5 years); the standard lease terms (SLT) would then apply (ROD, p. 5).

Greater Sage-Grouse – Nesting/Early Brood Rearing Habitat

Stipulation: Timing Limitation: March 15 to July 15

Objective: To protect occupied or potential habitat for nesting and early brood rearing

Waiver: None

Exception: None

Modification: A modification of the Stipulation/Lease Restriction may be granted if new habitat studies or surveys show that a portion of the area does not contain nesting/early brood rearing habitat or the habitat is not occupied; the SLT would then apply (ROD, p. 5).

Greater Sage-Grouse – Summer Habitat

Stipulation: Controlled Surface Use

Objective: To require that activities be located and/or designed to avoid or minimize the potential for adverse effects to sage grouse summer habitat and to ensure that the viability of sage grouse is not adversely affected

Waiver: None

Exception: None

Modification: A modification of the stipulation may be granted if new habitat studies or surveys show that a portion of the area does not contain summer habitat or the habitat is not occupied; the SLT would then apply (ROD, p. 5).

Raptors - Nesting Buffers of 800 meters radius around nest

Stipulation: Timing Limitation - March 1 to August 15

Objective: To preclude the commencement of activities within the nest stand which could cause increased stress and or displacement during the critical nesting/fledging period.

Waiver: None

Exception: Oil and gas activity can occur during periods when the nests are not occupied. If oil and gas activity is occurring and ongoing and nest becomes occupied, then oil and gas activity may continue.

Modification: Depending on species and their sensitivity to activity, controlled surface use may be allowed (ROD, p. 6).

Elk Winter Range

Stipulation: Controlled Surface Use

Objective: To require that activities be located and/or designed to avoid or minimize the potential for loss of habitat, increased stress and/or displacement of animals within the winter range.

Waiver: None

Exception: An exception may be granted if it can be demonstrated that reclamation will improve habitat in the long term; the SLT would then apply.

Modification: A modification may be granted if specific study shows no elk winter range in the Project Area; the SLT would then apply (ROD, p. 6).

Bighorn Sheep

Stipulation: Controlled Surface Use

Objective: To require that activities be located and/or designed to avoid or minimize the potential for loss of habitat, increased stress and/or displacement of bighorn sheep

Waiver: None

Exception: An exception may be granted if it can be demonstrated that reclamation will improve habitat in the long range; the SLT would then apply.

Modification: A modification of the Stipulation/Lease Restriction may be granted if site-specific inventory shows no critical bighorn sheep range in the Project Area; the SLT would then apply (ROD, p. 6).

Mule Deer Winter Range

Stipulation: Controlled Surface Use

Objective: To require that activities be located and/or designed to avoid or minimize the potential for loss of habitat, increased stress and/or displacement of animals within the winter range

Waiver: None

Exception: An exception may be granted if it can be demonstrated that reclamation will improve habitat in the long range; the SLT would then apply

Modification: A modification of the Stipulation/Lease Restriction may be granted if site-specific inventory shows no mule deer winter range in the Project Area; the SLT would then apply (ROD, p. 7).

Pigmy Rabbit: Habitat for the pigmy rabbit often occurs in the same habitat as the sage grouse giving the pigmy rabbit habitat the same stipulations (Biological Assessment and Biological Evaluation (BE/BA), p. 11).

Spotted bat: SLT stipulations would apply to this species and its habitat (BE/BA, p. 9).

Neotropical Migratory Birds: The LRMP does not include specific restrictions or protective measures for neotropical migratory birds (WR, p. 9). The Migratory Bird Treaty Act provides protection for all migratory birds. An Executive Order (EO) “addresses the responsibilities of Federal agencies to protect migratory birds by directing regulatory agencies to “ensure that environmental analyses of Federal actions required by NEPA or other established environmental review processes evaluate the effects of action and Agency plans on migratory birds, with emphasis on species of concern” (EO 13186, 1/10/01, WR, p. 9).

“CSU stipulations for other resources would offer some overlapping protections for neotropical migratory birds nesting and foraging habitats that are not presently identified. This protection would include stipulations for greater sage-grouse summer habitat; raptor nesting buffers; elk and mule deer winter range; bighorn sheep habitat; mountain mahogany, aspen, sub-alpine habitats; slopes between 25 and 40 percent; all other roadless areas; semi-primitive non-motorized Recreation Opportunity Spectrum (ROS); and partial retention Visual Quality Objectives (VQO). These CSU stipulations would limit the overall level of disturbance including restricting the number of concurrent oil and gas operations that would occur within these areas during any given time” (WR, p. 11).

The combination of Standard Lease Terms, Forest Plan direction, and NSO/CSU protection for other resources offers adequate protection from direct impacts of oil and gas exploration

activities. Exploration is expected to directly impact up to 360 acres and the projected disturbance from development is estimated at 34 acres. These activities may result in some unintentional impacts to neotropical migratory bird species. Site-specific mitigation of known nesting areas may limit some of the direct impacts (FEIS, pp. 1-11 - 1-12).

The FEIS provides sufficient mitigation and protective measures for the protection of wildlife species as stated above. The Forest met CEQ requirements.

APPEAL ISSUE 5a: The FEIS and ROD do not require that intensive site-specific surveys and radio tracking work be done on sage grouse populations prior to exploration or leasing activity.

RESPONSE: CEQ requires discussion of environmental impacts, including direct effects and their significance and indirect effects and their significance (40 CFR 1502.16(a) and (b)).

The FEIS addresses only the leasing analysis, with subsequent requirement of reviewing and verifying lease proposals (FEIS, p. I-6). This subsequent requirement includes verifying that oil and gas leasing of specific lands has been adequately addressed in a NEPA document and is consistent with the LRMP (FEIS, p. I-6; Appendix F, p. F-7; 36 CFR 228.102(e)(1)). An opportunity for site-specific environmental analysis would be completed when surface use plans are submitted for review and approval, and appropriate stipulations would then be clarified to address the project level impacts (FEIS, p. 2-8).

The Forest Service is not required to do intensive site-specific surveys and radio tracking work on sage grouse populations prior to deciding which lands would be administratively available for oil and gas leasing. The CEQ requirements are met.

APPEAL ISSUE 6: The FEIS fails to provide an adequate discussion on effects of the alternatives to species viability of the pygmy rabbit.

RESPONSE: CEQ requires discussion of environmental impacts, including direct effects and their significance and indirect effects and their significance (40 CFR 1502.16(a) and (b)).

The FEIS addresses only the leasing analysis, with subsequent requirement of reviewing and verifying leasing proposals (FEIS, p. I-6). This subsequent requirement includes verifying that oil and gas leasing of specific lands has been adequately addressed in a NEPA document and is consistent with the LRMP (FEIS, p. I-6, Appendix F, p. F-7, and 36 CFR 228.102(e)(1)). An opportunity for site-specific analysis is available when the surface use plans are submitted for review and approval, and appropriate stipulations would then be clarified to address the project level impacts (FEIS, p. 2-8).

The FEIS provides an adequate discussion on the effects of the alternatives. Species viability for the pygmy rabbit may be addressed in the site-specific NEPA. The Forest met CEQ requirements.

APPEAL ISSUE 7: The rare plant (Region 4 (R4) Sensitive) analysis is inadequate. There is no systematic analysis that relates to likely impacts. There is no mapping, analysis, or any other information provided in the FEIS; therefore, there was no “hard look” at the effects of the action on rare plants.

RESPONSE: CEQ requires discussion of environmental impacts, including direct effects and their significance and indirect effects and their significance (40 CFR 1502.16(a) and (b)).

The BA/BE identifies R-4 sensitive plant species for the Humboldt-Toiyabe National Forest (BA/BE, p. 4). Based on the Forest TES Plant Program and Nevada Natural Heritage Program information, the BA/BE identifies those sensitive plant species for which further analysis was not provided, because they do not occur or do not have the probability of occurring on the Ely Ranger District (BA/BE, pp. 4-5). The BA/BE includes a description of habitat, occurrence, potential causes of project-related effects, and mentions trends toward federal listing or loss of viability of the known species (BA/BE, pp. 11-21).

The Forest met the requirement by providing the analysis and conclusion regarding project-related effects to R4 sensitive plants in the BA/BE, which is referenced in the FEIS.

APPEAL ISSUE 8: The FEIS fails to consider and examine the current or foreseeable extent and expansion of invasive species in association with oil and gas exploration and development disturbance. Cheatgrass is not mentioned.

RESPONSE: CEQ requires discussion of environmental impacts, including direct effects and their significance and indirect effects and their significance (40 CFR 1502.16(a) and (b)).

The Noxious Weed Specialist Report (NWSR) contains a detailed analysis of project-area resources that are referenced in the FEIS (FEIS, p. 1-4). The NWSR addresses the following project-related activities associated with noxious weeds: construction of roads, pads, berms, water diversions and pits, all of which require heavy equipment and creation of disturbed sites upon which noxious weeds can become established (NWSR, Appendix, p. 3). The risk assessment used in the specialist report addresses “undesirable” plants, not just noxious weeds (NWSR, Appendix, p. 1). Cheatgrass is mentioned in the NWSR where precautions are suggested that will help reduce the risk of increasing noxious weed or invasive species populations (NWSR, p. 9).

The FEIS references the 2002 weed inventory, which includes noxious presence and extent (FEIS, p. 3-38). A general discussion of noxious weeds is included in Chapter 3 (FEIS, p. 3-38). The FEIS provides the results of the risk assessment, based on the estimated total of 396 acres of soil disturbance used in the analysis, and conclusion of possible adverse effects on site and possible expansion of infestation within the project area (FEIS, p. 4-21).

The FEIS also includes potential cumulative effects to wildlife, which includes the effects of weeds and invasive species resulting from past, present, and future livestock grazing; wild horse management; recreation uses, fuel wood harvest; road construction and maintenance; mineral

exploration; and the proposed oil and gas exploration (FEIS, p. 4-9). The description of the low sagebrush/grass vegetative cover type includes cheatgrass as an associated grass species based on Gap Analysis Program (GAP) analysis (WR, pp. 13-14). The cumulative effects analysis for aquatic and riparian ecosystems, including streams and surface water quality sensitive resource components, includes vegetation conversion as a potential impact from oil and gas exploration or development activities with existing watershed disturbances (FEIS, p. 4-17).

The Forest met the requirement by including analysis of the potential effect of the project activities on establishment and spread of noxious weeds and undesirable plants, including baseline information from the 2002 Weed Inventory and GAP analysis. It includes risk assessment for noxious weeds and analysis of the effects of noxious weeds on other resources.

APPEAL ISSUE 9: The FEIS and ROD wrongly rely on the outdated Forest Plan for protection of vegetation communities and do not include current ecological science. The FEIS wrongly relies on just the Forest Plan for special vegetation community protections or mitigations, ignoring NFMA requirements and its own policies for R4 sensitive species consideration and protection.

RESPONSE: NFMA requires that resource plans and permits, contracts, and other instruments for the use and occupancy of National Forest System lands be consistent with the land management plans (16 U.S.C. 1600, section 6(i)). Management direction for sensitive species that are pertinent to the decision, are to maintain viable populations of all native and desired non-native wildlife, fish, and plant species in habitats distributed throughout their geographic range and to avoid or minimize impacts to species whose viability has been identified as a concern (FSM 2670.32). CEQ requires that the analysis and supporting data from the natural and social sciences and the environmental design arts be considered (40 CFR 1502.8).

The decision is to implement Alternative 3, which includes Forest Plan management direction. It also provides additional controlled surface use stipulations that provide protection to vegetation, including greater sage-grouse-summer habitat to require that activities be located and/or designed to avoid or minimize the potential for adverse effects to sage grouse summer habitat; elk winter range to require activities to be located and/or designed to avoid or minimize the potential loss of habitat, increased stress and/or displacement of animals within the winter range; bighorn sheep to require that activities be located and/or designed to avoid or minimize the potential for loss of habitat, increased stress and/or displacement of bighorn sheep; mule deer winter range to require that activities be located and/or designed to avoid or minimize the potential for loss of habitat, increased stress and/or displacement of animals within the winter range; mountain mahogany to limit construction within mountain mahogany, where it serves as wildlife forage and winter range, by designing facilities and developments to minimize habitat loss; riparian aspen to limit construction activities within aspen stands by designing facilities and developments to minimize habitat loss; and Great Basin sub-alpine (all except bristlecone pine) to limit construction of well sites and facilities within this limited plant community; erosion hazard (slopes 25-40%) to require facilities such as well sites to be located to minimize construction on slopes or to be designed to minimize large cut and fill slopes that are difficult to rehabilitate; inventoried roadless areas (IRA), except Quinn IRA, under which road construction

and reconstruction would not be allowed in accordance with 2001 Roadless Area Conservation Rule (ROD, pp. 5-9). It also includes no surface occupancy stipulations for bristle cone pine to preclude construction within bristlecone pine stands; rare plants – R4 sensitive plants (occupied habitat) to protect sensitive plant species; erosion hazard (slopes greater than 40%) to preclude construction of well sites and related facilities on slopes over 40%; riparian buffers to preclude new surface-disturbing activities within critical riparian and aquatic habitats and 100-year flood plains; Recreation opportunity spectrum – primitive non-motorized areas within Wilhoites IRA to preclude surface occupancy and new surface disturbing activities within the primitive setting area; and visual quality objectives to protect the high quality scenic resources present on Forest lands (ROD, p. 8-11). The determination in the *Biological Evaluation/Assessment for Threatened, Endangered, and Sensitive Species* is that with the protections provided by the Forest Plan and stipulations of Alternative 3, species would either undergo no impacts or the project may result in impacts to individuals but not likely contribute to a trend towards Federal listing or loss of viability (BA/BE, p. 5).

The references cited in the BA/BE are all dated after the issuance of the LRMP, with the exception of one for which a revised version is also cited, and 9 of those 23 are from 2000 or later (BA/BE, pp. 21-22). Of the 23 references used in the *Wildlife Report*, all but 5 predate the LRMP, one is the LRMP, and 13 are from 2000 or later (WR, pp. 18-19).

The decision to implement Alternative 3 includes Forest Plan direction, as required by NFMA. It indirectly provides additional protection for vegetation through controlled surface use stipulations and no surface occupancy stipulations for different resources as well as directly for bristlecone pine and R4 sensitive plants. The determination in the BA/BE is that with the protections provided by the Forest Plan and stipulations of Alternative 3, species would either undergo no impacts or the project may result in impacts to individuals but is not likely contribute to a trend towards Federal listing or loss of viability, meeting the management direction for sensitive species. The analyses used in the Wildlife Report, which included vegetation communities, along with the BA/BE references, and data queries that date from before the LRMP to the present met CEQ requirements.

APPEAL ISSUE 10: The modification and exception provisions of the ROD give the forest latitude to lessen stipulation restrictions. The ability to change stipulations weakens the environmental protection measures given the various resources.

RESPONSE: Allowance of a waiver (permanently remove), exception (case-by-case exemption), and modification (permanently change) for a lease stipulation is consistent with FS regulations (36 CFR 228.104). These regulations recognize that there are circumstances where a lease stipulation, broadly applied to a tract of land, may not apply to a specific site due to actual conditions on the ground. The strict regulatory criteria under which the authorized Forest officer may authorize a waiver, exception, or modification of a lease stipulation will not weaken the environmental protection measures for surface resource (36 CFR 228.104(b) (2)). Instead, it gives the Forest Service the discretion to approve an activity when it can be demonstrated that the factors for which the lease stipulation was developed have changed sufficiently to make the protection provided by the stipulation no longer justified or that the proposed operation would

not cause unacceptable impacts. As part of the review of any proposed waiver, exception, or modification, the authorized Forest officer shall ensure compliance with NEPA and any other applicable laws, and shall ensure any appropriate environmental documents are prepared (36 CFR 228.104(b)(1)). The public has the opportunity to appeal decisions to waive, modify, or grant an exception to a lease stipulation in conjunction with an appeal of a decision on a surface use plan of operation (36 CFR 228.104(d)(2)).

The waiver, exception, or modification, provisions for lease stipulations described in the ROD are consistent with Forest Service regulations and will not weaken the intended environmental protection measures (ROD, pp. 4-10).

APPEAL ISSUE 11: The FEIS fails to adequately analyze the effects to IRA's and the unique characteristics that they possess. Specifically, the FEIS provides no specific evaluation of all the IRA's or a comparison of the Quinn IRA versus the remaining IRA's and violates the court order for the protection of the IRA's.

RESPONSE: The Roadless rule was adopted by the Department of Agriculture in March 2001 (36 CFR part 294). The Department adopted this final rule to establish prohibitions on road construction, and reconstruction, and timber harvesting in inventoried roadless areas on NFS lands. The rule provides protection for inventoried roadless areas within the NFS in the context of multiple-use management.

The FEIS evaluated the current condition and impacts of this proposal on the characteristics of the affected roadless areas (FEIS, pp. 4-35 - 4-45).

Prior to the Roadless Rule, the Humboldt Toiyabe National Forest inventoried roadless areas in 1998 as part of a forest-wide inventory of undeveloped/roadless areas (FEIS, Recreation Specialist Report, p. 4, 8/6/2006). This inventory utilized updated digitized Primary Base Series maps with internal and public review and clearly identified those areas that had at least 5,000 contiguous acres in generally natural/undeveloped condition. The Forest again inventoried and evaluated roadless areas as part of their forest plan revision in March of 2006 to determine areas with a high potential to be managed as wilderness (Humboldt Toiyabe, Forest Plan Revision, pp. 1-12 "Assessment of Wilderness Potential", May 2006).

The Humboldt Forest Plan stated "Roadless areas not designated as wilderness will be managed for uses other than wilderness and will be re-evaluated in further wilderness considerations during the next planning period" (H-T, LRMP, Amendment 1, p. 7). National direction for the protection of inventoried roadless areas has been provided. The policy states that "inventoried roadless areas, shall as a general rule, be managed to preserve their roadless characteristics. However, where a line officer determines that an exception may be warranted, the decision to approve a road management activity can be made by the Regional Forester or the Chief (Interim Directive Number 1920-2004-1).

This direction is being followed in the forest plan and in the ROD (H-T, FP, IV-32, IV-33; ROD, p.3).

The analysis complied with the March 2001 regulations and rules dealing with IRA's and with the September 2006 District Court ruling concerning IRA's and roads (ROD, pp. 1, 3). Therefore, the FEIS follows policy and current Forest Plan management direction.

APPEAL ISSUE 12: The FEIS fails to adequately provide baseline information on pinon/juniper vegetative communities.

1. The FEIS did not display the effects to pinon/juniper vegetative communities and the important and sensitive species that depend on this habitat.
2. Single-leaf pinon provides an essential food source for the R4 Forest sensitive species, the Pinon Jay.
3. The Forest failed to conduct adequate analysis on the current status of the Pinon Jay population and habitat in and near the project area.
4. A full range of effects of the proposed action on forested vegetation could not have occurred because there was no Forester involved in the FEIS.

RESPONSE: Federal agencies shall to the fullest extent possible implement procedures to make the NEPA process more useful to decision makers and the public; to reduce the accumulation of extraneous background data; and to emphasize real environmental issues and alternatives (40 CFR 1500.2).

1. There are no sensitive species in which the critical habitat is the pinon/juniper vegetative communities. Townsend's big-eared bat may forage such community vegetation, however, it is not restricted by vegetative communities in its foraging (BA/BE, pp. 5-11).
2. The Pinon Jay is not an R4 Sensitive species (FEIS, p. 3-7; BA/BE, p. 4).
3. The specialist report recognized the limited information on local population trends and that past Breeding Bird Survey routes in Nevada were not a large enough sample to adequately reflect Forest population for Neotropical species, including the Pinon Jay. A more intense monitoring program was begun in 2002, which is too short of a period to establish long term trends. Neotropical species were therefore discussed in general terms (FEIS, pp. 3-18 - 3-19; WR, p.10).
4. It was not necessary to have a Forester on the Interdisciplinary Team (IDT) since it included an Ecologist as well as several Biological Resource Specialists, including a Wildlife Biologist and Botanist (FEIS, p. 5-3).
5. Plant communities were mapped from satellite imagery for broad-scale analysis. For Nevada, vegetative cover types have been classified following Gap Analysis Program (GAP) methodology, determined by the dominant species. For this analysis, the plant community types and cover types present in the analysis area have been grouped into eight communities based on dominant plant species and elevation zones. These communities include: alpine; Great Basin subalpine (white and Douglas fir, limber and bristlecone pine); low sagebrush/grass; mountain mahogany; mountain sagebrush;

mountain shrub; Pinon/juniper; and riparian-aspen (FEIS, pp. 3-31 - 3-37, WR, pp.13-15). Pinon/juniper woodlands were recognized as common throughout the project area at low-to mid-elevation, and they were not identified as critical or of special concern to be analyzed further (FEIS, p. 3-31; WR, p.13).

The Forest was not required to provide detailed information on pinon/juniper vegetative communities or the species that inhabit these communities. Adequate baseline data was provided and information gaps in local neotropical bird monitoring data were discussed.

APPEAL ISSUE 13: FEIS does not adequately address surface and groundwater resources. Specifically: 1) necessary baseline information on the quality, quantity and habitat condition of ground and surface water is lacking; 2) cumulative impacts from other projects combined with oil and gas development on ground and surface water condition, quantity and quality is not adequately displayed; and 3) impacts to aquifers and subsequent impacts to water quantity at springs and streams is not adequately displayed.

RESPONSE: FSM direction on soil and water management provides the following: 1) protect soil productivity, water quality and quantity, and timing of water flows; 2) protect, manage and improve riparian areas, in context of the environment in which they are located, recognizing their unique values; 3) give preferential consideration to riparian dependent resources when conflicts among use occur; and 4) minimize loss, destruction, and degradation of wetlands (FSM 2502.1; 2526.02; 2526.03(2); 2527.02).

The FSM also provides direction for groundwater management. One objective is to manage ground water underlying NFS lands primarily for the long-term protection and enhancement of aquifers and other ground-water systems, streams, springs, seeps, lakes, ponds, and their associated riparian and aquatic ecosystems (FSM 2543.02). The policy provides the following: 1) evaluate the effects of proposed actions on ground-water quantity and quality prior to approving a proposed use. Revise or amend applicable land use plans and evaluate project alternatives using appropriate science, technology, models, information, and ground water expertise; 2) plan and manage surface water and ground water as hydrologically interconnected systems unless it can be demonstrated otherwise; and 3) prevent contamination of ground-water resources by applying best management practices (BMPs) when transporting, storing, mixing, and applying pesticides and other potentially toxic materials; cleaning, repairing and fueling equipment; and when disposing of fuels, lubricants, pesticides or other potentially toxic materials (FSM 2543.03).

The LRMP also contains objectives, standards, and guidelines to direct the management of aquatic and riparian habitats: 1) management activities in riparian areas will be monitored and corrective action will be taken to prevent deterioration of riparian areas or degradation of water quality; 2) do not allow construction of new roads, except for crossings, within riparian areas unless no other alternative exists; 3) avoid development in 100-year flood plains unless it is the only practical alternative; 4) maintain or improve the Biotic Condition Index (BCI) on 95 percent of the streams to a minimum standard of 85 BCI; 5) strive to achieve and maintain at least 90

percent of the natural bank stability for streams; and 6) supporting Bonneville cutthroat trout and 80 percent on all other streams (LRMP, p. IV-49).

Cumulative effects that occur must be considered and analyzed without regard to land ownership boundaries. Consideration must be given to the incremental effects of past, present, and reasonably foreseeable related future actions of the FS, as well as those of other agencies and individuals (FSH 1909.15 (1)).

1) Necessary baseline information on the quality, quantity and condition of ground and surface water is lacking.

The hydrologic analysis for the FEIS included figures and tables displaying and summarizing the surface water distribution and associated stream flow regimes across the project area (FEIS, pp. 3-23 - 3-30 - 3-49 - 3-56). Available historical and current stream flow and water chemistry data were presented and summarized. The report also included a discussion of each 6th level watershed including anecdotal observations and other available information on stream, spring and watershed condition (FEIS, pp. 3-29). Baseline conditions for groundwater are addressed as well as groundwater occurrence and movement, current withdrawals by basin and water quality (FEIS, pp. 3-53 - 3-55).

The analysis provides adequate baseline information on surface and groundwater resources to evaluate the environmental consequences (FEIS, p. 3-30).

2) Cumulative impacts from other projects combined with oil and gas development on ground and surface water condition, quantity and quality is not adequately displayed.

The existing condition of surface water and groundwater in the project area included a baseline for these resources including alterations due to human activities and indicators of the health and trend of these systems (FEIS, pp. 3-23 - 3-30, 3-53 - 3-55). The environmental consequences section addresses cumulative impacts on surface water systems (FEIS, p. 4-17). The analysis provides a description of potential cumulative effects that could occur in streams and allows that “the magnitude and extent of cumulative effects will depend on watershed conditions and existing disturbances at the time that oil and gas exploration or development activities occur.” The analyst identified development in certain soil/slope zones as the primary risk for erosion and subsequent possible contribution to cumulative effects from the proposed activity. The alternatives were ranked in magnitude of possible cumulative effects based on how each alternative dealt with high and very high soil erosion areas. Cumulative impacts for groundwater were also addressed (FEIS, pp. 4-29 - 4-30). The analyst identified both pumping and hazardous material spills as risks for cumulative effects to groundwater (aquifer depletions and quality degradation). Although there were no differences between the action alternatives in regard to cumulative groundwater effects, mitigation was identified to attenuate the risk.

The analysis in the FEIS provided adequate cumulative effects analysis on surface and groundwater resources to evaluate the environmental consequences of the proposed action.

3) *Impacts to aquifers and subsequent impacts to water quantity at springs and streams is not adequately displayed.*

A description of impacts to groundwater and how changing levels could affect water flows at springs is included in the environmental consequences section (FEIS, pp. 4-27 – 4-32). The FEIS relates that the estimated water supply requirements at oil exploration sites are “a small rate of withdrawal, and would not be expected to produce interference drawdown impacts in nearby wells and springs” (FEIS, p. 4-28). The following measure is common to all action alternatives: 1) riparian areas and streams would be “protected with NSO...NSO applies to those areas delineated as riparian within stream buffer zones (583 acres)” (FEIS, pp. 4-19). Mitigation was identified to attenuate quantity and quality risks to groundwater resources (FEIS, pp. 4-31 and 4-32). Because of this, there were no indirect or direct differences between alternatives regarding flows at springs and streams. Groundwater withdrawals at the regional level were also examined in the cumulative effects section (FEIS, pp. 4-30 - 4-31). For the same reasons, there were no differences between alternatives in terms of water flows at springs and streams.

The analysis in the FEIS provided adequate analysis on impacts to aquifers and subsequent impacts to water quantity at springs and streams.

APPEAL ISSUE 14: FEIS fails to adequately address cumulative impacts on resources within the project area. Actions ignored include other energy projects, powerline, hard rock mining proposals and livestock grazing and the related facilities such as fences and troughs.

RESPONSE: Cumulative actions are actions that, when viewed with other proposed actions may have ‘cumulatively significant’ impacts that should be discussed in the same EIS (40 CFR 1508.25).

When preparing statements on broad actions agencies may find it useful to evaluate the proposal in one of the following ways:

1. Geographically, including actions occurring in the same general location.
2. Generically, including actions which have relevant similarities such as common timing, impacts, alternatives, methods of implementation, media, or subject matter.
3. By stage of technological development.

Agencies shall, as appropriate, employ scoping, tiering and other methods listed to relate broad and narrow actions and avoid duplication and delay (40 CFR 1502.4, 5).

The Forest Service reviewed the cumulative effects analysis for all resources which included the following activities by resource:

Ecological integrity and biodiversity - Cumulative effects may result from the combination of past, present, and future livestock grazing, wild horse management, recreation uses (such as hunting and dispersed camping, fuel wood harvest, road maintenance, mineral exploration, and the proposed oil and gas exploration). This assessment involves estimation of the extent of

ongoing and proposed activities in relation to potential oil and gas exploration activity in the future (FEIS, p. 4-4).

Sensitive wildlife species - Cumulative effects may result from the combination of past, present, and future livestock grazing; wild horse management; recreation uses such as hunting, off-highway vehicle use, and dispersed camping; fuel wood harvest; road construction and maintenance; mineral exploration; and the proposed oil and gas exploration. These often lead to fragmentation of habitat as well as the introduction of and spreading of noxious and invasive weed species (FEIS, p. 4-9).

Plants - Cumulative effects to sensitive plant species may result from the combination of past, present, and future livestock grazing; wild horse management; recreation uses such as hunting, off-highway vehicle use, and dispersed camping; fuel wood harvest; road construction and maintenance; mineral exploration; and the proposed oil and gas exploration/development. The cumulative impacts on sensitive plants from these activities coupled with oil and gas exploration activities would involve estimation of the extent of ongoing and proposed activities in relation to potential oil and gas exploration activity in the future (FEIS, p. 4-9).

Wildlife - Cumulative effects may result from the combination of past, present, and future livestock grazing; wild horse management; recreation uses such as hunting, off-highway vehicle use, dispersed camping; fuel wood harvest; road maintenance and construction; mineral exploration; and the proposed oil and gas exploration and development. There are other activities that may occur in project area that are not addressed above, but these describe the major activities that are most likely to continue to occur regularly in the future (FEIS, p. 4-15).

Aquatic and riparian ecosystems - Cumulative impacts are due to combined direct and indirect effects of oil and gas exploration or development activities with existing watershed disturbances, such as effects of fire, vegetation conversions, grazing, roads, off-highway vehicle use, road maintenance, mining, and water diversions. These combined effects cause changes in the amount and/or timing of runoff and sediment produced by a watershed, which brings about cumulative impacts within aquatic and riparian ecosystems (FEIS, p. 4-17).

Vegetative communities - Cumulative effects may result from the combination of past, present, and future livestock grazing; wild horse management; recreation uses such as hunting, off-highway vehicle use, dispersed camping; fuel wood harvest; road maintenance and construction; mineral exploration; the proposed oil and gas exploration and development. There are other activities that may occur in the project area that are not addressed above, but these describe the major activities that are most likely to continue to occur regularly in the future. The cumulative impacts on the vegetation communities from these activities coupled with oil and gas exploration activities involves estimation of the extent of ongoing and proposed activities in relation to potential oil and gas exploration activity in the future (FEIS, p. 4-20 - 4-21).

Slope stability and soil erosion - Cumulative effects may result from the combination of past, present, and future activities and site conditions within the project area lands that may affect slope stability and soil erosion and include seismic activities, grazing, vegetation conversion, wildfires, vegetation management, recreational use, off-road vehicle travel, and mining operations with associated use of access roads (FEIS, p. 4-27).

Groundwater - The boundaries for any cumulative affects are the boundaries of the project area, which are the same as the hydrographic area boundaries for all basins within the project area (FEIS, p. 4-29).

Cumulative impacts for the three designated wilderness areas and the roadless areas were addressed over the entire acreage (FEIS, p. 4-34 - 4-43).

Cumulative effects analyses for resources were included in the FEIS on the appropriate scale. There will be opportunities to review the adequacy of the analysis at the leasing and post-leasing stages prior to commitment of resources (ROD, pp. 1-2; FEIS, Appendix J-20 and FEIS, p. 2-8).

APPEAL ISSUE 15: FEIS fails to adequately consider effects of the use of chemicals or the potential for pollution.

RESPONSE: The FEIS must analyze the reasonable foreseeable impacts of the post-leasing activity projected in the RFD scenario (36 CFR 228.102(c)(4)). The FEIS discusses the use of chemicals in the drilling, completion, and production of oil and gas wells in a manner, which is consistent with the anticipated activity discussed in the RFD (FEIS, pp. E-11, E-15 - E-16, E-20, E-24 - 26, E-28, E-31). The FEIS also incorporates by reference the joint BLM /FS publication *Oil and Gas Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development* (Gold Book) and the EPA publication *Profile of the Oil and Gas Extraction Industry* (FEIS, p.1-12). These publications provide even more detail on the use of chemicals in different phases of oil and gas exploration and development. They describe best management practices and other mitigation measures commonly used to reduce the potential for pollution. The FEIS describes the effects of a chemical release to aquatic and riparian ecosystems and groundwater (FEIS, pp. 4-17 - 4-18; 4-28 - 4-31).

The FEIS adequately discloses the reasonably foreseeable use of chemicals in oil and gas activities. Under applicable regulations, the operator is required to remove or control solid wastes, toxic substances, and hazardous substances (36 CFR 228.108(g)). The Surface Use Plan of Operations will detail the operator's means to manage waste and prevent pollution in order to meet this requirement (FEIS, pp.1-6, 1-12; F-6).

APPEAL ISSUE 16: The FEIS fails to consider actions related to the bonding of lease activities and the feasibility of reclamation in the arid landscape.

RESPONSE: The FEIS analyzes the reasonable foreseeable impacts of the post-leasing activity described in the RFD scenario (36 CFR 228.102(c) (4); FEIS, pp. 4-1 - 4-54). Reclamation of all surface disturbances associated with post-lease activity is both a regulatory requirement and a standard operating procedure (36 CFR 228.108(g); FEIS, pp.1-12, E-30 - E-33). Past experience with oil and gas operations in the project area suggests that reclamation is feasible (FEIS, p. J-25). To address areas where reclamation may be problematic, the FEIS contains a recommended lease stipulation that prohibits surface occupancy on slopes over 40% and controls surface use on slopes between 25 to 40% (ROD, pp. 8-9). An opportunity for site-specific consideration of

surface use requirements, including reclamation can occur if leases are issued and surface use plans of operation are submitted to the FS for approval (36 CFR 228.108).

Both the FS and BLM regulations require that a bond be posted in advance of approving post-lease operations to ensure complete and timely reclamation (36 CFR 228.109; 43 CFR 3104). Neither agency will release the bond until all reclamation requirements are satisfied. Thus, if revegetation requires different techniques or additional time to become established, the involved operator is obligated to take the necessary action to ensure reclamation is complete and the Forest Service will have the necessary financial guarantee for the work.

The FEIS adequately considered reclamation of surface disturbance for the purpose of a leasing analysis. In addition, reclamation of, and bonding for, lease activities is a regulatory requirement.



File Code: 1570-1

Date: November 19, 2007

Route To:

Subject: Reviewing Officer Recommendation
White Pine & Grant-Quinn Oil & Gas Leasing Project
Appeal No. 08-04-07-0009 A215

To: Appeal Deciding Officer

This is my review and recommendation on the disposition of the appeal filed by Katie Fite on behalf of Western Watersheds on the Humboldt-Toiyabe NF's White Pine & Grant-Quinn Oil & Gas Leasing Project.

Project Background

This decision identifies lands in the White Pine and Grant-Quinn portions of the Ely Ranger District that will be available for oil and gas leasing and the conditions controlling those leases. It also amends the Humboldt-Toiyabe National Forest's Land and Resource Management Plan. The Forest Supervisor's decision makes 255,603 acres of National Forest System land available in the project area for oil and gas leasing.

Appellant's Request for Relief

The appellant requested that all components of the Environmental Impact Statement (EIS) that would allow oil and gas activity (exploration, leasing, and development) not be authorized.

Appeal Summary

The appellant asserts violations of the National Environmental Policy Act (NEPA), the Forest Plan, the Administrative Procedures Act (APA), the Clean Water Act, and the National Forest Management Act (NFMA). Specifically:

- The Reasonably Foreseeable Development (RFD) scenario is based on outdated and inaccurate information and thereby underestimates the amount of actual disturbance that can be expected to occur in the project area. This flawed RFD leads to a flawed analysis on which the Forest based its decision.
- The Final Environmental Impact Statement (FEIS) and Record of Decision (ROD) fail to provide any limits or caps on the amount of exploration and development that could occur in the project area. The Reasonable Foreseeable Development Scenario (RFD) is only an estimate of activity that can be exceeded once leases are issued.
- The FEIS provides no information on location and existing elements of fragmentation in important and sensitive species habitats – ranging from number and location of spring developments that may have reduced, altered or killed all perennial surface flows in sage grouse wet meadow areas to the location and effects of livestock fences on sage grouse, big game or pygmy rabbit habitat. Nowhere is an analysis of the scale and severity of



existing and foreseeable fragmentation, loss of connectivity, and genetic isolation of populations and population declines and effects on important, sensitive and Management Indicator Species (MIS).

- The FEIS fails to provide sufficient analysis for critical wildlife species-sage grouse, pygmy rabbit, elk, mule deer, raptors, bighorn sheep, neotropical migratory birds and bat species.
- The FEIS fails to provide sufficient mitigation and protective measure for the protection of wildlife species. Failure to provide adequate protection is a violation for the National Forest Management Act (NFMA) and the Humboldt National Forest Land and Resource Management Plan (Forest Plan).
- The FEIS fails to provide an adequate discussion on effects of the alternatives to species viability of the pygmy rabbit.
- The rare plant (Region 4 (R4) Sensitive) analysis is inadequate. There is no systematic analysis that relates to likely impacts. There is no mapping, analysis, or any other information provided in the FEIS; therefore, there was no “hard look” at the effects of the action on rare plants.
- The FEIS has failed to consider and examine the current or foreseeable extent and expansion of invasive species in association with oil and gas exploration and development disturbance. Cheatgrass is not mentioned.
- The FEIS and ROD wrongly rely on the outdated Forest Plan for protection of vegetation communities and do not include current ecological science. The FEIS wrongly relies on just the Forest Plan for special vegetation community protections or mitigations, ignoring National Forest Management Act (NFMA) requirements and its own policies for R4 sensitive species consideration and protection.
- The modification and exception provisions of the ROD give the forest latitude to lessen stipulation restrictions. The ability to change stipulations weakens the environmental protection measures given the various resources.
- The FEIS fails to adequately analyze the effects to Inventoried Roadless Areas and the unique characteristics that they possess. Specifically, the FEIS provides no specific evaluation of all the IRA’s or a comparison of the Quinn IRA versus the remaining IRA’s and violates the court order for the protection of the IRAs.
- The FEIS fails to adequately provide baseline information on pinyon/juniper vegetative communities.
- The FEIS does not adequately address surface and groundwater resources. Specifically: 1) necessary baseline information on the quality, quantity and habitat condition of ground and surface water is lacking; 2) cumulative impacts from other projects combined with oil and gas development on ground and surface water condition, quantity and quality is not adequately displayed; 3) impacts to aquifers and subsequent impacts to water quantity at springs and streams is not adequately displayed.
- The FEIS fails to adequately address cumulative impacts on resources within the project area. Actions ignored include other energy projects, powerline, hard rock mining proposals and livestock grazing and the related facilities such as fences and troughs.
- The FEIS fails to adequately consider effects of use of chemicals or the potential for pollution.
- The FEIS fails to consider actions related to the bonding of lease activities and the feasibility of reclamation in the arid landscape.

Findings

As Appeal Reviewing Officer, my role is to review the substantive quality and correctness, or appropriateness of the project decision with respect to clarity, comprehension, effectiveness of public participation, and requested changes. My findings are based on my review of the decision and project record, in accordance with 36 CFR 215.19.

1. Clarity of the Decision and Rationale

The Responsible Official's decision is clearly described in the Record of Decision (ROD). The rationale is logical and explains that after careful consideration of public input, and two independent federal decisions made in late 2006, modifications were necessitated between the draft and final Environmental Impact Statement (EIS). The rationale accounted for the new legislation, which established four new wilderness areas, and expanded the Currant Mountain Wilderness. It also considered the U.S. District Court Order (9/20/06), which reinstated the "2001 Roadless Rule" that eliminated the option of road construction or reconstruction within all Inventoried Roadless Areas.

From the information presented in the FEIS and the Project Record, it can be concluded that the amount of oil and gas disturbance projected in the RFD is a reasonable, technical and scientific approximation of anticipated activity and is based upon the best available information.

It is evident from the project record, the ROD and EIS that the Responsible Official conducted a thorough review of relevant scientific information, a consideration of responsible opposing views, and the acknowledgment of incomplete or unavailable information, scientific uncertainty, and risk.

2. Comprehension of Benefits and Purpose of the Proposal

The Purpose and Need and Decision framework are clearly stated in the EIS and ROD and facilitate responsible exploration and development of oil and gas resources in the project area.

3. Consistency of the Decision with Policy, Direction, and Supporting Information

I find the decision is consistent with agency policy, direction, and procedures for completing the EIS and ROD. The EIS, ROD and project record adequately disclose the environmental effects and provide sufficient evidence and analysis to make a reasoned choice.

4. Effectiveness of Public Participation Activities and Use of Comments

I find that the Responsible Official complied with regulations concerning publication of Notice of Intent and Notice of Availability in the Federal Register, and legal notices in the newspapers of record. I also find that the Responsible Official's staff provided additional public involvement through newsletters to interested parties and meetings with county commissioners. The record also illustrates consultation with tribal governments.

5. Requested Changes and Objections of the Appellant

The appellants request that oil and gas activities not be allowed. In my review of the appeal, I did not find that the appellants presented a compelling argument in contrast to the information the Responsible Official had to make his decision. I feel the decision and record adequately address and refute the appellants' rationale for reversing the decision.

Recommendation

Based on my review of the Environmental Impact Statement, Record of Decision, and supporting documentation in the project record, I recommend that the decision made by Forest Supervisor Ed Monnig be affirmed.

/s/ Kevin B. Elliott

Kevin B. Elliott

Appeal Reviewing Officer