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Western Environmental Law Center

Defending the West Land, Sky, Water, Wildlife, Culture

Via Hand Delivery

September 15, 2005

Martin Chavez
Forest Supervisor
Carson National Forest
208 Cruz Alta Road, Taos, New Mexico 87571

Re: Valle Vidal Forest Plan Amendment

Dear Mr. Chavez:

Please find attached scoping comments for the Valle Vidal Forest Plan Amendment submitted by the Coalition for the Valle Vidal and, individually: American Rivers, Amigos Bravos, Audubon New Mexico, Backcountry Horsemen of New Mexico, Bird's Eye View – GIS Services, Center for Biological Diversity, Consulting and Funding Resources LLC (d/b/a/ InfraSUR LLC), Eye for Design, Johnny's FABCO, MacArthur Quarter Horses, Middle Rio Grande Chapter of the Back Country Horsemen of New Mexico, Natural Resources Defense Council, New Mexico Chapter of REP (Republicans for Environmental Protection) America, New Mexico Environmental Law Center, New Mexico Wilderness Alliance, New Mexico Wildlife Federation, Oil and Gas Accountability Project, Rio Grande Chapter of the Sierra Club, Sierra Club, Southwest Consolidated Sportsmen, Taos Saddle Club, The Horsemen's Voice, and The Wilderness Society.

If you have any questions, please not hesitate to contact me. Thank you for your time and consideration.

Sincerely,

Erik Schlenker-Goodrich
Counsel for the Coalition for the Valle Vidal

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SCOPING COMMENTS OF THE COALITION FOR THE VALLE VIDAL

And, individually:

American Rivers, Amigos Bravos, Audubon New Mexico, Backcountry Horsemen of New Mexico, Bird's Eye View – GIS Services, Center for Biological Diversity, Consulting and Funding Resources LLC (d/b/a/ InfraSUR LLC), Eye for Design, Johnny's FABCO, MacArthur Quarter Horses, Middle Rio Grande Chapter of the Back Country Horsemen of New Mexico, Natural Resources Defense Council, New Mexico Chapter of REP (Republicans for Environmental Protection) America, New Mexico Environmental Law Center, New Mexico Wilderness Alliance, New Mexico Wildlife Federation, Oil and Gas Accountability Project, Rio Grande Chapter of the Sierra Club, Sierra Club, Southwest Consolidated Sportsmen, Taos Saddle Club, The Horsemen's Voice, and The Wilderness Society

PREPARED FOR THE UNITED STATES FOREST SERVICE'S PROPOSED LAND AND RESOURCE MANAGEMENT AMENDMENT FOR THE VALLE VIDAL, CARSON NATIONAL FOREST, NEW MEXICO

[70 FED. REG. 34441 (June 14, 2005)]

Prepared by:

Erik Schlenker-Goodrich, Western Environmental Law Center
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Jon Thomas Klingel, Wildlife Biologist

September 15, 2005

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I. THE VALLE VIDAL

Donated to the American people in 1982, the Valle Vidal of New Mexico is a spectacular wildlands landscape located in the heart of northern New Mexico's Sangre de Cristo Mountains within a lush mountain basin. Beloved by New Mexicans and people around the world, abundant populations of wildlife, including mule deer, black bear, mountain lion, wild turkeys**,** and native Rio Grande cutthroat trout, call the Valle Vidal home. Most famously, vast alpine meadows within the Valle Vidal provide habitat for one of New Mexico's premier elk herds – an elk herd that relies on the health and integrity of not simply the Valle Vidal, but the broader landscape, to survive and prosper. As promised at the dedication of the Valle Vidal in 1985, "Max Peterson, chief of the Forest Service, [said that] the Forest Service would manage the unit to protect its *prime* resource – its wildlife."[1]

The Valle Vidal also comprises the headwaters of numerous streams and tributaries of both the Rio Grande and Canadian Rivers. These waters are considered so important that the State of New Mexico has proposed to designate all of the Valle Vidal's waters as Outstanding National Resource Waters – a designation that represents the highest form of water quality protection pursuant to the Clean Water Act. Furthermore, several waters within the Middle Ponil, North Ponil, and Rio Costillo drainages are eligible for designation pursuant to the Wild and Scenic Rivers Act.

Given the wildlife and water resources of this special place, it is no surprise that the Valle Vidal is a recreational paradise. Hunting and fishing opportunities on the Valle Vidal are spectacular, providing the surrounding communities with economic opportunities derived from outfitter operations and the infusion of money expended by hunters and anglers. In addition to the aforementioned elk herd, the Valle Vidal contains an outstanding trout fishery. Visitors to the Valle Vidal – whether for hunting, fishing, hiking, or other recreational endeavors – can enjoy the Cimarron and McCrystal campgrounds, both of which were voted as two of the top ten campgrounds in the United States by the Great Outdoor Recreation Pages.

It should also be no surprise that the Valle Vidal holds a long, rich, and colorful history, embodying many of the most important – for better or worse – historical elements of the Rocky Mountain West. Native peoples, including the original Folsom people, Anasazi, Pueblo cultures, and Jicarilla Apache, trace their ancestry and history to the Valle Vidal. The Valle Vidal, as part of the former Maxwell Land Grant, also reflects New Mexico's Spanish and Mexican land grant heritage, and the West's predilection for violent and bloody conflicts – e.g., the Colfax County Wars. Ranching and agricultural has also been historically important in the Valle Vidal, and remains important to the people of northern New Mexico to this day. These historical elements demonstrate that the Valle Vidal provides current and future generations with important lessons about what we have done right and what we have done wrong in our evolution as a people and in our relationships with our public lands. Sadly, however, the Valle Vidal is threatened by one of our nation's most poorly justified predilections: the exploitation and degradation of our most special public lands for relatively miniscule reserves of oil and gas. Now managed in trust for

[1] Valle Vidal Assessment Process Opens, Public Response Sought, The Taos News, Thursday March 19, 1992 (emphasis added)..

the American people, the Valle Vidal should be protected from exploitation, and its ecological health and integrity restored, to ensure that we can understand the lessons of history, and to ensure that our futile quest for energy independence through a myopic "drill, drill, drill" mentality does not destroy our natural and cultural heritage.

The Forest Plan Amendment planning process giving rise to these scoping comments was formally begun on June 14, 2005 with a Notice of Intent to Prepare an Environmental Impact Statement (*See* 70 Fed. Reg. 34441 (June 14, 2005)). However, it is important to note that Forest Plan Amendment planning process truly began in May 2002 with the submission of an "Expression of Interest" for the eastern 40,000 acre area of the Valle Vidal by El Paso Corporation to the Santa Fe Office of the Bureau of Land Management. After El Paso Corporation was rebuffed due to other management priorities, in June of 2003, El Paso Corporation met with the White House Task Force on Energy Project Streamlining, an entity established pursuant to Executive Order 13212 to expedite energy-related projects. *See* Memorandum of July 10, 2002 from Forest Supervisor Martin Chavez to the Regional Forester (on file with the Western Environmental Law Center). Soon thereafter, The White House Task Force on Energy Project Streamlining sent a memorandum to the Forest Service requesting an expedited response from the Forest Service concerning a "status report on the described project" – i.e., a analysis of whether or not "environmental conditions would restrict or prohibit the exploration of natural gas within the Valle Vidal Unit of the Carson National Forest." *See* Memorandum of July 24, 2003 from Robert W. Middleton, Director, White House Task Force on Energy Project Streamlining, to Deb Atwood, Chief of Staff, USDA (on file with the Western Environmental Law Center). Subsequently, the Forest Service contracted out the preparation of a Reasonably Foreseeable Development Scenario to assess the Valle Vidal's mineral resources, a document that did not account for the Valle Vidal's ecological resources.

At the same time as these events were transpiring, the people of New Mexico including hunters and anglers, ranchers, conservationists, businesses, Boy Scouts, hikers, and local communities began to organize, unified in their objective of protecting the Valle Vidal as a part of New Mexico's natural and cultural heritage. While not opposed to oil and gas development *per se*, this organized group of citizens and organizations believed in a basic principle: "do it right." To "do it right" means not simply conducting oil and gas development in a truly environmentally responsible fashion, but, in certain instances, to leaving the most special places alone. One of these special places is the Valle Vidal. Protection of the Valle Vidal is not merely a matter of conservation, but of bottom-line economics. The West is a changing place and communities no longer depend primarily on resource extraction. Indeed, resource extraction can cripple long-term economic growth and sustainability. Thus, protecting, not exploiting public lands functions as one of several critical factors necessary to create a thriving and sustainable rural economy.

It is in this light that the Coalition for the Valle Vidal – the evolved successor of these early organizing efforts – and the above-named individual organizations and there *over two million members* submit these scoping comments. We believe that the Forest Service should prohibit oil and gas development in the Valle Vidal and protect this special place for the benefit of current and future generations. The Valle Vidal is simply too precious and too important a resource to exploit for a few hours of coalbed methane natural gas.

II. THE COALITION'S MANAGEMENT ALTERNATIVE

A. Overview

The following comments within this section – Section II – provide the Forest Service with an alternative management framework predicated on a restoration-based Vision and the implementation of ecosystem management principles. This alternative management framework should be considered in its own right as a management alternative in the Forest Plan Amendment/National Environmental Policy Act ("NEPA") process and, through comparative analysis, as a critique of the Forest Service's own Proposed Amendment.

B. The Valle Vidal Should be Restored and, Once Restored, Protected for Current & Future Generations

As explained in previous submissions to the Forest Service, the Coalition is held together based on a strong belief in a set of Core Values. We used these Core Values as a basis of drafting the following alternative "Vision" for the Valle Vidal:

> The Valle Vidal is a frontier, wildlands landscape beloved by the people. The Valle Vidal shall therefore be restored and, once restored, protected, to ensure that current and future generations can enjoy its unique combination of wildland resources and intrinsic beauty and value. Of paramount value are the Valle Vidal's abundant fish and wildlife, and important watershed and water resources, which serve as indicators of the land's ecological health and integrity.
>
> Without compromising this paramount value, the Valle Vidal shall be managed for the benefit of all the people. Management shall accordingly protect the Valle Vidal's natural solitude and scenic beauty in order to provide the people with unique, high quality, low impact recreational and sporting opportunities; protect the important cultural resources of the Valle Vidal; and acknowledge the Valle Vidal's importance to rural and agricultural communities by emphasizing the land's role in creating a thriving, sustainable economy.
>
> Implementation of this guiding vision for the Valle Vidal shall be rooted in the precautionary principle of land management: in the face of uncertainty, it is better to prevent harm to the land than to attempt to repair it later.

This Vision is designed to express the way we value the Valle Vidal as a component of our intertwined natural and cultural heritage and to articulate those values within a management framework that the Forest Service can implement. The Valle Vidal is not a commodity that can be broken down into its constituent parts and sold. Rather, the Valle Vidal is a special place wherein, whether quantitatively or qualitatively, the 'whole is greater than the sum of its parts.' As Aldo Leopold – a former Forest Supervisor for the Carson National Forest – explained in the foreword to *A Sand County Almanac*:

> We abuse land because we regard it as a commodity belonging to us.
>
> When we see land as a community to which we belong, we may begin to use it with love and respect. There is no other way for land to survive the impact of mechanized man, nor for us to reap from it the esthetic harvest it is capable, under science, of contributing to culture.
>
> That land is a community is the basic concept of ecology, but that land is to be loved and respected is an extension of ethics. That land yields a cultural harvest is a fact long known, but latterly often forgotten.

Aldo Leopold. *A Sand County Almanac*. Pp. xviii-xix (1966).

The key to our Vision is that the Valle Vidal's ecological health and integrity must be restored and, once restored, protected. Restoration in this context means, essentially, the repair of the Valle Vidal's and the broader landscape's natural ecological structure, function, and composition. The priority given to the restoration of ecological health and integrity does not necessarily mean that other resources and uses are less important. Rather, it simply reflects the common sense proposition that the use and enjoyment of our public lands is derivative of an intact, healthy ecosystem that, here, is indicated by the presence of healthy, abundant, native aquatic and terrestrial wildlife populations, clean waters, and ecologically sound watersheds.

Importantly, for the Valle Vidal, we are under no illusion that the environment – regardless of its considerable beauty and value – is pristine. Considerable work therefore must be done to restore the land to ensure that its values and uses can be optimized for the land's intrinsic benefit and for the people's benefit. We would consider it a tragic mistake if the Forest Service allowed for degradation of the Valle Vidal. Considerable time and effort has been expended by a host of organizations and individuals to make the Valle Vidal what it is today. For example:

- Since 2004, Amigos Bravos, through a three-year contract with the New Mexico Environment Department and a Memorandum of Understanding with the Forest Service, and assistance from the New Mexico Wilderness Alliance, have assisted in two separate watershed and riparian restoration projects expressly designed to, *among other things*, protect the Valle Vidal from illegal off-highway vehicle intrusions from access points located in the upper Red River watershed. This work involves providing federal Clean Water Act grant monies to the Forest Service to enforce off-highway vehicle ("OHV") regulations.

- Amigos Bravos has also focused on creating winter flows below the Costilla dam, restoring cutthroat trout habitat on Comanche Creek, ensuring Forest Service compliance with its duties under the Wild and Scenic Rivers Act, filing a lawsuit against EPA to ensure water quality improvements on Cordova Creek, and ensuring river flows below the Cerro Canal diversion structure.

- The Boy Scout's Philmont Scout Ranch requires each of its approximately 3,000 yearly campers on its staffed camps in the Valle Vidal – Whitman Vega, Seally Canyon, and Ring Place – to perform four hours of conservation work on Forest Service approved projects. Such work therefore totals approximately 12,000 hours of service on the Valle Vidal each year.

- The Forest Service has undertaken considerable work with the Quivera Coalition, New Mexico Environment Department (Surface Water Quality Bureau), the Valle Vidal Grazing Association, and other partners on a Watershed Restoration Action Strategy for the Valle Vidal.

- The Forest Service, New Mexico Game and Fish, and others have worked hard to restore conditions for Rio Grande Cutthroat Trout through a myriad of projects.

- The Forest Service has undertaken efforts over time to close, rip, and seed unnecessary roads within the Valle Vidal.

- Since 1982, The New Mexico Wildlife Federation, and its affiliate chapter The Albuquerque Wildlife Federation, have been involved in yearly restoration projects that have enhanced and helped restore numerous segments of streams and wetlands in the Valle Vidal. Their aquatic and terrestrial habitat projects have greatly supplemented the cold water fishery restoration for the Rio Grande Cutthroat and other wildlife in the Valle Vidal. Their persistent conservation work over the years has transformed several dry denuded areas into lush wet meadows.

Our Vision to restore the Valle Vidal's ecological health and integrity, in addition to ensuring the continuation of restorative work on the Valle Vidal, implements and is consistent with the Core Values of the Coalition, and, critically, the Forest Service's authority and duties pursuant to Federal law. The Organic Act of 1897 explicitly provides that National Forests are designed "to *improve and protect* the forest" and to "secure[e] favorable conditions of water flows…" 16 U.S.C. § 471 (emphasis added). In fact, "[t]he legislative history of the 1897 Organic Act indicates that many congressmen considered watershed protection to be the paramount, if not exclusive, purpose of established forest reserves." Charles F. Wilkinson & H. Michael Anderson, *Land and Resource Planning in the National Forests* at 203 (1987) ("Wilkinson & Anderson").[2] To achieve these objectives, the Organic Act grants the Forest Service expansive authority to "make such rules and regulations ... to regulate [the National Forest's] occupancy and use and to *preserve the forests thereon from destruction*." 16 U.S.C. § 551 (emphasis added). Building upon the Organic Act, the Multiple Use, Sustained Yield Act of 1960 ("MUSYA") states, *among other things*, that:

[2] Wilkinson and Anderson proceed to note that [t]he 1897 Organic Act as enacted, however, treated timber production as co-equal with watershed protection." Wilkinson & Anderson at 204. To the extent relevant, the Coalition simply adds that regardless of the legal status of each purpose as "co-equal," the protection of water resources, as unequivocally essential to sustainable timber production, is effectively paramount.

> It is the policy of the Congress that the national forests are established and shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes.

In 1976, Congress fortified the Forest Service's authority over National Forests with passage of the National Forest Management Act ("NFMA"). NFMA "complement[s] and expand[s] the directive of the 1897 Organic Act to protect watersheds." Wilkinson & Anderson at 209. NFMA also, notably, mandates that the Forest Service, through forest planning, "provide for diversity of plant and animal communities based on the suitability and capability of the specific land area in order to meet overall multiple-use objectives." 16 U.S.C. § 1604(g)(3)(B).

Prior to NFMA, in 1969, the National Environmental Policy Act ("NEPA") was enacted. NEPA, in establishing a national environmental policy, directs the Forest Service to:

> 1. Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations.
>
> 2. Assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings.
>
> 3. Attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences.
>
> 4. Preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity, and variety of individual choice.
>
> 5. Achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities.
>
> 6. Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

42 U.S.C. §§ 4331(b)(1)-(6); *see also id.* at § 4331(a). NEPA's directives are critical given that the Forest Service's authority under the Organic Act, MUSYA, and NFMA (and, for that matter, all "policies, regulations, and public laws of the United States") "shall", "to the fullest extent possible," "be interpreted and administered in accordance with the policies set forth" by NEPA – i.e., those set forth in 42 U.S.C. § 4331. This principle is reinforced, and succinctly articulated, by enforceable regulations promulgated by the Council on Environmental Quality, which direct the Forest Service to:

> Use all practicable means, consistent with the requirements of [NEPA] and other essential considerations of national policy, to restore and enhance the quality of the human environment and avoid or minimize any possible adverse effects of their actions upon the quality of the human environment.

40 C.F.R. § 1500.2(f); *see also* 40 C.F.R. § 1508.14 (defining "human environment").

In addition to the authorities and duties provided by the Organic Act, MUSYA, NFMA, and NEPA, several other statutes and authorities bear witness to the legal validity – if not necessity – of our Vision. For example, the federal Clean Water Act states that its objective "is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251. Given their eligibility under the Wild and Scenic Rivers Act of 1968, the Forest Service is also, here, duty bound to "protect and enhance" eligible Wild and Scenic Rivers in the Middle Ponil, North Ponil, Rio Costilla, and Rio Costilla/Comanche drainages for their outstandingly remarkable values and to preserve their classifications in compliance with applicable statutory requirements, including but not limited to 16 U.S.C. § 1281 and Forest Service policy set forth in the Forest Service Handbook, Ch. 8 "Wild and Scenic River Evaluation," § 8.12 "Interim Management of Study Rivers." As interpreted by enforceable interagency guidelines, the Forest Service's duty to "protect and enhance" these rivers imposes "nondegradation and enhancement" requirements on the Forest Service's management of these rivers or activities that impact these rivers. 47 Fed. Reg. 39454, 39459 (Sept. 7, 1982).

The laws and authorities referenced above are not intended to be exhaustive but, rather, indicative of the Forest Service's authority and duty to restore and, once restored, protect the Valle Vidal.

C. Restoration and Protection Should be Achieved through Ecosystem Management

We believe that the Forest Service should adopt an ecosystem management approach to managing the Valle Vidal. As explained in our pre-scoping comments on page 4 (attached as Exhibit A), in discussing our Core Values, and consistent with our Vision for the Valle Vidal:

> Notably, these Core Values, and the Forest Service's management emphasis in the Valle Vidal must be underst[ood] relative to contemporary ecological thinking – i.e., ecosystem management – which we believe is a predicate to the formation of economically sustainable communities that evidence a high quality of life. Accordingly, the Valle Vidal's management must emphasize the *restoration* of ecological structure, function, and composition and the Valle Vidal's consequent role in providing landscape connectivity in the region. This can be done by emphasizing high quality habitat, low-impact recreation, watershed protection and restoration (both ground and surface water), and visual resources. Once restored, the Valle Vidal's ecological structure, function, and composition – and role in providing landscape connectivity – must be *protected*.
>
> Inherent to ecosystem management is the need to take a conservative approach and err on the side of protecting the ecosystem to preserve ecological structure, function, and composition. In common parlance, this is referred to as the "precautionary principle" of conservation biology, which states that precautionary measures should be taken when a certain activity or inactivity threatens to harm

> human health or the environment, even when science has not fully established cause and effect relationships (Meffe et al. 1994, Noss and Cooperrider 1994).[3] The precautionary principle acknowledges the complexity of dynamic natural systems and the effects of human activities through the common sense principle that it is easier to prevent harm to the land than to attempt to repair it later.
>
> Implementation of ecosystem management requires a front-end NEPA analysis of the landscape's ecosystem structure, function, and integrity at multiple temporal and spatial scales, and an analysis of disturbance regimes. Without such a requisite analysis, the efficacy of any management framework is intrinsically suspect as it invites *post hoc* analysis and can be undermined by agency bureaucratic momentum to proceed with a course of action – even if that course of action is merely a broad management framework that does not itself dictate specific decision or resource commitments. This is because the framework affects agency resource allocations, budget prioritization, selection of possible projects and activities, and, in general, functions as a 'lens' through which all management is viewed.

To achieve true ecosystem management, the Forest Service's NEPA analysis must be closely linked to the agency's Standards & Guidelines. Consistent with our Vision, these Standards & Guidelines should establish enforceable, quantifiable objectives and disturbance thresholds established for, *broadly*, general landscape-scale ecological health and integrity and, *specifically*, aquatic and terrestrial wildlife populations and habitats and water quality, and other resources and values as appropriate. All Standards & Guidelines – and the objectives and disturbance thresholds used to establish such standards & guidelines – should be conservative, with built in safety margins to ensure that resources are not managed to the edge of impairment, and explicitly reflective of the common sense proposition that it is easier to prevent harm to the land than to attempt to repair it later. Compliance with these Standards & Guidelines should be achieved through a rigorous monitoring, mitigation, and restoration plan that ensures the efficacy of authorized management activities and ensures that such activities are properly "tiered" to the EIS prepared for the Forest Plan Amendment.

[3] Meffe, G.K., and C.R. Carroll. 1994. Principles of Conservation Biology. Sinauer Associates, Inc., Sunderland, MA; Noss, R.F., and A. Cooperrider. 1994. Saving Nature's Legacy: Protecting and Restoring Biodiversity. Island Press, Washington, DC.

III. CONCERNS OVER THE FOREST SERVICE'S PROPOSED FOREST PLAN AMENDMENT

A. Overview

We appreciate the time and effort that the Forest Service put into the preparation of the Proposed Forest Plan Amendment for the Valle Vidal. In particular, we appreciate the Forest Service's sincere efforts to engage the public prior to the release of the Proposed Action through the pre-scoping public participation process.

That said, the current Proposed Action raises serious concerns about the Forest Service's management direction in the Valle Vidal. Despite the purported emphasis on wildlife, native fisheries, outdoor recreation, and high scenic integrity, each component of the Proposed Amendment – Vision, Management Highlights, and Standards and Guidelines – fails to afford the Valle Vidal a level of protection consonant with the land's irreplaceable resources and values. The Proposed Amendment, as presently constructed, also leaves the door open to the possibility of coalbed methane ("CBM") development.

In this context, the Forest Service's Proposed Amendment appears to be designed in light of the Forest Service's commitment to preparing a subsequent oil and gas leasing EIS ("Leasing EIS") in response to El Paso's Expression of Interest in opening the Valle Vidal to coalbed methane development. In designing the Proposed Amendment in this fashion, we fear that the Forest Service is putting the proverbial "cart before the horse." In effect, the Forest Service, by committing to the Leasing EIS, has seemingly denied itself the opportunity through the Forest Plan Amendment process to select a highly-protective management alternative under which no level of CBM development, given the importance or sensitivity of other resources and values, is acceptable. If that were not the case, then it would be illogical, at this stage of the process, to already commit significant federal resources to the preparation of a full-blown Leasing EIS. Put simply, the Forest Service holds the statutory and regulatory authority – and may in fact be duty bound – to simply say no (or, at the least, reserve the right to say no) to oil and gas leasing at the Forest Plan Amendment stage by determining that the Valle Vidal is "unsuitable" for CBM leasing "through exercise of management direction." 36 C.F.R. § 228.102(c)(1)(iii).[4]

A leasing analysis considering a decision to lease specific lands (36 C.F.R. § 228.102(e)) – a distinct regulatory step – would only be necessary if the Forest Service determined that the Valle Vidal is "suitable" for minerals development. Such a leasing analysis, however, is the *second* stage in the minerals leasing process, not the *first* stage. In effect, the Forest Service has, here, decided to combine the two stages of the minerals leasing process – (1) the suitability analysis and (2) the leasing analysis considering a decision to lease specific lands – into a single stage. In so doing, the Forest Service has undermined the Forest Plan Amendment process and

[4] Neither the Mineral Leasing Act of 1920 nor the Federal Onshore Oil & Gas Leasing Reform Act of 1987 mandates that any particular lands be offered for leasing. Instead, whether the Forest Service leases particular lands is subject to the agency's discretion. 30 U.S.C. § 226(a). This position has been upheld by the federal courts. *See, e.g., Udall v. Tallman*, 380 U.S. 1 (1965); *Rocky Mountain Oil & Gas Association v. U.S. Forest Service*, 157 F.Supp.2d 1142 (D.Mont. 2000).

effectively eliminated otherwise reasonable management alternatives as viable, possible selections. At present the planning and decision-making framework chosen by the Forest Service is unsupported by the agency's overarching legal framework and – whether intentionally or unintentionally – ascribes minerals development with a dominant position in what should be an equal playing field for all multiple uses. The Forest Service must therefore change course by conducting the suitability analysis and retaining the authority to consider and select a highly-protective management alternative

Turning to the specifics of the Proposed Amendment, the rationale behind the Vision, Management Highlights, and Standards and Guidelines is unclear, and it is also unclear how each of these components will translate into on-the-ground management decisions. The Forest Service therefore needs to explain the role of each component and tighten the linkages between the Vision, Management Highlights, and Standards and Guidelines. The Proposed Amendment, in creating a management framework, should also clearly set out long and short term time frames within which goals and objectives are intended to be achieved. Without such time frames, goals and objectives tend to be little more than aspirations that are often not achieved. The following sections provide more detailed comments concerning each component of the Proposed Amendment.

B. Concerns with the Forest Service's Proposed Vision

As presently written the Proposed Amendment's Vision for the Valle Vidal needs clarification. We refer the Forest Service to the Coalition's Proposed Vision articulated above in Section II for suggested language. As stated, our alternative management framework outlined in Section II should be considered in its own right as a management alternative in the Forest Plan Amendment process and, through comparative analysis, as a critique of the Forest Service's own Proposed Amendment. At bottom, we emphasize that the Forest Service's Vision is flawed.

First, as a general matter, certain components need to be defined. What does "maintenance" mean? What does "restoration" mean? What does "sustain" mean? What does "improve" mean? Once a Forest Plan Amendment is adopted, these definitions will be critical for the public and agency officials to discern whether the Forest Service is achieving management objectives consistent with the Valle Vidal's Vision.

Second, the fact that the phrases "maintenance or restoration" and "sustain or improve" are written in the disjunctive suggests equivocation on the part of the Forest Service as to the agency's actual management objectives. In other words, as currently written, it is unclear what circumstances would provide for simply "maintenance" and what circumstances would provide for "restoration." The same goes for the phrase "sustain or improve." Additionally, the inclusion of the word "focusing on maintenance or restoration" also suggests equivocation; is the Forest Service simply "focusing" on maintenance or restoration, or is maintenance or restoration a mandatory, enforceable mandate (i.e., the Forest Service *shall* …)? At present the Vision seems to allow just about anything to happen on the land and provides no real direction or limitations.

We therefore suggest that the Forest Service clarify its Vision and set a definitive management direction for the Valle Vidal so that it is clear what uses or activities are or are not

allowed in the Valle Vidal and to give agency officials clear markers for how to manage the land. In our view, the Forest Service should seek to "restore" the Valle Vidal's ecological health and integrity with a focus on wildlife and water and, once the land is "restored," protect it.

C. Concerns with the Forest Service's Proposed Management Highlights

The Proposed Amendment identifies four management highlights: (1) wildlife (with an emphasis on elk); (2) outdoor recreation experience (with an emphasis on dispersed recreation); (3) high scenic integrity; and (4) high quality stream and in-stream conditions.

While these management highlights represent a good start, the Forest Service should establish a unifying management highlight – the restoration of ecosystem health and integrity. This unifying management highlight, consistent with the Coalition's Vision proposed in Section II above, serves as a foundation for management of all other resources, providing clarity to the overall management direction for the Valle Vidal, and allowing the Forest Service to properly and rationally balance competing uses of the land.

Additionally, each Management Highlight needs more specificity:

- For **wildlife**, the Highlight needs to place more emphasis on the fact that the Valle Vidal provides habitat for a diverse suite of species. Efforts should be undertaken to restore ecological health and integrity to ensure viable aquatic and terrestrial wildlife habitat for all native species within the Valle Vidal *and* the broader landscape. While the Elk herd is important, the Forest Service must not ignore its fundamental duty to all native species.

- For **outdoor recreation**, the Forest Service needs to clarify what exactly is meant by an "outstanding" experience and work to minimize user conflicts. Moreover, the Forest Service should ensure that outdoor recreation is consistent with the Forest Service's duties to ecological health and integrity and the land's wildlife. It would be tragic if the Forest Service, in promoting outdoor recreation, unintentionally created a situation whereby high-impact outdoor recreationists, such as off highway vehicle ("OHV") users, compromised the fundamental resources and values that make the Valle Vidal so special.

  Given the dominant purposes for which the donation of the Valle Vidal was made, the emphasis must be on high quality, low-impact recreation experiences that allow the public to enjoy the Valle Vidal's natural solitude and quiet, and to experience the wildlife free from anthropogenic influences. More intrusive, high impact recreational opportunities should be limited to areas easily accessed from Forest Road 1950 and designed to provide families with opportunities for wildlife viewing and fishing. The Valle Vidal is not and should not be an OHV "play area."

- For **high scenic integrity**, the Forest Service should emphasize that scenic integrity is used as an indicator of ecological health and integrity. As presently written, the highlight seems to relegate the protection of scenic integrity to merely a cosmetic issue, thus suggesting that certain landscape characteristics, so long as not within view of the public, could be degraded or impaired. Fundamentally, scenic integrity should be restored and, once restored, protected throughout the entire Valle Vidal, regardless of one's vantage point. This ensures that the Valle

Vidal's wildlife corridors, open meadows, riparian areas, geological features, forests, and streams are actually protected. The protection of scenic integrity should also be linked to the Forest Service's promotion of high quality, low impact recreational opportunities that provide people with the opportunity to enjoy the Valle Vidal free of anthropogenic influences through, for example, the creation of a designated hiking trail system designed to provide access while protecting ecological health and integrity.

- For **streams**, *all* of the Valle Vidal's waters are important, and *all* should be protected. The Forest Service's focus on the west-side streams is troubling given that the east-side 40,000 acres is targeted for CBM development. The Forest Service's focus strikes us as a means to create a built-in explanation for opening the east-side to CBM development.

  In protecting *all* of the Valle Vidal's waters, the Forest Service should promote not only the restoration of native fisheries, but, comprehensively, work to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters" (33 U.S.C. § 1251) via, *among other things*, attainment of water quality standards (all components). The Forest Service should also explicitly state as part of this highlight that it will "protect and enhance" eligible Wild and Scenic Rivers (16 U.S.C. § 1281) through imposition of "nondegradation and enhancement" requirements (47 Fed. Reg. 39454, 39459 (Sept. 7, 1982)).

D. Concerns with the Forest Service's Proposed Standards & Guidelines

In crafting Standards & Guidelines, the forest Service should step back and establish a proactive management framework designed expressly to achieve the Vision and satisfy the intended Management Highlights. At present, the Standards and Guidelines lack a coherent theme and, instead, appear designed to respond to specific issues and problems. While it is important to respond to these issues and problems, it is absolutely vital for the Forest Service to demonstrate its long-term commitment to the Valle Vidal's protection by crafting *comprehensive* and *proactive* Standards & Guidelines.

We therefore suggest, consistent with our comments concerning the Forest Service's Vision and Management Highlights, the Forest Service craft Standards and Guidelines designed to restore ecological health and integrity. Standards and Guidelines for ecosystem health and integrity would consist of two key components:

- **Watershed.** Standards and Guidelines would be designed to restore and, once restored, protect overall watershed health and integrity. Specific components would include provisions to achieve Water Quality Standards promulgated by the State of New Mexico and restore watershed structure, function, and composition. Additionally, the forest Service should design such Standards & Guidelines consistent with the agency's duties to "protect and enhance" eligible Wild and Scenic Rivers (16 U.S.C. § 1281) through imposition of "nondegradation and enhancement" requirements (47 Fed. Reg. 39454, 39459 (Sept. 7, 1982)).

- **Wildlife Habitat.** The Forest Service should assess each habitat type within the Valle Vidal and determine threshold points beyond which the land would no longer protect species diversity. These thresholds would constitute an absolute floor under of protected habitat needed in the

Valle Vidal. Critically, Forest Plan Standards and Guidelines should also establish habitat objectives consistent with the need to not simply *protect* current habitat levels and species diversity, but to actually *restore* native habitat and species diversity within the Valle Vidal. Such thresholds and objectives should account for: (1) overall habitat disturbance; (2) habitat connectivity and fragmentation; and (3) protection/restoration of natural conditions in otherwise disturbed land surrounding undisturbed healthy, viable habitat. These thresholds and objectives should be designed to create large blocks of contiguous habitat free from anthropogenic influences (such as roads) to support native wildlife.

These ecosystem health & integrity" Standards and Guidelines would, in accord with the Vision and Management Highlights, function as unifying factors for management of the Valle Vidal and guide the creation of more issue and problem-specific Standards and Guidelines for all other management areas such as roads, visual quality, recreation, etc. In unifying the Standards and Guidelines, the Forest Service would be able to tighten the presently unclear and uncertain link between the Standards and Guidelines and the Forest Plan Amendment's eventual Vision and Management Highlights.

In addition to this overarching comment, we also have specific comments regarding the proposed Standards & Guidelines and suggestions for additional Standards and Guidelines:

- **Seasonal & Area Closures.** These provisions state that the identified areas are "closed to public entry." The closure needs to include commercial activity and all non-essential administrative use.

- **Roads.** We are pleased to see that vehicular access is limited to Forest Road 1950, although the Forest Service should eliminate the reference to "long-term" as it is unnecessary, unexplained, and troubling in light of potential efforts to open the Valle Vidal to CBM development. Indeed, as the agency itself has previously stated (U.S. Forest Service 2000), temporary roads may be virtually as harmful as permanent ones. With this modification, we believe this Standard and Guideline provides the public with sufficient access. That said, we feel that the Forest Service also needs to limit *non-public* – e.g., administrative access – on other roads within the Valle Vidal. Use of such roads can be problematic especially where used as a rationale to maintain roads that should otherwise be decommissioned and obliterated to promote restoration.

  The Forest Service should also provide that no new roads will be built and, further, identify roads that should be fully decommissioned and obliterated to promote the restoration of the Valle Vidal consistent with the unifying Ecosystem Health & Integrity Standards and Guidelines proposed above. The Valle Vidal still contains too many unnecessary roads that impair ecological health and integrity by, for example, causing degradation of water quality. The Forest Service should establish specific timetables within which such roads projects would be completed, with mitigation commitments in the even of funding shortfalls or other failures to comply. Such timetables and restoration objectives would facilitate cooperative arrangements with relevant private and public entities that have already invested significant resources on restoration-based projects.

- **Recreation.** This Standard and Guideline notably excludes any discussion of OHV use. OHV use can cause significant environmental impacts and must be addressed through appropriate standards and guidelines and thus OHV use must be addressed through the promulgation of OHV-specific Standards and Guidelines. The Forest Service should ensure, in accord with the agency regulations, that Executive Orders 11644 and 11989, are fully complied with. This may necessitate the imposition of limits or other restrictions (e.g., for snowmobiles, minimum snow depth, 4 cycle machines, etc.).

  The Forest Service should also add a Standard and Guideline to ensure that designated campgrounds are properly maintained. Additionally, the Forest Service should create a limited designated trail system designed to allow access to important viewsheds consistent with the overarching objective of restoring and, once restored, protecting ecological health and integrity. In addition, the Forest Service should fix the lodge and other infrastructure at Shuree Ponds so that the location can be used for special events and serve as a base for people working on restoration projects within the Valle Vidal.

- **Visual Quality.** We are concerned that this objective is too weak to afford sufficient protection to the Valle Vidal's scenic beauty and emphasizes visual quality from the roads. However, Visual Quality (scenery) is at least as important to people hiking and horseback riding through the Valle Vidal's backcountry as it is to those driving a vehicle. The Forest Service, to strengthen this provision, should ensure that scenic integrity is restored and protected throughout the *entire* Valle Vidal to ensure that Visual Quality protections are not merely cosmetic and, instead, are considered as essential elements of ecosystem health and integrity.

  We reject a situation wherein creating a buffer around public access routes that merely present the illusion of an intact landscape, or simply painting infrastructure the same color as the landscape, is deemed adequate. Such actions, standing alone, simply obfuscate degradation and surface disturbance.

  Such strengthening is consistent with our desire to see the Forest Service restore and, once restored, protect ecosystem health and integrity. Visual Quality Standards and Guidelines should also be linked to the Forest Service's promotion of high quality, low impact recreational opportunities that provide people with the opportunity to enjoy the Valle Vidal free of anthropogenic influences. Accordingly, the Visual Quality Objective should be "Retention" throughout the entire Valle Vidal, with a reduction to "Partial Retention" for specific and limited situations such as existing structures.

- **Rio Grande Cutthroat Trout.** The Forest Service should publicly note that the Rio Grande Cutthroat Trout is the State fish of New Mexico, a Forest Service and state Sensitive species, and a species petitioned for listing under the federal Endangered Species Act ("ESA"), indications that Rio Grande Cutthroat Trout is of critical concern in the Valle Vidal.

  While we generally concur with the Proposed Amendment's statements regarding "Conservation agreement, Vegetation and Grazing Management, and Fish Passage," we do have some concerns with language within the Management Highlights section – i.e., that the Valle Vidal shall "[p]rovide high quality stream and in-stream conditions to promote the

restoration of native fisheries, particularly on the western portion of the Valle Vidal." The statement should be changed to read, "Provide high quality stream and in-stream conditions to promote the restoration *and, once restoration is obtained, protection (i.e., maintenance)* of native fisheries." The statement "particularly on the western portion ..." should be completely dropped. Native species should be restored and maintained throughout the *entire* Valle Vidal.

- **Fire.** We concur that fire should be restored to its natural role to the extent possible. More specificity is, however, required. We direct the Forest Service's attention to two "Science Briefs" prepared by The Wilderness Society's Ecology & Economics Research Department – *Integrating Science into Fire Management Planning: Maximizing the Benefits of Fire* and *Wildland Fire Use: An Essential Fire Management Tool* (attached as Exhibits B & C) – which should serve as a foundation for the Forest Service's fire management policy on the Valle Vidal.

- **Vegetation.** The Valle Vidal has been previously logged and therefore contains stands that may not be healthy. Additionally, the proliferation of non-native and invasive vegetation is a problem that should be addressed. The Forest Service should design Standards and Guidelines, reflecting the best and most current science and specific to the ecotype and geophysical location of stands, to restore native vegetative structure, function, and composition and reign in non-native and invasive species. For example, any necessary revegetation should be carried out only with native seed species reflective of natural distribution and diversity. With specific regard to Forest health issues, this would also promote a more rational fire management policy by tightening the link between vegetation and fire management.

- **Soils.** There are presently no Standards & Guidelines for soils despite the fact that soils are important to the restoration and protection of vegetation conditions and the maintenance of water quality. The Forest Service should therefore establish Standards & Guidelines to restore and, once restored, protect soil resources.

- **Livestock grazing.** Livestock grazing occurs on the Valle Vidal. While grazing can be a compatible use relative to the Valle Vidal's other resources, excessive livestock grazing also creates significant impacts to, among other things, water quality, soils, natural fire regimes, and wildlife. The Forest Service should establish standards and guidelines designed to ensure that livestock grazing is conducted consistent with the unifying ecosystem health and integrity Standards and Guidelines proposed above. To implement Grazing Standards and Guidelines, the Forest Service should also cooperate with ranchers and outside organizations (e.g., the Quivera Coalition) to promote and implement sustainable grazing practices.

- **Groundwater.** The Proposed Amendment does not include Standards and Guidelines for groundwater. Specific Standards and Guidelines need to be developed for each of the Valle Vidal's strata. Notably, shallow groundwater is critical for the same users both from wells and from the springs, seeps, and wetlands it supplies. The deep ground water in the coal seam aquifer, where pure enough for direct use or treatable, will likely be the critical source of water for future generations. Further, the connectivity between strata and surface waters needs to be understood as much as possible, and acknowledged in the Standards and Guidelines. In particular, since connectivity is incredibly complex and likely highly variable

in the Valle Vidal, a Standard and Guidelines should be established prohibiting any activities which might disturb existing connectivity. Such a Standard and Guidelines is consistent with a "precautionary principle" basis for managing the Valle Vidal.

- **Minerals.** As explained and substantiated throughout these comments and our previous correspondence to the Forest Service, the Forest Service should determine that the Valle Vidal unsuitable for oil and gas leasing and development in the Forest Plan Amendment and should include a Standard and Guideline to that effect.

  Additionally, the scoping document only limits Common Variety Mineral extraction near Comanche Point. Common Variety Minerals such as talus can fall within important habitats. Extraction of Common Variety Minerals should not be permitted on the Valle. The entire Valle should be closed to extraction of Common Variety Minerals.

- **Air.** The Proposed Amendment fails to include any standards and guidelines designed to promote the purposes of the Clean Air Act and to comply with its provisions. Such Standards and Guidelines should be considered and incorporated into the Forest Plan Amendment. The Valle Vidal, consisting of significant, naturally forested areas, is vital to reducing human impacts to the atmosphere and it is important to maintain the Valle Vidal ecosystem as part of broader regional, national, and global efforts to curb atmospheric degradation and such degradation's consequences.

- **Natural Solitude & Quiet.** The Proposed Amendment fails to include any Standards and Guidelines designed to protect the Valle Vidal's natural solitude and quiet, values that underpin the high-quality value of many of the Valle Vidal's other resources and values, most notably wildlife and ecosystem health and integrity.[5] Put simply, the sound of an oil and gas compressor station, for example, would degrade the Valle Vidal's non-industrial resources and values.

- **Cultural resources.** The Proposed Amendment fails to include any Standards and Guidelines to ensure cultural resource protection. At least 143 heritage sites are contained with the boundaries of the Valle Vidal, and the Valle Vidal, as a general proposition, holds a rich cultural history that deserves express recognition and protection.

[5] Noise has been documented to impact wildlife (Fletcher and Busnel 1978, USEPA 1971).

IV. THE FOREST SERVICE SHOULD PREPARE A MODEL FOREST PLAN AMENDMENT AND ENVIRONMENTAL IMPACT STATEMENT

A. Overview

Regardless of how the Forest Service ultimately decides to manage the Valle Vidal, the Forest Service is obligated to prepare a conceptually and scientifically sound EIS. To do this, we emphasize that the Forest Plan Amendment and EIS should reflect the Valle Vidal's role as a component of a broader, interconnected landscape. Accordingly, the Forest Service, in preparing the Forest Plan Amendment and EIS should look beyond the administrative boundaries of the Valle Vidal Unit to, instead, a defined ecological unit such as the interconnected series of watersheds associated with the Valle Vidal. Such a perspective may open up new management options (i.e., NEPA alternatives) for the Forest Service that cannot be identified by simply looking within the Valle Vidal's administrative boundaries. Moreover, such a perspective will allow the Forest Service to properly consider the environmental impacts of each management alternative. While we understand that the Forest Service intends to revise its overarching Carson Forest Plan in 2007, this does not obviate the need to consider the Valle Vidal's management from within a broader context. Indeed, we feel that such a broader context will facilitate a linkage between the Forest Plan Amendment and any revised Carson Forest Plan and, in any event, is mandated by NEPA.

In preparing the EIS for the Forest Plan Amendment, the Forest Service should be cognizant of the fact that NEPA is our "basic national charter for the protection of the environment." 40 C.F.R. § 1500.1. NEPA has twin objectives. First, to ensure that a federal agency "consider[s] every significant aspect of the environmental impact of a proposed action." *Baltimore Gas & Elec. Co. v. Natural Res. Def. Council, Inc.*, 462 U.S. 87, 97 (1983). And second, to "ensure[] that the agency will inform the public that it has indeed considered environmental concerns in its decisionmaking process." *Id.* To achieve these objectives, NEPA imposes "action forcing procedures … requir[ing] that agencies take a hard look at environmental consequences." *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989) (citations omitted). These procedures instill upon federal agencies a 'look before you leap' ethic – i.e., agencies must take a "hard look" at the environmental consequences of a proposed action "*prior* to a decision, when the decisionmaker retains a maximum range of options." *Sierra Club v. Peterson*, 717 F.2d 1409, 1413-1414 (D.C. Cir. 1983) (emphasis in original).

While procedural in nature, NEPA's relevance to substantive decisionmaking must not be discounted. NEPA provides a vehicle to ensure compliance with other legal obligations and encourage environmental protection. *See Andrus v. Sierra Club*, 442 U.S. 347, 350-351 (1979) ("The thrust of [NEPA] is ... that environmental concerns be integrated into the very process of agency decision-making. The 'detailed statement' it requires is the outward sign that environmental values and consequences have been considered during the planning stage of agency actions. If environmental concerns are not interwoven into the fabric of agency planning, the 'action-forcing' characteristics of [NEPA] would be lost"); *Center for Biological Diversity v.*

U.S. Forest Service, 349 F.3d 1157, 1166 (9th Cir. 2003) ("[t]he procedures prescribed both in NEPA and the implementing regulations are to be strictly interpreted 'to the fullest extent possible' in accord with the policies embodied in the Act ... '[g]rudging, *pro forma* compliance will not do'") [citations omitted]; 42 U.S.C. § 4332(1) ("to the fullest extent possible ... the policies, regulations, and public laws of the United States shall be *interpreted and administered* in accordance with the policies set forth in [NEPA]" (emphasis added)). As eloquently explained by CEQ regulations implementing NEPA:

> Ultimately, of course, it is not better documents but *better decisions* that count. NEPA's purpose is not to generate paperwork – even excellent paperwork – but to foster excellent *action*. The NEPA process is intended to help public officials make *decisions* that are based on understanding of environmental consequences, and take *actions that protect, restore, and enhance the environment*.

40 C.F.R. § 1500.1(c) [emphasis added].

It is axiomatic that federal agencies must comply with NEPA before there are "any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented." 42 U.S.C. § 4332(2)(C)(v); 40 C.F.R. §§ 1501.2, 1502.5(a); *Sierra Club v. Hodel*, 848 F.2d 1068, 1093 (10th Cir. 1988) ("[a]gencies are to perform this hard look *before* committing themselves irretrievably to a given course of action, so that the action can be shaped to account for environmental values") [emphasis added]; *see also Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1216 (9th Cir. 1998) (NEPA's action-forcing procedures require agency to prepare a "coherent and comprehensive up-front environmental analysis to ensure informed decision making to the end that 'the agency will not act on incomplete information, only to regret its decision after it is too late to correct'") (*quoting Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 371 (1989)).

With this overview of NEPA serving as a foundation, the following sections flesh out the agency's specific NEPA obligations. Section B discusses the Forest Service's duty to take a "hard look" at environmental impacts. Section C discusses how the agency should approach its duty to consider a reasonable range of alternatives. Section D discusses the Forest Service's public participation duties. Section E provides the Forest Service with information regarding specific resources and issues of concern relevant to the Forest Service's NEPA duties.

B. Social and Environmental Impacts

A fundamental role of the NEPA process is to take a "hard look" at the consequences of the management alternatives to the environment. *Robertson*, 490 U.S. 332, 350. Impacts to the environment can be direct, indirect, or cumulative. A direct impact is caused by the action itself within the same time and place. 40 C.F.R. § 1508.8(a). An indirect impact is caused by the action, but occurs later in time or farther removed in distance, although it is reasonably foreseeable. 40 C.F.R. § 1508.8(b). A cumulative impact is defined as:

> the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future

> actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

40 C.F.R. § 1508.7. The importance of cumulative impacts cannot be underestimated. As the CEQ states, a failure to assess cumulative impacts impermissibly subjects NEPA's decisionmaking process to the "tyranny of small decisions." CEQ, *Considering Cumulative Effects Under the National Environmental Policy Act*, at 1(1997) (available at http://ceq.eh.doe.gov/nepa/ccenepa/ccenepa.htm (last visited November 19, 2004)). In this light, "the consistent position in the case law is that ... the agency's EA must give a realistic evaluation of the *total* impacts and *cannot isolate a proposed project, viewing it in a vacuum*." *Grand Canyon Trust*, 290 F.3d 339, 342 (D.C. Cir. 2002) (citations omitted & emphasis added).

An adequate "hard look" cumulative impacts assessment must, at a minimum, do two things. First, BLM must catalogue the past, present, and reasonably foreseeable projects in the area. *Muckleshoot Indian Tribe v. U.S. Forest Service*, 177 F.3d 800, 809-810 (9th Cir. 1999); 40 C.F.R. § 1508.7. Second, BLM must analyze these projects in light of the proposed action. *Id.* If BLM determines that certain actions are not relevant to assess the cumulative impacts of the proposed action, the agency must "demonstrat[e] the scientific basis for this assertion." *Sierra Club v. Bosworth*, 199 F.Supp.2d 971, 983 (N.D. Ca. 2002).

Given this legal framework, to properly assess impacts, the Forest Service, as a general proposition, must first identify the actual resources and values implicated by the Forest Plan Amendment and collect relevant baseline data for these resources and values. Such baseline data includes not simply point-in-time data, but, also, trend data. In other words, the Forest Service must identify and assess current conditions and also assess whether or not current conditions are static, improving, or degrading, providing as much quantifiable analysis as possible. Critical to the obtainment of such baseline data is an assessment of the Valle Vidal's pre-disturbance condition to provide a benchmark for restoration objectives. While we do not necessarily expect the Forest Service to actually return the Valle Vidal to these conditions, such conditions can be used to identify potential restoration projects. For example, along the road on the eastside, there are deep cut arroyos – e.g., Lookout Canyon and Cerrososo Canyon – that may have once been small meandering streams like the upper Comanche creek. There may be an opportunity to return these streams to pre-disturbance conditions or, at least, to restore their place in terms of landscape structure, function, and composition.

As noted above, the Forest Service's analysis of impacts must be cognizant of relevant spatial scales implicated by management of the Valle Vidal. Impacts may be felt at a broad landscape scale that encompasses a region much larger than the land contained within the specific boundaries of the Valle Vidal. Impacts may also be specific to specific areas or resources within specific portions of the Valle Vidal. At bottom, identifying and assessing impacts at different spatial scales is critical to a sound impact analysis and a proper determination of what management alternatives – or components thereof – are appropriate and necessary. For example, as demonstrated by a suite of satellite and aerial images prepared by Skytruth, considerable development has already taken place within the Raton Basin on the Vermejo Park Ranch (attached as Exhibit D; also, please note that the original, high fidelity

images of this exhibit, as well as other relevant images and photos, can be obtained directly from Skytruth's website at http://skytruth.mediatools.org/objects/view.acs?object_id=4424). Such development must be considered by the Forest Service in preparing the EIS for the Forest Plan Amendment.

Similarly, such an analysis must also be sensitive to both short and long-term temporal scales of management actions and impacts, a factor that also requires the agency to create a Forest Plan Amendment that includes timeframes for implementation of specific actions and timeframes for the achievement of management objectives/Standards and Guidelines. In creating such timeframes, and taking temporal scales into account, the Forest Service should answer several questions: What impacts will be felt in the short term? What impacts will persist in the long term? What are the short and long-term positive impacts of each management alternative? What impacts outside of the boundaries of the Valle Vidal will occur in the short and long-term, and how long will these impacts persist?

Where baseline data and other necessary information – e.g., inventory/monitoring data or scientific literature assessing a particular resource or issue – are incomplete or unavailable, the Forest Service must "always make clear that such information is lacking." 40 C.F.R. § 1502.22. Furthermore, as provided by CEQ regulation:

> (a) If the incomplete information relevant to reasonably foreseeable significant adverse impacts is essential to a reasoned choice among alternatives and the overall costs of obtaining it are not exorbitant, the agency shall include the information in the [EIS].
>
> (b) If the information relevant to reasonably foreseeable significant adverse impacts cannot be obtained because the overall costs of obtaining it are exorbitant or the means to obtain it are not known, the agency shall include within [EIS]:
>
> 1. A statement that such information is incomplete or unavailable;
>
> 2. A statement of the relevance of the incomplete or unavailable information to evaluating reasonably foreseeable significant adverse impacts on the human environment;
>
> 3. A summary of existing credible scientific evidence which is relevant to evaluating the reasonably foreseeable significant adverse impacts on the human environment; and
>
> 4. The agency's evaluation of such impacts based upon theoretical approaches or research methods generally accepted in the scientific community….

See also Utah Environmental Congress v. Bosworth, --- F.3d ----, (10th Cir. 2005) 2005 WL 1995583, 35 Envtl. L. Rep. 20,170, August 19, 2005 (agency's obligations under National Forest Management Act regulations require collection of actual population data for planning process).

The Forest Service, by understanding the specific environmental impacts of a proposal across relevant spatial and temporal scales, can craft particularized management alternatives that

account for and remedy these impacts. In other words, the hard look and alternatives duties, combined, facilitate NEPA's basic procedural purpose "to foster excellent action" and "take actions that protect, restore, and enhance the environment." 40 C.F.R. § 1500.1(c).

Certain impact vectors are of key importance in the Valle Vidal. As noted, the Valle Vidal, while a spectacular wildlands landscape, is also far from pristine. Roads, grazing, and logging have all contributed to degradation. This is not intended as criticism, merely as a reflection of reality. Much work remains to be done to restore the land and repair degradation. In order to facilitate such restoration work, and to also identify and assess the efficacy of Standards and Guidelines, the Forest Service should focus the EIS on several key impact issues:

- **Habitat Fragmentation & Landscape Connectivity.** Roads, trails, and other surface disturbances can degrade the ecosystem's structure, function, and composition. In so doing, habitat connections across the landscape can be lost, thus threatening the viability and survival of many wildlife species. The Forest Service needs to understand how the diverse mix of native aquatic and terrestrial wildlife on the Valle Vidal has evolved with the land in order to understand what specific Standards and Guidelines are appropriate and necessary to ensure species diversity and viability. We direct the Forest Service's Attention to a "Science Brief" prepared by The Wilderness Society – *Landscape Connectivity: An Essential Element of Land Management* (attached as Exhibit E) – that delves into this subject that should serve as a guide to further analysis by the Forest Service.

  Understanding habitat fragmentation and landscape connectivity and, by extension, the ecosystem's broader health and integrity, requires a rigorous, science-based analysis of surface disturbance and environmental impacts. Roads, in this context, in addition to livestock grazing, are arguably the most relevant vectors of ecosystem impacts on the Valle Vidal, causing a myriad of impacts including direct loss of habitat, loss of habitat effectiveness through disturbance, habitat fragmentation, siltation, increased water pollution, increased mortality, and increased invasion of non-native plants and animals (Watson 2005; Oxley, Fenton and Carmody 1974).[6]

  Consequently, the Forest Service should prepare a spatial analysis of surface disturbance. Such analyses are now affordable and common. We direct the Forest Service's attention to several such analyses prepared by the The Wilderness Society's Ecology & Economics Research Department: (1) *Ecological and Financial Implications of Roads in the Monongahela National Forest* (attached as Exhibit F); (2) *Ecological Effects of a Transportation Network on Wildlife* (attached as Exhibit G); and (3) *Wildlife at a Crossroads: Energy Development in Western Wyoming* (attached as Exhibit H).

[6] A sixteen foot wide road directly removes about two acres of habitat per mile of road for all wildlife (Watson 2005), but the direct, indirect and cumulative impacts extend far beyond the road right-of-way. Notably, such impacts are not felt solely by big game. Roads impact fish and aquatic organisms through siltation and pollution (Furniss et. al. 1991); small mammals through disturbance, habitat fragmentation, direct mortality and direct habitat loss (Oxley, Fenton and Carmody 1974); and reptiles and birds through disturbance, habitat fragmentation, direct mortality and direct habitat loss. *See also* Ercelawm, A. 1999.

In conducting such an analysis, the Forest Service should also account for the intensity of use on roads, whether for public, commercial, or administrative use; any motorized use on roads reduces habitat effectiveness, including administrative use (Christensen *et. al.* 1993). Moreover, the Forest Service must account for both legal *and* illegal OHV use in the Valle Vidal both on and off road. In carrying out such an analysis, the Forest Service must also consider snowmobiles. Snowmobiles can impact wildlife and fish through disturbance, pollution and habitat destruction for subnivean (below the snow) species (Bury 1978). The EIS should analyze snowmobile impacts to fish and wildlife (not just big game) and habitats for areas open to snowmobiles. By preparing a spatial analysis of habitat fragmentation, and accounting for the intensity of use of roads and habitat, the Forest Service can prepare science-based Standards and Guidelines to protect ecosystem health and integrity.

- **Watersheds & Water Quality.** The above habitat fragmentation and landscape connectivity comments are also relevant to watershed health and water quality standards.

  In addition, the Forest Service should assess how each management alternative promotes or impairs the achievement of water quality standards promulgated pursuant to the Clean Water Act. We note that several waters impaired – McCrystal Creek, Middle Ponil Creek, North Ponil Creek, and Comanche Creek (Costilla-Little Costilla) – do not support these waters' designated use as a High Quality Cold Water Fishery. The loss of riparian habitat, forest roads, rangeland grazing, streambank modifications and destabilization, and silvicultural harvesting has contributed to these waters impairment.

  Furthermore, the Forest Service must assess the impacts of each management alternative to rivers eligible for designation under the Wild and Scenic Rivers Act, and the impacts to the Forest Service's ability to comply with its management obligations to "protect and enhance" eligible Wild and Scenic Rivers (16 U.S.C. § 1281) through imposition of "nondegradation and enhancement" requirements (47 Fed. Reg. 39454, 39459 (Sept. 7, 1982)).

- **Wildlife.** While an analysis of habitat fragmentation and landscape connectivity is critical and serves as a foundation for the Forest Service's NEPA analysis, the Forest Service should also consider specific wildlife impacts. These include population and individual level impacts, impacts to species interactions, and impacts, both in the short and long-term, to native species diversity and viability. In significant part, such analysis can be used to reinforce and confirm conclusions reached regarding broader, landscape scale metrics, or to adopt/revise species-specific Standards and Guidelines as necessary and appropriate.

- **Hydrology.** To assist in the attainment of water quality standards in the Valle Vidal, the Forest Service should assess the connectivity between surface and groundwaters, and connectivity between individual groundwater strata. While its intrinsic complexity precludes a truly credible understanding of the hydrological system, a basic assessment could assist in identifying opportunities for restoration-based activities and in establishing a framework for monitoring water quality in the long-term and ensure that management actions do not harm hydrological connectivity or undermine restoration efforts.

C. Alternatives

A critical companion to the analysis of impacts is the consideration of alternatives. Alternatives are the "heart" of the NEPA process and thus essential to assess whether a federal agency has taken the requisite "hard look" at relevant environmental concerns. 40 C.F.R. § 1502.14; *Grand Canyon Trust*, 290 F.3d 339, 340-341 (D.C. Cir. 2002). NEPA obligates federal agencies to "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources." 42 U.S.C. § 4332(E); *see also* § 4332(2)(C)(iii). In so doing, agencies must "[r]igorously explore and objectively evaluate all reasonable alternatives …." 40 C.F.R. § 1502.14(a). The range of alternatives must "*sharply defin[e]* the issues and *provid[e] a clear basis for choice* among options by the decisionmaker *and* the public." 40 C.F.R. § 1502.14 (emphasis added). Notably, the agency's duty to consider alternatives "is both independent of, and broader than," its duty to complete an environmental analysis. *Bob Marshall Alliance v. Hodel*, 852 F.2d 1223, 1229 (9th Cir. 1988).

In the Tenth Circuit – which is where the Valle Vidal is located – courts apply a "rule of reason" analysis to determine whether the range of alternatives, "and the extent to which it discuss[ed] them," was reasonable and adequate. *Utahns for Better Transp. v. Department of Transp.*, 305 F.3d 1152, 1166 (10th Cir. 2002); *Colorado Envtl. Coalition v. Dombeck*, 185 F.3d 1162, 1174 (10th Cir. 1999). Federal agencies must consider "all reasonable alternatives to the proposed action." *Utahns for Better Transp.*, 305 F.3d at 1166. This includes "[a]lternatives that fall between the obvious extremes." *Colorado Envtl. Coalition*, 185 F.3d at 1175.

Here, we feel that the Forest Service, in addition to considering its own proposed action, should also consider the management alternative proposed above in Section II. There are basic distinctions between the two alternatives that should be fleshed out by the Forest Service through the NEPA process and which sharply focus the relevant issues and provide the Forest Service and the public with, hopefully, a clear basis for choice as to how the Valle Vidal should ultimately be managed. We also request that as the agency develops these alternatives it stay in communication with us to ensure that when presented to the public, the alternatives appropriately embody our views and are appropriate for implementation.

Additionally, in crafting management alternatives, the Forest Service should assess protective actions that would complement the restoration work carried out on the Valle Vidal, and potential Wild and Scenic Rivers designation and Outstanding National Resource Water designation. In other words, management alternatives should consider options that would not preclude or impair management of any Wild and Scenic Rivers that may ultimately be designated or, similarly, waters that may ultimately be designated as Outstanding National Resource Waters.

The contours of each management alternative should also reflect agency resources. The Forest Plan Amendment should thus be a practical document that ensures the allocation of adequate staff and establishes reasonable timetables to meet management objectives and ensure compliance with standards and guidelines. This raises a related issue: accountability. The Forest Plan Amendment, at its roots, constitutes a bundle of promises made by the Forest Service to the people. The Forest Service should be held to these promises and, if they breach promises made in the Forest Plan Amendment, then the people should be able to hold them accountable. To that

end, the agency should specifically note that the Forest Plan Amendment binds agency officials and does not afford agency officials the discretion to simply disregard the Forest Plan's provisions. By making the Forest Plan Amendment reflective of agency resources, the Forest Service provides itself with a reasonable degree of certainty that it is actually capable of fully complying with the Forest Plan Amendment and has not overcommitted itself. One important component of this is planning for a variety of budget scenarios and their potential impacts on management success and effects. By binding itself to the promises made within the Forest Plan Amendment, the Forest Service ensures that decisions are credible and viable, thus creating an incentive for public participation and increasing the public's trust in the forest Service's ability to manage public resources.

We note that a recent Government Accounting Office Report entitled "Oil and Gas Development: Increased Permitting Activity Has Lessened BLM's Ability to Meet Its Environmental Protection Responsibilities" (GAO-05-418) (June 2005) (attached as Exhibit I) raises significant concerns about, specifically, oil and gas development but also, generally, the ability of federal agencies to meet environmental protection responsibilities. The GAO report, in summarizing its results, stated that "[a] dramatic increase in oil and gas development on federal lands over the past 6 years has lessened BLM's ability to meet its environmental protection responsibilities." GAO Report at page 5. Given El Paso's Expression of Interest in the Valle Vidal, the results of this GAO report should be considered by the agency in setting the Valle Vidal's management direction through the Forest Plan Amendment. Setting a course that allows for significant commercial or industrial development without considering the strain such a course would have on agency time and resources and the agency's abilities to meet higher management priorities would be unwise and likely trigger a situation akin to that faced by the BLM.

D. Public Participation

We believe that the Forest Service has thus far done an admirable job of involving the public in the decision-making process for the Valle Vidal. We encourage the Forest Service to continue to do so. Facilitating a transparent and open public dialogue will be critical to the success or failure of the Forest Plan Amendment.

The scoping period constitutes an important juncture in the planning process where it is appropriate to remind the Forest Service of its core public participation duties so that the Forest Service can accurately identify is responsibilities and thereby facilitate such a dialogue. Regulations promulgated by the Council on Environmental Quality expressly mandate that federal agencies shall "[m]ake diligent efforts to involve the public in preparing and implementing their NEPA procedures." 40 C.F.R. § 1506.6(a). Compliance with NEPA procedures facilitates the dissemination of "high quality" "environmental information … to public officials and citizens before decisions are made and before actions taken." 40 C.F.R. § 1500.1(b). Federal agencies, in complying with such procedures, are required to "[e]ncourage and facilitate public involvement in decisions which affect the quality of the human environment" and to "affirmatively solicit[] comments" from the "interested or affected" public. 40 C.F.R. §§ 1500.2(d), 1503.1(a)(4); *see also* 40 C.F.R. § 1503.4(a) (requiring explanation as to why public comments, if not used to alter or otherwise modify the NEPA document analysis, did not warrant further response).

We emphasize at this time that the public's involvement in the Forest Plan Amendment is unprecedented in New Mexico. While Forest Service decision-making is not a voting process, we encourage the Forest Service to acknowledge the public's unprecedented involvement in the Forest Plan Amendment. At last count, it is our understanding that over 60,000 comments had been received through the pre-scoping and scoping process, almost all in favor of protecting the Valle Vidal from commercial and industrial exploitation. The Forest Service has sometimes tended to discount comments submitted in form letters. However, the fact that many of these comments were submitted in that form does not detract from them as an indicator of how much the public is concerned over the Valle Vidal's fate and unequivocally desires that this land be protected. Many people are simply unable to devote the time required to review, fully understand, and draft their own individualized comments on agency documents and analyses. Given their passion for this special place, and the impacts of any decision to their interests, they nonetheless desire to see the Valle Vidal protected and so have chosen to rely on and adopt the analysis of organizations that they trust to ensure that their voices are cogently and timely heard. Dismissing such comments as "form letters" would deny these people a voice and, whether intentionally or unintentionally, is disrespectful of the values that they hold dear. The Forest Service, in responding to public comments, and in making its ultimate decision, should incorporate this reality by expressly acknowledging and, to the extent possible, respecting this voice.

E. Resources & Issues of Concern

The following information, while far from exhaustive, is intended to give the Forest Service some additional background information regarding certain resources and suggestions/concerns that we have regarding how the Forest Service should consider these resources through the Forest Plan Amendment process. In regard to wildlife, we also direct the Forest Service to attached exhibits providing the agency with a list of wildlife within the Valle Vidal, and a list of federal and state threatened, endangered, and sensitive species ("TES species") (attached as Exhibits J & K). Additionally, we refer the Forest Service to the Westwild Model for Valle Vidal developed by the Forest Service and the New Mexico Department of Game and Fish developed to assess the potential impacts of vegetation management on the Valle Vidal Unit (1993). The model includes analysis for elk, mule deer, black bear, American marten, Aberts squirrel, red squirrel, plain titmouse, red-naped sapsucker, spotted towhee (rufous sided), wild turkey, goshawk, Lincolns sparrow, pygmy nuthatch, brown creeper, Mexican spotted owl, boreal owl, flammulated owl, hairy woodpecker, and ptarmigan.

In general, a number of species are important on the Valle as game or indicators of ecosystem conditions including: Rio Grande Cutthroat Trout, elk, mule deer, black bear, Aberts squirrel, red squirrel, plain titmouse, red-naped sapsucker, spotted towhee (rufous sided), wild turkey, goshawk, Lincolns sparrow, pygmy nuthatch, brown creeper, flammulated owl and hairy woodpecker. Current baseline and monitoring data are needed for these species to indicate success or failure of management direction. Without monitoring it will not be possible to adapt management. Moreover, as the above-referenced species list demonstrate, the Valle contains habitat for a number of other important state or federal listed species (e.g., Mexican spotted owl, ptarmigan, boreal owl, SW Willow Flycatcher, American marten, lynx, etc.) and these animals

may be present. Inventories and assessment of the habitat condition should be part of the Forest Plan Amendment. Federal listed species (e.g., Mexican Spotted Owl, lynx and SW Willow Flycatcher) require section 7 consultation with the U.S. Fish and Wildlife Service.

- **Elk.** Constitutes the premier terrestrial species on the Valle for both viewing and hunting with the herd being stable at 2,000 to 2,500 animals. The herd is currently managed for high quality – high number of animals, high density and a high ratio of large bulls (Darrell Weybright, NMDGF pers. com 2005). Elk hunting on the Valle is provided for through a once-in-a-lifetime drawing. Visitation for the purpose of watching elk is also important. The west side of the Valle Vidal is primarily summer range and the east side is winter range. Winter range is the limiting factor for the herd. Elk are sensitive to activity, mechanized vehicles (i.e., road densities and snowmobiles), and noise (Fletcher and Busnel 1978, USEPA 1971; Watson 2005).

  The EIS alternatives need to specify and analyze limits of impacts to elk for summer and winter range including road densities, closures, human activity, noise, livestock management and vegetation management. Considerable oil and gas activity is occurring adjacent to the Valle Vidal on the Vermejo Park Ranch and long term data exists regarding distribution and abundance (Larry Temple pers. com. to Jon Klingel). The adjacent activity is likely causing elk to move onto the Valle to avoid the disturbance. This data needs to be analyzed and included as part of the cumulative affects analysis of each alternative, in addition to the direct and indirect impacts analysis. Data regarding movement of elk between the Valle and adjacent properties is minimal and out of date due to the great increase in activity and roads on adjacent land during recent years. Movement patterns and abundance also need to be understood in order adequately assess the management alternatives for the Valle Vidal. So to does the Forest Service need to assess impacts relative to the distribution of forage, dover, and roads, and road density (USFS. 1986. A Model to Evaluate Elk Habitat in Western Oregon. Pacific Northwest Region; Lyon 1979, Lyon 1983).

  The affects of roads on elk has been studied extensively. Habitat effectiveness for elk summer range with 25-50% canopy closure is approximately 75% for a density of 0.5 miles/section and 50% for a density of 2 miles/section (i.e., approximate minimum road density for evenly spaced oil & gas wells on 160 acre spacing). Current habitat effectiveness is about 85% on East and West Side of Valle. This effectiveness level should be maintained to protect winter and calving habitats. Impacts of roads are more severe in open country and appear to be even more critical on winter range. Any motorized use on roads will reduce habitat effectiveness, including administrative use. (Christensen et.al. 1993; Lyon 1979). Winter range on the Valle (east side) is relatively open ponderosa pine with the most critical areas (e.g., Whitman Vega) being entirely open. Other studies, notably, have shown roads impact other big game species such as deer and affect winter distribution and migration routes (Rost and Bailey 1979, Berry and Overly 1976, Leege 1976, and Thiessen 1976) such that the Forest Service should not fixate solely on elk in assessing road impacts.

  Finally, the Scoping document states, "If elk are in the area and snowmobile use is determined to be negatively affecting them, Area 1B can be closed to snowmobiles." Repeated human disturbance or harassment of big game populations on crucial winter range can change activity patterns, increase predation, reduce access to resources, and increase

energy expenditures necessary for survival (Geist 1978 and Hobbs 1989 In Easterly et al. 1991; in Watson 2005). If elk are in the area, Area 1B should automatically be closed to snowmobiles. Moreover, any meaningful standard and guideline will avoid vague assertions like "can be closed," providing instead, solid criteria upon which effects analysis and informed public input can be based.

- **Merriam's Turkey**. Turkey are very important on the Valle Vidal for viewing and hunting. The Valle Vidal has been used as the primary source of animals for restoration efforts in other parts of New Mexico (Darrell Weybright pers. com. to Jon Klingel) because of the high quality of habitat and resulting abundance of birds. The intense activity adjacent to the Valle Vidal may be displacing animals to the Valle Vidal resulting in impacts to the habitat. More information is needed on movement, distribution, and abundance of turkeys on the Valle Vidal, including movement to/from adjacent properties for cumulative effects analysis of each alternative.

- **Black Bear.** Bears are of interest to visitors to the Valle and constitute an important element of the ecosystem. The intense activity adjacent to the Valle may be displacing animals to the Valle Vidal resulting in impacts to the habitat. More information is needed on movement, distribution, and abundance of bears on the Valle, including movement to/from adjacent properties for cumulative effects analysis of each alternative, as well as monitoring and management feed-back.

- **Mule Deer.** While not abundant on the Valle they are of major interest to visitors. Potential impacts to deer from roads and activity need to be thoroughly assessed in the amendment. The intense activity adjacent to the Valle may be displacing animals to the Valle resulting in impacts to the habitat. More information is needed on movement of deer on the Valle and to/from adjacent properties for cumulative effects analysis of each alternative, as well as monitoring and management feed-back.

- **American Marten.** Habitat for marten, a state-listed species, exists in the spruce-fir forest on the western portion of the Valle around Little Costilla Peak. The Forest Service should collect baseline inventory and monitoring data for this species, especially around Little Costilla Peak, as part of the Forest Plan Amendment process. Restoration of spruce-fir may be needed to improve the habitat for this species and should be specified in the Forest Plan Amendment.

- **Lynx.** Lynx almost certainly occurred on the Valle Vidal prior to early intense trapping and potential habitat exists at least within the spruce-fir forests on Little Costilla Peak, and Snowshoe hares, a critical component of lynx habitat, exist on the Valle Vidal. The habitat is therefore suitable, containing both spruce-fir forest and snowshoe hares, and continuous with known occupied habitat in Colorado where lynx have been restored. Lynx from Colorado have been documented recently in New Mexico both east of the Valle Vidal and south in the Sangre de Cristo Mountains to Santa Fe, and may have passed through the Valle Vidal. The potential habitat on the Valle Vidal for lynx needs to be assessed and restoration of spruce-fir forest considered as part of the amendment. Lynx are a federally listed species requiring the

Forest Service to engage in formal Section 7 ESA consultation with the U.S. Fish and Wildlife Service.

- **Peregrine Falcon.** Little Costilla Peak may have suitable nesting habitat. Surveys are needed.

- **Bats.** The Valle Vidal is potential habitat for several species of bats including listed and sensitive species. Inventories are needed to determine which species are present, habitat needs, and potential impacts assessed.

- **Amphibians and Reptiles.** The Valle Vidal is potential habitat for several species of herptiles including listed and sensitive species. Inventories are needed to determine which species are present, habitat needs, and potential impacts assessed.

- **Terrestrial and macro-benthic aquatic invertebrates.** The Valle Vidal contains habitat for numerous terrestrial and aquatic invertebrate species. Inventories for potential TES species and species important to ecosystem function need to be completed and potential impacts of alternatives assessed. TES and critical ecosystem species occurring on the Valle should be included in any monitoring program.

- **Forests, grasslands, and riparian areas.** To the extent that the Forest Service is considering the adoption of the Carson Forest Plan's Standards and Guidelines, these Standards and Guidelines should be revisited for the Valle Vidal consistent with our proposed, overarching Vision for the Valle Vidal and our proposed Management Highlight of Ecological Health and Integrity and the related Standards and Guidelines as described above in Sections II and III. Additionally, we have certain specific comments as follows for specific forest types:

  - **Spruce-fir:** This forest type occurs on Little Costilla Peak, on the western portion of the Valle. The habitat was heavily logged prior to the donation to the Forest Service. This habitat needs a thorough assessment of present condition and the identification of actions that would be necessary to restore this forest type in the Forest Plan Amendment.

  - **Ponderosa Pine:** Heavy logging of ponderosa occurred on the Valle prior to the donation, especially on the east side where railroad logging occurred. This habitat type is important for many species of wildlife (e.g., elk winter range, turkey, Abert's Squirrel, etc.) and livestock grazing. The amendment must include a thorough assessment of current conditions and restoration needs. This habitat is adjacent to the intense CBM activity and development occurring on the Vermejo Park Ranch and may be impacted by increased pressure from displaced wildlife. Impacts need to be thoroughly assessed as part of the cumulative affects analysis.

  - **Aspen:** Should be included in "Unsuitable Timber" on the Valle and not managed as harvestable timber. Road densities under Aspen Mgt. Area 6 may be up to 4 miles per section which seriously conflicts with other resource values on the Valle. Regeneration

should be managed by fire. Aspen forests, snags and downed logs are extremely valuable for many species of wildlife.

- **Pinon-Juniper, High Elevation Grassland, Oak and Riparian Management Areas:** The Scoping Document references Forest Wide Management Area Prescriptions in the Forest Plan for these areas. While these measures may be adequate, the Forest Service should nonetheless assess the efficacy of these prescriptions to ensure that they achieve defined management objectives.

- **Socioeconomic analysis.** The Forest Plan Amendment will unquestionably have socioeconomic impacts – both positive and negative – to the people of New Mexico, in particular of Taos and Colfax counties. In conducting a socioeconomic analysis, we refer the Forest Service to two reports: (1) a report by the Sonoran Institute entitled "Public Lands Conservation and Economic Well-Being (www.sonoran.org/programs/propserity.html) (attached as Exhibit L); and (2) a report by Dr. Thomas M. Power entitled "The Local Economic Impacts of Natural Gas Development in Valle Vidal, New Mexico" (attached as Exhibit M). Both reports illustrate that protecting rather than exploiting public lands makes good economic sense. As a general proposition, and as reinforced by Dr. Power's report, the Sonoran Institute Report concludes that protected public lands "play an important role in stimulating economic growth – and the more protected the better." In terms of how the Forest Service should prepare the requisite socioeconomic analysis as part of the Forest Plan Amendment process, we refer the Forest Service to the detailed comments submitted under separate cover letter by Michelle Haefele, PhD, of The Wilderness Society.

- **Cultural resources.** There are at least 143 documented heritage sites within the Valle Vidal. Additionally, given current documentation, and an understanding of the Valle Vidal's history, it is reasonable to assume that there may in fact be approximately one thousand or more heritage sits in total.

  These sites function not simply of individual, isolated sites that can be assessed and understood within a vacuum, but as resources irreplaceably woven into the fabric of the entire landscape. These cultural resources are likely of special importance to Native American tribes and Hispanic peoples, in particular the Pueblo of Taos, the Hopi Tribe, the Pueblo of Picurís, the Jicarilla Apache Nation, the Kiowa Tribe, the Navajo Nation, and the Pueblo of Isleta. Consequently, the Forest Service should ensure compliance with its duties under Section 110 (16 U.S.C. § 470h-2) of the National Historic Preservation Act (as amended) as well as Section 106 (16 U.S.C. § 470f).

V. COALBED METHANE DEVELOPMENT

A. Overview

For all the reasons noted above, the Valle Vidal is unsuitable for minerals leasing and development, and the Forest Service should stipulate this in the Forest Plan Amendment. Given the importance and sensitivity of other resources and values within the Valle Vidal, if the Forest Service chooses a highly protective management alternative for the Valle Vidal based on restoration and protection, the burden on the Forest Service to "say no" is minimal, fully within the agency's discretion, and consistent with the agency's responsibilities. Such a decision does not require the agency to prepare a subsequent full-blown EIS, which would reach what we feel would be an obvious conclusion.

The Forest Service should not proceed to the second stage of the minerals leasing process – the actual "Leasing Analysis" of specific lands – until completion of the Forest Plan Amendment and only if the agency determines that the Valle Vidal is suitable for minerals leasing. Conducting the intensive level of analysis required to authorize the BLM to actually sell oil and gas leases (i.e., the Leasing Analysis) – given that it constitutes a legal "irreversible and irretrievable commitment[] of resources" (42 U.S.C. § 4332(2)(C)(v)) – would divert attention away from base level concerns regarding the Valle Vidal's other resources. Indeed, in our view, such an intensive Leasing Analysis may prove, as stated, unnecessary. We are, therefore, concerned about the Forest Service's commitment to preparation of a full-blown, EIS-level Leasing Analysis. Based on our conversations with the Forest Service, this "pre-commitment" to the Leasing EIS is reflective of a troubling and legally incorrect perception that decisions *not* to lease National Forest lands should be "rare," a perception that makes it far more difficult to protect the land for other resource values and ascribes the minerals resource with a dominant position relative to other resources that is unsupported by federal law, tilting the playing field in favor of minerals development.

It is, therefore, our position that the Forest Service need only conduct a base level analysis of CBM to reach a conclusion that such development – given CBM's documented and obvious resource impacts – is unsuitable in the Valle Vidal. To that end, Subsection B below explores the nature of CBM, Subsection C looks at the impacts of CBM development, and Subsection C responds to unsubstantiated arguments that drilling in the Vermejo Park Ranch supports a decision to open the Valle Vidal to CBM leasing and development.

B. What is Coalbed Methane?

Methane (natural gas), while perhaps most closely related in our minds with petroleum, also occurs in association with coal, the most abundant fossil fuel resource in the United States. During the eons-long formation and organic decomposition of coal, methane gas is generated and stored within the coal on internal surfaces. Coal beds can store large volumes of methane gas. Much of the coal – and therefore much of the methane – lies at relatively shallow (geologic) depths making wells easy to drill and inexpensive to complete. Exploration costs for coalbed methane are low, and the wells are cost effective to drill. Methane occurs in most coals, and the locations of the coal resources of the United States are well known (U.S. Geological Survey,

2000). Historically, coalbed methane gas ("CBM") was a nuisance that caused mining accidents and downtime in coal fields like the Raton basin of northern New Mexico and southern Colorado. Initially, low methane prices made this low-pressure gas undesirable and the first coalbed methane wells were drilled to reduce gas in the coal mines.

Although CBM is primarily methane gas, it may also contain very small amounts of ethane or propane, and carbon dioxide or nitrogen. In many cases it can go directly from the well to gathering systems, pipelines and customers once trace amounts of water and carbon dioxide are removed. Methane gas may be used to heat homes, generate electricity, and as a fuel for vehicles.

CBM gas development in the American West, Alaska, and Alabama has been undergoing a boom during the past 15 years or so. CBM activity is well established in Wyoming, Montana, northern New Mexico, southern Colorado, and eastern Utah. Many of the definitive reports on CBM in the U.S. originate from the Powder River Basin in Wyoming and Montana. Thousands of CBM wells are also operating in Alabama.

Producing coalbed methane carries technological and environmental difficulties. In a conventional oil or gas reservoir, for example, gas lies on top of oil which, in turn, lies on top of water. An oil or gas well draws only from the petroleum that is extracted without producing a large volume of water. But water permeates coal beds, and its pressure traps methane within the coal. To produce methane from coal beds, water must be drawn off first, lowering the pressure so methane can flow out of the coal and to the well bore. This water, which is commonly saline but in some areas can be potable, must be disposed of in an environmentally acceptable manner. Surface disposal of large volumes of potable water can affect streams and other habitats, and subsurface reinjection makes production more costly. In addition, methane is a greenhouse gas; in the atmosphere it acts to trap heat and thus contributes to global warming (U.S. Geological Survey, 2000).

Coalbed methane development requires a significant infrastructure spread across the landscape underlain by coal beds. Coal beds in many cases – and particularly in the western Raton Basin that includes the Valle Vidal Unit – are relatively thin, and commonly discontinuous. Because of these features, the industry claims it is necessary to drill many wells to ensure that all the coal beds in a given area can be tapped for gas. The coalbed methane drilling infrastructure therefore requires many closely spaced well pads connected by a network of access roads, underground and above-ground gas pipelines, gas compressor facilities, electrical generation and power transmission facilities; water pumps, lines, and storage tanks; and miscellaneous other equipment and constructions (Brister and others, 2004, p. 65-66). The following section summarizes the coalbed methane development process and infrastructure, and its potential impacts on the landscape of the Valle Vidal Unit, Carson National Forest.

C. The Social and Environmental Impacts of Coalbed Methane Development

As stated, CBM development in the American West, Alaska, and Alabama has been undergoing a boom during about the past 15 years. Thus, there are many examples of the

features, scale and impacts of CBM practices common to the industry. Because CBM development has consistent patterns throughout many different landscapes and environments, the CBM industry, the U.S. Forest Service, and others can readily estimate of potential CBM impacts on the Valle Vidal Unit of the Carson National Forest.

In particular, extensive CBM development now occurs across the Jicarilla Ranger District of the westernmost parts of the Carson National Forest in north-central New Mexico. Thus, it is reasonable to assume that similar CBM development could also occur in the Valle Vidal Unit of the Carson National Forest. Additionally, CBM development is pervasive across the landscapes of public and private lands north and northeast of the Valle Vidal Unit in New Mexico and southern Colorado. Such development additionally serves to indicate the scope of CBM activities that might be required by industry to extract the CBM resource from the Valle Vidal Unit.

Typical CBM development on public and private lands in the Rocky Mountains and nearby areas involves gas wells built on well pads at spacing of every 160, 80, 40, 20, and denser acreages. The 160-acre spacing is the nominal minimum density for the first phase of most CBM development, and the industry typically seeks to maximize the number of well locations to tap the entire gas resource and improve the financial bottom line. Well pads range in size from about 2 to 6 acres, and are serviced by a network of access roads, gas and water pipelines, and electrical lines. The built environment in CBM fields includes compressor stations that range in size from buildings about the size of a two-car garage to that of large warehouses. Well pads typically contain temporary and permanent constructions such as drill rigs, pumpjacks for water pumps, gas-water separators, reserve ponds or pits, storage tanks for water, fuel, and other fluids associated with developing the well, containers of various sizes, and portable buildings such as trailers of various sizes. Developing each well typically requires 100 to 200 or more vehicular round trips for all phases of well pad and well construction and maintenance. Following well development, dewatering the well and producing CBM gas may continue for 10 to 20 years or more, and land, water, wildlife and ecosystem reclamation and restoration efforts following gas extraction are expected to continue for more than a century.

In 2004, the Forest Service contracted with the New Mexico Bureau of Geology and Mineral Resources to produce a "Reasonable Foreseeable Development Scenario" ("RFDS") for CBM development in the Valle Vidal. This action occurred after the Forest Service received petroleum industry requests to make the Valle Vidal Unit available to leasing for CBM extraction. The contract resulted in a report entitled "Oil and Gas Resource Development Potential Eastern Valle Vidal Unit: A 20-year Reasonable Foreseeable Development Scenario (RFDS)." (Brister and others, 2004). This report outlined the lease infrastructure requirements to develop coalbed methane gas in the easternmost 40,000 acres of the Valle Vidal Unit, and thereby gives insights into the potential and specific impacts of coalbed methane gas development.

Specifically, Brister and others (2004) recommend leasing the entire 40,000 acres of the eastern Valle Vidal Unit as a contiguous block of acreage. To tap the CBM resource, the RFDS report predicts that between 195 and 254 vertical or slightly deviated wellbores would need to be drilled on 191 to 250 surface locations (well pads), based on the current and foreseeable State of

New Mexico regulated well density of 160 acres per well. The report suggests that approval for 80-acre infill (increased density) drilling locations could be needed to produce the CBM gas resource within a 20-year time frame, emphasizing the possibility of increasing the numbers of well pads from 191 to 500 surface locations. The RFDS does not specify the mileage of new roads required to service the wells. However, the lowest road density possible for even spacing of well pads at 160 acres per well is about one-half mile of road per well. This estimate yields a minimum of about 100 miles of new roads to service 191 well pads, and about 250 miles of new roads to service 500 well pads. In practice, the road mileage is likely to be significantly greater because of topography, adjustments for avoiding problem and restricted areas, and other factors.

Brister and others (2004) also specify the need for CBM gas and water-handling facilities, including a trunk gas pipeline, a central compressor facility, a gathering pipeline system that branches to individual wells, well pad equipment including wellheads and wellhead separators, electrical power lines, pumpjacks (to remove water from wells), water lines from well pads to storage tanks, and water disposal wells. The RFDS report thus describes the transformation of the easternmost 40,000 acres of the Valle Vidal Unit into an industrial gas field, and acknowledges the practical dimensions of extracting the CBM gas resource.

The RFDS report describes a level of development typical of the first phases of CBM development as practiced elsewhere in the Rocky Mountains. This level of development would dominate the land, water, ecosystems, and current economy of the easternmost 40,000 acres of the Valle Vidal Unit for at least two decades of CBM development and an unknown but extensive period of time for reclamation and restoration efforts. This latter impact – to the economy – must not be discounted. Too often it is suggested that extractive industries are an automatic economic good but they are not. We refer you to the Exhibits L & M and the comments of the The Wilderness Society, submitted separately, for documentation and methodology relevant to understanding the important role that protected landscapes play in facilitating the formation of thriving, sustainable local economies.

The level of development anticipated by the Forest Service in the RFDS report is incompatible with the Vision suggested to the Forest Service in these scoping comments.

D. CBM Gas Drilling on the Vermejo Park Ranch is *Not* a "Model" for the Valle Vidal Unit

In its quest to drill the Valle Vidal Unit, the CBM industry and its supporters are making various claims to garner public support for CBM gas extraction. For example, the industry repeatedly contends that it will take an "environmentally sensitive" approach to creating a CBM industrial landscape covering the easternmost 40,000 acres of the Valle Vidal Unit.

There is no approach to CBM development that would be sensitive enough to protect the immense values of the Valle Vidal. Certain lands are simply too important for other resources and values to exploit for any minerals development. For example, no reasonable person would ever propose to drill for oil and gas underneath the Statue of Liberty. The Valle Vidal, just because it is not a human-built construct, is no different in terms of its importance as a component of our irreplaceable natural and cultural heritage. Even assuming, *arguendo*, that

drilling technologies have improved, the fact of the matter is that drilling nonetheless requires considerable infrastructure and will, invariably, irrevocably alter the landscape and have, at the least, profound short-term impacts. We refer the Forest Service to two maps prepared by the Coalition projecting development levels on the Valle Vidal at 160 and 40 acre spacing (because, of course, downspacing is common and likely if CBM development, if allowed, proceeds and is economically productive) (attached as Exhibit N). Thus, even if drilling technology has improved, this is simply not an adequate justification for opening the Valle Vidal to minerals leasing and development.

Moreover, there is little or no scientific evidence that CBM development has been or might ever be accomplished with environmental responsibility in mind. Environmental responsibility — as validated by science — is a holistic model based on a clear understanding of the whole fabric of ecosystems. It is a passionately thorough sensitivity to the delicate connections among people, water, wildlife, vegetation, soil and air. Environmental responsibility focuses on attention to the long term. Responsible environmental design focuses on comprehending the whole before exploiting a part. It says that it is easier to prevent harm to the land now than to attempt to repair it later.

CBM development is little more than a decade into its heavy-handed impacts on lands throughout the Rocky Mountains. Here, gas industry activities have run the gamut from standard and practical to sloppy to abusive to criminal. Access, development, bonding, and cleanup requirements for the industry are minimal throughout the region's public and private lands (Billings Gazette, 2004). The long-term consequences of CBM development are poorly understood, and it will be decades before scientists come to definitive conclusions about what has already happened on CBM lands in a very short time.

The CBM industry and its supporters currently are using CBM operations on the privately owned Vermejo Park Ranch west of Ratón, New Mexico as one model for industrializing the Valle Vidal. They claim "environmental sensitivity" in this work, but the work, in fact, is simply an experiment in modifying the prevailing industrial design for CBM development. This relatively consistent design involves grading broad terrains with dense networks of roads and well pads among many other environmental intrusions such as generating construction traffic, pipeline trenching and pumping massive quantities of groundwater. The pattern of CBM work on the Vermejo Park Ranch is clear from aircraft and satellite views that are unambiguous in documenting the scale and type of surficial CBM development scars and other features on the landscape (SkyTruth, 2005). For the most part, the CBM industry is emphasizing cosmetic approaches to "environmental" issues at Vermejo Park Ranch, such as disguising industrial apparatus with certain hues of paint, "hiding" well sites and other constructions from view from traveled roads, muffling noise, and making modest decreases in land-surface disturbance at well sites. This amounts only to minor concessions to a massive industrial imprint on the land that remains highly damaging and intrusive.

The Vermejo Park Ranch area is being transformed into a patchwork of industrial designs surrounding fragmented, island-like spaces of natural terrain. The area is, in fact, being transformed into a patchwork of industrial designs surrounding fragmented, island-like spaces of natural terrain. It may not be possible to return the area to its pre-industrialized state for centuries or, indeed, millennia. Neither the industry, the Forest Service, nor the public will know

the environmental consequences of the industrialization experiment on Vermejo Park Ranch for decades. Scientific analyses of water, wildlife, vegetation, soil and air quality either never were performed, or are only now proceeding concurrent with the CBM activity. The results are at best in the realm of ongoing scientific debate, and are years away from scientific confirmation.

For example, the Vermejo Park Ranch currently uses about 70 groundwater monitoring wells to collect data on volumes and constituents of the groundwater system. These data will need to be collected and analyzed over the course of 10 to 15 years or more to determine long-term impacts on the groundwater system, including the as-yet poorly understood relations between near-surface and deep groundwater aquifers, and implications for the discharge and quality of surface waters. Thus, the industry can make no definitive scientific claims about the relation of its activities to long-term impacts on the local and area wide groundwater and surface water systems. The claims by the industry about "environmentally responsible drilling" on the Vermejo Park Ranch arise from the industry itself without independent scientific verification. Such claims must be viewed as anecdotal or at the very least premature with respect to their use in making decisions about the Valle Vidal Unit.

In terms of specific CBM practices, the work on the Vermejo Park Ranch is defined in a unique "Mineral Extraction Agreement" negotiated between the CBM development company and the private landowner. The details of the agreement place certain performance requirements on the CBM development company that differ significantly in many cases from common practices on public (and private) lands elsewhere in the Rocky Mountains. For example, the agreement specifies limiting the number of wells to one for every 160 acres, and limiting the total number of wells for the project. The agreement also imposes maximum ground disturbance dimensions for well sites, compressors, roads, and pipeline corridors. The agreement acknowledges the landowner's wishes to stop CBM activities during specified periods to allow certain other uses of the land, and limits the numbers of vehicles and workers that can be on the property at any one time. The agreement treats among other issues speed limits, security restrictions, noise abatement, accident response, areas where no drilling is allowed (about 30 percent of the property), annual and long-term reclamation requirements, and CBM development monitoring by Vermejo Park Ranch representatives. The industry sees these contractual details in their totality as an expression of "environmental sensitivity," whereas such details do not begin to treat the major environmental issues of landscape domination and fragmentation, widespread scarring and removal of forest and meadow ecosystems, and a host of other impacts. Finally, the "Mineral Extraction Agreement" is a privately developed contract that may have little or no bearing on the widely adopted rules and regulations of the federal government for CBM development on public lands.

Industrializing the Vermejo Park Ranch, however it is accomplished, provides no justification for mineral development activities of any kind in the Valle Vidal Unit. The future management of the Valle Vidal Unit is a matter of public land-use decisionmaking, upon which the decisions about nearby private lands should have no bearing.

Moreover, the industry is simply not prepared to offer any guarantees about the environmental consequences of industrializing the Valle Vidal Unit other than that the impacts will be heavy and of long duration. Vermejo Park Ranch representatives have stated that it will

take perhaps 100 years to restore the area to pre-drilling conditions (The Taos News, April 21, 2005). Because CBM development in the Valle Vidal Unit would be open to competitive bids should the area be leased, the industry, the Forest Service, and the public cannot know who will do the work, nor how it will proceed under changing regulations about managing public lands. The best current model for the future of the Valle Vidal Unit under CBM development would appear to be that practiced in the Jicarilla Ranger District of the Carson National Forest rather than the unique practices on the Vermejo Park Ranch (U.S. Forest Service, Carson National Forest, 2004). Such a model, however, inspires little confidence.

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