THE WILDERNESS SOCIETY

February 14, 2008

Delivered via electronic mail and overnight mail (with attachments)

West-wide Energy Corridor DEIS
Argonne National Laboratory
9700 S. Cass Avenue
Building 900, Mail Stop 4
Argonne, IL 60439

Re: Comments on the West-wide Energy Corridors Draft Programmatic Environmental Impact Statement

To Whom It May Concern:

Please accept and fully consider these comments on behalf of The Wilderness Society and the other organizations identified below. The Wilderness Society, founded in 1935, strives to deliver to future generations an unspoiled legacy of wild places. Our more than 300,000 members and supporters nationwide care deeply about the management of our public lands. We appreciate the opportunity to submit these comments to the Department of Energy, the Bureau of Land Management, the U.S. Forest Service and their cooperating agencies on the Draft Programmatic Environmental Impact Statement (Draft PEIS) for designation of the West-wide Energy Corridors. We are submitting these comments today via electronic mail and also forwarding a copy with attachments to you separately.

We have participated in the West-wide Energy Corridor designation process from the outset and have previously submitted scoping comments (on November 23, 2005) and comments on the preliminary map of potential corridors (on July 10, 2006), which we incorporate herein by reference. We are extremely concerned by the agencies' cavalier disregard of the likely impacts from designation of these energy corridors and the related failure to consider any alternatives to the corridors proposed in the Draft PEIS. These omissions render the Draft PEIS woefully inadequate for designation of energy corridors that, as the agencies essentially acknowledge elsewhere in the Draft PEIS, are likely to alter the character of our public lands. These failures can only be remedied by preparation of a supplemental, legally compliant PEIS and another opportunity for review and comment by interested parties.

Issues Addressed: **Page**

I. The Draft PEIS must be revised to comply with the Energy Policy Act of 2005.

The agencies are conducting the West-wide Energy Corridor process pursuant to the Energy Policy Act of 2005 (EPAct). However, the Draft PEIS does not fulfill the agencies' responsibilities as directed by EPAct.

A. Section 368

Section 368 of EPAct directs the agencies to designate corridors for oil, gas and hydrogen pipelines and electricity transmission and distribution facilities on federal land, starting with the Western States, but Section 368 also includes additional requirements, which the agencies have failed to fulfill in this process. Section 368(a) directs the agencies to consult with other units of government and "interested persons" as part of the designation process. Accordingly, the agencies must consult in good faith and provide the public with sufficient information to effectively participate in designation. By failing to provide sufficient information about the decision-making process, the impacts of designation and alternatives, the agencies have not adequately consulted with interested parties.

Section 368(a)(2) also directs the agencies to "perform any environmental reviews required to complete the designation," which necessarily includes sufficient review of environmental consequences, including through compliance with the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA) and the National Historic Preservation Act (NHPA). As will be discussed in detail below, the agencies have not performed sufficient environmental reviews to support designation.

Section 368(d) requires the agencies, in carrying out this section of EPAct, to:

> take into account the need for upgraded and new electricity transmission and distribution facilities to-
> (1) improve reliability;
> (2) relieve congestion; and
> (3) enhance the capability of the national grid to deliver electricity.

However, the agencies have not conducted an extensive study of the need for the proposed corridors or provided detailed information showing that the corridors will improve reliability, relieve congestion, or enhance the capability of the grid. For instance, in the Red Desert of Wyoming, there are multiple corridors proposed for designation in close proximity to one another, without an explanation of need (there are 7 segments in this fairly small area: 121-220, 121-221, 220-221, 219-220, 218-240, 121-240, 129-218), even though they all join with single corridors at relatively close locations (segment 73-129 to the east and segment 55-240 to the west). At a minimum, the northernmost corridor (segment 121-221) should be removed and all other corridors in the area should be subject to a showing of need.

Section 368(e) provides that corridor designations must, "at a minimum, specify the centerline, width, and compatible uses of the corridor." This language, especially when taken in conjunction with the requirements to conduct environmental review and consider the need for corridors, indicates that the agencies should be designating width and uses for each corridor. Instead, the vast majority of the corridors are designated with an average width of 3500 feet and provide for all types of uses. As the Draft PEIS (at pp. 2-3 – 2-5) explains:

> A corridor width of 3,500 feet was selected by the Agencies for the Section 368 energy corridors (Text Box 2.2-2). This width would provide sufficient room to support multiple energy transport systems. For example, assuming an operational ROW width of 400 feet, about 9 individual 500-kV transmission lines could be supported within a 3,500-footwide corridor. Alternately, as many as 35 liquid petroleum pipelines (each consisting of a 32-inch-diameter pipe and a 100-foot construction ROW) or 29 natural gas pipelines (42-inch-diameter pipe and 120-foot construction ROW) could be supported within a 3,500-foot-wide corridor.

This approach essentially permits large-scale development of power lines and pipelines in the corridors, without sufficient justification of each corridor, in each place, for a well-defined width and set of uses.

Perhaps most troubling, the agencies have interpreted the language of Section 368 to somehow limit their ability to involve the public, perform environmental reviews and take into account the need for new corridors. For instance, the agencies have interpreted the designation of corridors on *federal* land as an excuse not to provide the public with projected locations of entire corridors – resulting in corridor maps that consist of "dots" and "dashes" on federal lands, with interested parties left to guess how they might be connected across state, private and tribal lands. In addition, despite the explicit language directing consideration of both "upgraded" and "new" facilities, the agencies interpret the "designation" of corridors as an excuse not to consider alternatives that would rely primarily or even completely on increasing the efficiency of existing facilities. The agencies have similarly interpreted the "designation" of corridors as a mandate to

designate new corridors, seemingly regardless of need and without consideration of *not* designating corridors based on potential conservation measures. These are realistic alternatives that are in no way prohibited by the language of Section 368 and the agencies are disregarding their responsibilities in carrying out Section 368, complying with applicable law and managing our public lands by their overly narrow interpretation.

Recommendations: In order to comply with Section 368, the agencies must provide for meaningful public participation and conduct thorough environmental reviews of potential corridors, which includes providing substantial detail on decision-making processes, data considered, alternatives to designation of new lines and specific designations based on need for corridors.

B. Section 1221

Section 1221 of the EPAct directed the Department of Energy to complete an analysis of congestion and constraints. The Draft PEIS (at p. 1-5) acknowledges the study and the information gained, stating:

> In response to Section 1221(a), a separate provision of EPAct, the DOE recently completed a nationwide analysis of electricity transmission congestion. The *National Electric Transmission Congestion Study* examined in-depth historical data, existing studies of transmission expansion needs, and regionwide modeling of the western transmission grid. The report concluded that a combination of several factors, including new energy demands and lack of investment in energy transport facilities, are creating electric infrastructure problems in some areas in the West (DOE 2006a) (see Figure 1.1-2).

The Draft PEIS proceeds to identify the three types of areas where additional attention is needed in the West: Critical Congestion Areas, Congestion Areas of Concern, and Conditional Congestion Areas. However, the designations of corridors in Section 368 do not correspond to these areas and do not appear to take into account the study results to inform the width and uses of designated corridors.

Recommendations: The agencies should incorporate the results of the Section 1221 study into the PEIS and use these results to designate corridors on federal lands based on need, type of use required and width needed.

II. The Draft PEIS must be revised to comply with NEPA.

NEPA, 42 U.S.C. § 4321 *et seq*., dictates that the agencies take a "hard look" at the environmental consequences of a proposed action and the requisite environmental analysis "must be appropriate to the action in question."[1] As discussed in detail below, the environmental analysis in the Draft PEIS is woefully inadequate. Prior to designating corridors, the agencies must complete an additional EIS and provide for sufficient public participation.

[1] Metcalf v. Daley, 214 F.3d 1135, 1151 (9th Cir. 2000); Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 348 (1989).

A. Direct, indirect and cumulative impacts

In order to take the "hard look" required by NEPA, the agencies are required to assess impacts and effects that include: "ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, **whether direct, indirect, or cumulative**." 40 C.F.R. § 1508.8. (emphasis added). NEPA regulations define "cumulative impact" 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. (emphasis added). A failure to include a cumulative impact analysis of actions within a larger region will render NEPA analysis insufficient.[2] The scope of NEPA analysis must be appropriate to the scope of the proposed action.[3] In the context of this PEIS, the NEPA analysis must take into account the likely use and path of the designated corridors. The Draft PEIS fails to adequately account for the likely impacts of designating corridors on public land.

1. <u>The Draft PEIS improperly denies that corridor designations will have environmental consequences.</u>

The Draft PEIS proposes to designate approximately 6000 miles of corridors affecting close to 3 million acres of federal lands. The agencies acknowledge that: "[i]f the Agencies decide at the end of this environmental review, under NEPA, to designate a system of energy corridors, it will be for the purpose of establishing those corridors as *preferred locations for energy transport projects*." Draft PEIS, p. 1-11. (emphasis added). Further, once corridors are designated, Section 368(c)(2) of EPAct directs the agencies to "*expedite* applications to construct or modify oil, gas, and hydrogen pipelines and electricity transmission and distribution facilities within such corridors, taking into account prior analyses and environmental reviews undertaken during the designation of such corridors." (emphasis added). The Draft PEIS carries out this direction by providing that "Individual project analyses, reviews, and approvals and denials may *tier off the PEIS*, thus using and referencing the information, analyses, and conclusions presented in the PEIS to supplement the project-specific reviews and analyses." Draft PEIS, p. 1-17. (emphasis added). Further, the Draft PEIS will amend land use plans to incorporate the corridors and "[b]y amending land use plans at the designation stage, the proposed action may *accelerate the process* of subsequently applying for energy project ROWs. In particular, an applicant could avoid delays associated with seeking a land use plan amendment for a specific project." Draft PEIS, p. 1-11, 1-17. (emphasis added).

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[2] *See, e.g.*, <u>Kern v. U.S. Bureau of Land Management</u>, 284 F.3d 1062, 1078 (9th Cir. 2002) (analysis of root fungus on cedar timber sales was necessary for entire area).
[3] <u>Kern v. U.S. Bureau of Land Management</u>, 284 F.3d at 1072.

Nonetheless, the agencies spend many pages of the Draft PEIS claiming that they cannot analyze likely impacts of the designations and conclude that "[u]ntil a site-specific project is presented to the Agencies and the project is evaluated, authorized, and implemented, the land and resources within a designated energy corridor would remain unchanged." Draft PEIS, p. 1-16. This contradicts the likely effects of designating a "preferred location" and "expediting" approval. Further, there is no commitment in the Draft PEIS that the agencies will prepare environmental impact statements for projects in the corridors or even a commitment to provide opportunities for public comment on environmental assessments that might be prepared. Accordingly, there is ample evidence that NEPA analysis for individual projects will be limited and will rely on the PEIS to justify placement of projects in designated corridors. The analysis currently presented in the Draft PEIS cannot support tiering of later analysis or expediting later NEPA review.

Section 368(a)(2) of EPAct mandates that the agencies "perform any environmental reviews that may be required to complete the designation of such corridors." Because NEPA requires that agencies perform an environmental review for major federal actions significantly affecting the human environment, this action of designating energy corridors with the intent to expedite energy development is without a doubt a major federal action. It is irresponsible for the agency to suggest that impacts will not occur from the designation of corridors until site-specific projects are proposed. To the contrary, the designation of corridors will create likely locations for projects. For instance, the Bureau of Land Management (BLM), upheld by the Interior Board of Land Appeals, has found that simply identifying a route as "open" on a map increases the likelihood that individuals will use it.[4] Similarly, designation of an energy corridor, especially in conjunction with a guarantee of expedited approval, radically increases the likelihood of projects being proposed (and approved) in those corridors. Amendment of the affected agencies' land use plans through the PEIS will also ensure that the NEPA analysis normally required to amend management plans will not occur in conjunction with specific projects. Accordingly, designation of corridors will alter future land use decisions. For example, a corridor identified in a BLM resource management plan (RMP) significantly changes how the land in that area will be assessed for various management prescriptions, including: recreation, visual resources, protection of roadless areas, lands with wilderness characteristics, and other special land classifications. Further, large-scale transmission projects are already proposed that will coincide with the proposed corridors and ensure their immediate and intensive use. Maps prepared by Western Resource Advocates highlight a number of these projects, including the Mountain Sates Intertie Transmission Proposal and the Northern Lights Inland Express MT and WY Transmission Proposals. *See*, maps provided as Attachment 1.

Recommendations: In order to comply with NEPA, the agencies cannot designate corridors and amend land use plans without a thorough analysis of the likely impacts of corridor designations on lands within the corridors and surrounding lands.

2. The Draft PEIS must analyze the impacts of the likely path of the corridors.

The maps of the corridors do not show the likely path of the projects as they would cross state, private and tribal lands; instead, they show only the portions on federal lands. The Draft PEIS acknowledges that these corridors would eventually connect, stating (at p. 3-31):

[4] Arizona State Association of 4-Wheel Drive Clubs, Inc., 165 IBLA 153 (2005).

> Land use and property values on nonfederal land (i.e., privately owned land, Tribal and trust land, and land controlled by state and local governments) could also be affected by the corridor designations under this alternative, either as a result of being adjacent to federal land on which a corridor has been designated or as a consequence of being a nonfederal land "gap" that would connect projects on designated corridors if they were to be built.

However, the Draft PEIS does not show the manner in which these gaps are likely to be connected or fully assess the effects of the continuation of these corridors, which would include not only impacts on land use and property values, but also impacts on other natural resources, such as wilderness qualities, wildlife habitat and recreation opportunities. NEPA requires the agencies to assess "reasonably foreseeable" impacts. 40 C.F.R. § 1508.7. Based on the proposed corridors received during scoping, which were included in preliminary maps (*see, e.g.*, Figure 2.1-1, p. 2-3), and the "conceptual network" of corridors that the agencies included in the Draft PEIS (Figure 2.2-5, p. 2-19) the agencies can unquestionably predict likely locations of corridors with sufficient definition to assess their impacts and provide all of this data to the public.

Recommendation: The agencies must create maps that show the likely routes of corridors, analyze their impacts and provide the public with an opportunity to review and comment on these impacts.

3. Analysis of connected and cumulative impacts should address impacts at a landscape level and take into account other pending large-scale projects and programmatic efforts, as well as additional development to be supported by new corridors.

The scope of NEPA analysis must be appropriate to the scope of the proposed action.[5] In the context of this PEIS, the agencies should look to the overall effect on the landscape of these contiguous eleven Western States, and the many resources it contains.

A landscape level analysis of proposed energy corridors will take into account the distribution of resources across the affected states, complying with the agencies' legal obligations to truly assess potential impacts and yielding management decisions that will balance and protect the multiple resources of these public lands. The placement of and conditions placed on energy corridors can define which areas will remain or become roadless, and which areas will be disturbed and how. By affecting the fragmentation of the landscape, energy corridors can affect how naturally or unnaturally a landscape will behave in terms of water flow and quality, wildlife migration, and species composition and function. In considering the potential impacts of permitting an entire network of energy corridors, the agencies must consider how this placement will change the landscape and interfere with species' ability to migrate and survive.

The correct scope of analysis necessitates consideration of the connected landscapes of these states. As documented in the *Heart of the West Conservation Plan* (available at: http://www.wildutahproject.org/Templates/sub%20Available%20publications.dwt and previously submitted) -- a science-based spatial analysis of the relative importance of various

[5] Kern v. United States Bureau of Land Management, 284 F.3d 1062, 1072 (9th Cir. 2002).

wildlife habitat cores and linkages throughout the Heart of the West ecoregion -- the areas of northeastern Utah, northwestern Colorado, and southwestern Wyoming are inextricably linked in an ecoregion with core habitat areas and key migratory linkages. As a result, impacts to wildlife habitat in one part of the Heart of the West ecoregion will affect wildlife viability throughout the ecoregion. Similarly, there are basin-wide impacts, in terms of changes to the water quantity and quality in the Green River system, and cumulative impacts to the common airshed, all of which affect the entire Heart of the West ecoregion. The Draft PEIS also acknowledges the existence of numerous ecoregions within the eleven states considered for designation, and provides an overview of effects; Appendix O to the Draft PEIS describes these regions in detail. *See, e.g.,* Draft PEIS, pp. 3-184 – 3-186. However, a more thorough analysis of effects can and should be completed and provided to the public for review.

A landscape approach is supported by NEPA guidance on cumulative and connected impacts, which requires that the entire area potentially affected be included in an analysis of potential environmental consequences and holds that a failure to include an analysis of actions within a larger region will render NEPA analysis insufficient.[6] Thus, in order to accurately evaluate the potential environmental consequences of west-wide designation of energy corridors, the analysis of environmental impacts would necessarily look at the cumulative and connected impacts on all of the directly and indirectly affected landscapes. The Environmental Protection Agency, in providing direction to its reviewers, emphasizes the importance of ensuring that the cumulative impact analysis is based on "geographic and time boundaries large enough to include all potentially significant effects on the resources of concern. The NEPA document should delineate appropriate geographic areas including natural ecological boundaries, whenever possible, and should evaluate the time period of the project's effects."[7]

The Council on Environmental Quality's (CEQ) guidelines on cumulative effects analysis provide the following steps for determining the appropriate geographic boundary of cumulative impact analysis:

1. Determine the geographic area that will potentially be directly affected by an action – known as the "project impact zone";
2. Identify resources in the project impact zone that could be affected by the action;
3. Determine the geographic areas occupied by the resources outside the project impact zone.
4. Identify the appropriate area for analysis of cumulative effects based on the largest of the areas determined in step 3.[8]

For the energy corridors, the geographic area of impact will include the resources, such as wildlife, within areas of proposed development and their habitat extending outside such areas. The agencies can and should take the overall impacts of the corridors on the affected landscapes

[6] *See, e.g.,* Kern v. U.S. Bureau of Land Management, 284 F.3d 1062, 1078 (9th Cir. 2002) (analysis of root fungus on cedar timber sales was necessary for entire area).
[7] U.S. Environmental Protection Agency, 1999, *Consideration Of Cumulative Impacts In EPA Review of NEPA Documents*. (emphasis original).
[8] Council on Environmental Quality, 1997, *Considering Cumulative Effect Under the National Environmental Policy Act*.

into account when considering their potential environmental consequences.[9] A landscape level analysis is an important part of a programmatic EIS, even if site-specific analysis might be deferred until authorization of specific projects. For instance, the U.S. Court of Appeals for the Second Circuit has held that analyzing the overall environmental risks involved in transporting oil from off-shore leases was appropriate and necessary in a PEIS, although specific analysis of individual pipeline locations could be deferred.[10] In order to fulfill the mandate of NEPA that the agencies make an informed assessment of the environmental consequences of their actions, the landscape level effects of an expanded large-scale corridor system must be assessed.

The analysis of impacts included in the PEIS must address the cumulative and connected impacts of both the proposed energy corridors and other foreseeable connected activities within the same general areas. As noted above, the resources that allow an ecosystem to function often share a common geography, such that changes to the water quantity and quality in a river system or impacts to an airshed (which may be affected by activities such as oil and gas drilling or operation of coal-fired power plants), all contribute in common. Similarly, changes to these resources may affect the core habitat and linkages that are critical for survival of wildlife and vegetation in a region. Accordingly, where there are shared environmental resources that can act as indicators of the health of ecosystems, the agencies must analyze all of the direct and indirect impacts that affect them.

The Environmental Protection Agency provides the following guidance to its reviewers on assessing the range of other activities to be considered in cumulative impacts analysis:

1. the proximity of the projects to each other either geographically or temporally;
2. the probability of actions affecting the same environmental system, especially systems that are susceptible to development pressures;
3. the likelihood that the project will lead to a wide range of effects or lead to a number of associated projects; and
4. whether the effects of other projects are similar to those of the project under review.
5. the likelihood that the project will occur -- final approval is the best indicator but long range planning of government agencies and private organizations and trends information should also be used;
6. temporal aspects, such as the project being imminent.[11]

In this case, the agencies' obligation to analyze impacts must encompass not only the proposed corridors, but also the cumulative impacts of the corridors, taken together with the impacts of existing, proposed, or reasonably foreseeable projects, on the environment. Thus, the agencies

[9] *See, e.g.*, Newmont Mining Corp., 151 IBLA 190 (1999) (Where the Bureau of Land Management could take into account the overall degradation from existing and connected proposed operations, a cumulative analysis of all impacts was required); Kern v. United States Bureau of Land Management, *supra.* (BLM must perform cumulative impact analysis of reasonably foreseeable future timber sales on spread of root fungus before approving single proposed sale).

[10] County of Suffolk v. Secretary of Interior, 562 F.2d 1368, 1376-1377 (2nd Cir. 1977) (It was "essential to consider and weigh the environmental aspects of transportation, as well as of exploration and production.").

[11] U.S. Environmental Protection Agency, 1999, *Consideration of Cumulative Impacts in EPA Review of NEPA Documents.*

must analyze the cumulative impacts not just of the proposed corridors, but also of other projects that will impact resources in common with this proposed action. For instance, the BLM is currently evaluating or has approved a number of other programmatic environmental impact statements, such as the Programmatic Vegetation Treatments EIS and Environmental Report, the PEIS on Wind Development and programmatic environmental impact statements for development of oil shale and tar sands, as required by Section 369 of the Energy Policy Act of 2005. Section 1221 of the Energy Policy Act of 2005 also requires DOE to conduct a study and designate national interest electric transmission corridors. Section 368 of the Energy Policy Act of 2005 requires not only this PEIS for the eleven contiguous Western States, but also a follow-on PEIS for the rest of the nation. There are also large projects proposed in the same landscape, such as the TransWest Express, Rockies Express and Ruby pipelines – most of which have proposed specific locations and uses. *See*, maps of proposed routes provided as Attachment 2.

In addition, once energy corridors are put in place, it is reasonably foreseeable that energy development projects will proceed and increase based on the location of those corridors – indeed, that is the entire purpose of this initiative: to increase the opportunities for energy development projects. The increased level of projects that is likely to occur around these corridors will have a correspondingly increased level of impacts on the surrounding lands. For instance, branch powerlines will need to be constructed to make best use of the powerlines in the approved corridors. Similarly, pipelines will likely support additional oil and gas development projects and also require construction of feeder pipelines. As noted by the Environmental Protection Agency in commenting on a Draft EIS for the Piceance Basin Expansion Pipeline (copy attached for your reference as Attachment 3):

> **Increased gas transportation capacity will facilitate increased density and intensity of gas development. Increased transportation capacity will also increase the rate of gas development.** The FEIS should examine the indirect environmental impacts associated with increasing capacity for natural gas transportation and identify mitigation that will be implemented to reduce these impacts. Although the Piceance Basin DEIS did include a section on the cumulative impacts of oil and gas in the Piceance Basin, the analysis did not identify the indirect impacts that will be induced by increasing gas transportation capacity nor was any mitigation identified for impacts other than the impacts directly resulting from construction of the pipeline. (emphasis added)

The reasonably foreseeable growth of projects related to the corridors requires a thorough discussion of the "growth-inducing impacts" of the actions contemplated by the PEIS.[12]

In determining the appropriate scope of environmental analysis for an action, the Government must consider not only the single proposed action, but also three types of related actions:

> (1) Connected actions - Actions which are closely related and:

[12] Davis v. Mineta, 302 F.3d 1104, 1122-1123 (10th Cir. 2002) (Indirect impacts of proposed highway construction project would be to support increased development, so "the agency must provide an adequate discussion of growth-inducing impacts."),citing Laguna Greenbelt, Inc. v. United States Dep't of Transp., 42 F.3d 517, 526 (9th Cir. 1994).

(i) Automatically trigger other actions which may require environmental impact statements.

(ii) Cannot or will not proceed unless other actions are taken previously or simultaneously; or

(iii) Are interdependent parts of a larger action and depend on the larger action for their justification.

(2) Cumulative actions – Actions, which when viewed with other proposed actions, have cumulatively significant impacts.

(3) Similar actions – Actions, which when viewed with other reasonably foreseeable or proposed agency actions, have similarities that provide a basis for evaluating their environmental consequences together, such as common timing or geography.

40 C.F.R. § 1508.25. Under any of these classifications, the coordinated actions that the agencies are taking through this PEIS trigger a broader assessment of the cumulative and connected impacts. The designation of individual corridors triggered by the PEIS may well require preparation of an EIS; and the corridor designations are all a part of the mandate from Section 368 of the Energy Policy Act of 2005. In addition, this PEIS and the other corridor programs identified above are all part of a policy to increase transmission and distribution facilities. So, the resulting agency actions are connected as "interdependent parts of a larger action," all of which "depend on the larger action [the Government policy] for their justification." Further, the many corridors that may be authorized based on this EIS, plus the other corridor designation efforts, the oil shale and tar sands development, and vegetative treatments will all have a compounding impact on natural resources, such as air and water, as well on species and habitat, causing a "cumulatively significant" impact. Finally, since the PEIS covers corridors in the eleven contiguous Western States, and the Wind Development PEIS, oil shale EIS, tar sands EIS and vegetative EIS also focus on these areas and are all in process or recently completed, these reasonably foreseeable actions will have "common timing and geography" and will be similar in terms of permitting more activities on these same lands, possibly even in the same places.

The increased level of energy development projects that will follow these corridors are also connected, as the individual projects (such as an oil and gas development project) are likely to trigger preparation of an EIS. Similarly, the clustering of projects to access the transmission corridors is likely to have a cumulatively significant effect on the resources in the area. And, since the additional energy development projects will be tied, at least to some extent, to the location of the corridors, these projects are certainly similar in terms of geography.

Both the various programs and the increased development projects will have a connected and cumulative effect on resources ranging from elk and pronghorn herds to bird of prey populations, sage grouse populations, air quality, water quality (and erosion and sedimentation), and overall potential for primitive recreation. Therefore, their combined impact should be taken into account as part of the analysis of impacts associated with this PEIS.

Courts have held that there are situations where an agency must consider several related actions in a single NEPA document. For instance, the U.S. Court of Appeals for the Fifth Circuit held that in a cumulative impact analysis, an agency should consider "(1) past and present actions without regard to whether they themselves triggered NEPA responsibilities and (2) future actions that are 'reasonably foreseeable,' even if they are not yet proposals and may never trigger NEPA-review requirements.[13] The court noted that the applicable law "does not limit the inquiry to the cumulative impacts that can be expected from proposed projects; rather, *the inquiry also extends to the effects that can be anticipated* from "reasonably foreseeable future actions."[14] Similarly, the U.S. Court of Appeals for the Ninth Circuit has specifically required analysis of activities on both public and private land, since both may impact federal resources, and has also found cumulative impacts analysis insufficient where it did not include foreseeable projects in the same geographical region.[15]

In this case, the agencies' obligation to analyze impacts extends beyond the immediate impacts of the proposed corridor initiative to include the cumulative and connected impacts of this project, taken together with the impacts of existing, proposed, or reasonably foreseeable projects, on the environment. As noted above, an insufficient cumulative or connected impact analysis of actions within a larger region will render NEPA analysis insufficient.[16]

Recommendations: In order to fulfill the mandate of NEPA that the agencies make an informed assessment of the environmental consequences of their actions, the agencies can and should take these connected, cumulative and similar actions into effect and perform an analysis of their potential effects on the overall Western landscapes. "It is not appropriate to defer consideration of cumulative impacts to a future date when meaningful consideration can be given now."[17]

4. The Draft PEIS must disclose the basis of the agencies' decision-making and provide accurate data to the public for comment.

The agencies must "insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements." 40 C.F.R. § 1502.24. Information regarding reasonably foreseeable significant adverse impacts that is essential to a reasoned choice among alternatives shall be included in an EIS if the costs of obtaining it are not exorbitant. 40 C.F.R. § 1502.22(a). In addition, regarding the content of an environmental analysis:

> NEPA procedures must **insure that environmental information is available to public officials and citizens** before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA.

[13] Fritiofson v. Alexander, 772 F.2d 1225, 1245 (5th Cir. 1985).
[14] Id. at 1243. (emphasis added).
[15] *See*, Natural Resources Defense Council v. U.S. Forest Service, 421 F.3d 797, 815-16 (9th Cir. 2005); Muckleshoot Indian Tribe v. U.S. Forest Service, 177 F.3d 800 (9th Cir. 1999).
[16] *See, e.g.*, Kern v. U.S. Bureau of Land Management, 284 F.3d at 1078.
[17] Kern v. United States Bureau of Land Management, 284 F.3d at 1075.

40 C.F.R. § 1500.1(b). (emphasis added). The Data Quality Act and the agencies' interpreting guidance expand on this obligation, requiring that the agencies ensure the "quality, objectivity, utility and integrity" of the information disseminated to the public.[18]

The Draft PEIS omits data, provides inaccurate data, and fails to disclose sufficient information about the agencies' decision-making process to support its conclusions or to permit meaningful public comment. While the Draft PEIS identifies wilderness, wilderness study areas (WSAs) and national conservation areas (NCAs) as resources to be avoided (*see*, Table 2.2-7, p. 2-23), none of the maps identify these special areas as distinguished from broader federal agency management, thereby preventing the public from understanding the potential impacts of the corridors on these areas in the context of surrounding lands. A corridor is actually located between the Alvord Desert and Bowden Hills WSAs on BLM lands in Oregon (segment 24-228), but the maps do not depict these units and Table G does not include these or other WSAs that are within one mile of the corridors. When the GIS data is mapped, this corridor appears to impinge on the WSAs, requiring clarification both on the maps and in the text of the document.

The omission of data is especially egregious in the context of NCAs on BLM lands, which are crossed by these corridors, because the information on impacts is also omitted from Appendix G (Sensitive Resource Areas That Would Be Intersected by Proposed West-wide Energy Corridors) and Table 2.2-6 (Major Sensitive Resource Areas That Would Be Intersected by the Centerlines of the Proposed Energy Corridors under the Proposed Action). Proposed corridors do, in fact, cross the Snake River - Birds of Prey NCA in Idaho (segment 36-228) and the Black Rock Desert – High Rock NCA in Nevada (segment 16-24) ,

Where corridors are located in proximity to special places but are not intended to impact those areas, the maps should be accurate and the location of the corridors as outside these areas must be confirmed in the text of the document and any records of decision (RODs). For instance, a number of corridors intersect Forest Service Roadless Areas, but current regulation and policy prohibits development of corridors in these areas. Not only should the maps of the corridors be corrected to avoid these areas, but also the PEIS and RODs should clarify that the corridors are not to be located in the Forest Service Roadless Areas. The corridor that tracks the boundary of Arches National Park in Utah (segment 66-212) actually appears as within the Park boundary on certain maps, presumably due to an error in GIS or other data. It is imperative that the maps and other data be corrected and that the PEIS confirm that this corridor will not encroach upon Park lands.

Data regarding wildlife habitat, including special status species habitat, crucial winter range and migration corridors, are also not provided on any of the maps or in any form that would permit reviewers to assess the manner in which the agencies may or may not have accounted for such impacts. A similar glaring omission relates to lands that have been identified by citizens - and often acknowledged by the agencies – as having wilderness characteristics, which are suitable for eventual protection as wilderness, are being considered by the agencies for interim protection, are especially sensitive to development, and in some cases already being considered for

[18] Treasury and General Government Appropriations Act for Fiscal Year 2001, Pub.L.No. 106-554, § 515. *See also*, Bureau of Land Management Information Quality Guidelines, available at http://www.blm.gov/nhp/efoia/data_quality/guidelines.pdf.

designation in legislation before Congress. The agencies should be taking these values and potential protection of them into consideration and should be providing the public with the opportunity to make informed comments on how proposed corridors could affect these lands.

The Draft PEIS also fails to disclose the manner in which the agencies made decisions on specific corridor locations and about avoiding or mitigating impacts of corridors on other resources. For instance, the Draft PEIS indicates that other than federal agencies, "two states, three county governments, two conservation districts, and one Tribe" acted as cooperating agencies and that the California Energy Commission established an "interagency" team" for input from that state. For the federal agencies, the Draft PEIS provides a general description of GIS data being provided to 55 national forests, 74 BLM district and field offices, 17 Department of Defense facilities and the national office of the U.S. Fish and Wildlife Service. Draft PEIS, p. 2-25. The managers and staff were then asked to apply "their unique, site-specific knowledge of sensitive resources, management activities, and compatible lands uses," and then certain adjustments were apparently made based on their recommendations with "detailed supporting rationale." Id. Many of these meetings were held as "webcasts," identified in Appendix I (Summary of WWEC PEIS Webcasts for Corridor Review and Revision). However, there is not detail provided in the PEIS or in Appendix I about the types of resources that were taken into account or the changes that were made to protect them. Since the corridors unquestionably impact "sensitive resources" and current management, a more detailed discussion of the factors that were taken into account and the development of the specific corridor locations is critical for disclosing the agencies' process and permitting public scrutiny.

Recommendations: The agencies should ensure the quality and completeness of the data provided. The PEIS should identify wilderness, wilderness study areas, national conservation areas, and lands with wilderness characteristics on the maps. For all sensitive places that are being avoided but are in proximity to the corridors, the maps and language in the PEIS and RODs should confirm that the lands of these areas are not included with the corridor designations. The confusing and inaccurate information also necessitates that the public be provided with clarification and an opportunity to comment on the impacts of the proposed corridors on these special places. Details should also be provided regarding data taken into consideration on wildlife habitat, including the data utilized and the decisions made. Further, a more comprehensive description of the values taken into consideration and how they were protected (or not) through the agencies' discussions and "webcasts" is needed in order for the public to meaningfully comment on the information that was or was not considered and the actions that were or were not taken by the agencies in arriving at the proposed designations.

5. Specific examples of impacts not considered/adequately addressed in the Draft PEIS.

In addition to the fatal flaws in the agencies' approach to analyzing direct, indirect and cumulative impacts, there are specific types of impacts that have been ignored or especially inadequately discussed. These omissions also affect the alternatives that have or should have been developed for designating corridors, compounding the agencies' failure to comply with NEPA.

a) *Climate change*:

Global climate change is now acknowledged to be a major consideration for effects of major federal actions. The Supreme Court has concluded that "[t]he harms associated with climate change are serious and well recognized."[19] Further, the Supreme Court has held that while agency action may not completely reverse global warming, it does not relieve the agencies of the responsibility to take action to reduce it.[20] In fact, an order issued by the Secretary of the Interior requires that:

> Each bureau and office of the Department will consider and analyze potential climate change impacts when undertaking long-range planning exercises, when setting priorities for scientific research and investigations, when developing multi-year management plans, and/or when making major decisions regarding the potential utilization of resources under the Department's purview.

U.S. Dept. of the Int., Sec. Order No. 3226 (Jan. 19, 2001), Section 3. The Draft PEIS discussing the *existing* climate and meteorology in the eleven Western states that will be affected by corridor designation in the contexts of a number of resources, including air quality (Section 3.6.1.1) and vegetation (Section 3.8.1.1). However, the Draft PEIS does not discuss the potential direct, indirect and cumulative impacts on climate change from these energy corridors, even though these impacts are reasonably foreseeable. For instance, at this point, the energy corridors are likely to support and increase use of electricity generated by coal-fired power plants, a significant contributor to the generation of greenhouse gases (GHG) and, consequently, to climate change. Maps prepared by Western Resource Advocates shows that the proposed corridor locations will support proposed and existing coal power plants, but are less likely to support power generated by wind and solar power. *See*, Appendix C to these comments. It is essential that the PEIS examine not only the increase in GHG and other air pollutions from the proposed corridors, but also the global and regional impacts on precipitation, air temperatures, wind, lightning storms and secondary impacts including decreased snow pack and insect outbreaks.

(1) Key considerations for analysis of impacts from climate change.

The analysis of impacts from climate change arising out of designation of corridors must address the following**:**

- Climate change will alter the distribution of species and their productivity, so how will this affect the structure, function and health of the forests and rangeland in the Rockies? How will changes in productivity affect the distribution of suitable grazing lands? How will changes in climate alter the rate of restoration for the hundreds of thousands oil and gas wells in the region?

- Because climate change will alter the distribution of species, it is critical that a supplemental PEIS examine the potential impact on species migration and distribution. How will climate

[19] Massachusetts v. E.P.A., 127 S.Ct. 1438, 1455 (2007).
[20] Id. at 1458.

change impact the efforts of state wildlife officials and federal agencies to conserve areas for species migration? How will migration routes change as the climate changes?

- Climate change has the potential to affect the structure, function and health of forest as much as timber harvesting (Joyce et al. 2000b). How will climate change, facilitated by the bias towards coal evident with the proposed corridors, impact the amount and distribution of high quality old-growth forests? What are the impacts on habitat connectivity needed to support viable wildlife populations? How will climate change affect the ability of key species to survive and is there adequate protection for predicted changes in habitat?

- There is growing concern from the ski industry about the impacts of climate change on snow pack. States and communities are also concerned about water yields from the snow pack, the timing of runoff, and the potential for increased drought in the west. What are the impacts to our snow pack and our water yield, if we increase our use of coal as a result of the biased corridor selection process?

- There is also concern about increased outbreaks of mountain pine beetles and the change in forest structure from such outbreaks. How might insect outbreaks increase if our emissions of GHG increase as a result of the corridor bias towards coal?

- The spread of non-native species is often facilitated by natural disturbances, including fire and flooding and riparian scouring. How might climate change affect the threat of invasive species in the west? How will the potential spread of invasive species impact native species, water yields and suitable land for grazing?

- It is also apparent that the proposed corridors have the potential to provide the excessive amount of energy necessary to possibly produce oil from oil shale in Colorado and Utah. What are the cumulative impacts of the proposed corridors from the construction of more coal-fired power plants and the potential large scale commercial development of oil shale?

- Air pollution from oil and gas drilling are already increasing the air pollution in Class 1 airsheds in the Rockies, as well as in communities and cities. What are the cumulative impacts when the air pollution from the current oil and gas operations are combined with increased air pollution from proposed coal-fired power plants and the pollution from potential oil shale development – all facilitated by the proposed and biased corridor routes selected?

- Leading ecologists studying climate change impacts are employed by the USFS, USGS, and Universities, yet the Draft PEIS fails to consider the results of these studies. The failure to use the best available science must be addressed.

- The IPCC used 5 Global Climate Models and several emissions scenario A1B (IPCC 2007). These models can be used to predict changes in temperatures and precipitation from historical averages. Coupling these types of climate data with a Dynamic Vegetation Model will make it possible to examine the impact of the climate change on a range of environmental conditions.

- The following studies should be analyzed at a minimum:

Aber, J.D., R.P. Neilson, S. McNulty, J.M. Lenihan, D. Bachelet and R.J. Drapek. 2001. Forest processes and global environmental change: predicting the effects of individual and multiple stressors. Bioscience. 51(9):735–751. Existing ecological communities probably will not survive climate change intact.

Dale, V.H., L.A. Joyce, S. McNulty, R.P. Neilson, M.P. Ayres, M.D. Flannigan, P.J. Hanson, L.C. Irland, A.E. Lugo, C.J. Peterson, D. Simberloff, F.J. Swanson, B.J. Stocks, and B.M. Wotton. 2001. Climate change and forest disturbances. BioScience, 51: 723-734. Climate change can affect forests by altering the frequency, intensity, duration and timing of fire, drought, introduced species, insect pathogen outbreaks, hurricanes, windstorms, ice storms and landslides.

Hansen, AJ, Neilson, RP, Dale VH, Flather, CH, Iverson, LR, Currie, DJ, Shafer, S., Cook, R, Bartlein, PJ. (2001). Global change in forests: responses of species, communities and biomes. Bioscience 51 (9): 765-779. Ranges of tree species and forest communities were predicted over 100 years using several models and six CO2 emission scenarios.

Haynes, R. W., Adams, D. M.; Alig, R. J.; Ince, P. J.; John R.; Zhou, X.. (2007). The 2005 RPA timber assessment update. Gen. Tech. Rep. PNW-GTR-699. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 212 p. Models can be used to predict the impacts of climate change and elevated CO_2 on the inventories of soft and hardwoods. Impacts on markets are at rates that reflect the change in inventories.

Joyce, L. A.; Birdsey, R., Technical Editors. (2000a). The impact of climate change on America's forests: a technical document supporting the 2000 USDA Forest Service RPA Assessment. Gen. Tech. Rep. RMRS-GTR-59. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 133 p. This report documents trends and impacts of climate change on America's forests as required by the Renewable Resources Planning Act of 1974. Recent research on the impact of climate and elevated atmospheric carbon dioxide on plant productivity is synthesized. Modeling analyses explore the potential impact of climate changes on forests, wood products, and carbon in the United States.

Joyce, L.A.; Aber, J.; McNulty, S.; Dale, V.H.; Hansen, A.; Irland, L.C.; Neilson, R.P.; Skog, K. (2000b). Potential consequences of climate variability and change for the forests of the United States. In: National Assessment Synthesis Team, comps. Climate change impacts on the United States: the potential consequences of climate variability and change: foundation. Cambridge, UK: Cambridge University Press: 489-522. Increases in forest productivity by warming and elevated CO_2 are likely to be tempered by local environmental conditions (moisture stress, nutrient limitations). Increases in forest inventories are likely to be met with lower prices. Changes in severity, frequency and extent of natural disturbances are possible, with impacts on forest

structure, biodiversity and functioning. Ecological models indicated changes in the location and area of potential habitats for many tree species. Recreation and socioeconomic impacts are predicted and discussed.

Joyce, L. R., Haynes, White, R., and. Barbour R. J., Technical Coordinators (2007) Bringing climate change into natural resource management. Proceedings of a Workshop June 28-30, 2005 Portland, Oregon. PNW-GTR-706. Summary of ideas from a workshop to explore climate and natural resource management in the western US. Articles illustrate the complexity of climate change and the need for managers to consider how the impacts will unfold across regional and local landscapes.

Prasad, A. M. and L. R. Iverson. (1999-ongoing). A Climate Change Atlas for 80 Forest Tree Species of the Eastern United States [database]. http://www.fs.fed.us/ne/delaware/atlas/index.html, Northeastern Research Station, USDA Forest Service, Delaware, Ohio. Although exclusive to the Eastern US, this tool developed by the USFS demonstrates the methodology and application of climate change models towards predicting landscape change, especially species distributions.

Walsh, J.E., Chapman, W.L. Romanovsky, V., Christensen, J.H. and Stendel M. 2007. Global Climate Model Performance over Alaska and Greenland. Journal of Climate, submitted.

(2) A quantitative cumulative effects analysis is required.

Cumulative Effects Analysis (CEA) is not intended to be a list of actions and receptors; it is intended to be a quantitative analysis of the "impacts to resources, ecosystems and human communities that may be affected and used towards developing an adequate understanding of how the resources are susceptible to effects" (CEQ 1997).

The PEIS must complete a quantitative assessment of climate change impacts from the proposed corridors' bias toward coal and hydrocarbon resources. A solely qualitative assessment will not be sufficient. CEQ provides seven primary methods for developing the conceptual causal model for a cumulative effects study of ecosystem-level effects, including (1) gathering information; (2) checklists to identify potential cumulative effects; (3) development of matrices to determine the cumulative effects on ecosystems by combining individual effects from different actions; (4) networks and system diagrams to trace multiple, subsidiary effects on various actions that accumulate upon ecosystems; (5) models to quantify the cause-and-effect relationships leading to cumulative effects; (6) trends analysis to assess the status of ecosystems over time and identify cumulative effects problems, establish appropriate environmental baselines, and project future cumulative effects; and (7) overlay maps and GIS analysis to incorporate local information into cumulative effects analysis (p. 50, CEQ 1992).

While uncertainty is prevalent in all actions and impacts, uncertainty cannot be used as an excuse for failing to assess the possible impacts and biological and value-based thresholds for the affected resources, ecosystem and human communities. The CEQ states that "Cumulative effects analysis necessarily involves assumptions and uncertainties, but useful information can be

put on the decision making table now. Decisions must be supported by the best analysis based on the best data we have or are able to collect. Important research and monitoring programs can be identified that will improve analyses in the future, but their absence should not be used as a reason for not analyzing cumulative effects to the extent possible now" (p. 3, CEQ 1992). This language is tied to the CEQ's principle of using the best analysis and the best data available in a quantitative analysis. While there is uncertainty in climate predictions, scientific analysis has revealed clear trends towards warming. Further, there is an extensive body of literature regarding the quantitative analysis of uncertainty and variability in environmental policy and decision making (e.g. Frey 1992 and onward; Morgan and Henrion 1990). Thus, within the scientific literature there are examples of a variety of statistical methods that can be used to address uncertainty (Webster 2002; Roe and Baker 2007).

Global and Regional Dynamic Ecosystem Models have been used to predict how ecosystems will respond to changes in temperature and precipitation across ranges of values as well as in combination with land use data (e.g. Starfield & Chapin 1996). This type of analysis represents the best available scientific method for addressing climate change at present. The data necessary to drive these models is publicly available, including land cover data, coarse and downscaled temperature and precipitation data. This input is critical towards modeling cumulative effects.

With respect to wildlife, we propose that a quantitative CEA incorporate at least the following components or similar analyses as these methods yield:

1. A Resource Selection Model that incorporates wildlife movement monitoring data with land cover classification;
2. Population Viability Analysis that incorporates harvest and predator demands with wildlife population census data;
3. Establish Disturbance Coefficients that incorporate wildlife responses to industrial and other human activities;
4. Climate Change Scenarios that capture changes in temperature and precipitation in order to develop an understanding of the stability and trajectories for change of physical and biological resources;
5. Model Habitat Availability using a range of climate scenarios.

These data belong in a spatially explicit analysis (i.e., GIS-based) of cumulative effects, and should be interpreted within the best scientific understanding of wildlife and conservation biology. This type of quantitative ecosystem-level analysis will result in a truly quantitative, substantial set of results upon which the agencies can base their conclusions and decisions.

Recommendations: The potential effects on climate change from facilitating placement of transmission to support coal power plants and not providing the same support to other sources of power are inescapable and must be evaluated. The inquiries set out above must be analyzed in the PEIS, applicable studies must be utilized, and the revised analysis provided to the public for review and comment.

b) *Health and safety risks*.

The types of projects contemplated for construction in the energy corridors already have documented health and safety risks. For instance, fires in Southern California last year were tied

to sparks from transmission lines. Associated Press, November 17, 2007, *California Fire Officials Fault Power Line Sparks for Largest San Diego Wildfire* (**http://www.foxnews.com/story/0,2933,312020,00.html** and Attachment 4). In Colorado, leaking gas pipelines have been tied to water contamination. Denver Post, March 7, 2006, *Inspections lagging amid oil, gas boom* (**http://www.denverpost.com/news/ci_3576313** and Attachment 5). The Draft PEIS discusses how placement of corridors coincides with areas of seismic activities and landslides, but does not discuss the potential for impacts to health and safety of explosions, leaks and fires. The Draft PEIS acknowledges that impacts arise with respect to corridors "within the designated corridors or on adjacent private lands through which those energy transport systems pass," but declines to consider them because they would arise only with specific projects. Draft PEIS, p. 3-304. This approach ignores the known risks associated with the projects and the proximity of these projects to communities, both of which are critical to identifying locations that are appropriate (or not safe) for energy corridors. It is neither reasonable nor acceptable for the agencies to identify locations that are preferable for locating pipelines and power lines and will be subject to expedited approval and abridged environmental review without acknowledging that there are risks associated with the health and safety of the people who live near those locations.

c) *Lands with wilderness characteristics*:

The public lands contain significant lands that have wilderness characteristics and are under consideration for protection under the Wilderness Act, 16 U.S. C. § 1131-1136, or under specific administrative prescriptions. For instance, the BLM, which manages the bulk of the lands affected by these designations, has committed to continuing to protect wilderness values. Instruction Memoranda (IMs) Nos. 2003-274 and 2003-275 contemplate that BLM can continue to inventory for and protect land "with wilderness characteristics," such as naturalness or providing opportunities for solitude or primitive recreation, through the planning process. The IMs further provide for management that emphasizes "the protection of some or all of the wilderness characteristics as a priority," even if this means prioritizing wilderness over other multiple uses. (emphasis added). The guidance issued by the BLM's Arizona State Office serves to elaborate upon this guidance by providing for identification of lands with wilderness characteristics and development of management prescriptions to protect and enhance these values (*See* IM No. AZ-2005-007).

Numerous BLM planning efforts now underway in the eleven Western states are contemplating protection of these lands. *See*, *e.g.*, Proposed RMP/Final EIS for the Arizona Strip, Table 2-10, pp. 2-131 – 2-134 (available at: http://www.blm.gov/az/lup/strip/docs/FEIS/CHAPTER_2.pdf); Draft RMP/EIS for Little Snake (Colorado) Field Office, pp. 2-47 – 2-51 (available at: http://www.blm.gov/pgdata/etc/medialib/blm/co/field_offices/little_snake_field/rmp_revision/documents.Par.50646.File.dat/05_LSDEIS_Chapter_2_SFS.pdf) ; Draft RMP/EIS for Moab (Utah) Field Office, pp. 2-5 – 2-6 (available at: http://www.blm.gov/pgdata/etc/medialib/blm/ut/moab_fo/rmp/draft_eis.Par.82643.File.dat/CHAPTER%202.pdf). Development of pipelines and power lines (made more likely by designation of these corridors) will unquestionably affect the wilderness characteristics of these lands, since they will affect their "naturalness" and/or opportunities for solitude and/or opportunities for primitive or unconfined recreation. For example, a proposed corridor (segment 126-218) would pass through lands with wilderness characteristics in the Vernal (Utah) Field Office, which are

being considered for protection in the ongoing RMP revision. *See*, map provided as Attachment 6; Vernal Supplement Draft RMP, Figure 20e (Non-WSA Lands with Wilderness Characteristics – Alternative E, available at: http://www.blm.gov/pgdata/etc/medialib/blm/ut/vernal_fo/planning/supplement_eis/supplement.Par.52783.File.dat/m.%20Figure%2020e.pdf). Further, as discussed in detail below, since the beginning of this process, The Wilderness Society has provided the agencies with detailed information on substantial areas with wilderness characteristics and proposed for protection under the Wilderness Act. The Draft PEIS should acknowledge the wilderness values present on the affected lands and consider the impacts of locating corridors on them.

d) *Wildlife habitat*.

It is our understanding that the agencies had data available on wildlife habitat and likely impacts to habitat from location of corridors. However, the agencies have not provided this data in the Draft PEIS in detail or conducted any specific analysis of the likely impact to wildlife. The agencies can also obtain additional data from the state Comprehensive Wildlife Conservation Strategies, which inventory habitat and provide general information on areas of concern, as discussed in more detail later in these comments.

Section 3.8 4 of the Draft PEIS describes numerous impacts that are likely to occur to wildlife and vegetation from construction of projects in the corridors. Table 3.8-5 identifies hundreds of threatened and endangered species listed under the Endangered Species Act that are found in the eleven Western states affected by corridor designation. Table 3.8-8 provides a list of damage to wildlife that can occur from construction of energy transport facilities. Table 3.8-9 provides an equally impressive list of damage that can occur from operation of these facilities. Table 3.8-10 sets out the likely damage to threatened, endangered and other special status species from construction and operation. The section also discusses mitigation measures that can be developed to minimize impacts. However, the section fails to analyze the *actual* impacts that can reasonably be expected from the proposed energy corridors.

For instance, the Draft PEIS acknowledges the devastating impacts that can occur due to habitat fragmentation. The Draft PEIS (at p. 3-200) states: "The reduction, alteration, or fragmentation of habitat would result in a major construction-related impact to wildlife." With respect to fragmentation, in particular, the Draft PEIS confirms:

> Fragmentation can separate wildlife populations into smaller populations that are more susceptible to extirpation from random events such as drought, disease, introduction of exotic predators, and so forth. It can also make movement between habitat fragments more difficult during periods when resources are limited. Habitat fragmentation can degrade the unique habitat characteristics of large, unbroken habitat tracts; the characteristics include accessible migration corridors, cover and forage that are free from disturbance, and areas isolated from hunting and predators (BLM 2005d).

As discussed in detail in our scoping comments, there are numerous metrics available to measure habitat fragmentation and the Draft PEIS can and should make use of these in assessing the likely effects of development within these corridors. Existing road density can be calculated by measuring the length of linear features in a given sub-area at regular intervals and then reported

as miles of route per square mile (mi/mi^2). The degree of habitat fragmentation, the distribution of unroaded areas, or core areas, can also be measured and calculated based on the amount of land beyond a given distance or effect zone, from transportation routes (Forman, 1999). Wildlife species respond to disturbances related to this type of network at varying distances, so determining the size distribution of core areas for a range of effect zones (i.e., of 100ft, 250ft, 500ft and 1320ft) from all routes is also important.

The agencies have already performed similar analyses. For instance, the Draft RMP/EIS for the Monticello (Utah) Field Office conducts an analysis of habitat fragmentation from the various management alternatives, including an entire section (4.3.19.3.19) on "Impacts of Habitat Fragmentation on Wildlife." This section provides standards at which habitat is considered "unfavorable" and identifies the percent of the planning area that is unfavorable for certain species under each alternative. Monticello Draft RMP/EIS, pp. 4-598 - 4-602. The Draft RMP/EIS released by the Vernal (Utah) Field Office in January, 2005, included extensive measurement of potential habitat fragmentation using a range of effect zones and specific impacts to be expected for different affected species, including pronghorn and raptors. *See*, Vernal DRMP/EIS, Appendix I and Section 3.19.2. The recently-released Vernal Supplement also presents detailed information on habitat fragmentation from oil and gas development, including measurements of route density and percent of the area outside three functional habitat loss zones. Vernal Supplement, pp. 4-128 – 4-130. Without this information, not only the public, but also the agency is deprived of the opportunity to make an informed decision. The Draft PEIS neither conducts this analysis nor mandates that it be conducted as part of later analysis required for authorization of projects in the designated corridors.

e) *Generation facilities and oil and gas development activities.*

Locations of energy corridors will also affect the location of generation facilities, because proximity to transmission is a key economic consideration in siting facilities. At this point, as discussed above, the proposed corridors will support proposed coal power plants. However, these corridors will also likely affect the location of other future generation facilities. Further, as discussed above, the location of the corridors will also affect the location of oil and gas development and related activities. The recent update for the TransWest Express Project, a massive pipeline project in the West, also cited the West-wide Energy Corridor designations as a major consideration. *See*, slide of potential corridors from TransWest Express Project Update provided as Attachment 7. The likely effects of these connected actions should be specifically identified in the Draft PEIS and analyzed as part of determining the most desirable corridor locations.

f) *Designation of corridors encompassing existing rights-of-way*.

The Draft PEIS notes that many of the corridors are designated along existing corridors or rights-of-way. However, many of these designations require massive increases in the width of the areas available for development and are also likely to change the type of use currently occurring. For instance, the corridor proposed for designation adjacent to Arches National Park in Utah (segment 66-212) encompasses a number of preexisting rights-of-way and transmission lines, but none of these are 500 Kv lines and they are currently widely separated. Designating a wider corridor and designating it as "appropriate" for multiple 500 Kv lines would transform the type of development likely to occur in this area. Similarly, the corridor proposed for designation

through Grand Staircase-Escalante National Monument in Utah (segment 68-116) currently contains a single 500 Kv line, but would now be "approved" for development of as many 500 Kv lines and pipelines as can be included in a 3500-foot wide corridor, projected as "about 9 individual 500-kV transmission lines"; "as many as 35 liquid petroleum pipelines (each consisting of a 32-inch-diameter pipe and a 100-foot construction ROW): or "29 natural gas pipelines (42-inch-diameter pipe and 120-foot construction ROW) could be supported within a 3,500-foot-wide corridor." Draft PEIS, ES-13. These are not minor changes in use; development at the level projected in the Draft PEIS would transform the character of these lands and must be thoroughly assessed as part of designating energy corridors.

g) *Socioeconomic impacts*.

The socioeconomic impacts of potential corridor development go far beyond the construction and maintenance jobs analyzed in the Draft PEIS. They will leave permanent impacts on the landscape of the West – a landscape which is both iconic and an important economic driver in this region. The public lands that would be impacted by the corridors proposed in the Draft PEIS include places which are important and valuable to all Americans. These lands should not be sacrificed in order to facilitate the continued consumption of more energy than any other nation in the World. And it is especially egregious that these corridors favor the misguided continuation of the dirtiest of energy sources (coal) in a region where most of the states have embraced renewable energy. The analyses done for the Draft PEIS need to be expanded to incorporate the larger impact that the potential corridors will have on the West's public lands, opens spaces and natural amenities.

These analyses appear in two sections of the Draft PEIS: Section 3.12 and Appendix S. These comments refer to both these sections, and where very specific analysis is discussed it will be noted. Otherwise the two sections are considered together. Several specific and notable deficiencies in the Draft PEIS are noted here and discussed in more detail below.

1. The Draft PEIS does not account for the non-market values associated with the National Parks, National Monuments, Wilderness Areas, National Wildlife Refuges, Roadless Areas and other undeveloped public lands through which many of the proposed corridors pass.
2. The Draft PEIS does not address the potential benefits to the local area economies that arise from these National Parks, National Monuments, Wilderness Areas, National Wildlife Refuges and other undeveloped public lands, and which will be impacted by the development of energy corridors.
3. The socioeconomic analysis in the Draft PEIS relies on IMPLAN and economic base analysis which is not adequate to fully predict or assess the economic impacts of the development of the proposed energy corridors on local communities.
4. The socioeconomic analyses relied solely on utility industry-sponsored studies to asses the potential impacts of energy corridor designation and development on residential property values.
5. The socioeconomic analysis does not adequately address the potential impacts on the quality of life for residents of communities that will be impacted by energy corridor development.

(1) Non-Market Values.

One of the most important purposes of public lands, especially places like National Parks, National Monuments Wilderness Areas and National Wildlife Refuges, is the provision of public goods. Non-market goods often fall into the category of public goods. These are things like opportunities for solitude, outdoor recreation, clean air, clean water, the preservation of wilderness and other undeveloped areas that would be underprovided if left entirely to market forces.

In the assessment of the socioeconomic impacts of the proposed corridors, the Draft PEIS does not account for the non-market values associated with these undeveloped wild lands and other special places. Many of the proposed corridors would cross lands such as National Parks, National Monuments, Wilderness Areas and National Wildlife Refuges, damaging some of the attributes which make them special and important sources of non-market values. The agencies implementing the Draft PEIS have an inherent responsibility to see that these lands are not impaired in order to endure that the public goods they produce continue to be provided and in quantities that meet the demand of all U.S. citizens.

Non-market values have been measured and quantified for decades. There is a well established body of economic research on the measurement of non-market values, and the physical changes (decreases in the source of these values) brought about by oil and gas development and motorized recreation are very easy to measure quantitatively.

This analysis is especially important when considering actions which would degrade or damage roadless areas or other lands with wilderness characteristics since these lands produce benefits and values that are seldom captured in the existing market structure. The literature on the benefits of wilderness is well established and should be used by the agencies to estimate the potential value of the lands with wilderness characteristics in the Monument. Krutilla (1967) provides a seminal paper on the valuation of wilderness lead the way for countless others who have done research all providing compelling evidence that these lands are worth much more in their protected state. Morton (1999), Bowker et al. (2005) Krieger (2001) and Loomis and Richardson (2000) provide overviews of the market and non-market, use and non-use values of wilderness and wildlands. See Walsh et al. (1984), Bishop and Welsh (1992), Gowdy (1997), Cordell et al. (1998), Loomis and Richardson (2001) and Payne et al. (1992) for several more examples.

Peer reviewed methods for quantifying both the non-market and market costs of changing environmental quality have been developed by economists and are readily applicable to the present case. For a catalog of these methods see Freeman (2003). For a complete socioeconomic analysis, agencies implementing the Draft PEIS should adapt these methods to conditions in each of the proposed corridors locations to obtain a complete estimates of the economic consequences of the proposed corridors.

> ***Recommendations*:** The agencies must measure and account for changes in non-market values associated with the development of the proposed corridors. To do otherwise omits a very important socioeconomic impact that is the direct result of this development. The analysis must assess the non-market economic impacts on the owners of the public lands through which these proposed corridors would pass – all Americans. This analysis must include the passive use values of public lands such National Parks, National Monuments,

National Wildlife Refuges, Wilderness Areas, Roadless Areas and other undeveloped public lands.

(2) Economic Benefits of Natural Amenities.

In addition to non-market values, public lands, and especially National Parks, National Monuments, Wilderness Areas, National Wildlife Refuges, Roadless Areas and other protected and undeveloped public lands also produce measure economic benefits for local communities. These benefits are attributed to the mere presence of protected lands and the natural and recreational amenities that they provide for local communities.

The Draft PEIS fails to fully address the impacts that the development of the proposed corridors will have on the local economies throughout the West. The economic impact that undeveloped lands have on local economies is well documented and has grown in importance as the U.S. moves from a primary manufacturing and extractive economy to one more focused on service sector industries. This shift means that many businesses are free to locate wherever they choose. The "raw materials" upon which these businesses rely are people, and study after study has shown that natural amenities attract a high-quality, educated, talented workforce – the lifeblood of these businesses. The narrow scope of the socioeconomic analysis and the use of economic base methods to assess the potential impacts of the proposed corridors on the local communities affected fails to address this important facet of today's economy.

As the economy of the West evolves public lands, especially areas such protected from development and others that have been recognized for their unique natural and cultural attributes (such as National Parks, National Monuments, National Wildlife Refuges, Wilderness Areas, and Roadless Areas), are increasingly important for their non-commodity resources – scenery, wildlife habitat, wilderness, recreation opportunities, clean water and air, and irreplaceable cultural sites. To site the proposed energy corridors in any way that impairs these natural amenities would be short-sighted at best.

A vast and growing body of research indicates that the economic prosperity of rural Western communities depends more and more on these amenities and less and less on the extraction of natural resource commodities. See Whitelaw and Niemi 1989, Rudzitis and Johansen 1989, Johnson and Rasker 1993 and 1995, Freudenburg and Gramling 1994, Snepenger et al. 1995, Power 1995 and 1996, Bennett and McBeth 1998, Duffy-Deno 1998, McGranahan 1999, Nelson 1999, Rudzitis 1999, Morton 2000, Lorah 2000, Deller et al. 2001, Johnson 2001, Shumway and Otterstrom 2001, Lorah and Southwick 2003, Rasker et al. 2004, Holmes and Hecox 2004 and Reeder and Brown 2005, for some examples.

New residents in the rural West often bring new businesses, and more and more of these are not tied to resource extraction. Some are dependent directly on the recreation opportunities on the surrounding public lands. Entrepreneurs are also attracted to areas with high levels of natural amenities. The Federal Reserve Bank of Kansas City has found that the level of entrepreneurship in rural communities is correlated with overall economic growth and prosperity (Low 2004). These businesses may be harmed or deterred if the quality of the scenic and natural amenities is harmed due to the development of the proposed energy corridors.

Retirees and other who earn non-labor income are also important to rural western communities. This income is important for the western states – making up an average of 26% of total personal in the region (Table 1). If investment and retirement income were considered an industry it

would be one of the largest in all of the eleven western states impacted by these proposed energy corridors. Retirees are attracted by natural amenities that are available on undeveloped public lands. The potential impact that the proposed corridors will have on this source of income and economic activity must be accounted for.

Table 1. Investment & Retirement Income as a Percentage of Total Personal Income (2005)

Arizona	25%
California	24%
Colorado	22%
Idaho	28%
Montana	30%
Nevada	27%
New Mexico	25%
Oregon	28%
Utah	21%
Washington	25%
Wyoming	32%

Source: U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economic Information System (http://www.bea.gov/)

The socioeconomic analyses of the impacts of development of the proposed corridors looks only the income and employment changes in the sectors directly involved in the development (utilities and construction). Furthermore it only looks at the potential gains of this development and construction activity and fails to examine the costs in a meaningful way.

This narrow analysis ignores any potential changes that may occur in other sectors if the corridors cause deterioration in the area's natural amenities. As discussed above these amenities are important economic drivers in the areas proposed for the corridor development. Much of the economic activity attributable to the presence of protected public lands is in the professional and service sector, and it is entirely possible that changes to these lands will have impacts on this sector.

Growth in the service sector is tied to the natural and other amenities in the area. The National Parks, National Monument, National Wildlife Refuges, Wilderness Areas and Roadless Areas, along with other public lands in the region enhance the West's attractiveness for both skilled workers and employers. Protected public lands provide indirect support for local and regional economies, a fact that is increasingly being recognized by communities throughout the West. These lands provide a scenic backdrop, recreation opportunities and a desirable rural lifestyle, and many other tangible and intangible amenities that attract new residents, business and income to the rural West.

As noted above, a vast and growing body of research indicates that the environmental amenities provided by public lands are an important economic driver in the rural West. In a letter to the President and the Governors of all the Western states, 100 economists from universities and

other organizations throughout the United States pointed out that, "The West's natural environment is, arguably, its greatest long-run economic strength" (Whitelaw et al. 2003).

Several studies of specific western communities have also found that protected public lands contribute to economic prosperity. In a report examining the economic health of Doña Ana County, New Mexico, the Sonoran Institute (2006) found that the county is set to prosper. The area possesses an abundance of natural amenities, beautiful scenery, and many of the other natural amenities and attributes correlated with economic growth in the rural West. Barrens et al. (2006) also focused their research in neighboring New Mexico, estimating the total economic benefits of protecting the state's inventoried roadless areas. They estimate that these areas provide between 563 and 880 jobs, generate from 13.7 to 21.5 million dollars of personal income and, most importantly, induce economic growth rates that are faster for counties containing roadless areas than for those without.

Local communities with nearby protected wildlands reap measurable benefits in terms of employment and personal income (Rasker et al. 2004). "Telework" using electronic communication has made it possible for more and more people in the West, and all over the country, to choose where they live and work. Many businesses are able to conduct national or international commerce from any location they choose. Other entrepreneurs simply choose to live in a particular place and build businesses in response to local needs. Retirees are also not tied to a specific location by employment. All of these people often seek an attractive place to live. Research supports the assertion that protected public lands contribute to rural economic health (Rasker et al. 2004, Rudzitis and Johnson 2000, Rudzitis and Johansen 1989). As development increases near the Monument (a prediction made in the DRMP/DIES), this landscape will become even more integral to the community (as its backdrop or setting), contributing to and even creating the amenities on which the communities' economies depend. See Haefele et al. (2007) for a detailed description of the amenity economy and the ways in which local economies benefit from protected public lands.

The Center for the Study of Rural America, at the Federal Reserve Bank of Kansas City (the Rural Center) has developed a set of Regional Asset Indicators that are linked to the potential for economic growth in rural counties (Weiler 2004). The Rural Center describes the regional asset indicators as providing "…new, forward-looking metrics that regions can use to better understand their economic assets and to help inform private, public, and nonprofit regional development strategies." [21] These Regional Asset Indicators often corroborate and extend the findings of Rasker et al (2004).

An area's amenities often act as a key driver of economic prosperity. The Rural Center has developed an index to measure the level of human amenities for each county, which includes a measure of natural amenities (developed by the U.S. Department of Agriculture), access to healthcare, innovation (which is also measured separately as an additional Regional Asset Indicator below), recreation areas and restaurants. These are then standardized into one index for each county (Center for the Study of Rural America 2006a).

[21] Federal Reserve Bank of Kansas City, Regional Asset Indicators. The Regional Asset Indicators for every U.S. County can be downloaded here, along with documentation on the development of the Indicators and additional research showing their importance to rural economies.
http://www.kansascityfed.org/home/subwebnav.cfm?level=3&theID=9602&SubWeb=12

As the Rural Center points out, the human amenity index is highest in coastal and mountain regions. This helps to explain the high scores for all of the eleven western states potentially impacted by the designation and development of the proposed corridors (Table 2). The scores reflect the presence of the West's many National Parks, National Monuments, National Wildlife Refuges, Wilderness Areas, Roadless Aras, as well as the many other public lands potentially impacted by the proposed corridors. These lands produce the scenic amenities and recreation opportunities which make the West a high amenity area and which thus attract population and employers.

One of the facets that the Rural Center includes in its Human Amenities Index is the Natural Amenities score calculated by the U.S. Department of Agriculture. It is instructive to pull this score out by itself. The index is based on climate factors (warm winters and mild summers), proximity to water bodies and varied topography. Again, all of the western states have Natural Amenity Scores that are much higher than the U.S. average (Table 2).

Table 2. Amenity Indicators for the Western States

	Human Amenities Indicator [a]	Natural Amenities Scale [b]
Arizona	36	4.87
California	41	6.73
Colorado	36	4.03
Idaho	27	2.02
Montana	31	1.36
Nevada	32	4.72
New Mexico	30	3.54
Oregon	32	3.78
Utah	31	3.41
Washington	35	2.78
Wyoming	33	2.88
U.S. average	29	0.06

[a] Calculated by the Center for the Study of Rural America, Summer 2006
[b] U.S. Department of Agriculture, Economic Research Service, Natural Amenities Typology

Other Regional Asset Indicators reflect the quality of a region's workforce. Because areas which have abundant amenities are more able to attract and retain a high quality workforce, the Human Amenity Index is very important for the region as it may well be the key to enhancing and maintaining the other important workforce and demographic indicators discussed below. Human amenities have been found to be positively correlated with both income and employment growth (Center for the Study of Rural America 2006a).

Workforce indicators include entrepreneurship, the general availability of skilled workers and the proportion of a region's workforce in creative occupations. A creative work force increases a region's human capital and its level of innovation and entrepreneurship - this index measures the level of specialized, highly creative occupations that are unique to an area, making a distinction between these unique concentrations and creative jobs that can be found in almost any location (The Center for the Study of Rural America 2006b).

The eleven western states all have high levels of entrepreneurship (Table 3), which has been found to correlate positively with economic growth (Low 2004). The states in the region vary with respect to the supply of skilled workers, and where deficits exist, the presence of natural amenities will most certainly play a role in addressing the lack of skilled workers. On the other hand, if the development of the proposed energy corridors which currently pass through National Parks, National Monuments, Wilderness Areas, Roadless Areas, National Wildlife Refuges and other undeveloped public lands comes to pass this will likely reduce the region's ability to attract vital skilled workers.

Business owners create jobs and wealth in a local economy and stimulate growth as the income and employment they generate filters through the economy. Entrepreneurship and long-term economic growth have been found to be correlated (Low 2004). Entrepreneurs can have both small and large impacts in local communities. Some small businesses may not produce large employment or income benefits; however, they enhance the local quality of life and the level of human amenities (for example local restaurants may not produce large numbers of jobs, but do contribute to the area's amenity index). Others bring both direct and indirect employment and income.

Table 3. Workforce Indicators for the Western States

	Entrepreneurs as a percentage of the workforce [a]	Creative Workers as a Percentage of the Workforce [b]	Supply of skilled workers compared with demand [b]	
Arizona	18%	19%	-4.018	deficit
California	22%	23%	-1.822	deficit
Colorado	22%	23%	3.823	surplus
Idaho	21%	17%	-2.329	deficit
Montana	24%	15%	0.047	surplus
Nevada	17%	18%	-3.597	deficit
New Mexico	18%	19%	-0.987	deficit
Oregon	20%	19%	-1.321	deficit
Utah	19%	20%	-2.409	deficit
Washington	18%	21%	-1.305	deficit
Wyoming	21%	18%	0.714	surplus
U.S. average	18%	17%	-2.715	deficit

a U.S. Department of Commerce, Bureau of Economic Analysis (www.bea.gov) 2005 data.

(Entrepreneurs as a percentage of the workforce = non-farm proprietors / non-farm employment.)
b Calculated by the Center for the Study of Rural America, Summer 2006

Thompson et al. (2006) studied rural economies and found that areas with higher levels of entrepreneurship experienced higher employment growth. Low et al. (2005) analyzed the characteristics of rural economies to asses their potential for entrepreneurship and economic growth, and they found that lifestyle amenities, local workforce skills, access to capital and information and innovative activity were the strongest indicators of an area's ability to attract and maintain entrepreneurial activity.

In addition to attracting a quality workforce, amenities also attract retirees and others with non-traditional sources of income (Nelson 1999). These new residents in turn spur economic development (Deller 1995). Residents who rely on non-labor income become both a pool of customers and clients for new business and a potential source of investment capital.

Research into the motivation that drives entrepreneurs and businesses to choose particular locations consistently finds that amenities and quality of life top the list (Rasker and Hansen 2000, Snepenger et al. 1995, Rasker and Glick 1994, Whitelaw and Niemi 1989). Developing the proposed energy corridors through undeveloped public lands will hinder western communities' ability to attract more small businesses into the region to further enhance this sector.

These findings together point to the value of public lands like National Parks, National Monuments, Wilderness Areas and other protected lands to strong local economies. Development of energy corridors through these western lands poses a very real threat that must be addressed in the final WWEC PEIS.

> ***Recommendations:*** The agencies proposing the energy corridors must collect and analyze actual data on the economic impacts of these corridors if they impact lands such as Wilderness Areas, National Wildlife Refuges, Roadless Areas, National Parks, National Monuments or other undeveloped public lands. Some suggested analyses and sources of data can be found in *"Socio-Economic Framework for Public Land Management Planning: Indicators for the West's Economy"* (Attachment 8).

The agencies must make a thorough examination of the full socioeconomic impacts likely to occur if the proposed corridors are developed. These analyses must take into account the impacts that the resulting degradation of undeveloped public lands will have on the surrounding communities, including the added cost of providing services and infrastructure, the long-term costs of the likely environmental damage, and the impacts on other sectors of the economy. The agencies must examine the role that protected public lands (including lands with wilderness characteristics) play in the local economies.

(3) Economic Base Models.

The use of economic-base models such as IMPLAN is insufficient to predict future economic impacts from the development of the proposed corridors. While these models can be useful as a tool to develop static analyses of the regional economy, the agencies proposing the corridors and local communities potentially impacted must be aware of the shortcomings and poor track record of such models as predictive tools. Economic base models do not consider the impacts of many important variables that affect regional growth in many rural communities, especially in the

West. Attributes such as natural amenities, high quality hunting, fishing and recreational opportunities, open space, scenic beauty, clean air and clean water, a sense of community, and overall high quality of life are not measured or accounted for in economic base models, however these amenities are associated with attracting new migrants as well as retaining long-time residents. Many residents of Western communities (both long-time and new) earn retirement and investment income, and while it is technically possible, most economic base models completely fail to consider the important economic role of retirement and investment income.

Many economists have offered constructive critiques of such models. See for example: Krikelas (1991), Tiebout (1956), Haynes and Horne (1997), Hoekstra, et al. (1990), Richardson, 1985 and the Office of Technology Assessment (1992). The ease of data acquisition for estimating the impacts of manufacturing, construction and resource extractive sectors combined with the difficulty of estimating the impacts of recreation and tourism underscores the potential bias favoring development in economic base models. The concern over the accuracy of these models combined with concern over the use of such models for planning, suggests that it is not only inappropriate but a disservice to rural communities to rely on economic base analyses to estimate the economic impacts of public land management alternatives on rural communities.

> ***Recommendations:*** We recommend that the agencies proposing the corridors do not rely solely on IMPLAN or on other models derived from economic base theory to predict the economic impacts of these corridors. As these comments demonstrate the relationship between public land management and local and regional economic prosperity and growth is far more complex than these models assume, and given the potentially significant impacts on many of the region's public lands use of such models will result in an incomplete and inadequate analysis of the socioeconomic impacts.

(4) Use of utility industry-sponsored studies to determine impacts to property values.

The Draft PEIS relies entirely on utility industry-sponsored studies of property value changes to assess these potential impacts. It is not surprising that these studies found no significant impacts. This ignores a much broader and more independent body of work which looks at the positive impacts of open space and protected public lands on property values. These studies can be applied to infer the inverse decline in property values associated with the loss of protected public lands and open spaces. Numerous studies show that there is a positive correlation between property values and open spaces and protected public lands. Given that the proposed corridors will impact a great deal of public land and open space throughout the West, it is likely to have negative impacts on the property values in the region.

Several examples of such studies include Earnhart (2006), Bengochea Moranco (2003), Espey and Owosu-Edusei (2001), Bolitzer and Netusil (2000), Lutzenhiser and Netusil (2001), Geoghegan et al. (2003), Geoghegan (2002), Acharya and Bennett (2001), Irwin (2002), Tajima (2003), Luttik (2000), Loomis et al. (2004) and Breffle et al. (1998). . McConnell and Walls (2005) provide a good overview of both property values and non-use values associated with open spaces. All of these studies provide empirical evidence of the potential losses to western citizens from the development of the proposed corridors.

A credible quantitative analysis of the potential impacts on property values is especially important when the property in question is residential. "Residential property" means people's homes which are often a family's single largest asset or investment. A decrease in the value of

residential property will be a real and negative impact of the proposed corridor development and is therefore well within the scope the analysis.

> ***Recommendations:*** The agencies proposing these corridors should examine a more broad and less potentially biased body of literature on the impacts of development (or the lack thereof) on residential and other property values. The agencies should make a quantitative assessment of these potential impacts.

(5) Incomplete analysis of impacts on quality of life.

The socioeconomic analysis does not adequately address the potential impacts on the quality of life for residents of communities that will be impacted by energy corridor development. The analysis implies that the only way that the quality of life will be impacted is by the reduction of property values (and the assessment of this potential impact is, as noted above, inadequate). The quality of life in many communities with abundant protected public lands is often tied inextricable with those lands. The proposed energy corridors will have negative impacts on these lands and therefore will cause deterioration in at least one other aspect of western quality of life.

As discussed above, such a decline will have more than just emotional or psychological impacts. Areas with high quality of life are better able to attract the entrepreneurs, skilled and creative workers, retirees and others who are the economic drivers of many western communities.

> ***Recommendations:*** The agencies proposing the West-Wide Energy Corridors must assess the full quality of life impacts that are likely to be associated with corridor development. The potential resulting economic impacts of these quality of life impacts must also be assessed in order to fully evaluate the proposed corridors.

h) *Community expansion and sprawl*.

Because designating energy corridors will increase the likelihood of projects being constructed in those corridors, the designation will support expansion of communities and "sprawl" beyond the current physical boundaries of urban and suburban areas. The Draft PEIS implicitly acknowledges this likelihood in discussing the purpose of designation, stating that "the Section 368 energy corridors that comprise the Proposed Action were sited, in part, considering the need to address reliability and congestion, and to enhance the capability to deliver electricity of the western portion of the grid." Draft PEIS, ES-20.

Expansion and sprawl place additional pressures on both related infrastructure (i.e., highways and other roads) and the public lands. In fact, the BLM has emphasized the relationship between sprawl and public lands, stating:

> In the fast-growing West, the 12-State population has risen from 19.6 million in 1950 to more than 60 million today, placing new pressures on the public lands—particularly in the form of "urban sprawl" and the increased use of public lands for new and diverse forms of outdoor recreation.

"The Bureau of Land management Today"; available at: http://www.blm.gov/nhp/news/releases/pages/2006/pr060206_budget.pdf . The Draft PEIS does not discuss the predictable expansion of communities along these corridors or the likely impacts on public lands.

Recommendations: The agencies cannot ignore the serious impacts likely to occur from corridor designation; their claims that likely impacts cannot be predicted or analyzed until specific projects are unsupportable. The Draft PEIS does not include any requirements for completion of a thorough NEPA analysis of most of the impacts summarized above, nor does the Draft PEIS specify methodology or metrics that should be used to quantify them. There is no assurance that these impacts will ever be addressed in later NEPA analysis and the agencies must address them in this PEIS. Further, the lack of analysis of impacts in the Draft PEIS indicates that the agencies cannot reasonably rely on the inclusion of potential mitigation measures (discussed in detail in the following section of these comments) to lead to sufficient avoidance or mitigation. The PEIS must conduct a thorough analysis of the risks from corridor designation highlighted above and provide specific results, which can then be used to support the reasonableness of the location of these corridors (or indicate the need for relocation) and the reliability (or lack thereof) of mitigation measures.

B. Mitigation measures.

The Draft PEIS (at p. 3-34) identifies the need for mitigation measures to address potential impacts of projects sited in the corridors, stating:

> The greatest potential for land use impacts would occur as a result of decisions made during the design and siting phases of an authorized project. **A variety of mitigation measures could be incorporated**, as stipulations, into the design and development of energy corridors to reduce potential land use impacts. However, it may not be possible to mitigate all impacts of a given project (e.g., the development of access roads needed by the project but deemed undesirable by some users). (emphasis added)

The Draft PEIS also identifies general types of mitigation measures that could be used. Draft PEIS, pp. 3-34 – 3-35. Additional types of mitigation measures are also identified for each of the affected resources listed in Chapter 3, although, as noted in the Draft PEIS, the Draft PEIS merely provides "standard mitigation measures that may be used as appropriate during future development." Draft PEIS, p. 3-1. (emphasis added). Section 2.4 of the Draft PEIS also sets out interagency operating procedures (IOPs) for planning, construction and operation of projects, which will be incorporated into the amended land use plans and adopted as "appropriate" for projects, which could serve to mitigate certain impacts. Draft PEIS, pp. 2-26 – 2-34.

The agencies are obligated to manage the public lands to protect their varied natural resources. For instance, the Federal Land Policy and Management Act requires the BLM to "minimize adverse impacts on the natural, environmental, scientific, cultural, and other resources and values (including fish and wildlife habitat) of the public lands involved." 43 U.S.C. §1732(d)(2)(a). In order for the agencies to rely on mitigation to reduce potentially significant impacts, NEPA requires that the agencies make a firm commitment to the mitigation and discuss the mitigation measures "in sufficient detail to ensure that environmental consequences have been fairly evaluated…"[22] NEPA defines "mitigation" of impacts (at 40 C.F.R. § 1508.20) to include:

- Avoiding the impact altogether by not taking a certain action or parts of an action;
- Minimizing impacts by limiting the degree or magnitude of the action and its implementation;

[22] Communities, Inc. v. Busey, 956 F.2d 619, 626 (6th Cir. 1992).

- Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; or
- Compensating for the impact by replacing or providing substitute resources or environments.

Simply identifying mitigation measures, without analyzing the effectiveness of the measures violates NEPA. Agencies must "analyze the mitigation measures in detail [and] explain how effective the measures would be . . . A mere listing of mitigation measures is insufficient to qualify as the reasoned discussion required by NEPA."[23] NEPA also directs that the "possibility of mitigation" should not be relied upon as a means to avoid further environmental analysis. *Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations*.[24]
While the Draft PEIS raises important considerations, additional commitments and measures are necessary.

1. Mitigation measures must be mandatory.

As noted above, the mitigation measures identified in Chapter 3 of the Draft PEIS are not required to be included in the land use plan amendments. Further, it is not clear that the inclusion of the IOPs in the land use plan amendments will specify that these measures are required to be included in each and every permit as long as certain circumstances are present. Unless the mitigation measures are guaranteed to be applied, the agencies cannot rely upon them to avoid or lessen potential impacts from siting projects in the corridors.

Recommendations: The PEIS should include language requiring that the mitigation measures identified in Chapter 3 and other applicable measures be included in land use plan amendments and in all grants of rights-of-way or other permits for construction in the energy corridors. Similar language must be included with respect to IOPs.

2. Mitigation measures must be based on credible science.

The Draft PEIS does not provide scientific support for its conclusions that the mitigation measures included in the IOPs or Section 3 are likely to be effective. As noted above, both NEPA and the Data Quality Act require the agencies to use and present information of sufficient scientific quality. Further, as discussed in the comments of BIO-Logic, Inc., additional mitigation measures and improvement of proposed measures are required to ensure adequate protection of the natural resources of the affected lands.

Recommendations: The PEIS must assess and present the scientific basis for the proposed mitigation measures and make the additions and improvements to these measures identified in the expert comments of BIO-Logic, Inc., incorporated herein by reference.

[23] Northwest Indian Cemetery Protective Association v. Peterson, 764 F.2d 581, 588 (9th Cir. 1985), rev'd on other grounds 485 U.S. 439 (1988).
[24] *See also* Davis v. Mineta, 302 F.3d 1104,1125 (10th Cir. 2002).

3. Monitoring and adaptive management approaches include specific standards and commitments.

Many of the mitigation measures identified in the Draft PEIS rely on deferred actions, usually involving monitoring, and then development of more specific management and mitigation. In order to fulfill the agencies' obligations to protect the natural resources of our public lands and to comply with NEPA's requirements regarding mitigation measures, the PEIS must include or require that the agencies' permits for projects include concrete commitments to specific actions, including definitive standards, timing and details for actions that will be taken and a discussion of the agencies' basis for relying on their success, including likely funding.

Recommendations: The PEIS should contain and/or require permits for projects to contain specific commitments, including timelines, for preparation and implementation of inventorying and monitoring programs, and standards for when monitoring as part of management is not appropriate.

All such programs should also identify the existing condition of resources, standards for when management change will be triggered and the use of a "fallback prescription" where adaptive management is not suitable or funding for necessary monitoring is not sufficient. All data should be identified in terms of its source, location, and time. Furthermore, data, and its application, should be available for independent review and evaluation; it should be formalized and standardized to allow for sophisticated and accurate aggregate understanding of the landscape and the impacts of management practices within the landscape to enhance agency credibility and accountability. The agencies should disclose not only the results of a given analysis, but the underlying methodology and data management practices used. The focus of data collection should be on the impacts – whether adverse or beneficial – caused by particular activities and not the activity itself.

The agencies should limit use of this type of "adaptive management" to appropriate situations (where the risk of failure will not cause harm to sensitive resources). The management framework should be based on best available science and include the following elements:

- **Ensure adequate baseline prior to starting adaptive management and identify indicators.**

Projects can only be approved along with a requirement for a detailed analysis of current inventory status to accompany the environmental analysis, which clearly specifies resources that may be affected by various activities and their baseline condition, then identify indicators for resources or groups of resources that will demonstrate the effects of management decisions.

- **Set out a detailed monitoring plan and ensure agency commitment to fund monitoring.**

A detailed monitoring plan is crucial for assessing potential impacts on resource conditions, ensuring that indicators are measured at regular and consistent intervals. Commitment of adequate resources should be firm and sufficient to support the full implementation of adaptive management. Funding for adaptive management should not be dependent on shifting the financial and personnel burden to various user interests or other cooperating community groups.

- **Include defined limits of acceptable change in resource conditions and specify actions to be taken if change reaches or exceeds those limits.**

For all indicators, the PEIS must require that, for all projects, the agencies prepare an identification of range of acceptable change from the baseline condition, using best available science, and specify those actions that will be taken in the event that unacceptable levels of change are identified.

- **Have a "fallback" plan should monitoring or other aspects of the adaptive management process not be fully carried out.**

Adaptive management must include requirements for when and how the proposed outcome will be reevaluated if it is not being met. The agencies' ability to reevaluate or amend desired outcomes should not be the sole fallback if either the adaptive management process is not working or outcomes are not being met. The PEIS should require the agencies to build into project analysis and approvals provisions to address situations based on new information, circumstances, regulatory requirements, or discontinued agency funding for monitoring that would trigger a plan amendment or revision under a new EIS.

4. Projects should be presumptively limited to designated corridors.

The Draft PEIS does not require the agencies to limit projects to designated corridors. Draft PEIS, p. 1-11. The effectiveness of mitigation measures depends on the agencies' applying them to all projects. Further, the benefit to other lands from designation of energy corridors derives in large part from the placement of development projects in those corridors. The failure to limit projects to designated corridors also jeopardizes the effectiveness of the constraints imposed on certain corridors in sensitive areas. For instance, the corridor designated through the Sevilleta National Wildlife Refuge in New Mexico (segment 81-272) is limited to 1500 feet in width, as opposed to the 3500-foot width applied to most corridors. However, other corridors in the area are not limited to this width. Accordingly, development proposed outside the borders of the corridor on other lands could lead to pressure to permit development within the Refuge, outside the proposed corridor, unless projects are limited to designated corridors. The PEIS and amended land use plans could certainly include exceptions from these limitations, such as where cultural resources are located in the proposed location; however, the PEIS does not even attempt to impose a presumptive limitation.

Recommendations: The PEIS must require that amended land use plans and other relevant documents limit power lines and pipelines to designated corridors, subject to exceptions where needed to comply with applicable law.

5. More stringent mitigation measures should be applied to corridors in or adjacent to sensitive resources or protected lands.

Certain corridors are limited in width or limited in use. As noted above, the corridors through the Sevilleta National Wildlife Refuge in New Mexico is limited to 1500 feet in width; the corridor through Snake River-Birds of Prey National Conservation Area in Idaho is limited to 1000 feet in width. For two corridors proposed along the borders of the Mojave National Preserve (northern segment 27-225, southern segment 27-41), use is limited to electric lines and those lines must be buried. Projects in other corridors are limited to "upgrade only," prohibiting

construction of new facilities. *See*, Draft PEIS, p. 2-35; Appendix F (Section 368 Corridor Parameters). However, these types of limitations are not uniformly applied to corridors in or adjacent to sensitive areas, such as the areas that the agency identifies as sensitive resource areas (*see* Table 2.2-6, Appendix G) or potentially sensitive visual resource areas (*see* Appendix P).

Recommendations: The Draft PEIS should impose additional restrictions on width and use of corridors where sensitive resources and lands already managed for conservation or recreation are impacted.

C. Alternatives.

1. The Draft PEIS fails to consider a reasonable range of alternatives

The Draft PEIS only considers two alternatives: the "no action" alternative, where no corridors are designated, and the "proposed action" designating the proposed corridors selected by the agencies. Draft PEIS, p. 2-1. However, in this situation, where the agencies have interpreted Section 368 of EPAct to require designation of corridors, the "no action" is only presented as a point of reference and is not a seriously considered alternative.[25] Thus, the Draft PEIS only thoroughly considers one alternative – the proposed action.

NEPA requires that the agencies consider a range of management alternatives, which is "the heart of the environmental impact statement." 40 C.F.R. § 1502.14. NEPA requires the agencies to "rigorously explore and objectively evaluate" a range of alternatives to proposed federal actions. *See* 40 C.F.R. §§ 1502.14(a) and 1508.25(c). "An agency must look at every reasonable alternative, with the range dictated by the nature and scope of the proposed action."[26] An agency violates NEPA by failing to "rigorously explore and objectively evaluate all reasonable alternatives" to the proposed action.[27] This evaluation extends to considering more environmentally protective alternatives and mitigation measures.[28] For this Draft PEIS, the consideration of more environmentally protective alternatives is also consistent with the obligations of the agencies to protect the many resources of the public lands, including those areas designated for conservation purposes, such as national wildlife refuges.

NEPA requires that an actual "range" of alternatives is considered, such that the Act will "preclude agencies from defining the objectives of their actions in terms so unreasonably narrow that they can be accomplished by only one alternative (i.e. the applicant's proposed project)."[29] This requirement prevents the EIS from becoming "a foreordained formality."[30] The Draft PEIS spends pages describing the numerous alternatives that were proposed by the public, as well as additional alternatives identified during scoping, and explaining why *none* of those merited full consideration. Draft PEIS, pp. 2-34 – 2-38.

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[25] *See*, *e.g.*, California v. Block, 690 F.2d 753, 765 (9th Cir. 1982).
[26] Northwest Envtl Defense Center v. Bonneville Power Admin., 117 F.3d 1520, 1538 (9th Cir. 1997).
[27] City of Tenakee Springs v. Clough, 915 F.2d 1308, 1310 (9th Cir. 1990) (quoting 40 C.F.R. § 1502.14).
[28] *See*, *e.g.*, Kootenai Tribe of Idaho v. Veneman, 313 F.3d 1094,1122-1123 (9th Cir. 2002) (and cases cited therein).
[29] Colorado Environmental Coalition v. Dombeck, 185 F.3d 1162, 1174 (10th Cir. 1999), citing Simmons v. United States Corps of Engineers, 120 F.3d 664, 669 (7th Cir. 1997).
[30] City of New York v. Department of Transp., 715 F.2d 732, 743 (2nd Cir. 1983). *See also*, Davis v. Mineta, 302 F.3d 1104 (10th Cir. 2002).

By only thoroughly considering one alternative, the proposed action, the agencies have reduced the Draft PEIS to a "foreordained formality" and improperly limited the alternatives under consideration. This limitation has especially damaging effects because NEPA analysis for projects within the designated corridors will inevitably be limited to a single proposed action when projects are actually proposed. Because the PEIS has identified the corridor locations as acceptable for pipelines, power lines and related facilities, it will be virtually impossible for the agencies or the public to urge consideration of alternative locations or additional mitigation measures in connection with specific projects.

Recommendations: The Draft PEIS incorrectly and unacceptably limits consideration of corridor locations to the proposed action in violation of NEPA's requirement to consider a range of alternatives. The agencies must thoroughly consider and present the public with a true range of alternatives.

2. The Draft PEIS should have considered an alternative to maximize access for renewable energy.

The Draft PEIS identifies "new energy policies seeking renewable resources" as one of the reasons that additional electric infrastructure in the West is needed. Draft PEIS, p. 1-3. The Draft PEIS also identifies the relationship of the proposed corridor locations to wind, solar and geothermal energy resources. Table 2.2-6, Draft PEIS, p. 2-20. However, the Draft PEIS does not consider an alternative that would increase or maximize access to transmission capacity for renewable energy sources, such as locating corridors to accommodate proposed development or including requirements to give priority to projects developing renewable resources.

As noted by the agencies, many states have made commitments to use energy generated by renewable energy sources. As documented by the Department of Energy, the following standards have been adopted as commitments to the portion of electricity that will be obtained from renewable resources by twenty-eight states and the District of Columbia, including eight of the eleven Western states in which the corridors will be designated:

Summary of State Renewable Portfolio Standards

The following table gives a rough summary of state renewable portfolio standards and links to organizations that are administering these standards or explain the details involved. Percentages refer to a portion of electricity sales and megawatts (MW) to absolute capacity requirements. Most of these standards phase in over years, and the date refers to when the full requirement takes effect.

State	Amount	Year	Organization Administering RPS
Arizona	15%	2025	Arizona Corporation Commission
California	20%	2010	California Energy Commission
Colorado	20%	2020	Colorado Public Utilities Commission

Connecticut	23%	2020	Department of Public Utility Control
District of Columbia	11%	2022	DC Public Service Commission
Delaware	20%	2019	Delaware Energy Office
Hawaii	20%	2020	Hawaii Strategic Industries Division
Iowa	105 MW		Iowa Utilities Board
Illinois	25%	2025	Illinois Department of Commerce
Massachusetts	4%	2009	Massachusetts Division of Energy Resources
Maryland	9.5%	2022	Maryland Public Service Commission
Maine	10%	2017	Maine Public Utilities Commission
Minnesota	25%	2025	Minnesota Department of Commerce
Missouri*	11%	2020	Missouri Public Service Commission
Montana	15%	2015	Montana Public Service Commission
New Hampshire	16%	2025	New Hampshire Office of Energy and Planning
New Jersey	22.5%	2021	New Jersey Board of Public Utilities
New Mexico	20%	2020	New Mexico Public Regulation Commission
Nevada	20%	2015	Public Utilities Commission of Nevada
New York	24%	2013	New York Public Service Commission
North Carolina	12.5%	2021	North Carolina Utilities Commission
Oregon	25%	2025	Oregon Energy Office
Pennsylvania	18%	2020	Pennsylvania Public Utility Commission
Rhode Island	15%	2020	Rhode Island Public Utilities Commission

Texas	5,880 MW	2015	Public Utility Commission of Texas
Vermont*	10%	2013	Vermont Department of Public Service
Virginia*	12%	2022	Virginia Department of Mines, Minerals, and Energy
Washington	15%	2020	Washington Secretary of State
Wisconsin	10%	2015	Public Service Commission of Wisconsin

*Three states, Missouri, Virginia, and Vermont, have set voluntary goals for adopting renewable energy instead of portfolio standards with binding targets.

See, U.S. Department of Energy, Energy, Efficiency and Renewable Energy, States with Renewable Portfolio Standards (available at: http://www.eere.energy.gov/states/maps/renewable_portfolio_states.cfm).

As proposed, the designated energy corridors would support existing and proposed development of coal power plants. *See*, map included in Appendix C. The corridors do not offer the same support to development of wind, solar or geothermal energy projects. *See*, maps included in Appendix C.

Recommendations: Designation of energy corridors can and should take into account accommodation of renewable energy resources. The agencies must consider alternatives that would support renewable energy projects and/or require priority for approval in designated corridors to be given to projects developing renewable energy.

3. The Draft PEIS should have considered an alternative that would minimize or eliminate the need for new transmission.

The agencies acknowledge that "[a]lternatives calling only for increased energy efficiency of existing transport facilities and energy conservation by users could help alleviate concerns related to congestion and increased energy demand in the West." Draft PEIS, p. 2-37. However, the agencies have declined to consider an alternative that would not require new corridors, claiming that "Section 368 specifically calls for the designation of federal energy corridors and does not authorize the agencies to direct energy users to be more efficient and effective in their use of energy" and relying also on Section 368's requirement that the agencies identify corridor centerlines and widths. Draft PEIS, p. 2-37. The agencies also decline to consider alternatives that specifically require increased efficiency and/or increased conservation, even though they acknowledge that these alternatives "would be possible" and provide no explanation for omitting such requirements from consideration.

The agencies' rather casual dismissal is rebutted by the expert comments of Utility System Efficiencies, Inc. (incorporated herein by reference), which detail the reasonable, cost-effective and environmentally beneficial approaches that can be taken instead of merely considering

designation of new corridors. These comments also provide feasible alternate locations for corridors that should be considered.

The agencies' interpretation of Section 368 is, as discussed previously, overly narrow. Where corridors are not needed, Section 368 does not somehow obligate the agencies to designate them – as shown by Section 368's specific direction to consider the "need" for new transmission and distribution facilities. Where there is no need for new facilities, the agencies need not designate them. Further, Section 368 does not override the requirements of NEPA and the agencies' other obligations in managing the public lands, which include considering alternatives to minimize environmental damage.

Recommendations: The agencies must consider alternatives that would minimize and/or eliminate the need for new transmission, including through increasing efficiency of existing transmission and increasing conservation.

4. The Draft PEIS should consider alternatives that would reduce impacts on climate change.

As discussed in detail above, the agencies must consider the potential impacts of the designation of corridors on climate change. Further, the current proposed corridor locations would support use of coal power plants, which would contribute to additional climate change. By ignoring the potential effects of the designations on climate change, the agencies have also ignored the need to develop an alternative that would avoid or limit these impacts.

Recommendations: Another environmentally protective alternative that the agencies must consider would decrease the effects of corridor designation and related projects on global climate change. Such an alternative could include requirements for project proponents seeking to construct projects in the corridors to show that they will avoid or reduce impacts on climate change and/or require use of energy sources that do not contribute to climate change, such as renewable energy resources.

III. The agencies have not complied with the Endangered Species Act.

Congress enacted the Endangered Species Act (ESA) as "a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." 16 U.S.C. § 1531(b). As the Supreme Court observed, the statute "afford[s] endangered species the highest of priorities."[31] To achieve its objectives, Congress directed the U.S. Fish and Wildlife Service (FWS) to list species that are "threatened" or "endangered," as defined by the ESA. 16 U.S.C. § 1533; § 1532(6), (20).

Once a species is listed, Section 7 of the ESA mandates that every federal agency "consult" with FWS, as well as with the National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NMFS – collectively referred to as "FWS" below unless specified) when taking any action that "may affect" listed species." 16 U.S.C. § 1536(a)(2); 50 C.F.R. §

[31] TVA v. Hill, 437 U.S. 153, 194 (1978).

402.14(a).[32] The purpose of the Section 7 consultation process is to insure that no agency actions "jeopardize the continued existence" of a listed species. Id. To facilitate the consultation process, the "action agency" prepares a "biological assessment," which identifies the listed species in the action area and evaluates the proposed action's effect on the species. 16 U.S.C. § 1536(c); 50 C.F.R. §§ 402.02, 402.12. Through a biological assessment, the agency determines whether formal or informal consultation is necessary. 50 C.F.R. § 402.13(a). When formal consultation is necessary, FWS prepares a "biological opinion" that determines whether the agency's action will result in jeopardy to the species. 16 U.S.C. § 1536(b)(3)(A); 50 C.F.R. § 402.14(g). If there is jeopardy, FWS sets for "reasonable and prudent alternatives" aimed at avoiding jeopardy. 16 U.S.C. § 1536(b)(3)(A). If there is no jeopardy, FWS identifies the reasonable and prudent mitigation measures. 16 U.S.C. § 1536(b)(4).

The agencies did not consult with the FWS or prepare a biological assessment, deciding that the designation of energy corridors will have "no effect" on listed species and critical habitat, because it would be too difficult to assess potential impacts on listed species. Draft PEIS, p. 1-14. The agencies' conclusion is contraverted by the Draft PEIS, which identifies hundreds of species in the areas where corridors may be designated, identifies the impacts to species from construction and operation of facilities in the corridors, and acknowledges that "[p]ortions of the corridors would likely include areas occupied by listed species or within critical habit." Draft PEIS, p. 1-14 and Tables 3.8-5 (identifying listed species), Table 3.8-8 (identifying impacts to wildlife from construction of energy transport facilities), Table 3.8-9 (identifying impacts to wildlife from operation of energy transport facilities) and Table 3.8-10 (identifying impacts to threatened, endangered and other special status species from construction and operation of facilities). Further, the NMFS has disagreed with the agencies' conclusion, sending in formal comments to emphasize that:

- Designation "may affect" listed species;
- The Draft PEIS has not presented any reason to discount likely adverse affects on listed species; and
- Consultation under the ESA is required.

Draft PEIS, p. 1-14. The agencies have refused to adhere to the recommendations of the NMFS constituting a refusal to comply with the ESA.

The ESA defines agency action broadly. 16 U.S.C. § 1536(a)(2).[33] It includes "*all* activities or programs *of any kind* authorized, funded, or carried out, in whole or in part, by Federal agencies." 50 C.F.R. § 402.02 (emphasis added). Agency actions include those "actions directly or indirectly causing modifications to the land, water, or air." 50 C.F.R. § 402.02. The agencies' designations of energy corridors constitute agency actions within the meaning of the ESA.

By designating energy corridors without taking steps to consider potential adverse effects to protected species and to incorporate appropriate limitations on potential projects, the agencies are failing to comply with the mandates of the ESA to ensure that its actions are "not likely to jeopardize the continued existence of any endangered or threatened species." 16 U.S.C. § 1536(a)(2). In fact, the agencies' designations of energy corridors and the resulting development

[32] *See also* Nat'l Wildlife Fed'n v. Nat'l Marine Fisheries Serv., 422 F.3d 782, 790 (9th Cir. 2005).
[33] *See also* Lane County Audubon Soc'y v. Jamison, 958 F.2d 290, 294 (9th Cir. 1992).

in those corridors are likely to jeopardize the continued existence of many endangered or threatened species.

Moreover, all federal agencies are obligated to conserve listed species by "carrying out programs for the conservation of endangered species and threatened species." 16 U.S.C. § 1536(a)(1). Under the ESA, "conserve" is defined as recovering a species. Therefore, the agencies are not only obligated to avoid jeopardizing the survival and recovery of listed species, but are also required to take steps within its purview to recover these species. 16 U.S.C. § 1532(3) (definition of "conserve").

In order to remedy this error, the agencies must engage in the Section 7 consultation process directed by the ESA to determine the effects of its corridor designations on the endangered and threatened species—and then make necessary adjustments to the designations. The agencies must prepare biological assessments for the designation of energy corridors, engage in formal consultation with FWS, and identify and incorporate appropriate alternatives and/or mitigation measures in connection with each corridor. *See* 16 U.S.C. § 1536(c)(1), 1536(a)(2); 50 C.F.R. §§ 402.12(k)(1), 402.14(a). The agencies also must carry out programs to conserve listed species in the action area. *See* 16 U.S.C. § 1536(a)(1).

Recommendations: Until the agencies complete the consultation process mandated by Section 7(d) of the ESA, they may not lawfully designate corridors or otherwise commit agency resources under Section 368 of the EPAct.[34] The agencies must fulfill their obligations to prepare biological assessments and engage in consultation, then include alternatives and mitigations, including conservation of listed species, in the PEIS.

IV. The agencies have not complied with the National Historic Preservation Act.

A. The agencies have not fulfilled their responsibilities under Section 106 and Section 110 of the NHPA.

A federal "undertaking" triggers the Section 106 process, which requires the lead agency to identify historic properties affected by the action and to develop measures to avoid, minimize, or mitigate any adverse effects on historic properties. 16 U.S.C. § 470f; 36 C.F.R. §§ 800.4, 800.6. Because the designation of energy corridors is an "undertaking," Section 106 review must occur prior to approving these designations in the record of decision.

The NHPA stipulates that consultation among agency official(s) and other parties with an interest in the effects of the undertaking on historic properties commence at the early stages of project planning, focusing on the opportunity to consider a broad range of alternatives. 36 C.F.R. § 800.1(c). Compliance with Section 106 is applicable "at any stage where the Federal agency has authority . . . to provide meaningful review of . . . historic preservation goals."[35]

[34] *See* NRDC v. Houston, 146 F.3d 1118, 1127-28 & n.6 (9th Cir. 1998) (agency action that commits resources before agency completes ESA Section 7(d) consultation violates the ESA).

[35] Morris County Trust for Historic Preservation v. Pierce, 714 F.2d 271, 280 (3d Cir. 1983) (emphasis added); Vieux Carre Property Owners v. Brown, 948 F.2d 1436, 1444-45 (5th Cir. 1991).

Therefore, the agencies cannot rely on later review process as a justification for refusing to comply with the NHPA.

The agencies claim that they have fulfilled their Section 106 requirements through an overview of the types of cultural resources that could be found in the areas where corridors are designated and a general data request to agencies with management responsibilities, but note that the data received was not consistent or complete; in fact, one state did not respond at all to the inquires. Draft PEIS, pp. 3-263, 3-266, Appendix R (Cultural Resources Data Request). In addition, the Draft PEIS does not contain specific commitments as to how Section 106 consultation will be carried out or impose mandatory mitigation measures in order to ensure compliance with the NHPA prior to approval of projects in the designated corridors. Further, State Historic Preservation Officers were not given the opportunity to review changes to corridor locations based on data received. Appendix R, p. R-3.

Section 106 regulations require BLM to "make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey." 36 C.F.R. § 800.4(b)(1). As part of this duty, BLM must account for information communicated to it by parties expressing an interest in historic properties affected by the undertaking.[36] While the initial efforts conducted by the agencies are a good first step, further efforts are required prior to the designation of energy corridors, including documentation of the extent of data that needs to be compiled, specific requirements for inventory of proposed locations, and obtaining at least a minimum level of data for each state. The Draft PEIS neither performs the necessary level of analysis nor contains sufficiently clear and mandatory requirements for actions to be taken in connection with applications for rights-of-way to satisfy the requirements of the NHPA.

To satisfy the Section 106 compliance requirement, the Responsible Agency Official must consult with the State Historic Preservation Officer(s) (SHPO), and appropriate Tribes and/or Tribal Historic Preservation Officer(s) (THPO). The agencies' present designation process has also denied SHPOs and THPOs their required right to consultation. This must be rectified.

Section 110 of the NHPA obligates the agencies to identify sites that may be eligible for the National Register. The Draft PEIS acknowledges this obligation as an ongoing effort of various agencies, but does not include any commitments to further compliance in connection with designation of these energy corridors. Draft PEIS, p. 3-261. The agencies should take this opportunity to analyze the information obtained to identify eligible sites and to commit to or require commitments to further inventory and submissions of proposals for listing. The agencies should maximize the opportunity to obtain and use information on cultural resources to fulfill their obligations under the NHPA and increase our knowledge and protection of our cultural heritage.

***Recommendations*:** The agencies must satisfy their obligations to identify and inventory cultural resources within the area of potential effects associated with each proposed corridor locations. At a minimum, this includes updating the data received, providing another opportunity for

[36] Pueblo of Sandia v. United States, 50 F.3d 856, 860–61 (10th Cir. 1995).

review by SHPOs, specifying mitigation measures, and assessing sites as appropriate for nomination to the National Register, including archaeological districts, as well as incorporating similar requirements into procedures for evaluation and approval of projects within the corridors. In this manner, the agencies can also ensure that cultural resources are protected.

B. The agencies have not fulfilled their obligations to consult with tribal representatives.

Beyond the NHPA compliance and consultation requirements, the agencies must consult with, invite, and offer opportunities for federally-recognized Indian Tribes to collaborate and participate in the planning process. This is to satisfy the necessary Government-to-Government consultation with Tribes stipulated under Executive Order 13175.

The agencies state that they sought such consultation, in order to "ensure that the designation of energy corridors considers and accounts for the interests of Indian Tribes." Draft PEIS, pp. 1-21 – 1-22. Appendix C (Tribal Consultation) provides additional detail regarding the manner in which this consultation was carried out, including letters sent during the scoping process, letters inviting representatives to information meetings, meetings with information distributed after the meetings, and letters inviting further consultation. For those Tribes that requested consultation, some additional in-person meetings were held.

However, based on the documentation attached as exhibits to Appendix C of the Draft PEIS, the vast majority of written contact was conducted through form letters. There is little documentation in the Draft PEIS supporting the contention that the agencies have made significant efforts to engage in robust consultation with Indian Tribes that did not respond to the form letters, or that the consultation letters inviting participation specifically identified cultural or religious properties of significance that would be relevant to the Tribes' participation. Meaningful consultation with Indian Tribes cannot be accomplished by sending form letters to tribal councils or leaders or by having brief conversations regarding potential effects.[37]

Recommendation: The agencies must engage in meaningful consultation with potentially-affected Tribes and make a good faith effort to reach out to these Tribes.

V. The PEIS must address specific concerns regarding conservation values and incorporate appropriate protection.

As discussed in our scoping comments and comments on the preliminary map, certain areas should be presumptively avoided in placing transmission corridors under this process. These places have been formally designated or otherwise identified because of their special natural values, which could be damaged or destroyed by the surface disturbance, alteration of viewsheds and features, impact to air and water quality, erosion, and increased human access likely to occur in connection with the construction and use of energy corridors. Accordingly, energy corridors should not be sited in the following areas:

1. Wilderness Areas;
2. Wilderness Study Areas (WSAs);

[37] Pueblo of Sandia v United States, 50 F.3d 856, 860-862 (10th Circuit 1995).

3. National Parks;
4. National Wildlife Refuges;
5. National Monuments;
6. National Conservation Areas;
7. Other lands within BLM's National Landscape Conservation System (NLCS), such as Outstanding Natural Areas and Cooperative Management Areas, or areas that have been proposed for designation by pending legislation[38];
8. National Historic and National Scenic Trails;
9. National Wild, Scenic, and Recreational Rivers, study rivers and segments, and eligible rivers and segments;
10. Areas of Critical Environmental Concern (ACECs)[39];
11. Forest Service Roadless Areas;
12. Threatened, endangered and sensitive species habitat;
13. Other critical cores and linkages for wildlife habitat, such as that identified by state wildlife agencies through State Comprehensive Wildlife Conservation Strategies[40];
14. Citizen Proposed Wilderness Areas; and
15. Other lands with wilderness characteristics as identified by the land management agencies or the public.

Based on GIS analysis, The Wilderness Society has prepared a list of conservation areas that appear to be impacted and state-by-state maps detailing impacts to these areas, attached as Appendix A to these comments, and recommend that corridors avoid these values. Appendix A includes areas identified as suitable for wilderness designation by citizens and we are also including GIS data identifying those areas to facilitate avoidance. In addition, the Center for Native Ecosystems has conducted an analysis to assess areas with conservation values and species habitat that appear to be impacted for Colorado, Utah and Wyoming, attached as Appendix B to these comments. **The agencies should not only take the information in Appendices A and B into account in considering our comments, but also provide this and**

[38] Such as:

- S.2483, to designate the Piedras Blancas Historic Light Station as an Outstanding Natural Area in California;
- S. 275, to establish the Prehistoric Trackways National Monument in New Mexico;
- S.260, to establish the Fort Stanton-Snowy River Cave National Conservation Area in New Mexico;
- H.R.3576, to designate Wilderness areas in Colorado;
- H.R. 222, to designate Wilderness areas and otherwise promote economic development and recreational use of public lands in central Idaho; and
- H.R.3682, to designate certain Federal lands in Riverside County, California, as wilderness, to designate certain river segments in Riverside County as a wild, scenic, or recreational river, to adjust the boundary of the Santa Rosa and San Jacinto Mountains National Monument, and for other purposes.

[39] As an example, *see* attached listing of ACECs in Colorado, Utah and Wyoming affected by the proposed corridor locations included in Appendix B to these comments.

[40] For example, the Arizona Game and Fish Department has identified the Kaibab-Paunsagunt wildlife corridor as a critical linkage for migrating mule deer between southern Utah and northern Arizona's Kaibab Plateau. See: Carrel, William K., Richard A. Ockenfels, and Raymond E. Schweinsburg. 1999. An Evaluation of Annual Migration Patterns of the Paunsaugunt Mule Deer Herd Between Utah and Arizona. Arizona Game and Fish Department Technical Report 29. Phoenix. 44 pages

comparable information for the other affected states to the public as part of providing sufficient information regarding the potential impacts of the proposed corridor locations and alternative approaches. Further discussion of these values and recommendations for improving management in the Draft PEIS is provided below.

A. Proposed wilderness

There are numerous areas that have been identified as suitable for wilderness protection in the West. For decades citizens and public land management agencies have identified lands throughout the West that meet the criteria for permanent wilderness protection. Today, many of these proposals have been forwarded to Congress and are awaiting congressional approval. However, there are many areas that have been identified as having wilderness characteristics that have not yet had the opportunity to be considered by Congress; and others have not yet been formally submitted to the land management agencies.

Proposed wilderness areas were not discussed or evaluated in the Draft PEIS. It is critical that these areas be included with other sensitive lands analysis due to their documented natural and remote character. In addition, such areas should be avoided and/or impacts mitigated so as not to inhibit their potential inclusion in the National Wilderness Preservation System at some point in the future. Currently, there are approximately twenty pieces of legislation pending in the 110th Congress that would designate wilderness. Over half of those legislative packages have a good chance of being enacted before the end of 2008 and the remainder, as well as other areas, may be protected at a later date. Therefore, we feel strongly that these areas should not be impacted by the energy corridors.

We have attached a list of lands that have been identified as suitable for wilderness designation that are affected by the proposed corridors; these areas need to be discussed and considered for avoidance in the PEIS (Attachment 9).

As an example, a corridor (segment 133-142) runs through the northern portion of the Yampa River unit of the Colorado's Canyon Country Wilderness Proposal. The corridor is not along a road, would be 3500-feet wide, and would be open to all uses. This proposed wilderness includes a 17-mile stretch of the Yampa west of Milk Creek as it meanders past Duffy Mountain. Extensive wildlife populations include dozens of bald eagles wintering along the river, and large numbers of deer and elk foraging on the area's critical winter range. Brood rearing grounds for grouse are found in rolling sagebrush steppe along the area's southwestern edge, and hikers and boaters frequently spy pronghorns along the hillsides flanking the river. This segment of the Yampa contains critical habitat for the endangered pikeminnow, as well. The impacts from multiple powerlines and pipelines on the natural attributes and recreation experience for this area would be unacceptable.

In Nevada, concerned citizens, local governments and the congressional delegation are discussing a public lands bill for the west-central part of the state. Given the recent track record of the Nevada congressional delegation, there is a good chance that there will be some public lands in the region designated as wilderness. Currently, wilderness advocates are working with all interested parties to identify specific areas worthy of wilderness protection. There is a chance

that some of these proposed areas would be impacted by corridor segment 18-23, which crosses three Forest Service Inventoried Roadless Areas (Long Valley, Mt. Hicks, and Larken Lake) likely to be incorporated in a formal proposal, as well as additional lands.

Recommendation: There are many special and sensitive places that have been documented as meeting the criteria for wilderness protection and are thus not appropriate for accelerated and increased development. The agencies should either avoid these areas altogether or, if the corridor has been shown to be necessary, mitigate impacts by requiring underground transmission and limit corridor widths to only what has been shown to be absolutely needed. In addition, the agencies should ensure that their information is updated as areas are proposed for formal protection in legislation.

B. Forest Service Roadless Areas

In 2006, a federal court in California invalidated the Bush Administration's May 2005 decision to replace the 2001 Roadless Area Conservation Rule with a discretionary state petition process, finding violations of NEPA and the ESA.[41] The court reinstated the 2001 Rule and enjoined any management activity contrary to the Rule in all national forest inventoried roadless areas in the lower 48 states. Judge Laporte stated, "Defendants are enjoined from taking any further action contrary to the Roadless Rule without undertaking environmental analysis consistent with this opinion."[42]

In response to the court's decision, the Chief of the Forest Service issued a national directive on September 22, 2006, stating: "Do not approve any further management activities in inventoried roadless areas that would be prohibited by the 2001 Roadless Rule." As written, the Roadless Rule prohibits road construction in identified roadless areas and the Forest Service has specifically acknowledged that development and construction of transmission lines and pipelines requiring roads would be prohibited. *See*, 66 Fed. Reg. 3243, 3270 (January 12, 2001).

Based on our analysis, the Draft PEIS designates corridors in Forest Service Roadless Areas. *See*, analysis detailing intersections provided as Attachment 10. The legal requirement for such avoidance has been reaffirmed by the recent decision of the federal court and the subsequent policy issued by the Forest Service.

Recommendation: The PEIS must provide for no new corridors to be designated in Forest Service Roadless Areas and where an intersection between and corridor and a roadless area is the result of a GIS or mapping error, those errors must be corrected.

C. BLM National Monuments

National Monuments should be off-limits to this corridor process both under current law and public policy concerns. These special places have in large part been reserved by Presidential proclamation under the Antiquities Act of 1906 (16 U.S.C. § 432) to protect objects of historic or scientific interest. The Antiquities Act specifically limits the boundaries of Monuments to "the

[41] California ex rel. Lockyer v. U.S. Dept. of Agriculture, 459 F.Supp.2d 874 (N.D.Cal. 2006).
[42] 459 F.Supp.2d at 919.

smallest area compatible with proper care and management of the objects to be protected." Thus, every part of the Monument is just as important as any other part in protecting Monument objects.

The BLM has only recently been given administrative and management control over fifteen Monuments, which are all part of the BLM's National Landscape Conservation System (NLCS). The first and largest such place designated within this system is the Grand Staircase-Escalante National Monument (GSENM). As the proclamation discusses, this has historically been a remote and undeveloped region with abundant opportunity for the study of geology, archaeology, paleontology, human history, and ecology. *See*, Proclamation 6920 (Sept. 18, 1996).

Designating a 3,500 foot wide corridor (68-116) for oil, gas, hydrogen, and electricity transmission through the GSENM is inconsistent with the intent and the plain language of the Proclamation and Antiquities Act. While it is true that this corridor follows an existing electricity transmission right-of-way for a 500 kV line, there is no justification for an accelerated process that could lead to the broad expansion of the current much smaller right-of-way. Not only will the current width of the right-of-way be more than doubled, but the allowable uses will permit expedited development of oil, gas, and hydrogen pipelines as well. This is an arbitrary action and an abuse of discretion by the agencies.

The Draft PEIS provides that "project siting and design must be consistent with land use plans." Draft PEIS, p. 2-2. While factually accurate, it is only logical that if specific projects are going to be consistent with land use plans, the designation of corridors for those projects should also be consistent. The GSENM Monument Management Plan (MMP) adopted objectives to fulfill the mandates of the proclamation:

> The Proclamation and Antiquities Act provide a clear mandate for this plan – to protect the myriad historic and scientific resources in the Monument. To meet this objective, the Monument will be managed according to two basic principles. First and foremost, the Monument will remain protected in its primitive, frontier state. **The BLM will safeguard the remote and undeveloped character of the Monument, which is essential to the protection of the scientific and historic resources**. MMP, at iv (emphasis added).

The corridor running for around twenty miles through GSENM (68-116) inconsistent with the MMP. This corridor runs through the Paria Canyons and Plateaus Special Recreation Management Area, which is to be managed to allow for a recreation experience that is "primitive, uncrowded, and remote." MMP, p. 59. Much of this area is also classified as a Class II Visual Resource Management Area. According to the MMP, there should be minimal changes to the overall landscape for such areas.

> The objective of this class is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape. MMP, p. 60-61.

The MMP also found the Paria River as suitable for recommendation for inclusion of the Wild and Scenic Rivers System. This particular example is discussed in more detail in Section G. However, it should be noted here that this corridor is not only inconsistent with the Wild and Scenic Rivers System and protective management of eligible and suitable rivers, but also with the MMP itself.

According to the Draft PEIS, Step 1 of the designation process was to identify the unrestricted need for a network of corridors based on supply, reliability, and suggestions by stakeholders. Draft PEIS, p. 2-16. Figure 2.2-7 on page 2-21 of the Draft PEIS illustrates energy congestion areas in the West, the direction of desired flows of energy transmission, and constraints limiting desired flows. It appears from this analysis that corridor 68-116 cannot even be justified as being necessary in this area. It is neither relatively close to a congestion area nor does it line up with the desired flows. Thus, because this corridor cannot be justified under Step 1 of this process, this corridor should not be designated. This is especially true if the impacts to this National Monument had been considered.

Recommendation: Corridor 68-116 is patently inconsistent with the purpose and intent of the GSENM, the Antiquities Act, and the Monument's proclamation and land use plan. The Draft PEIS does not provide any evidence that this corridor is needed in this location, let alone the impacts that an abridged development process will have on this area. For these reasons, this corridor should be removed. No corridors should be designated with BLM National Monuments.

D. BLM National Conservation Areas

Proper management of National Conservation Areas (NCAs) depends on the management priorities set out in each NCA's enabling legislation. Impacts from the designated corridors to NCAs or consistency with the values for which they were established were not evaluated in the Draft PEIS or accompanying maps despite the sensitive resources and values they contain. This is especially a concern because the individual resource management plans that govern the administration of the NCAs will be automatically amended from the corridor designation and there will have been no serious consideration of whether the specific location of the corridor abridged application process is appropriate for such areas. As discussed above, waiting until a site-specific project is applied for in these areas is too late and defeats the entire purpose of designating corridors in the first place.

Within the BLM lands, the NCAs are also part of the National Landscape Conservation System (NLCS). Table 3.2-13 on page 3-17 of the Draft PEIS lists "Special Management Areas" within the BLM's NLCS. This table includes a separate column for NCAs, which include nearly 12.8 million acres of BLM-managed lands. Thus, the Draft PEIS recognizes that NCAs are both specially-managed *per se* as well as given a heightened conservation priority for their inclusion in the NLCS. Even so, the Draft PEIS does not evaluate alternatives of avoiding these areas. Nor does the document analyze mitigation of impacts to NCAs. The agency must go back and look at such an option in order to provide a reasonable range of alternatives and a hard look at the impacts of this decision under NEPA. The following are specific examples of NCAs that could be affected.

1. Snake River-Birds of Prey NCA

Snake River-Birds of Prey National Conservation Area was established to protect one of the densest known raptor populations in North America including the habitat of the raptor prey base as well as the nesting and hunting habitat of raptors within the conservation area. A proposed corridor (36-228) intersects this NCA for around 19 miles along Highway 78. There is no evaluation of impacts or mention of the intersection in the Draft PEIS.

Corridor 36-228 allows for multimodal use and apparently narrows to 1,000 feet (from 3,500 feet) when it intersects the NCA. The agencies should provide an analysis of the need for the uses of this corridor and consideration of limiting the uses as well as the width. Consideration of requiring that all lines be buried should also be seriously considered due to the increased risk of adverse impacts on raptors that this area was reserved to protect.

2. Black Rock Desert-High Rock Canyon Emigrant Trails NCA

The Black Rock-High Rock NCA was established for a variety of conservation values. These values were enumerated in section 4(a) of the NCA's enabling legislation, including "to conserve, protect, and enhance for the benefit and enjoyment of present and future generations the unique and nationally important historical, cultural, paleontological, scenic, scientific, biological, educational, wildlife, riparian, wilderness, endangered species, and recreational values and resources associated with the Applegate-Lassen and Nobles Trails corridors and surrounding areas." In addition, section 5(a) of the NCA's act states that the BLM "**shall manage the conservation area in a manner that conserves, protects and enhances its resources and values**, including those resources and values specified in subsection 4(a), in accordance with this Act, the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.), and other applicable provisions of law."

A 3,500 foot corridor (16-24) is designated in the Draft PEIS for all uses. As a preliminary matter, the Draft PEIS states that this is a locally designated corridor. The PEIS should state what uses this corridor was designated for, how wide and long it is, and any other pertinent information to evaluate the rationale behind the agencies choosing a 3,500 foot corridor for all uses.

In addition, this corridor intersects the NCA and the Applegate-Lassen Trail. Impacts to the NCA values as well as the historic trail should be examined in the PEIS and mitigated as necessary. It is not apparent from the Draft PEIS that the designated width or uses of 16-24 is in accord with the supply and demand of resources.

3. Proposed NCAs

The Draft PEIS should also avoid proposed NCAs where the agencies are aware of the proposals, in addition to those already under consideration by Congress. For example, in southern New Mexico, a corridor runs through the a Proposed National Conservation Area in the Organ Mountains. This area (also identified as meeting criteria for wilderness designation by the New

Mexico Wilderness Alliance as the Organ Foothills or Talavera Proposed Wilderness Area) is included in a proposed NCA that is endorsed by the Las Cruces City Council, Dona Ana County Commission, conservation groups, hunters, backcountry horsemen, the Las Cruces Homebuilders Association and other elected officials. While there is an existing power line here, it is certainly not an area where anyone contemplated placement of 9 large power lines or 30 pipelines – but designation of the area as an energy corridor makes this scale of development more likely, an impact neither addressed nor mitigated in the Draft PEIS. *See*, map provided as Attachment 11.

The Oregon Natural Desert Association has also proposed an NCA to protect sage grouse habitat in southeastern Oregon, which is described in further detail in their comments on this Draft PEIS. As discussed above, transmission development can have significant impacts on sage grouse, which are already being affected by energy development in the West. Designation of a corridor could result in irreparable harm to the sage grouse.

Recommendations: In order to fulfill the mandates of the NCAs' enabling legislation and FLPMA, we urge the agencies to evaluate an alternative that would limit the visual, cultural, and ecological impact on these desert landscapes by seeking to avoid these areas and, to the extent that they cannot be avoided, by limiting corridor widths, burying any transmission lines and limiting the corridor's use to necessary uses. Similar care should be taken to protect the values identified in proposed NCAs.

E. National Park Service Lands

Lands managed by the National Park Service (NPS) are the most recognizable and popular conservation areas in the West. The very purpose of such lands is "to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." NPS Organic Act of 1916 (16 U.S.C. § 1). These values are the likely reasons that these areas were largely avoided by the corridor designation process due to their sensitive natural, cultural, and visual resources. We encourage the agencies to take a few additional steps to ensure that all of these special places and their resources are adequately protected from adverse impacts.

1. National Parks

For the most part, the proposed corridors avoid National Parks, although there is still room for improvement. One corridor of particular concern is segment 66-212. This corridor will clearly be within and dramatically impact the outstanding viewshed of the famous Arches National Park (Arches). Currently, the viewshed from Arches includes no developed areas or industrial sites whatsoever (even the town of Moab is not in the Park's viewshed once visitors are approximately one-half mile from the visitor center). Although Appendix P lists sensitive visual resource areas that are intersected or in close proximity to designate corridors, there is no evaluation or even mention of the impacts to Arches' viewshed in the Draft PEIS. Further, while the corridor narrows where it borders Arches, the corridors is extremely wide (4-5 miles wide) south of Arches and the town of Moab. As discussed above, the PEIS does not limit projects to

designated corridors. As a result, the PEIS does not address how the narrower portion of segment 66-212 could accommodate the pipelines and powerlines that would be in the same corridors in adjoining areas and would connect through them. Instead, the PEIS makes it more likely that projects would be placed both in the narrowed portion of the corridor *and* outside it, increasing the improper impact on Arches and the surrounding lands.

In addition to affecting Arches itself, this corridor crosses through spectacular, world-famous scenery. Much of the area has been proposed for wilderness preservation, including 1,000 foot high cliffs, slickrock domes, streams and floodplains, sensitive soils, and critical wildlife habitat. The corridor also crosses the Colorado River at the Portal near Moab. This Portal is a very narrow passage way carved by the river as it forced its way through the 1,000 foot tall, vertical Wingate and Navajo Sandstone cliffs.

The corridor has a mysterious gap as it reaches the town of Moab. Moab lies in a very narrow valley (approximately 1 to 1.5 miles wide) between steep sandstone walls. In order for projects within the corridor to go across the private property there will most likely either be a taking by the federal government in order to "connect the dots," or the corridor will necessarily have to be along the iconic Moab Rim on the west side of the valley or along the Mill Creek Rim along the east. Both of these rims are within BLM Wilderness Study Areas.

Corridor 66-212 can be easily re-routed to address most of the above concerns. Rather than continuing Southeast from the town of Green River, the corridor should be directed east along the I-70 corridor to connect to the energy corridor in western Colorado (132-136). There is no compelling reason to have this proposed corridor impact sensitive natural resources, Arches National Park, the Colorado River, and private property owners and the viewshed in Moab where there is an alternative corridor in Colorado, slightly east of this proposed corridor, to which the Moab corridor would eventually merge with anyway.

A proposed corridor (segment 30-52) is also located near the southern edge of Joshua Tree National Park. This corridor would be 3500 feet in width and accommodate both pipelines and powerlines with no restrictions. Given the proximity to the National Park, the agencies should conduct a thorough viewshed analysis and consider limitations on use of this corridor.

2. National Monuments

Impacts to the NPS National Monuments are similar to those mentioned in Section C above for BLM National Monument. One particular example of an NPS-managed National Monument that will be adversely affected by a proposed corridor is Dinosaur National Monument (Dinosaur) in Northeastern Utah. Corridor 126-218 passes within a mile of Dinosaur's border and continues north to intersect with several proposed wilderness areas. *See,* Attachment 6.

The need for such a corridor in this area is not clear from the Draft PEIS. The agencies should provide the information that was used to show how the need for specific corridors was demonstrated as well as the limits used in each corridor's designation. This is especially true where sensitive resources will be adversely impacted by future projects. This information is

particularly helpful to understand the context of how the width and permitted uses for each corridor were determined.

Assuming that the agency will provide such an analysis of need for corridor 126-218, there are several other options that the agencies have available to mitigate impacts to the surrounding area. This corridor is multimodal and 3,500 feet wide. It is not previously designated and does not follow a road, despite the fact that Highways 40 and 191 lead to the same relative end. This is an example of something that could have been provided for in a different alternative but was not and we are left to wonder why and how these corridors were designated in such areas.

Oddly, immediately to the north of the Wyoming border, permitted uses in this same corridor are limited to underground only but not when it crosses into Utah. This area has many sensitive natural resources and outstanding scenic values.

In order to protect Dinosaur and the surrounding areas, in particular, the agencies should require that future projects within this corridor are buried. The agencies should provide a proper evaluation that outlines the need for this corridor and balance this explanation with the other values of the area, such as the viewshed near Dinosaur and the nearby proposed wilderness areas that will be intersected.

3. National Recreation Areas

National Recreation Areas (NRAs) are designated in general to provide outdoor recreation opportunities on federal public lands. Each NRA is limited to the scope that was set out in its enabling legislation. There are several NRAs that are intersected by proposed corridors. In general, we urge the agencies to avoid and/or mitigate impacts to these special places so as not to degrade their recreational qualities. The following are examples of NRAs that are intersected and recommendations for improvement to this process.

a. Curecanti NRA – The Curecanti NRA in west-central Colorado contains three lakes with recreation opportunities like boating, camping, hiking, fishing, and wildlife viewing. Corridor 87-277 intersects two gulches in the NRA and follows an existing 230 kV transmission line. According to Appendix F, this corridor is limited to certain widths and uses in specific places. We urge the agencies to limit the width to a maximum of 1,000 feet and to restrict the use to electric only. If this is already the case, it should be shown correctly on the map.
b. Glen Canyon NRA – The famous Glen Canyon on Lake Powell provides recreationists with outstanding scenery and activities. The corridor (68-116) running through the NRA follows an existing 500 kV line, but is open to all uses. It is not clear from the Draft PEIS that oil, gas, and hydrogen pipelines are needed within this corridor and that the proposed width of 3,500 feet is justified.

4. National Preserve

Proposed corridors (segments 27-225 and 27-41) follow both the northern and southern boundaries of the Mojave National Preserve. The northern corridor (27-225) is 3500 feet in

width and limited to electricity only; the southern corridor (27-410) is 2700 feet in width and limited to underground use. From the GIS data provided, the corridors appear to cross through the Preserve. The agencies should not designate such broad corridors in the Preserve and should ensure that any new transmission permitted in this area does not damage the habitat for endangered and sensitive species such as the desert tortoise and bighorn sheep or damage the sand dunes, volcanic cinder cones, Joshua tree forests, and wildflowers that characterize this area and its fragile ecosystem.

Recommendations: Due to the highly-recognized special qualities of NPS-managed lands, designated corridors should take care to avoid impacts to these areas and their viewsheds. For the areas that are adversely affected, mitigation of impacts can be accomplished through measures such as limiting the corridor to the maximum width that has been demonstrated to be necessary and requiring that future projects be buried so as not to interrupt the scenic viewshed.

F. National Wildlife Refuges

The National Wildlife Refuge System (System) was set up to protect resident and migratory wildlife populations within the refuges. The mission of the Systems is to "administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for benefit of present and future generations of Americans." 16 U.S.C. § 668dd(a)(2). Under the National Wildlife Refuge System Improvement Act of 1997, 16 U.S.C. §§ 668dd-668ee, human **uses must be "compatible" and not "materially interfere with"** the System mission or the refuge purpose.

1. Havasu NWR

Havasu NWR includes 30 river miles (300 miles of shoreline) of the Colorado River from Needles, California, to Lake Havasu City, Arizona, bighorn sheep, many species of birds, while providing recreation opportunities to boat through the spectacular Topock Gorge, watch waterbirds in Topock Marsh, or hike to the Havasu Wilderness Area.

The proposed corridor (41-46) through Havasu NWR, which also passes into California, follows Highway 40 and is narrowed to 1,500 feet (from 3,500 feet) and is open to all uses. Analysis of whether this corridor's width and permitted uses are limited to the necessary uses should be performed before going forward. Adequate consideration should be given to the compatibility of the use of a corridor within this wildlife refuge such use should be balanced with the mission of the System and the purpose of this NWR. Consideration should also be given to this area's inclusion in the Southwest National Interest Electric Transmission Corridor – making it an even more likely target for development and truncated environmental review.

2. Sevilleta NWR

Sevilleta NWR in New Mexico is home to a vast array of wildlife number of important and endangered species, including desert bighorn sheep and bald eagles, as well as Gunnison prairie dogs. While the proposed corridor (81-272) includes an existing right-of-way and follows

Highway 25, large-scale use of the corridor will necessarily interfere with the protection of the wildlife in the Refuge, which is why the agencies should consider the need for such a corridor and whether it is compatible with the mission of the System and the purpose of this NWR.

The corridor also passes through the Rio Grande corridor (one of the most stressed rivers in the country), habitat for the endangered Pecos sunflower and two State Wildlife Refuges, which are not even acknowledged.

It is apparent from the Draft PEIS that the width of the corridor is limited to 1500-feet through Sevilleta NWR. The agencies should take additional steps to ensure that this width and all uses are necessary and appropriate for this area and consider the alternative of not designating corridor 81-272.

3. Desert NWR

Desert NWR, the largest wildlife refuge outside of Alaska, in Southern Nevada is home to a number of wildlife species including the desert bighorn sheep, as are the three Wilderness Areas (Delamar Mountains, Arrow Canyon and Meadow Valley) which border the proposed corridor east of the Refuge.

Five proposed corridors pass through or are adjacent to the Desert National Wildlife Refuge (segments 37-232, 232-233(W), 223-224, 37-223(N) and 37-223(S)). These corridors appear to follow some locally-designated energy corridors as well as interstate highways. However, the agencies should evaluate whether these corridors and their current widths are necessary and are compatible with the mission of the System and the purpose of the NWR.

The impacts to the bighorn sheep habitat in the Refuge will likely impact the populations in both the Refuge and the Wilderness areas. The Refuge also provides habitat for the threatened desert tortoise, which the corridor is likely to harm as well. The proposed corridor also impacts the Fossil Elbow and Gass Mountain citizen-proposed wilderness areas, both of which have been found by the U.S. Fish & Wildlife Service to be suitable for wilderness designation. Cumulative impacts from the corridor must be considered in conjunction with the development already occurring, such that all of the other land around the existing highway and proposed corridor to the east of the Refuge that is not protected as Wilderness is already subject to intensive private development – and also taking into account the continued encroaching development of the Las Vegas valley on the southern end of the Wildlife Refuge.

Recommendations: The need for individual corridors through NWRs as well as alternative options should be evaluated and balanced against potential adverse impacts and incompatible uses. The agencies should seriously consider an alternative that avoids all NWRs for corridors as incompatible with the NWR System and the purpose of individual NWRs. Corridors should not be designated in any NWRs unless and until they have been determined to be "compatible" pursuant to an official compatibility determination.

G. Wild and Scenic Rivers

We are especially troubled that the agency would even consider an alternative that designates corridors intersecting with any rivers or river segments included in the National Wild and Scenic River System (WSR System). It was in during a time of expansion and construction of hydroelectric and other energy development projects that the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§ 1271-1278) was passed in order to "preserve other selected rivers or sections thereof in their free-flowing condition to protect the water quality of such rivers and to fulfill other vital national conservation purposes." Since then, the WSR System has vastly grown to include some of the most spectacular rivers in the nation.

There are currently four designated WSRs that are directly crossed by corridors in the Draft PEIS. These include the Deschutes River, Clackamas River, Sycan River, and South Fork Trinity River. These are managed by various agencies for various outstandingly remarkable values and under various management classifications (i.e. wild, scenic, and recreational).

Section 10(a) of the Wild and Scenic Rivers Act provides general management direction as follows:

> Each component of the national Wild and Scenic Rivers System shall be administered in such manner as to **protect and enhance the values which caused it to be included in said system** without, insofar as is consistent therewith, **limiting other uses that do not substantially interfere with public uses and enjoyment of these values**.

Unfortunately, the Draft PEIS did not evaluate the anticipated impacts to each WSR's outstandingly remarkable values. Nor are impacts analyzed for designated WSRs adjacent to proposed corridors. Examples of such areas are the Sandy River and the White River, both within one mile of a proposed corridor. Instead, there is generic and inadequate statement that adverse impacts may occur. The Draft PEIS provides:

> Surface water bodies intercepted by the proposed corridor footprints could be subject to adverse impacts due to construction, operation, maintenance, and decommissioning and dismantling activities of any future projects. The degree of impact would be determined by existing conditions within the surface water body, the level classification and valley type for the stream, and the magnitude and type of impact resulting from the activity. Appropriate mitigation measures should be employed to ensure that impacts to any wild and scenic river segments are minimized to the extent possible.

Draft PEIS, p. 3-93 – 3-95.

This explanation is inadequate for the standard set by NEPA and the Wild and Scenic River Act. Allowing a truncated application process that may tier to this environmental review was not contemplated under either of these laws. The proposed action does neither protect nor enhance designated rivers.

In addition to designated WSRs, the land managing agencies also have certain duties in regard to WSRs that have been deemed eligible or suitable for designation. Interim protective management before designation is not discussed within the Draft PEIS although there are longstanding, specific guidelines for how it is to occur on behalf of the agencies.

The Forest Service Planning Handbook, 1909.12, provides the agency with the following guidelines for utility proposals within eligible and suitable WSRs.

> a. Wild, Scenic, Recreational. New transmission lines such as gas lines, water lines, and so forth are discouraged. Where no reasonable alternative exists, additional or new facilities should be restricted to existing rights-of-way. Where new rights-of-way are indicated, the project shall be evaluated as to its effect on the river's outstandingly remarkable values and classification. Any portion of a utility proposal that has the potential to affect the river's free-flowing character shall be evaluated as a water resources project. § 81.51(5)(a).

The BLM Manual 8351 sets out policy and program direction for identification, evaluation, and management of Wild and Scenic Rivers. The Manual's provisions for rights-of-ways provides the following language for wild, scenic and recreational river areas alike:

> New transmission lines, natural gas lines, water lines, etc., are discouraged unless specifically authorized by other plans, orders or laws. Where no reasonable alternative location exists, additional or new facilities shall be restricted to existing rights-of-way. Where new rights-of-way are unavoidable, locations and construction techniques shall be selected to minimize adverse effects on [wild, scenic, or recreational] river area related values and fully evaluated during the site selection processes. See, BLM Manual 8351.5(A)(2)(i); 8351.5(B)(2)(i); 8351.5(C)(2)(i).

The Draft PEIS does not take such interim protection of recognized suitable or eligible rivers into account. One such example is the Paria River in Southern Utah. The Paria River has been classified as suitable in the Grand Staircase-Escalante National Monument Management Plan. MMP, p. 100. The Paria encompasses the outstandingly remarkable values of scenic, recreational, wildlife, geological, historic, and riparian. From the intersection point with the corridor (segment 68-116), the Paria flows immediately through the Paria Canyon/Vermillion Cliffs Wilderness Area and then on to the Colorado River. The ways in which this river will be impacted has not been evaluated in the Draft PEIS.

Recommendation: The energy corridor process should not be used to expedite energy projects across or within proximity of designated, eligible, or suitable Wild and Scenic Rivers (WSRs). All proposed corridors in the Draft PEIS that cross WSRs should be re-routed or not designated.

H. National Historic and National Scenic Trails

The Draft PEIS crosses numerous National Historic and National Scenic Trails, including the Lewis and Clark Trail and the Continental Divide Trail. National Historic Trails closely follow a historic trail or route of travel of national significance in order to identify and protect their

history for public enjoyment. National Scenic Trails provide maximum outdoor recreation potential and to support the conservation and enjoyment of the various qualities – scenic, historical, natural, and cultural – of the areas they pass through. *See, e.g.*, BLM website on National Scenic and Historic Trails (http://www.blm.gov/nlcs/nsht/). The intended experiences of these trails are, therefore, not generally consistent with noticeable development and the PEIS should focus on facilitating the purposes for which the trails were created, as summarized in the National Trails System Act, "to promote the preservation of, public access to, travel within, and enjoyment and appreciation of the open-air, outdoor areas and historic resources of the Nation." 16 U.S.C. § 1241(a).

Recommendation: Where the agencies determine that corridors cannot avoid crossing National Historic or National Scenic Trails, the PEIS should minimize impacts on users' experience of these trails by minimizing width of the trails, maximizing requirements to limit use to buried lines, and imposing additional practices to reduce the visual appearance of transmission lines

I. Sensitive wildlife and plant species

1. Sage grouse

The Draft PEIS acknowledges broad concerns with the effects of development on sage grouse, including from causes associated with these energy corridors, such as "oil and gas wells and their associated infrastructure" and "pipelines." Draft PEIS, p. 3-202. Further, like the energy corridors, the majority of habitat is on lands managed by the BLM. Draft PEIS, p. 3-203. Accordingly, construction, operation and maintenance of energy transport facilities within designated energy corridors are likely to result in a range of damaging effects on sage-grouse. Draft PEIS, p. 3-202. The Draft PEIS cites proposed mitigation measures, including the BLM's National Sage Grouse Conservation Strategy and documents issued by the Western Association of Fish and Wildlife Agencies in 2004 and 2006. However, the Draft PEIS does not provide sufficient data on the potential impacts of the proposed energy corridors on sage grouse. The Wilderness Society has prepared a sample analysis of the proximity of the proposed energy corridors in Idaho to sage grouse leks and habitat (Attachment 12), which shows the potentially devastating impacts on sage grouse populations.

The Draft PEIS also fails to include the most recent research on sage-grouse and does not include definitive commitments to mitigate impacts. The findings and recommendations of noted experts, including those of Holloran (2005) regarding the impacts of development activities and those of Braun (2006), have yielded more recent guidelines that the agencies should employ instead. A multi-state effort to coordinate interpretation of recent science related to sage-grouse and oil and gas development, in which the state wildlife agencies from Colorado, Montana, North Dakota, Utah, and Wyoming participated, led to a summary of current research and findings, set out in a document entitled: "*Using the Best Available Science to Coordinate Conservation Actions that Benefit Greater Sage-Grouse Across States Affected by Oil and Gas Development in Management Zones I-II (Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming*" (included as Attachment 13 and incorporated herein by reference). In addition, "*A Blueprint for Sage-grouse Conservation and Recovery*" (authored by Clait Braun, included as Attachment 14 and incorporated herein by reference) details the habitat requirements

for successful and sustaining sage-grouse populations. This document provides that, "no surface occupancy should be allowed within 5.5 km of all active sage-grouse leks." The summary of best available science prepared by the state wildlife agencies and the proposed management for protection of sage-grouse habitat as outlined in the Blueprint should be taken into consideration for location of energy corridors and mandatory guidelines for development of projects within the corridors.

Recommendations: The agencies should provide an analysis of the proximity of proposed corridors to sage grouse leks and habitat and potential effects. Further, the agencies should utilize the science set out in "*Using the Best Available Science to Coordinate Conservation Actions that Benefit Greater Sage-Grouse Across States Affected by Oil and Gas Development*" and apply the guidelines for sage-grouse management set out in *A Blueprint for Sage-grouse Conservation and Recovery.* Corridor locations and mandatory management prescriptions should then be developed and incorporated into the PEIS based on this assessment.

2. Pecos sunflower

The Pecos sunflower is listed as threatened under the ESA and should therefore enjoy full protection under the ESA in the designation process. An important population of the Pecos sunflower exists within the corridor's path on the La Joya State Wildlife Refuge north of the Sevilleta National Wildlife Refuge (segment 81-272). In addition, there is a current critical habitat proposal for the sunflower, which includes the La Joya population. Critical habitat in this area would significantly upgrade the consultation obligations of the agencies in connection with designation of energy corridors with respect to this population.

Recommendations: The agencies must engage in full consultation with the U.S. Fish and Wildlife Service over impacts of the corridor to this listed plant and must also provide for adjustments in the event that the critical habitat area is expanded.

3. Black-footed ferrets

Black-footed ferrets have been listed as endangered under the ESA; they are considered "one of the most endangered mammals in the United States." U.S. Fish & Wildlife Service Black-footed Ferret Factsheet, available at: http://www.fws.gov/mountain-prairie/species/mammals/blackfootedferret/revfact.chy.pdf . Black-footed ferrets are currently the subject of a number of reintroduction plans, including in states affected by the proposed corridor designations. Id. However, a proposed corridor (segment 78-255) in Wyoming would impact a reintroduction area and contradict the Shirley Basin/Medicine Bow Black-footed Ferret Management Plan.

Recommendation: The agencies should identify the proximity of proposed corridor locations to black-footed ferret reintroduction areas and relocate corridors as needed to support the success of reintroduction efforts.

4. Colorado Natural Heritage Program Potential Conservation Areas

The Colorado Natural Heritage Program (CNHP) identifies Potential Conservation Areas (PCAs), which contain habitat for special status wildlife and sensitive plants. As described by the CNHP (http://www.cnhp.colostate.edu/gis.html):

- A PCA represents "CNHP's best estimate of the primary area required to support the long-term survival of targeted species or natural communities."
- PCAs are land units that have been identified as important to the continued existence of ecological processes that support one or a suite of rare or significant features.
- A PCA is identified because of the "ability of a conservation area to maintain healthy, viable targets over the long term (100+ years), including ability to respond to natural or human-caused environmental change."
- "PCAs do not necessarily preclude human activities, but their ability to function naturally may be greatly influenced by them."
- "PCAs at all scales may require ecological management or restoration to maintain their functionality."

PCAs serve an important role in identifying the need for special management of lands in Colorado to maintain biodiversity. The Center for Native Ecosystems has conducted an analysis of the proximity and intersection of the proposed corridor locations with PCAs, including an overview of the potentially affected areas. *See*, analysis included in Appendix B. The agencies should take this information into account in order to ensure that corridor designation does not cause irreparable harm to Colorado ecosystems.

Recommendations: The agencies must assess the intersection between the proposed corridors and PCAs and revise corridor locations and/or include mandatory management prescriptions for rights-of-way in the corridors in order to protect these areas.

VI. The Draft PEIS must be revised to address consistency with state plans and policies.

The agencies have failed to make a good faith effort to ensure that corridor designations are consistent with the plans and policies of the affected states. While Appendix D identifies potentially applicable regulatory requirements, it does not identify plans or policies, despite the agencies obligations to seek consistency. *See, e.g.*, FLPMA, 43 U.S.C. § 1712(c)(9); 43 C.F.R. § 1610.3-2 (Guidance and management plans shall "be consistent with officially approved and adopted resource related policies and programs of other Federal agencies, State and local governments and Indian tribes.").

A. State Comprehensive Wildlife Conservation Strategies

The federal government provides funding to states for management of wildlife through the Wildlife Conservation and Restoration Program and the State Wildlife Grants Program. In order to maximize use of these funds, Congress directed each states to develop statewide wildlife action plans, which are known as comprehensive wildlife conservation strategies (Conservation Strategies). The Conservation Strategies are designed to be "proactive" in order to "help conserve wildlife and vital natural areas before they become more rare and more costly to

protect." *See*, Association of Fish & Wildlife Agencies, State Wildlife Action Plans website, Factsheet: State Wildlife Action Plans (available at: http://www.wildlifeactionplans.org/pdfs/wildlife_action_plan_overview.pdf)

The Conservation Strategies essentially inventory distribution and abundance of wildlife, describe locations and assess condition of key habitats and community types, and, based on this data, outline the actions needed to conserve species on a long-term basis. Id. *See also*, for example, Comprehensive State Wildlife Strategy for New Mexico (September 2005). The scientific data included in these plans would provide vital data on areas to avoid and mitigation measures required for proposed corridor locations. Further, location of corridors and management of projects within those corridors should support the conservation approaches identified in the Conservation Strategies.

Recommendations: The PEIS should incorporate the baseline data from the Conservation Strategies for the affected states, assess corridor locations and management for consistency with the strategies, and revise the PEIS based on this assessment.

B. Renewable portfolio standards.

As discussed above, many states, including the majority of states within the areas of corridor designations, have enacted renewable portfolio standards that require electricity providers to obtain a minimum percentage of their power from renewable energy resources by a certain date. Further, the Department of Energy's summary of these standards (also provided above) include the state agencies responsible for administering these policies, providing the agencies with contact information for approaching consistency.

Recommendations: By failing to consider alternatives and/or include prescriptions to locate corridors to support renewable energy or to provide for prioritizing access to transmission for renewable energy sources, the agencies are undermining these state policies. The PEIS must be revised to address these omissions.

VII. The Draft PEIS must be revised to address consistency with federal plans and policies.

The agencies have also failed to ensure consistency with the plans and policies of other federal agencies. While Appendix D identifies potentially applicable regulatory requirements, it does not identify plans or policies, despite the agencies obligations to seek consistency. *See, e.g.*, FLPMA, 43 U.S.C. § 1712(c)(9); 43 C.F.R. § 1610.3-2 (Guidance and management plans shall "be consistent with officially approved and adopted resource related policies and programs of other Federal agencies, State and local governments and Indian tribes.").

A. National Landscape Conservation System

The National Landscape Conservation System (Conservation System) is administered and managed by the BLM. The 26 million acres in the system is a collection of national monuments, conservation areas, wilderness and wilderness study areas, scenic rivers, trails, and other

conservation designations. The mission of the system is to conserve, protect, and restore these nationally significant landscapes that have outstanding cultural, ecological, and scientific values for the benefit of current and future generations. This objective will be undermined if the energy corridors were designated today as they are now proposed in the Draft PEIS.

Recommendation: These comments have discussed several Conservation System units already, including the Grand Staircase-Escalante National Monument, the Snake River-Birds of Prey National Conservation Area, and the Lower Deschutes Wilde and Scenic River. There are numerous other units that may also be jeopardized by the proposed action and we urge the agencies to avoid such areas to be consistent with the purposes with which they were created.

B. National Park Service management

Lands managed by the National Park Service (NPS) are the most recognizable and popular conservation areas in the West. The very purpose of such lands is "to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." NPS Organic Act of 1916 (16 U.S.C. § 1). These values are the likely reasons that these areas were largely avoided by the corridor designation process due to their sensitive natural, cultural, and visual resources.

Recommendation: We encourage the agencies to take additional steps to ensure that all of these special places and their resources are adequately protected from adverse impacts in order to be consistent with the mission of the NPS.

C. Renewable energy initiatives.

Federal agencies have enacted policies and made commitments to encourage the use of public lands to support development and transmission of renewable energy. *See, e.g.*, "BLM Launches Effort to Facilitate Renewable Energy Development on Public Lands, *available at* http://www.blm.gov/wo/st/en/info/newsroom/2007/june/NR_0706_1.html ("'The Forest Service looks forward to working in concert with BLM on these geothermal projects,' said Forest Service Chief Gail Kimbell. 'Enhancing our nation's energy needs through safe and clean energy is an important focus of the Department of Agriculture and a proper use of our public lands.'"). In June 2005, BLM completed its programmatic EIS for a Wind Energy Development Program in the western U.S., including public lands within Arizona, Nevada and California. *See* http://windeis.anl.gov/. Indeed, "[i]t is the BLM general policy, consistent with the National Energy Policy of 2001 and the Energy Policy Act of 2005, to encourage development of wind energy in acceptable areas," Instruction Memorandum No. 2006-216 (http://www.blm.gov/nhp/efoia/wo/fy06/im2006-216.htm). Both the BLM geothermal and wind-focused studies built upon a DOI/DOE 2003 study, "Assessing the Potential for Renewable Energy on Public Lands," that included a key finding that of 20 BLM planning units that had high potential for three or more renewable energy resources, 12 occurred in Arizona, California and Nevada. *See* http://www.blm.gov/nhp/spotlight/energy_report/press_release.htm.

Recommendations: By failing to consider alternatives and/or include prescriptions to locate corridors to support renewable energy or to provide for prioritizing access to transmission for renewable energy sources, the agencies are undermining these federal policies. The PEIS must be revised to address these omissions.

D. FLPMA Section 503

In addition to the federal consistency requirements already mentioned, Title V, § 503 of FLPMA contains a separate provision containing criteria for designation of right-of-way corridors for the purpose of minimizing "adverse environmental impacts and the proliferation of separate rights-of-ways." FLPMA, 43 U.S.C. § 1763. FLPMA mandates that "in designating right-of-way corridors and in determining whether to require that rights-of-way be confined to them, the Secretary concerned shall take into consideration national and State land use policies, environmental quality, economic efficiency, national security, safety, and good engineering and technological practices." Id.

Recommendation: FLPMA's directives on siting corridors is of special relevant to this process because the vast majority of affected land is managed by the BLM. The PEIS should specifically address and incorporate FLPMA's requirements as part of considering location of corridors and appropriate uses of those corridors.

VIII. CONCLUSION.

Thank you again for this opportunity to provide input regarding the management of our public lands and the spectacular resources they hold. We appreciate the improvements that have been made in the proposed corridor locations since this process began, including avoiding many places with high conservation values, limiting the width and uses of certain corridors, and setting out procedures that can reduce impacts of projects in the corridors. However, because these designations are likely to affect our public lands, and surrounding areas, for decades to come, it is critical that the agencies conduct a thorough consideration of the need for designation of corridors, the likely impacts of their use, access for renewable energy sources, and alternatives to this single proposal, then provide the public with an opportunity to comment.

We hope to see the agencies fulfill their responsibilities as stewards of our public lands and look forward to continuing our positive working relationship. Please feel free to contact us if you have any questions or need additional information. We would also welcome the opportunity to meet with you to present and discuss these comments in person.

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Attachments and References

Attachments

Appendix A: The Wilderness Society's analysis of conservation areas, including lands identified as suitable for wilderness protection, on public lands affected by the proposed energy corridors, state-by-state maps, and GIS data for lands inventoried by citizens for their wilderness characteristics.

Appendix B: Center for Native Ecosystems' analysis of areas with conservation values and species habitat affected by the proposed energy corridors in Colorado, Utah and Wyoming, including a CD of Proposed Conservation Areas in Colorado.

Appendix C: Western Resource Advocates' maps showing existing and proposed coal, wind, geothermal, and solar power projects in relation to the proposed energy corridors and likely routes.

Numbered Attachments:

1. Map showing Mountain States Intertie Proposal and Northern Lights Northern Lights Inland Express MT and WY Transmission Proposals in relation to the proposed energy corridors, prepared by Western Resource Advocates.

2. Maps of TransWest Express, Rockies Express and Ruby pipelines.

3. Environmental Protection Agency comments on Draft EIS for the Piceance Basin Expansion Pipeline, June 23, 2005.

4. Associated Press/FoxNews.com, November 17, 2007, *California Fire Officials Fault Power Line Sparks for Largest San Diego Wildfire*.

5. Denver Post, March 7, 2006, *Inspections lagging amid oil, gas boom***.**

6. Map showing proposed energy corridor affecting lands with wilderness characteristics and Dinosaur National Monument in Northeast Utah.

7. Slide of potential corridors from TransWest Express Project Update.

8. The Wilderness Society. 2006. *Socio-Economic Framework for Public Land Management Planning: Indicators for the West's Economy* Washington DC: The Wilderness Society.

9. Lands identified as suitable for wilderness designation affected by the proposed energy corridors.

10. Forest Service Roadless Areas affected by the proposed energy corridors.

11. Map showing intersection of proposed energy corridor and proposed Organ Foothills National Conservation Area and lands with wilderness characteristics in New Mexico.

12. Map showing sage grouse habitat and leks in Idaho in relation to the proposed energy corridors.

13. Wyoming Game and Fish Dept. 2004. *Multi-State Sage-Grouse Coordination and Research-based Recommendations.*

14. Braun, Clait E. Ph.D. 2006. *A Blueprint for Sage-grouse Conservation and Recovery.*

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