

Thank you for your comment, Christine Canaly.

The comment tracking number that has been assigned to your comment is SolarM60176.

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Attachment: PEIS.SLVEC.Studyarea.draft.Scoping comments8.09.doc

Comment Submitted:

Please see attached comments below. There should be three attachments so we will send 3 forms.

Delivered via electronic mail and hard copy U.S. post

September 10, 2009

Linda Resseguie
Project Manager
Solar Energy PEIS Scoping
Argonne National Laboratory
9700 S. Cass Ave. – EVS/900
Argonne IL 60439

Re: Comments on the BLM Solar Energy Programmatic Environmental Impact Statement, (PEIS) specifically, 4 study areas selected for Colorado in the San Luis Valley

Dear Ms. Resseguie;

Please accept and genuinely consider these scoping comments on behalf of the San Luis Valley Ecosystem Council and the Citizens for San Luis Valley Water Protection Coalition. We serve the six county area of the San Luis Valley basin in South Central Colorado. We provide public policy recommendations for the entire Rio Grande Headwaters in CO, an area encompassing over 8,100 square miles.

San Luis Valley Ecosystem Council (SLVEC)

The mission of SLVEC is to protect and restore—through research, education, and advocacy—the biological diversity, ecosystems, and natural resources of the Upper Rio Grande bioregion, balancing ecological values and human needs. SLVEC works as the only local public lands advocacy organization that is concerned about protecting and restoring intact ecosystems and wildlife corridors, from the mountain peaks to the rivers along the valley floor, and into New Mexico.

Since 1995 SLVEC has been serving the San Luis Valley, which is surrounded by 3.1 million acres of public lands that includes the Great Sand Dunes National Park, the Rio Grande National Forest, three National Wildlife Refuges, numerous State Wildlife Areas, 230,000 acres of wetlands- the most extensive system in the Southern Rocky Mountains, and some of Colorado's most remote wilderness. SLVEC originally formed to offer input for the Revised Management Plan of the Rio Grande National Forest (RGNF). Today it stands as a voice for citizens concerned about threats from increased motorized recreation, destructive timber sales, unbridled development, oil and gas development, and most recently, utility scale solar power facilities and transmission lines. SLVEC has established a reputation for bringing a strong environmental voice that finds workable solutions to the rural, conservative, public arena. SLVEC has approx. 500 members and a mailing list of 4,000 supporters.

Citizens for San Luis Valley Water Protection Coalition (WPC)

is a grassroots organization representing a broad spectrum of interests. It's members are united by the belief that the vital ecological, wildlife, cultural, agricultural and water resources of the upper Rio Grande and Closed Basins of the San Luis Valley should not be jeopardized by destructive industrialization of any kind. By working with communities, local government and organizations, WPC is actively engaged in promoting an emerging culture of sustainability in the San Luis Valley that is responsive to climate change while protecting the vital natural resources that maintain the healthy functioning of ecosystem processes and services.

Thank you for giving us the opportunity to respond to, and offer input into the BLM and Department of Energy (DOE) Programmatic Environmental Impact Statement (PEIS) process for agency wide solar energy programs and policy.

We encourage both a national and a regional conversation on energy use and, especially, on fossil fuels and their impacts to climate change. It is imperative that our country makes the transition to the use of renewable energy sources. The warming effects are being felt in the San Luis Valley, as in other parts of the world, and are impacting wildlife, water supplies, and forest health.

We believe that renewable energy can offer a clean, affordable, sustainable, and environmentally friendly alternative. We support a measured approach, however, to the switch to alternatives.

We recognize the unique and valuable aspects of the San Luis Valley. We understand that the Valley has enormous potential in the area of solar production, and has a long history of supporting solar energy on a smaller scale. We encourage the development of renewable energy strategies that will promote the long-term health and well being of the community, and protect the environment, critical habitat, wildlife, sensitive corridors, and water, as well as the history and culture of this agro-pastoral community.

We urge the DOE and BLM to take a long term view when considering the scale, siting, water demands and the building of new transmission lines that will be required to accommodate Utility Scale Solar development in a culturally and ecologically sensitive area like the San Luis Valley (SLV). It is imperative that solar development remain **responsible and that renewable energy development does not compromise this area's unique values.**

We recommend a national model of appropriate energy development based on what is currently being implemented in European countries. They appear to exercise a three fold strategy; emphasis on flexibility in size and scale fitted to location and need, constructing open ended systems that can rapidly integrate new technologies, and suitably subsidizing research and development that encompasses a range of alternative energy sources.

Thank you for considering these scoping comments and for your commitment to prioritize and bring the possibility of responsible renewable energy development to our nation's infrastructure. We look forward to a continual interchange of ideas and information throughout this process.

Sincerely,

Christine Canaly, Director
San Luis Valley Ecosystem Council

Matthew Crowley, Co-Chair
SLV Water Protection Coalition

PEIS Comment Response Outline

- I. BLM Multiple Use Criteria-Amend Land Use Plan**
- II. Siting of Energy Corridors**
 - A. Areas to Exclude-National Historic and National Scenic Areas**
 - B. Threatened or Endangered Species, Wildlife Linkage Habitat**
- III. WATER**
 - A. History**
 - B. Water Quality**
 - C. Water Usage**
- IV. Site Specific Criteria**
 - A. Narrative of proposed areas**
 - B. Site specific species data Sheet**
- VI. Transmission Lines**
 - A. Regulatory Process- BLM Participation**
- VII. References**

There are 4 study areas within the San Luis Valley, representing all of Colorado totaling 22,000 acres.

1. DeTilla Gulch- North of Town of Saguache, between Hwy 285 and Hwy 17
2. Four mile East-NW corner of Hwy 150 and 160 intersection
3. Los Mogotes East- directly west of Town of Romeo & Hwy 285
4. Antonito Southeast- East of San Antonio Mountain

I. BLM Multiple Use Criteria-Amend Land Use Plan (Highlighted by BLM Question 35)

It is understood that “solar applications received by the BLM are for large- scale, commercial facilities. These facilities propose to have a large foot print and are likely to be an **exclusive use** of the land. They will also require occupancy of the surface for a long period of time, as much as thirty years. These characteristics generally require the BLM to amend the land use plan and will require the BLM to conduct a detailed environmental review under NEPA. Adequate time will also be needed to conduct any environmental studies needed and to coordinate with a wide variety of concerned organizations. There is also a need to consult with tribal and state governments and to conduct cultural and historic clearances.”

Recommendations:

The BLM will have to amend it’s land use plan, which is governed by “Multiple Use” policies to make an “exclusive use” determination of these proposed solar study areas. We are concerned about the precedence this will set on other BLM lands located in the general vicinity and strongly encourage the agency to consider a no action alternative, and leave the option open for siting on degraded private lands instead. Further, we encourage BLM to conduct a detailed environmental review that will be administered through the local field service offices. We assume this environmental review will be an Environmental Impact Statement (EIS). Local field offices should have the final say regarding the siting of these proposed utility scale facilities and the determination decision of what the land base is purported to support.

II. Siting of Energy Corridors

- A. Areas for Exclusion Consideration: National Historic and National Scenic Areas**

Special Management Areas-Sangre de Cristo National Heritage Area

The Notice of Availability identified a number of different types of special management areas where utility-scale solar development is not appropriate. Areas in the National Landscape Conservation System including National Heritage Areas are governed by other laws requiring protection as a priority to protect objects of historic or scientific interest, and must be managed to protect those values as a priority over other uses. NHA Legislation was passed in March of 2009 containing the counties of Conejos, Costilla and Alamosa counties. These areas also include the scenic by-way. Specifically, Study Area Four Mile East, which is on the Scenic by-way route and gateway to the Great Sand Dunes National Park.

Three of the four study areas are located within the Sangre de Cristo National Heritage Area.

- 1. Four mile East-NW corner of Hwy 150 and 160 intersection**
- 2. Los Mogotes East- directly west of Town of Romeo & Hwy 285**
- 3. Antonito Southeast- East of San Antonio Mountain**

The mission of the *Sangre de Cristo National Heritage Area (NHA)* is to promote, preserve, protect and interpret the profound historical, religious, environmental, geographic, geologic, cultural and linguistic resources. These efforts will contribute to the overall national story, engender a spirit of pride and self-reliance, and create a legacy in the Colorado counties of Alamosa, Conejos, and Costilla.

The geologic resources found in the NHA are directly associated with human habitation. The layered water systems first brought in game that attracted many Native tribes to the area, going back 12,000 years. Hispanic settlers from the south were enticed by the water to raise crops and sheep. This area boasts the oldest town in Colorado (San Luis), the oldest parish in Colorado (Our Lady of Guadalupe), and the oldest water rights in Colorado. Anglo ranchers and farmers raised cattle and wheat, and present-day crops of alfalfa, potatoes, and lettuce. **The geographic isolation of the area has essentially preserved cultural identity of those groups.**

Historically, the SLV area was a crossroads of culture. Mt. Blanca, southeast of the Great Sand Dunes, marks the eastern boundary of the Navajo. Mt. Blanca is considered one of four mountain peaks in the four corner area to be sacred among various tribes who inhabited and traded in this area.

B. Threatened, endangered and sensitive species habitat, as well as critical cores and linkages for wildlife habitat

Excerpts from Sangre de Cristo National Heritage Area feasibility Study

Wetlands and waterfowl

Within the Sangre de Cristo NHA, a mixture of wetland communities including, creek bottom, permanent and seasonal ponds, upland shrublands and playa wetlands provide breeding and migration habitat for raptors, songbirds, waterbirds and waterfowl. Wetlands are often found in areas where groundwater, from the aquifer, move towards low-lying areas and surfaces on the landscape.

Globally significant Flora and Fauna

A number of plant, plant community and animal species found in the Sangre de Cristo NHA have been recognized by the Colorado Natural Heritage Program (CNHP) as globally significant. These species have received a G1 to G3 rating, meaning they are vulnerable to extinction due to a very small population size, a very restricted range, or other biological factors.

Animals

Southwestern willow flycatcher-(*empidonax trailii extremus*), a federally endangered songbird inhabits riparian vegetation within the San Luis Valley. This songbird migrates and nests in dense willow and cottonwood areas throughout the SLV, including areas that are within the Sangre de Cristo NHA.

The following species are also found within the Sangre de Cristo NHA and have been

identified as “sensitive” by federal agencies. The sensitive designation indicates that the species’ population viability is a concern.

- Greater sandhill crane (Forest Service) [see map of flyway group](#)
- White-faced Ibis (FS/BLM)

Plants

Slender spiderflower (*Cleome multicaulis*)- a globally imperiled plant found in the transition areas between wet meadows and the adjacent silt grass/greasewood uplands throughout the NHA. (CNHP 1998). Although once widespread in the southern Rocky Mountains, this species now occurs almost exclusively in the San Luis Valley.

The San Luis Valley contains the most numerous, largest, and healthiest populations of the species in the world.”

Recommendation: We encourage withdrawal consideration of the 3 proposed study areas located within the Sangre de Cristo National Heritage Area.

- 1. Four mile East-NW corner of Hwy 150 and 160 intersection**
- 2. Los Mogotes East- directly west of Town of Romeo & Hwy 285**
- 3. Antonito Southeast- East of San Antonio Mountain**

It is imperative that the public lands within this NHA remain intact and continue as a cultural resource and a living example of the community history of the area. The NHA area needs to be maintained for traditional uses such as hunting, grazing and wood gathering purposes without having to create new access routes or changing the use so significantly that it no longer feasible for the land to be used for human substantive purposes. The reason for the NHA was to preserve a “sense of place”. It is important to remember that the study areas, if developed for industrial scale solar purposes, will alter surrounding areas as well.

III. WATER

A. History of Efforts to Protect the Waters of the San Luis Valley

The Great Sand Dunes National Park and Preserve Act of 2000 was a culmination of public support that was engaged for more than a decade. In December of 1987, a corporation called American Water Development Incorporated (AWDI), with Canadian shareholders, applied to water court for the right to pump 200,000-acre ft. of water per year from the confined aquifer underlying the Baca Ranch. Many efforts were made on the federal, state and local level to protect water interests in the San Luis Valley.

Examples include U.S. Senate Bill 1812 (102 Congress, 1st Session) introduced by Tim Wirth on October 4, 1991. The intention of this bill was to:

“provide for the protection of the water resources of the San Luis Valley from the potential impact of proposed water development projects for export of water out of the San Luis Valley upon Federal interests in Federal reclamation projects, interstate compacts for the allocation of water, national monuments, and national wildlife refuges, wildlife habitat area of withdrawals, and for other purposes.”

Saguache County passed a “Significant Recharge Area” ordinance through its 1041 regulations in 1994. It protected the waters flowing into the Baca Ranch based on a permeability study analyzing how much surface water will absorb into the soil within a 24-hour period. Anything above 6 ft./per day was considered a high recharge zone. A permeability rate of 17 ft./day was measured in some areas of the Baca Ranch (Allen Davey Study prepared for the 1991 AWDI legal case).

B. Water Quality Concerns

The significant recharge area highlights specific concerns,

especially regarding the introduction of heavy oils for heat transfer; ethylene glycol to stop water from freezing, and other types of potential spillage associated with the development of industrial scale solar.

In 1998, Colorado House Bill 98-1011 was passed requesting that, due to insufficient knowledge, a confined aquifer study be conducted in the San Luis Valley:

*“Concerning the replacement of depletions from new withdrawals of groundwater division 3 that will affect the rate **or direction of movement of groundwater in the confined aquifer**, and, in connection therewith, authorizing the State Engineer to promulgate rules that optimize the use of the groundwater and provide alternative methods to prevent injury”.*

In section (3) (a), the Water and Irrigation Act states that:

*“The hydrologic system in water division 3 and, in particular, the hydrology and geology of the shallow aquifer and confined aquifer systems and their relationship to surface streams in water division 3 are **unique and are among the most complex in the state**....there is currently **insufficient comprehensive data and knowledge of the relationship between the surface streams and the confined aquifer system** to permit a full understanding of the effect of groundwater withdrawals, affecting the confined aquifer upon the natural stream and aquifer systems in water division 3....(b)1..[rules promulgated by the State Engineer]shall be based upon specific study of the confined aquifer system and shall be promulgated prior to July 1, 2001...the State Engineer and the Colorado Water Conservation Board shall proceed with diligence to complete needed studies”.*

This act is important for two reasons:

- 1) It underscores the complex and poorly understood nature of the regions hydrogeology, even of the relatively shallow unconfined and confined aquifers and;
- 2) It addresses the need for further studies in order to better understand and inform water-related policy.

Water-The valley’s most prized Resources

Most recently, regarding the passage of the Sangre de Cristo National Heritage Area (NHA), the feasibility study states that “no other NHA has explored the role of water in shaping an alpine desert valley’s natural wonders and biological diversity.”

C. Water Usage-The Wilderness Society (TWS) comments as it relates to the SLV

Water continues to be a major concern in arid regions like the San Luis Valley where the proposed study areas are located and we urge the BLM to take a proactive approach to this issue in the PEIS.

Electric generation from solar (and other) thermal power plants is most efficient when a source of cooling – typically water – is available to remove waste heat from the thermal cycle.¹

Unfortunately, study areas that are the focus in places like the San Luis Valley, at the headwaters of the Rio Grande, are already dealing with intense competition between over-appropriated water supplies, Rio Grande Compact obligations to downstream users and agriculture.² Permitting

¹ See, e.g., Renewable Energy Transmission Initiative Phase 1B Final Report (January 2009), Chapter III – Environmental Assessment of Competitive Renewable Energy Zones, p. 3-3 (hereinafter “RETI Phase 1B Report”).

² See, e.g., Colorado River Project, River Report – Summer 2009, p. 8. See also *id.*, pp. 4-5, 6.

water-cooled production of energy from solar resources would add to that competition.³ The BLM should explore ways to avoid these results in the PEIS.

One option is to adopt a policy which would discourage the use of wet-cooling for power plants. Both California and Nevada have adopted such policies.⁴ California's policy states that the Energy Commission "will approve the use of fresh water for cooling purposes by power plants only where alternative water supply sources and alternative cooling technologies are shown to be 'environmentally undesirable' or 'economically unsound'."⁵ There is broad acceptance of this policy in California, including among the solar industry,⁶ where alternatives considered to date have included use of brackish water as well as dry-cooling.⁷ Although Arizona does not have an explicit policy, it has moved to strictly regulate water use in solar projects.⁸

Alternatively, there is the option of adopting a performance standard that specifies the amount of water that is acceptable per MW generated. Rather than tie solar development to one specific technology – i.e., dry-cooling, such an option would allow for any technology that would meet the standard and could in fact result in technology improvements.⁹

We also have concerns about converting an Agricultural water right into Municipal and Industrial (M &I) use, which will be the case with Industrial scale solar development. Once that change in water right occurs, it will remain in use for industrial scale purposes because it will no longer be economically feasible for it to return to agriculture. In viewing this scenario long term, we realize that in 30 years, consideration must be given to the future use of these converted M & I water rights, especially where technological changes will occur that render these industrial scale solar facilities obsolete.

Finally, there is the option of adopting a technology-forcing standard that would continue to elevate the bar regarding water use and, for that matter, encourage the use of new, innovative technologies. For an example, the Department of Energy's project selection criteria for renewable energy projects "seeks to give priority consideration to "new or significantly improve technologies" that are not extensively used in the marketplace, *See*, "Federal Loan Guarantees for Projects That Employ Innovative Energy Efficiency, Renewable Energy, and Advanced Transmission and Distribution Technologies," Loan Guarantee Solicitation Announcement, July 29, 2009, pp. 35-36.

³ The amount of water used for wet cooling a power tower plant is about 500 gallons of water per MWh of electricity, similar to a typical coal or nuclear plant. U.S. Department of Energy, Report to Congress, "Concentrating Solar Power Commercial Application Study: Reducing Water Consumption of Concentrating Solar Power Electricity Generation, p. 4 (hereinafter "DOE Report on Water Use") (accessible at http://www1.eere.energy.gov/solar/pdfs/csp_water_study.pdf). A water-cooled parabolic trough plant consumes about 800 gal/MWh, or about four times what a combined-cycle natural gas plant consumes. *Id.* Because wet-cooled plants are more efficient than dry-cooled, see text at note 6 *supra*, more land would be required to produce a given amount of energy.

⁴ See, e.g., California Energy Commission 2003 Integrated Energy Policy Report.

⁵ California Energy Commission, Preliminary Staff Assessment, Beacon Solar Energy Project, Application For Certification (08-AFC-2), Kern County (Posted April 1, 2009) (hereinafter "Beacon Staff Draft"), p. 4.9-5.

⁶ See, e.g., RETI Phase 1B Report, p. 3-3, describing agreement of all RETI stakeholders, including solar generators, to the assumption, for RETI purposes, that dry-cooling would be used except when reclaimed water from communities of a certain size is available.

⁷ In the case of the Beacon project, CEC analysis revealed that dry-cooling could "reduce ... consumption of potable water by up to 97 percent." Beacon Staff Draft, p. 1-6. In addition, the analysis revealed that not only were both of these options economically feasible, but also that dry cooling might "actually result in lower project operating costs." *Id.*, p. 4.9-48.

⁸ *See*

<http://www.azwater.gov/AzDWR/WaterManagement/documents/SolarPowerPlantsSummaryFINALPublic.pdf>

⁹ For additional options, *see* DOE Report on Water Use, *supra*.

Recommendations: The PEIS needs to produce guidelines on water use, including those described above, so that the agency and the concerned public can see the tradeoffs involved in saving fresh water. Some local citizens look at this utility scale solar movement as another opportunity for a large scale water grab, so it is imperative that the BLM be cautious about protecting these ground water systems, that they remain intact for future generations.

In conclusion, we want to ensure that all renewable energy development in the San Luis Valley:

- Does not put at risk our critically important aquifer, wetlands and other water sources that support migratory waterfowl, nor our diverse ecosystems, nor our historical and vital agricultural base; in particular the extensive but fragile aquifers that underlie these values, that we, and the citizens of the SLV have worked long and hard to protect.

V. Site Specific Criteria

The Nature Conservancy (TNC) identified key potential species conflicts that we would like to emphasize.

Since the entire Valley floor appears to be high potential for solar development, key potential conflicts were also identified throughout the Valley and beyond. Below are the most significant from an ecological/conservation perspective based on a preliminary analysis, and for which data was available data. See TNC map, species data and comments for rationale:

- Bald eagle roost sites and winter concentration areas
- Bighorn sheep production areas and severe winter range
- Gunnison sage-grouse production Areas, severe winter Range, winter Range, and overall range
- Globally imperiled plants and natural communities as ranked by CNHP
- Riparian areas
- Potential Conservation Areas as identified by the CNHP

Sandhill crane habitat

Los Mogotes Area of Critical and Environmental Concern (ACEC)

About 5 miles from Los Mogotes East solar study area- directly west of Town of Romeo & Hwy 285

This ACEC is located eight miles southwest of La Jara, the Conejos River forms its southern boundary. This area was designed as an ACEC due to the critical winter range for big game species. Mountain plover, a BLM sensitive species, nests in this area.

The area is characterized by wind sweep, gorgeous views of the Sangres, and a traditional hunting area for Antonito and Capulin residents. There are active Gunnison prairie dog colonies, winter wildlife range, mating grounds, and birthing grounds. It also contains special status plant values. We support preservation of the winter wildlife range, mating grounds, and birthing grounds and protection of the special status plant communities.

Identification of Resources

Active Gunnison prairie dog colonies, grouse, pronghorn antelope, elk, deer, coyote, wildlife winter range/birthing grounds.

Cumbres and Toltec Railroad Corridor ACEC Travel Management Area

This ACEC is located near the Antonito Southeast solar study area- East of San Antonio Mountain

“The Cumbres and Toltec Railroad ACEC was designated to protect the view shed for this historic railroad which runs from Antonito, CO to Chama, NM. The railroad is owned jointly by the states of Colorado and New Mexico. It was determined that the VRM classification (Class II) was of critical importance for the railroads financial stability. This is to protect the historic

cultural resources in context with the railroad and the VRM classification. This open terrain allows excellent scenery viewing for the train passengers.”

The final SLV BLM Travel Management Plan (TMP) EA objectives include:

- Strict conformance to VRM class objectives.
- Protect historical and visual values.
- Protect National Register eligible cultural resources for Cumbres and Toltec Scenic Railroad

Ortiz/Stateline

The railroad embraces this area because of the hills with flat open range, pinon, juniper, ponderosa pine forests. Traditional uses follow the wildlife corridor, hunting and fuel gathering used by people of Conejos County for more than 150 years.

Resources include: Gunnison Prairie Dog, pinon-juniper shrublands, ponderosa pine (higher elevation-near Forest BLM boundary). We continue to recommend seasonal closures for wildlife protection. The area is dissected by the Cumbres and Toltec Railroad, receives multiple exposure from the public. Herd migration patterns continue along Los Pinos Creek between Colorado and New Mexico.

De Tilla Gulch Solar Study Area- Species Identified within CNHP Potential Conservation Area (PCA) Review attached Data sheet for Species within specific area

Spermophilus tridecemlineatus blanca

Thirteen-lined ground squirrel

Subspecies

Spermophilus tridecemlineatus blanca

Libellula nodisticta Hoary Skimmer

Perognathus flavus sanluisi Silky Pocket Mouse Subsp

Thirteen-lined Ground Squirrel

Subspecies

Spermophilus tridecemlineatus blanca

Site Specific Recommendations: When reviewing the Species chart and other relevant data, it is clear there are potential conflicts in all 4 solar study areas. We recommend consideration of withdrawal of the 4 solar study areas based on the species, historical, traditional and scenic use data. Also, we do not know the consequences regarding impacts to flyway groups which are abundant in the SLV and take advantage of the concentrated wetlands. We do not know the impacts that heat/light concentrations at 40 plus ft (height of utility scale solar facilities) have on these water bird species. We have not been able to locate any research that has been done to analyze impacts to flyway groups as it relates to utility scale solar.

VI. Transmission lines

In addition to industrial scale solar energy plants themselves, habitat fragmentation can be caused by transmission corridors, which will need to be built to facilitate the export of solar power outside the SLV into a larger energy grid. Wildlife habitat fragmentation caused by transmission lines (including branch powerlines), pipelines (including feeder pipelines) and roads generally fall into three broad categories:

1. Construction impacts (access, right-of-way clearing, construction of towers, stringing of cables);
2. Line maintenance impacts (inspection and repair); and
3. Impacts related to the physical presence and operation of the transmission line.

As such, wildlife habitat must be examined on an individual project and site-specific basis. The only way to accomplish this requirement is to ensure that each individual solar

project is spatially evaluated for direct, indirect and cumulative impacts. Specific activities that negatively impact wildlife and cause destruction of core habitat or habitat fragmentation include the construction of facilities, blading and scraping of the ground, disturbance of soil by the use of heavy machinery, noisy machinery during construction and maintenance, noise from helicopters, removal of vegetation, blasting, filling depressions (a.k.a. re-contouring the landscape), disposal of waste and chemicals on site, use of herbicides, and the use of borrow pits.

Recommendation -Coordination of Transmission Corridor

BLM must work closely with the designation of new corridors and address it in the PEIS, then BLM must complete all of the necessary NEPA analysis for those corridors, including a thorough discussion as to why the ongoing corridor designation processes will not be sufficient. In making a determination about the need for additional corridors, the BLM should commit to first coordinating with the ongoing designation processes and prioritize using those corridors, instead of designating still more corridors without coordination. To our knowledge, BLM has played a minimal role in the public process regarding the proposed San Luis Valley/Calumet Comanche Transmission Project (from Walsenburg along Hwy 160 along La Veta Pass to the Alamosa sub-station). This will be an additional 95 miles of transmission line corridor. BLM needs to play a critical role in the designation process and become a cooperating agency with Tri-State and Excel through the Dept. of Agriculture.

Additional Recommendations

- **Benefits to the Local Economy from Undeveloped Public Lands**

The Solar PEIS should fully address the impacts that utility-scale solar energy development on undeveloped public lands will have on the local economies throughout the study area. The San Luis Valley in particular actively maintains the strong economic and cultural values based on agriculture and ranching. The Valley produces 92% of the potatoes grown in Colorado, which ranks fourth among potato producing states in the U.S. Local economic benefits of developing BLM lands for Solar siting purposes need to be reflected in the PEIS.

Thanks for giving us the opportunity to submit these comments. We look forward to further discussion and input regarding these proposed solar study areas. We appreciate your time and consideration in this matter.

VII. References

1. **Sangre de Cristo National Heritage Area** Feasibility Study, Mimi Mathers, Anne Marie Velasquez, July 8.23.05, Shapins and Associates
2. SLVEC/CSLV/WPC **Solar PEIS Scoping Comments** -July 2008, Ceal Smith, Research and Coordination
3. SLVEC **BLM Travel Management Scoping Comments**-July 2004, Christine Canaly
4. The Wilderness Society **Solar PEIS Scoping Comments**, July 2008
5. Center for Native Ecosystems, Eco Resolutions Forest Service **Ecologically based Travel Management Plan & GIS mapping Project** Julia Kinsch and Connor Bailey- March 2009
6. TNC BLM Colorado Solar Study Area Scoping Comments-September 2009
7. CNE Species Data SLVEC google Earth map review- September 2009