

Memorandum

To: Lori Sonken, Jeff Petrick, Jim Zoia, Dave Jansen, Meghan Conklin, et al.  
Senior staff, House Natural Resources Committee

From: John M. Fitzgerald, J.D.,  
Policy Director, Society for Conservation Biology

Re: Suggestions, H.R. 2337

Date: May 31, 2007

As introduced on May 16<sup>th</sup>, H.R. 2337's four titles and 116 pages address many important issues. These comments are intended to provide technical assistance to ensure that each section functions to fulfill the purposes stated in the bill, and as effectively as possible.

We also attach our response to the letter from the Chairmen of the House Energy and Commerce Committee and its relevant subcommittee, posing a series of questions on climate change and energy policy.

Main points:

1. Establish a process based on scientific and legal standards that conserves biological diversity in all forms of energy development and operation and that credits cleaner renewables with any net reductions in environmental impacts that they may represent. Recently reinstated Forest Service biodiversity regulations can serve as a starting place if augmented to incorporate more recent research on large scale connectivity and the impact of climate change itself.
2. Augment rather than override existing assessments, cost recovery, and remedies.

In general, where the bill changes the way the energy related actions of the Federal Government are considered under the National Environmental Policy Act, as in Title I, if the bill reduces the number of categorical exclusions or exemptions and ensures that the NEPA process is triggered early, it will ensure a more comprehensive consideration of alternatives. At the same time, supplemental EIS's should be required to address the details of and alternatives to particular projects that differ in their local impacts as well. These steps will allow NEPA to help us to understand and choose the best of both programmatic and site specific alternatives.

Where the bill provides penalties, as in Title II Subtitles A and B's civil fines for non-payment of royalties, and for false statements or claims, these should be clearly and explicitly in addition to existing remedies, such as the False Claims Act, and criminal

provisions such as 18 USC Sections 1001, 371, and 1505. That will ensure that you prevent the newer and more specific provisions you propose from being read to preempt the older and more general provisions. The provisions you specify, for example, do not include restitution for the value of stolen oil and gas, rewards in the form of shared damages currently available to whistleblowers under the False Claims Act, or criminal penalties under the false statement and conspiracy to defraud sections of the criminal code, all of which are critical to solving the problems that you address.

**Cost Recovery – Correct the current language that excludes the costs of habitat and wildlife restoration.**

Section 101 would limit the fees to market based fees, but does not define the term “market-based”, and limits fees for all energy development to the Secretary’s direct costs. As written it could prevent the Secretary from recovering through fees, the projected costs of controlling, correcting or mitigating the harm done to public lands and wildlife through energy development. Recovery such costs through other means, such as suing for damages due to violations of permit conditions or regulations, is much less reliable and less efficient. If you intend to allow the Secretary to collect mitigation fees in other ways, a provision should be added specifying that. You could delete (D) on page 4, and amend paragraph (1) on page 4 accordingly to reflect the broader authority to recover restoration costs anticipated through fees up front. To better reflect true costs you could direct the Secretary to adjust the fees no less than two and no more than three years after the date of enactment to allow him to consider, among other things, the study required by the Energy Policy Act of 2005 (26 USC 41 note. – National Academy of Science Study and Report.) of costs and benefits of energy production and consumption that are not fully incorporated into Federal taxes or fees or other revenue measures. So far that report has not been funded, though it was required by 2007.

**Section 103 – Energy Rights of Way – Correct the veto power given to individual local legislators over transmission corridors for clean energy sources on federal lands.**

By repealing outright the provision of the 2005 Energy Act requiring designation of energy corridors on federal land, and by requiring studies that are not limited in time or scope before any corridors could be designated, this section would end or significantly delay the on-going process of designating rights of way for transmission on public lands. Properly sited and designed, those lines can increase efficiency and reliability in the electric grids and encourage access to renewable energy sources such as solar, wind, and geothermal. If biologically wise climate change mitigation and energy security are the objectives you seek, a better approach would be to require the designation of corridors that deliver the greatest efficiency at the lowest environmental and economic cost over the long run. You can direct the Secretaries to do that in this section.

Section 103(a)(2)(B)(ii), of H.R. 2337 unfortunately, would allow local legislators to block any land from being considered for such a corridor by introducing legislation to

designate a protected area even if that area were of less value biologically or hydrologically than other areas.

Public lands contain massive solar, wind and geothermal energy potential. In 1991 the DOE estimated that the Dakotas and Nebraska alone had enough wind potential to supply all of the US electricity demand given transmission lines from there to the existing grid, say in Minneapolis and St. Louis. Electric generating capacity per turbine has doubled since then. This could eliminate more than a third of the climate-changing and health-damaging air pollution US sources emit.<sup>1</sup> At the time of the 1991 DOE wind study, electricity was not widely considered a potential source for liquid fuels for transportation energy, as it is now with the advent of hydrogen, electric, and plug-in hybrid vehicles.<sup>2</sup>

A recent study for the German government found similar potential for concentrated solar arrays on desert lands in North Africa that could provide much of the electric power needed by Europe via high voltage direct current lines that have little line loss during transmission. You address such arrays in section 307 of this bill in a way that limits the amount made available, not by biological or environmental constraints, which we should do using existing federal and state laws, and new, more comprehensive ones. Unfortunately as drafted the bill limits such arrays by choosing a maximum amount of solar power to be developed across the public lands without explaining the rationale. That limit should probably be replaced by biodiversity conservation limits based on science, rather than through a less rational limit that might stunt the growth of a relatively benign technology.

While it is understandable that governments and agencies should carefully consider environmental impacts, if existing environmental laws such as NEPA and the ESA and FLPMA and NFMA are applied properly, then a few such corridors strategically located could help address climate change by reducing inefficiency in delivering energy to, and then across, the electric transmission grid from new cleaner sources and more efficiently from existing sources, thus allowing us to reduce greenhouse gas emissions.

Therefore, you could strike (B)(ii) on page 7 or direct the Secretary to report and take into account such designations but not delegate federal policy to local councils so completely as it does now.

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<sup>1</sup> "An Assessment of the Available Windy Land Area and the Wind Energy Potential in the Contiguous United States, Pacific Northwest Laboratory, US DOE, 1991.

<sup>2</sup> Further wind development beyond the windiest states was estimated in 1991 to have the potential to produce about 10.8 billion kilowatt hours, well more than twice the electric power the U.S. used in 2005. Since that study was conducted, wind turbine design has improved. Each new utility-scale turbine now produces more than twice the power that the average turbine produced in the 1990s at any given time and several times as much over the course of a year due to increased efficiency at lower wind speeds and larger turbine sizes. Any energy technology should be applied after carefully ensuring minimal wildlife impacts and it is likely that a shift to properly applied wind, solar and small hydro, backing out more damaging practices so as to result in greatly reduced net mortality.

You could also alter the wording of (B) on page 7 so as to read: “shall, in considering areas for corridors, note the implications for permitting and conservation policy, if any such area is.” Such language would highlight federally or locally designated sensitive areas for appropriate protection without either giving transmission lines rights of way or erecting the barrier of agency delays to designations that comply with the law.

The Western Governors Conference has adopted a policy supporting the creation of wildlife corridors (attached). As climate change’s affects are being felt it’s becoming clearer to many biologists that landscape permeability across a very large scale could prove to be important to many species. Local or regional connectivity is not sufficient. In the Yellowstone to Yukon (Y2Y), far north of the habitat fragmentation typically caused by public roads and rail lines, fragmentation is being caused by “linear disturbances”—oil and gas exploration lines, access and exploratory rights of way, and power lines. Together these two factors suggest that before energy source and transmission development occurs, some sort of landscape connectivity analysis should occur and alternatives that minimize or have negligible fragmentation impacts be adopted. Such projects should include costs of maintaining connectivity, restoring connectivity, etc.

This connectivity analysis could be part of an improved set of regulations that could apply to developments on federal lands, based on the recently reinstated Forest Service biodiversity conservation regulations but updated and applied to federal lands generally and to larger scale energy developments generally as noted below.

#### **Section 104 -- Oil Shale and Tar Sands Leasing – require more comprehensive programmatic and site specific impact statements and biological assessments.**

The purpose of Section 104 is “to allow for sustainable and publicly acceptable large-scale development of oil share within the Green River Formation”. Such development may not be possible, given the considerable impacts of oil shale and tar sands development as are apparent in Alberta, Canada. Therefore, it would be best to review this language carefully to ensure that it or the provisions it amends do not curtail normal programmatic or site specific impact statement requirements of NEPA or requirements of other laws, for the initial or any future proposals. The programmatic impact statement should be comprehensive. That is, it should be required to assess whether there are any alternative means of achieving the public purposes for which an agency action permitting such development might be carried out. The programmatic EIS should address alternatives such as efficiency and using hybrid and all-electric vehicles, coupled with new transmission lines, if necessary, as well as other policy and technical adjustments. To the best of our knowledge there are significant groundwater and thermal impacts of tar sands extraction in Alberta that are likely to be repeated here. For example, the process requires injection of large amounts of heated water into the ground. The withdrawal and injection of water uses large amounts of energy, as does heating it, and may destabilize underground formations further affecting groundwater, Therefore, unless there are no viable alternatives for providing a similar amount of domestic transportation service with

less of an impact, which we doubt, this legislation should ensure that such projects do not more forward.

It should also be made clear, perhaps in committee report language, that any legislative expression of requirements for assessments here does not reduce requirements in existing law for biological assessments and interagency consultations when listed species are affected.

### **Section 105 – Reduce Categorical Exclusions**

It would be best to clarify in this section that the intent is to curtail the overly broad granting of categorical exclusions from the NEPA requirements so that a meaningful review of alternatives and of options to reduce harm is conducted whenever that is normally required under NEPA and is we learn more about the alternatives and best practices for each form.

## **Title II**

### **Section 203 – Fines and Penalties – Provide adequate deterrence and do not preempt other applicable laws.**

This section would amend the civil penalties provided under the Oil and Gas Royalty Management Act of 1982. This section should clarify that it does not preempt other existing remedies and penalties or in fact should clarify that such other penalties do apply to the false statements and thefts addressed in this section. Among those are the duties to restore or make restitution for federal property or land values that were degraded, stolen or destroyed in the process of committing the violation(s) and the applicability of the False Claims Act, which allows citizen-whistleblowers to be rewarded when reporting such thefts or false royalty reports. Finally the limits of 10,000 and 25,000 dollars a day in the lease administration and theft subsections may not be sufficient to deter those who may be stealing oil and gas at higher rates than that. Therefore, the fines should be clearly in addition to the restitution, for the value of the stolen property and for damage done in the process to the lands, water, and wildlife affected by the removal of the oil and gas. The fines should cover damage done in the area, downstream, and underground if proper precautions against fouling groundwater were not taken, for example. These remedies should not be reserved for repeat violators as in subsection (d) on page 20 but for any violation. Such acts should also be subject to treble damages as in the preceding royalties section. Otherwise, it could be cheaper to steal the oil outright than to fail to pay adequate royalties on it, for example.

Under proposed new section 109(a)(2) insert “In addition to such other civil remedies and criminal penalties as may be applicable,” [a] person who violates... . Similar caveats should be inserted in the subsections (b) and (c) following that.

Subsection (g) on page 21 would provide unchecked authority to the Secretary to reduce civil penalties. Such authority if provided at all, should be made subject to specific standards and findings. For example, you could require a finding that there were reasons for misunderstanding the rules and that a voluntary settlement would save money for the federal government. Such reductions, however, should not reduce the duty to restore harmed habitat, natural resources and to pay at least fair market value restitution for that which cannot be restored. The “sweetheart” settlements noted in your recent hearing on political interference with the Endangered Species Act are examples of the abuse of the settlement authority that can happen when neither the statutory law nor the court requires a better standard.

#### Sec. 222 - Reclamation Plans, Permits and Bonds Should Be Sufficient to Restore Wildlife Habitat

In order to fully restore lands and waters affected by coal-bed methane, oil and gas exploration and production, on page 35, in subsection (p), line 2, the committee could insert before “uses” the phrase, “human and wildlife” and on page 36 subsection (q) line 1, begin the line with “in case the work has” instead of the current phrase and add at the end, after “forfeiture” the phrase “or other failure to complete the restoration in a timely manner.”

#### Section 223 – Protect water required by wildlife as well.

The language of the current section provides that water degraded by oil, gas and coal-bed methane may be replaced by alternative sources (p. 37, lines 24-25). To protect the water over the long term for both human and wildlife uses, the committee could strike lines 24 and 25. Otherwise, the result could be permanent degradation with only temporary relief for human uses at the existing levels and no longer term remedy for agriculture or wildlife. Furthermore, it would be best to clarify that the requirements of this title are in addition to the requirements of other laws including but not limited to the Clean Water Act and the Endangered Species Act.

#### Section 224 – Ensure adequate Due Diligence Fees

One dollar per acre per year is a very small amount. The effect of subsection (d) is unclear especially given that its reference to “documents submitted by the President with the budget submission... relating to the Healthy Lands Initiative” is probably not sufficiently precise or limited to form the basis for an enforceable statutory standard. Therefore you could insert after “available” on line 9 (p. 39) the phrase “along with funds from other related fees, restitution requirements, fines and damage awards” and end the sentence after “development” on line 11, striking the remaining language which might be placed in the committee report and explained more fully.

#### Subtitle D – Ensure Sustainable Wildlife Impacts of All Energy Developments

Sections 231 – 235 would halt the construction of wind turbines of any size in any location pending a series of studies and the promulgation of regulations and permitting requirements for which there are very few if any scientific or legal standards, deadlines or limits. Its impact would probably be to shift production from wind, which has been the second largest source of new electric supply in this country for two years, to sources the current market costs of which are competitive with wind (4-8 cents per kilowatt hour). Those other supply sources however, have a much greater impact on birds, bats, fish, and other wildlife and plants in the production, transportation, processing, and burning of fossil fuels and in the global warming effects such activities engender, as well as the decommissioning of facilities associated with that power generation. The wait required would also be likely to eliminate much of our domestic capacity to plan and build wind farms, leaving that to foreign sources. This could substantially impair our ability to reduce US energy independence and to shift energy sources to minimize the greenhouse gas emissions. These emissions include extensive methane emitted by decay of matter and other factors in the large lakes that form behind large dams, according to recent study by Brazilian scientists. They also include the better known methane from coal mines, carbon oxides from all fossil fuel combustion, and the several other gases contributing to climate change.

The better approach would be to provide the factual basis for such regulation first, and then after reviewing such studies, enact legislation that would apply limits based on biologically-based legal standards, ensuring the maintenance of biological diversity throughout the affected ecosystems. Congress could do the first part by expanding to other energy forms the current dialogue between the wind industry, the Fish and Wildlife Service and others in which wind turbine siting guidelines are being developed. Congress could do so by providing the funds for the National Academy of Sciences to do the study “required” of them by 2007 by the 2005 Energy Act (26 USC 41 note). That NAS study was to report on the health, environmental, security, and infrastructure costs and benefits associated with the production and consumption of energy. A concurrent study could be required of the Federal agencies with jurisdiction over natural resources, energy, and climate. In a study published in 2002 entitled Summary of Anthropogenic Causes of Bird Mortality, Erickson et al., estimated that domestic cats, buildings, vehicles, cell phone towers and many other factors kill thousands, hundreds and scores as many birds as do wind mills each year respectively. Therefore, in the meantime, the application of state and local laws as well as the Endangered Species Act and the Migratory Bird Treaty Act siting and operational guidelines being developed by the Fish and Wildlife Service in cooperation with industry and environmental groups should allow us time to develop the better factual and legal basis for across the board regulation of net energy impacts on birds, bats and other wildlife.

Title III

**Define “Alternative Energy”**

In section 301 (p. 48), the bill would insert a new section 306A into the Coastal Zone Management Act to direct the Secretary to make grants for surveys for Alternative Energy. The bill does not contain a definition nor appear to refer to one. It would be safer to define the term and safer for wildlife and climate change to use the term “renewable energy”.

### **Section 306 – Cautioning against excess use of groundwater for hydroelectric generation**

This section requires the USGS to do an assessment of the potential use of groundwater for hydroelectric generation. Given the drawdown of aquifers in much of the western United States, such a study should be done very carefully, with participation by the Fish and Wildlife Service, the Forest Service, the Bureau of Land Management and with public review and comment replicating a kind of peer review from scientific societies before it is completed.

The section could also have fourth and fifth subsections requiring the assessment of net impacts of hydropower on wildlife and climate change, including but not limited to new evidence of large methane releases from such facilities, probably as a function of eutrophication; and, in the fifth, a report on decisions over the past six years pitting listed species against other interests in the allocation of federally impounded or directed water with particular care to report those made by or at the instruction of Presidential appointees.

For example, Jeff Ruch, President of Public Employees for Environmental Responsibility included in his recent testimony before the Committee on May 9<sup>th</sup> 2007 numerous accounts of interference and alteration of scientific findings. His testimony included a description of Karl Rove, advisor to the President, in essence instructing Interior Department personnel in a powerpoint presentation to political appointees, to release water when it should have been held for threatened Klamath River coho salmon at twice the depth in the river according to the report developed by expert salmon scientists of the National Marine Fisheries Service. Rove apparently intended this water release as a means of gaining political favor with area farmers in the 2002 election. The result was “the largest fish kill in the history of the Pacific Northwest”. Whether or not the committee chooses to amend the bill to require such reports, it should follow up. It could do so with the help of the Government Accountability Office, reviewing evidence of political interference intended to alter the factual basis of scientific and legal findings in the course of programs or procedures of the Federal Government. It could refer such evidence as PEER and others have accumulated to additional authorities, such as the Justice Department, as part of its oversight function.

### **Section 307 – Apply Biological Safeguards but Do Not Unnecessarily Limit Solar Energy on Federal Lands**

Section 307 establishes a pilot program for concentrated solar energy systems on federal lands, following up on European studies that have found large potential for clean energy

generation on desert lands through such technology. Subparagraph (b)(1)(A) however, limits the amount of land that can be designated as a reserve for such arrays to the amount necessary for no more than 10 GW (gigawatts) (line 2 page 57) without providing a reason or a process for expanding that as appropriate. It also establishes (line 12 page 57) a minimum array of 1 gigawatt, which is a large amount of electric generating capacity, perhaps more than necessary for commercially viable projects, depending on the proximity to the grid, perhaps far more than necessary for a pilot project. These limits could be eliminated and if not, the committee should clarify that the existence of the pilot program does not prevent the Secretary from permitting those outside the program from leasing public lands for solar arrays in a manner that complies with existing law.

Under (5) “Environmental Compliance” (page 58) for safety’s sake to ensure that all compliance is complete and not just that required under FLPMA, you could insert the phrase “and any other assessments or permitting requirements” after (FLPMA) “1976” and before “for” on line 18.

Under (6) line 2, “all” should be “each”.

Under (7) Rental Fees – on line 13 the bill (p. 59) requires the greater of \$200 dollars per acre or the market value, whichever is **greater**, with increases of 50% in ten years to be paid up front, at the beginning of operations for a term of 30 years. This stands in rather stark contrast to the one dollar per acre for unexercised oil and gas leases provided in an earlier section in the bill. Such above-market rates for 30 years are very expensive for a pilot program at no more than 10 sites might make concentrated solar impossible to develop. In order to provide a more neutral experiment that does not choke off the eventual use of solar arrays, the committee could remove the limited number, and charge the lesser of Fair Market Value and \$20 dollars an acre at the end of each year, with a fact-based performance bond for damage to habitat up front and set lease terms for five years with options to renew.

#### **(e) Sunset**

The committee may want to amend this subsection to bring the ten year sunset of all authorities into line with the 30 year lease terms by making lease terms five years with options to renew for at least 30 years and ensuring that the arrays would fall under other existing laws controlling impacts on natural resources, such as FLPMA.

### **Section 309 Biomass Pilot Program**

This section actually establishes only a woody biomass pilot program so the title could be amended accordingly so as to distinguish it from other biomass technologies such as ethanol from non-woody plant content, which also need careful biodiversity based regulation on federal lands or in federal programs. All forms of biomass for energy should be conducted in a manner that complies with the newly reinstated biodiversity conservation regulations of the Forest Service, but applied on BLM and other federal

lands as well so as to maintain the viability of all vertebrate animals on each major planning unit (or National Forest). The Committee could, in the bill, commission a study, in consultation with the states, to consider how this could be done for private and state lands as well. All such studies, assessments and regulations should cover the impacts of biomass removal on biodiversity and determine what level of removal is necessary to meet restoration objectives that address the social, economic, and ecological consequences of removal. Otherwise excessive removal is likely to do more harm than good, particularly to under-story communities.<sup>3</sup>

Subsection (b) limits the pilot program to timber-based residues or by-products, thus limiting the reach of the program and denying its availability to communities that may not want or have timber harvesting in their national forests or other federal forests but may still want to develop responsible woody biomass fuels programs thus the limits set out in 1-5 could be eliminated and so too could the limit of 10 different forest types.

On line 11 the term “ecological forest restoration” is used but its definition is neither apparent nor incorporated by reference. The concept is admirable but if not defined already, the Secretary could be directed to propose regulations to define the term or better yet, the committee could include a statutory definition after consultation with appropriate scientific societies and agency experts.

On line 24, alternative fuels is not defined and should probably be deleted, as woody biomass, when mixed with other forms, is most readily mixed with various forms of coal, peat and similar fuels, rather than “alternative fuels” and can reduce the sulfur emissions thereby.

Subsection (d) On line 3 of page 63 the term “projects” should be singular or if plural, then a deadline of 2008 or 9 specified for the study.

In subsection (g) the word “agreement” on line 17 should be replace by “decision” and stricken from line 20 in order not to tie the hands of the Secretary.

In subsection (i)(1)(B), maintains or improves should be maintaining or improving. After (B) an additional (C) could be added to emphasize the purposes of the act, as “reducing net pollution, including but not limited to ground level ozone, sulfur, and net greenhouse gases.”

Before the authorization the committee could clarify its intent by inserting a new subsection “(j) The provisions of this section shall not impede the authority of either secretary to develop or permit woody biomass for energy in compliance with existing law and such regulations to conserve biological diversity as the Secretary of the Interior may promulgate that are consistent with those of the Secretary of Agriculture.”

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<sup>3</sup> A paper by Dominick DellaSala, published in Ecological Restoration (2003) is one that addresses such a definition. We can provide it later if it would be helpful.

## **Subtitle B – Assess Terrestrial Conversion and Sequestration of Other Pollutants as well as Sequestration of Carbon**

On page 74, Section 421 requires an assessment by the USGS of sequestration of carbon in natural systems. The committee could in subsection ( c ) direct the Secretary to consult additional expert agencies including the EPA, FWS, and Secretary of Agriculture, and add after “carbon”, “nitrogen, methane and other major pollutants”, and after “stored”, “or converted”. For example, clover and some trees fix nitrogen in the soil but we seem to know little about their impact, if any, on the nitrous oxides. Methane is a powerful greenhouse gas but we also hear little about its conversion by nature.

## **Research Councils and Adaptation Research**

The bill also addresses research to be funded, presumably from proceeds of a permit auction into wildlife adaptation and related issues. We commend to the committee’s attention comments developed by a coalition of organizations prioritizing such research to address those species most affected by global warming. The committee may want to add a requirement that the studies also include how plants and wildlife together may function to mitigate factors causing climate change and the effects thereof.

We also recommend that you consider requiring each federal decision changing the protection of any wildlife species or habitat to state the basis on which it was made and the how it included climate change in the decision, citing the scientific findings on which that decision is based.

We appreciate the opportunity to provide these comments and hope they are helpful.