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VIA E-Mail

BCAP Draft PEIS
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RE: Biomass Crop Assistance Program Programmatic Environmental Impact Statement

These comments on the U.S. Department of Agriculture (USDA) Commodity Credit Corporation (CCC) Biomass Crop Assistance Program (BCAP) Programmatic Environmental Impact Statement (PEIS) are submitted on behalf of the Center for Biological Diversity (Center). The Center is a non-profit organization dedicated to protecting imperiled species and their habitats by combining scientific research, public organizing, and administrative and legal advocacy. The Center has 225,000 members and online activists, many of whom would be adversely impacted directly or indirectly by the actions carried out by USDA described in the PEIS.

In short, we believe that the draft PEIS is woefully deficient and fails to comply with the mandates of the National Environmental Policy Act (NEPA), 42 U.S.C. § 4321, *et seq.*, and its implementing regulations. Additionally, the conclusion articulated in the draft PEIS that no consultation is required under the Endangered Species Act (ESA), 16 U.S.C. § 1531, *et seq.*, is also flawed as a matter of fact and law.

As an initial matter, the draft PEIS is so poorly assembled it is difficult for the reader to determine what the actual proposed action is, what the distinction between the alternatives would be, and what the true environmental effects of the action would be. As such, it fails to perform many of the fundamental purposes of NEPA, and does not allowed informed commenting by the public, much less informed decision-making by USDA. Nevertheless, several specific deficiencies of the draft PEIS are readily apparent and discussed below.

The draft PEIS suffers from, *inter alia*, the following deficiencies:

- Failure to disclose and analyze the entire BCAP action, instead focusing only on the Project Areas Program while ignoring the Collection, Harvest, Storage, and Transportation Component (CHST) of the BCAP;
- Failure to consider a reasonable range of alternatives;
- Failure to distinguish between woody and non-woody biomass in disclosing and analyzing the effects of the proposed action;
- Failure to distinguish between public and non-public lands in disclosing and analyzing the effects of the proposed action;

- Failure to disclose and analyze the carbon dioxide and other greenhouse emissions associated with biomass utilization;
- Failure to disclose and analyze the emissions and other direct and indirect impacts associated with the full lifecycle of different forms of biomass utilization;
- Failure to disclose and analyze the effects of the proposed action in the context of a changing climate; and
- Failure to disclose and analyze the effects of the proposed action on threatened and endangered species.

While the deficiencies of the draft PEIS are many, they result in two primary impacts that are of concerns to the Center. First, by asserting as a blanket principle that biomass utilization is carbon-neutral, the draft PEIS fails to analyze the likely significant short and long-term adverse impacts to CO₂ reduction targets and climate change that will result from the substantial actual CO₂ emissions associated with biomass burning. Second, by failing to distinguish in any meaningful manner biomass produced from short-rotation crops grown on existing agricultural land, from woody biomass harvested from public and private forests, the draft PEIS ignores the significantly different environmental impacts of increased utilization of these two broad classes of biomass. The net result of these two analytical errors is that the proposed action will likely lead to significant increases in CO₂ emissions from the smokestacks of biomass energy facilities, combined with increased logging of forests for biomass and consequent reduction of forest carbon stores, without the effects of these activities ever being properly and fully analyzed in the PEIS or any subsequent NEPA document. To remedy these deficiencies, USDA CCC should withdraw the draft PEIS, and recirculate a revised PEIS that actually meets relevant legal standards.

A. The National Environmental Policy Act

NEPA is the “basic charter for protection of the environment.” 40 C.F.R. § 1500.1(a). In NEPA, Congress declared a national policy of “creat[ing] and maintain[ing] conditions under which man and nature can exist in productive harmony.” *Or. Natural Desert Ass’n v. Bureau of Land Mgmt.*, 531 F.3d 1114, 1120 (9th Cir. 2008) (quoting 42 U.S.C. § 4331(a)). NEPA is intended to “ensure that [federal agencies] ... will have detailed information concerning significant environmental impacts” and “guarantee[] that the relevant information will be made available to the larger [public] audience.” *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1212 (9th Cir. 1998).

Under NEPA, before a federal agency takes a “‘major [f]ederal action[] significantly affecting the quality’ of the environment,” the agency must prepare an environmental impact statement (EIS). *Kern v. U.S. Bureau of Land Mgmt.*, 284 F.3d 1062, 1067 (9th Cir. 2002) (quoting 43 U.S.C. § 4332(2)(C)). “An EIS is a thorough analysis of the potential environmental impact that ‘provide[s] full and fair discussion of significant environmental impacts and ... inform[s] decisionmakers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment.’” *Klamath-Siskiyou Wildlands Ctr. v. Bureau of Land Mgmt.*, 387 F.3d 989, 993 (9th Cir. 2004) (citing 40 C.F.R. § 1502.1). An EIS is NEPA’s “chief tool” and is “designed as an ‘action-forcing device to [e]nsure that the policies and goals defined in the Act are infused into the ongoing programs

and actions of the Federal Government.” *Or. Natural Desert Ass’n*, 531 F.3d at 1121 (quoting 40 C.F.R. § 1502.1).

The BCAP draft PEIS fails to meet the spirit or letter of NEPA’s requirements. As an initial matter, the draft PEIS fails to clearly articulate what “action” it is attempting to analyze. At various points the draft PEIS asserts that it is analyzing the entire BCAP, proposed regulations to implement the BCAP, and/or only the Project Areas Program of the BCAP. The abstract to the draft PEIS states the following:

The program is composed of two components, the Project Area Program component which supports the establishment and production of biomass crops for conversion to bio-energy in approved project areas, and the Collection, Harvest, Storage, And Transportation (CHST) component which provides monetary assistance with CHST of eligible materials for use in a biomass conversion facility (BCF). BCAP is administered by the Farm Programs Division of the FSA on behalf of the Commodity Credit Corporation (CCC). To implement the proposed action, FSA would develop a Proposed Rule.

PEIS Abstract. However, the draft PEIS also states that the actual proposed action is only a subset of the BCAP.

The Proposed Action is to establish and administer the Project Areas Program component of BCAP as mandated in Title IX of the 2008 Farm Bill.

PEIS at ES-1. And the draft PEIS acknowledges that the Project Areas Program is the only part of the BCAP being analyzed.

This Draft Programmatic Environmental Impact Statement (PEIS) analyzes the impacts of the two action alternatives of the Project Areas Program component on the nation’s environmental resources and economy.

PEIS Abstract. Yet elsewhere in the draft PEIS, the document states that the PEIS will be relied upon for the full BCAP and the proposed regulations implementing the full BCAP.

The full PEIS and all comments and lessons learned from the BCAP notices, including the NOFA [Notice of Funding Availability], will be utilized during the rulemaking process *for the entire BCAP program*.

PEIS at 1-3 (emphasis added). Apparently, the CHST component of BCAP is already being implemented and has not been subject to any NEPA review. This is illegal. 40 C.F.R. § 1500.1(b) (“NEPA procedures must insure that environmental information is available to public officials and citizens *before decisions are made and before actions are taken*.”)(emphasis added); *see also* 40 C.F.R. § 1506.1 (prohibiting agency action prior to completion of NEPA process); *Lathan v. Volpe*, 350 F. Supp. 263, 266 (W.D. Wa. 1972) (post-action NEPA is like “locking the barn door after the horses are stolen.”). Moreover, it seems USDA intends to rely upon a PEIS that does not analyze the CHST component of BCAP as its NEPA document for

regulations that include CHST. This also runs afoul of NEPA. USDA should prepare an EIS that is co-extensive with the actual action it is undertaking- the implementation of the entire BCAP, including the promulgation of regulations.

NEPA requires an agency to consider a range of reasonable alternatives to its proposed action. *State of New Mexico ex rel. Bill Richardson v. Bureau of Land Mgmt.*, 565 F.3d 683, 705 (10th Cir. 2009); *Envtl. Prot. Info. Ctr. v. U.S. Forest Serv.*, 234 Fed. Appx. 440, 442 (9th Cir. 2007). “The purpose of NEPA’s alternatives requirement is to ensure agencies do not undertake projects “without intense consideration of other more ecologically sound courses of action, including shelving the entire project, or of accomplishing the same result by entirely different means.” *Envtl. Defense Fund, Inc. v. U.S. Army Corps of Engrs.*, 492 F.2d 1123, 1135 (5th Cir. 1974). An agency will be found in compliance with NEPA only when “all reasonable alternatives have been considered and an appropriate explanation is provided as to why an alternative was eliminated.” *Native Ecosystems Council v. U.S. Forest Serv.*, 428 F.3d 1233, 1246 (9th Cir. 2005); *Bob Marshall Alliance v. Hodel*, 852 F.2d 1223, 1228-1229 (9th Cir. 1988).

Unfortunately, the draft PEIS also fails to comply with this requirement of NEPA. The draft PEIS describes its alternative analysis as follows:

This Draft Programmatic Environmental Impact Statement (PEIS) analyzes the impacts of the two action alternatives of the Project Areas Program component on the nation’s environmental resources and economy. The alternatives examine (1) a targeted implementation of the Program, examining limited development of new commercial BCFs [biomass conversion facilities] and newly established crops and (2) an extensive expansion of current biomass programs and new programs to greatly expand participation. The no action alternative (continuation of current program) is also analyzed in this draft PEIS to provide an environmental baseline.

PEIS Abstract. This is far from a sufficient alternatives analysis. Both alternatives assume that all types of biomass that fall within the statutory definition of “renewable biomass” will be treated equivalently by the BCAP. The PEIS should analyze alternatives that differentiate between types of biomass (e.g. woody biomass v. corn-based biomass v. switchgrass-based biomass, etc.), as growing, transporting, processing, and ultimately burning these different types of biomass have significantly different environmental impacts. Both alternatives also assume BCAP will be applied anywhere in the country where existing or proposed BCFs exist, without any analysis as to whether there might be regions of the country where the program should be emphasized or de-emphasized in accordance with the specific ecological and economic variables of a given region. The PEIS should therefore analyze alternatives based on geography, given certain regions of the country are much better suited for different crop-based forms of biomass than others, while in other regions of the country the program would have significantly elevated impacts on forests.

The failure to differentiate between woody and non-woody biomass and the consequent impacts on forests not only renders the alternatives selection inadequate under NEPA, but also compromises the analysis of the effects of implementing the alternatives actually considered.

As several agencies and numerous studies have documented, large-scale utilization of woody biomass from forests as a source of energy or biofuels is simply unsustainable. For example, as Sample (2009) cogently summarized, the Department of Energy previously concluded that meeting biofuels and renewable targets could have significant adverse impacts on U.S. forests

A 2007 study by the Department of Energy attempted to address this very question—it examined the environmental and economic impacts of implementing both a 25x'25 renewable electricity standard and a 25 percent renewable fuel standard by 2025 (EIA 2007b). The demand this would place on US forests for increased biofuels production, together with the even greater demand for biomass for power generation, could be more than the nation's forest can sustain. It could price most of the US wood products industry out of existence, and have impacts on soil and water resources, biodiversity, and other values that the American public would almost certainly find unacceptable.

While crop-based biomass is certainly not without its own adverse environmental impacts, the impacts of greatly accelerated forest biomass harvesting, as would be facilitated by BCAP, are potentially catastrophic for our forests and forest-dependant wildlife. Yet nowhere in the draft PEIS are these impacts analyzed in any meaningful way. Moreover, as explained further below, the differences between woody and non-woody biomass are not only highly significant from the standpoint of land use impacts, but also from a carbon standpoint.

An additional problem with the draft PEIS in regard to forests is the confusing treatment of the differences between federal and non-federal forest lands under the BCAP. While virtually all woody biomass removed from private lands falls under the statutory definition of “renewable biomass”, only a subset of woody biomass from federal lands meets that definition. *See* PEIS at 1-3. Yet nowhere in the draft PEIS is there any apparent analysis of the different impacts on federal and non-federal forests and forest resources that targeted biomass harvesting under these differing definitions will have. This is a significant oversight and must be corrected.

A primary analytical flaw in the draft PEIS is the assumption that biomass utilization is carbon neutral or better. This conclusion is based upon three tenuous assumptions. First, it assumes that an equivalent amount of carbon will be resequenced on a given plot of land as is harvested for biomass utilization. Second, it assumes (in part by completely discounting indirect impacts) that the lifecycle greenhouse gas emissions of biomass utilization are lower than those of fossil fuels. And third, it assumes that any energy derived from biomass burning or biofuels use will in fact displace an equivalent amount of fossil fuel derived energy rather than being additive. None of these assumptions are actually supported in the draft PEIS itself or in readily available science and policy documents.

The draft PEIS states that

Implementation of BCAP, and the subsequent planting of bioenergy crops or removal of biomass for bioenergy use, can alter the uptake and release of CO₂. Crops that generate more biomass take up more CO₂. However, carbon in crops is emitted back to the atmosphere as CO₂ following the decomposition, burning, or processing of crop biomass. Carbon in crops therefore cycles through the atmosphere over a one to three year time period and is thereby considered to have net zero CO₂ emissions (West and Marland 2002a). Forest products used for bioenergy purposes are considered to have a similar cycle, except that carbon in standing trees will be sequestered from the atmosphere for a longer time period. *CO₂ taken up and emitted by the growth of crop and forest biomass is hereby considered net zero, and is not further considered.*

PEIS at 3-25 (emphasis added). This conclusion is simply unsupported.

The conclusion that biomass growth and use results in “net zero” emissions misses two key points. First, there is no guarantee that a given patch of land from which biomass is harvested will remain in production such that an equivalent amount of carbon is reabsorbed by new growth post-harvest. Second, the draft PEIS acknowledges, but does not distinguish in its analysis, the significantly different lengths of the regrowth and resequestration periods between crop biomass and woody biomass. The first of these problems might be solvable with regulations that set binding contract terms for use of biomass that ensure that a given patch of land from which biomass is harvested is promptly replanted (or if natural forest, allowed to regenerate). But the second is so fundamental that it can not be remedied without a complete reworking of the analytical framework used by USDA, and a consequent complete rewrite of the draft PEIS.

NEPA mandates consideration of the relevant environmental factors and environmental review of “[b]oth *short- and long-term* effects” in order to determine the significance of the project’s impacts. 40 C.F.R. § 1508.27(a) (emphasis added).

The draft PEIS states that “Carbon in crops...cycles through the atmosphere over a one to three year time period.” PEIS at 3-25. The document then states that “Forest products used for bioenergy purposes are considered to have a similar cycle, except that carbon in standing trees will be sequestered from the atmosphere for a longer time period.” While the important point that carbon stored in trees is sequestered for “a longer time period” (i.e. longer than the “one to three year time period” of crops) is made, nowhere does the draft PEIS acknowledge, much less analyze, the critically important point that the resequestration of carbon also takes much longer, often a period of decades or centuries. Because meeting (or exceeding) atmospheric CO₂ targets has a strong temporal element, whether CO₂ released into the atmosphere today is reabsorbed in 3 years, or not for 300 years, is of critical importance.

The time between harvest and complete reabsorption of lost carbon by a forest stand can extend into hundreds of years. At its simplest, “to replenish carbon stocks fully after harvest, the forest must grow to the same age it was at harvest.” (Harmon et al. 1996). For old growth forest, this can be on the order of centuries. More recently, Mitchell et al. (2009) concluded that, even

assuming perfect conversion of biomass to energy, and assuming a one-to-one displacement of fossil fuels, that it still took from 34 to 228 years for western forests to reach carbon neutrality for biomass used directly for energy generation, and between 201 and 459 years if the biomass was converted to biofuels (the ranges dependant upon the characteristics of the trees, forests and fire return intervals). So even in the unrealistic “best case” scenarios, forest biomass utilization is not carbon neutral in the near-term.

It is well established as a matter of science and policy that temperatures must not be allowed to exceed 2°C over pre-industrial levels. (Hansen et al. 2008). Whether we exceed the 2°C threshold depends on how high atmospheric CO₂ levels are allowed to reach. The greater the CO₂ levels, the greater the risk of exceeding this threshold and triggering likely catastrophic climate changes. The probability of overshooting 2°C is as follows according to Hare and Meinshausen (2006):

85% (68-99%) at 550 ppm CO₂ eq (= 475 ppm CO₂)
47% (26-76%) at 450 ppm CO₂ eq (=400 ppm CO₂)
27% (2-57%) at 400 ppm CO₂ eq (= 350 ppm CO₂)
8% (0-31%) at 350 ppm CO₂ eq

“Only scenarios that aim at stabilization levels at or below 400 ppm CO₂ equivalence (~350 ppm CO₂) can limit the probability of exceeding 2°C to reasonable levels (see Table V).” (Hare and Meinshausen 2006: 137). But to stabilize atmospheric levels at or below 400 to 450 ppm CO₂eq, developed country emissions must peak by 2015. *See, e.g.* Den Elzen and Meinshausen (2007)(“In order to keep the option open of stabilising at 400 and 450 ppm CO₂ equivalent, the USA and major advanced non-Annex I countries will have to participate in an agreement aimed at reductions within 10-15 years.”).

In short, minimizing CO₂ emissions in the *near-term* is critically important to meeting climate targets, even if some of all of that CO₂ might in theory be reabsorbed from the atmosphere in the long-term. So while the theoretical one to three year net-zero release and resequestration of carbon from crop-based biomass utilization *might* justify excluding the carbon emissions from the growth and burning (but not processing and transportation) of *crop-based* biomass from further analysis in the PEIS, it in no way justifies excluding the emissions from *forest* biomass utilization. The difference between short carbon lifecycle crops and long lifecycle forest products is significant, but wholly unexamined in the draft PEIS, rendering the document legally infirm.¹

Even if the growth and combustion of biomass could be rationally considered to have “net zero” carbon emissions over some unspecified timeframe, the further conclusion that increased use of biomass for energy generation and fuel has a carbon benefit over fossil fuel use

¹ The Environmental Protection Agency (EPA) recently acknowledged the importance of a different time horizons in calculating the impact of emissions from biomass converted to biofuels: “EPA’s draft results suggest that biofuel-induced land use change can produce significant near-term GHG emissions; however, displacement of petroleum by biofuels over subsequent years can “pay back” earlier land conversion impacts. *Therefore, the time horizon over which emissions are analyzed and the application of a discount rate to value near-term versus longer-term emissions are critical factors.*” EPA 2009 (emphasis added).

is suspect. A key factor in whether biomass and biofuels would result in net carbon benefits is the role of indirect land use impacts. The draft PEIS notes that how this is calculated is subject to controversy, but rather than analyze the details of the controversy and utilize its discretion to choose how to analyze this impact, USDA simply decides to ignore it completely.

It is evident that consensus has not been reached regarding the impacts of indirect land-use change on greenhouse gas emissions, and this topic is therefore not further considered.

PEIS at 3-26. While such an analysis may be difficult, that does not excuse USDA from carrying it out. *See, e.g. Kern v. U.S. Bureau of Land Management*, 284 F.3d 1062, 1072 (9th Cir. 2002) (Where “it is reasonably possible to analyze the environmental consequences in an EIS for [a plan], the agency is required to perform that analysis.”).² Such a complete abdication of the duty to analyze the direct, indirect and cumulative impacts of the action is violative of NEPA.

The final flawed assumption relied upon by USDA to find that biomass utilization is carbon neutral or better is that any energy or fuel generated by biomass will directly displace an equivalent amount of energy or fuel produced via fossil fuels. The draft PEIS asserts

The primary impact to air quality from the implementation of the BCAP program will be a reduction of GHG emissions. Net GHG reductions will depend greatly on the crop grown, management of the crop, and which fossil-fuel type is being displaced.

PEIS at 3-26. First, as discussed above, even if this assumption is true, the displacement is not instantaneous, but occurs over time, while the CO₂ emissions occur as soon as the biomass is utilized. Moreover, USDA is in essence concluding that the actual significant impacts flowing from its actions (near-term CO₂ emissions) will be fully mitigated by actions totally beyond its control (presumably market-driven processes displacing fossil fuel use). This is not allowed under NEPA, as USDA must analyze *the action it is carrying out* and cannot rely on uncertain “mitigation”. *See, e.g. Neighbors of Cuddy Mountain v. U.S. Forest Service*, 137 F.3d 1372, 1380-81 (9th Cir. 1998)(“The Forest Service's broad generalizations and vague references to mitigation measures . do not constitute the detail as to mitigation measures that would be undertaken, and their effectiveness, that the Forest Service is required to provide.”); *Cabinet Mountains Wilderness v. Peterson*, 685 F.2d 678, 682 (D.C. Cir. 1982) (Mitigation must be assured and must “completely compensate for any possible adverse environmental impacts.”). Moreover, even if the mitigation (e.g. displacement of fossil fuels) turns out to be effective, it does nothing to actually prevent the CO₂ emissions resulting from the action itself. *Cf. Sierra Club v. Norton*, 207 F. Supp. 2d 1310, 1330 (S.D. Ala. 2002)(“The mitigation measures, admittedly beneficial and admittedly minimizing many of the lesser adverse effects of this action, do nothing to lessen the irreducible destruction of habitat.”).

² Moreover, numerous entities including the EPA have carried out such analyses in similar contexts, demonstrating that such an analysis is indeed possible.. *See, e.g.* <http://www.epa.gov/OMS/renewablefuels/420f09024.htm>

While the impacts of the BCAP on global warming as a result of the emissions flowing from biomass utilization is inadequately analyzed in the draft PEIS, the impacts of the action in the *context* of a warming climate are ignored entirely.

That global warming is significantly impacting the United States is no longer subject to any reasonable dispute. As the EPA recently noted in a proposed finding that greenhouse gases endanger public health and welfare:

*The Administrator concludes that, in the circumstances presented here, the case for finding that greenhouse gases in the atmosphere endanger public health and welfare is compelling and, indeed, overwhelming. The scientific evidence described here is the product of decades of research by thousands of scientists from the U.S. and around the world. The evidence points ineluctably to the conclusion that climate change is upon us as a result of greenhouse gas emissions, that climate changes are already occurring that harm our health and welfare, and that the effects will only worsen over time in the absence of regulatory action. The effects of climate change on public health include sickness and death. It is hard to imagine any understanding of public health that would exclude these consequences. The effects on welfare embrace every category of effect described in the Clean Air Act's definition of "welfare" and, more broadly, virtually every facet of the living world around us. And, according to the scientific evidence relied upon in making this finding, the probability of the consequences is shown to range from the likely to virtually certain to occur. This is not a close case in which the magnitude of the harm is small and the probability great, or the magnitude large and the probability small. In both magnitude and probability, climate change is an enormous problem. The greenhouse gases that are responsible for it endanger public health and welfare within the meaning of the Clean Air Act.*³

The EPA also summarized some of the overwhelming evidence concerning the effects of climate change on the United States that have *already* occurred. Among the relevant ones to the BCAP:

Drastic temperature increases: "U.S. average annual temperatures are approximately 1.25 °F (0.69 °C) warmer than at the start of the 20th century, with an increased rate of warming over the past 30 years. . . . [T]he rate of warming increased to 0.58 °F/decade (0.32 °C/decade) for the period from 1979-2008. [¶] The last ten 5-year periods . . . were the warmest 5-year periods in the 114 years of national records, demonstrating the anomalous warmth of the last 15 years."⁴

Degradation of water and land resources, agriculture and biodiversity: "Climate changes are very likely already affecting U.S. water resources, agriculture, land resources, and biodiversity as a result of climate variability and change. A 2008

³ 74 Fed. Reg. 18904 (emphasis added).

⁴ 74 Fed. Reg. 18898-99.

CCSP report that examined these observed changes concluded: “[t]he number and frequency of forest fires and insect outbreaks are increasing in the interior West, the Southwest, and Alaska. Precipitation, stream flow, and stream temperatures are increasing in most of the continental U.S. The western U.S. is experiencing reduced snowpack and earlier peaks in spring runoff. The growth of many crops and weeds is being stimulated. Migration of plant and animal species is changing the composition and structure of arid, polar, aquatic, coastal, and other ecosystems.”⁵

Extreme weather events: “Many extremes and their associated impacts are now changing. For example, in recent decades most of North America has been experiencing more unusually hot days and nights, fewer unusually cold days and nights, and fewer frost days. Heavy downpours have become more frequent and intense. . . . The power and frequency of Atlantic hurricanes have increased substantially in recent decades...”⁶

As to the devastating *future* climate change impacts on the United States, EPA observed:

Increasing temperatures: “By the end of the century, projected average global warming ranges (compared to average temperature around 1990) varies significantly depending on emissions scenario and climate sensitivity assumptions, ranging from 1.8 to 4.0 °C (4.3 to 7.2 °F), with an uncertainty range of 1.1 to 6.4 °C (2.0 to 11.5 °F), according to the IPCC.”⁷

Increased droughts and decreased water availability: “Drought is expected to increase in the western U.S., where water availability to meet demands for agricultural and municipal water needs is already limited. Another projected impact in the western U.S. is decreased water availability due to a range of interconnected factors. These include: decreases in snowpack, earlier snowmelt resulting in peak winter and decreased summer flows, which will disrupt and limit water storage capacity and will create additional challenges for water allocation among competing uses...”⁸

Floods: “The U.S. is projected to see an increase in the intensity of precipitation events, which is likely to increase the risk of flood events...”⁹

Crop failures and reduced livestock production: “[W]ith increased CO₂ and temperature, the life cycle of grain and oilseed crops will likely progress more rapidly. But, as temperature rises, these crops will increasingly begin to experience failure . . . [¶] Higher temperatures will very likely reduce livestock

⁵ *Id.*

⁶ *Id.*

⁷ *Id.*

⁸ 74 Fed. Reg. 18900.

⁹ *Id.*

production during the summer season, but these losses will very likely be partially offset by warmer temperatures during the winter season. [¶] In addition to human health effects, tropospheric ozone increases as a result of temperature increases and other climatic changes can have significant adverse effects on crop yields, pasture and forest growth and species composition.”¹⁰

Given the significant adverse impacts of global warming on the United States and the world, the draft PEIS should have analyzed the impacts of the BCAP in this context. It utterly failed to do so.

Such impacts are particularly important given the significant impacts the proposed action will have on forests, as forests are already undergoing severe stress in the context of global warming. As explained in Noss (2001), forest management needs to change in light of this reality to avoid having severe adverse impacts on forest health, forest carbon, and forest biodiversity:

Intensification of forestry activities is often promoted on the basis that young, actively growing trees will sequester carbon more rapidly than old-growth forests in which respiration may equal or even exceed photosynthesis (Birdsey 1992). Replacement of old forests with plantations is a “perverse incentive” of the Kyoto Protocol (Brown 1998; Dudley 1998). Simplistic carbon accounting, encouraged by the protocol, ignores the tremendous releases of carbon that occur when forests are disturbed by logging and related activities such as site preparation and vegetation management (Perry 1994; Schulze et al. 2000). It ignores the fate of woody debris and soil organic carbon during forest conversion (Cooper 1983; German Advisory Council on Global Change 1998). Typically, respiration from the decomposition of dead biomass in logged forests exceeds net primary production of the regrowth (Schulze et al. 2000). Considerable time is required - often hundreds of years - for regenerating forests to accumulate the carbon stocks characteristic of primary forests (Harmon et al. 1990). Over several rotations of growth and harvest, the mean carbon pool of intensively managed forests is only about 30% that of primary forests (Cooper 1983). From the standpoint of maintaining biodiversity during climate change, conversion of natural forests to plantations cannot be justified. Tree plantations around the world, especially exotic monocultures, have less biodiversity than natural forests in the same regions (Hunter 1990; Noss & Cooperrider 1994; Perry 1994). Plantations are often markedly less resistant to disturbances such as fire and more subject to pest outbreaks than natural forests (Schowalter 1989; Perry 1994). Pest outbreaks could increase in severity or change in distribution with changing climate (Williams & Liebhold 1995), amplifying the vulnerability of plantations.

Unfortunately, the draft PEIS, to the degree it discusses impacts on forests at all, completely ignores this reality. This deficiency also renders the PEIS deficient.

¹⁰ 74 Fed. Reg. 18902.

Finally, the discussion in the draft PEIS of the impacts of the proposed action on threatened and endangered species is completely unsatisfying. The draft PEIS simply concludes by slight of hand that such impacts are not a concern at this point. Specifically, the draft PEIS includes a paragraph on such species in a section entitled “Resources Considered But Eliminated From Analysis.” The paragraph simply recites the requirements of the ESA and assumes that any negative impacts will be avoided via consultation under the ESA at a future date:

Protected species are those federally designated as threatened or endangered and protected by the Endangered Species Act (ESA). Critical habitat is designated by the USFWS as essential for the recovery of threatened and endangered species, and like those species, is protected under ESA. Site specific environmental evaluation in accordance with established FSA regulation and existing procedures would verify the presence or absence of protected species or critical habitat. If protected species are present or suspected of being present, informal consultation with the USFWS would occur during the site-specific environmental evaluation to ensure the protection of these species. Formal consultation with USFWS would be completed in the event a BCAP practice may affect a listed species. If negative impacts to listed species are identified, it is not likely the land would be approved for inclusion in a BCAP action.

PEIS at 2-6 to 2-7. While the draft PEIS is correct that future implementing actions of BCAP will require consultation under the ESA, this does not excuse the complete failure to analyze the impacts of the actual proposed action- the programmatic implementation of the Project Areas Program of the BCAP. *Makua v. Rumsfeld*, 163 F. Supp. 2d 1202, 1218 (D. Ha. 2001) (holding consultation under ESA no substitute for NEPA review); *see also North Carolina v. FAA*, 957 F.2d 1125, 1129 (4th Cir. 1992) (NEPA's requirements cannot be met “by simply relying on another agency's conclusions about a federal action's impact on the environment”).

B. Endangered Species Act

As discussed above, USDA’s failure to discuss impacts on threatened and endangered species in the draft PEIS violates NEPA. USDA’s refusal to consult on the BCAP itself also violates the ESA.

The ESA was enacted, in part, to provide a “means whereby the ecosystems upon which endangered species and threatened species depend may be conserved...[and] a program for the conservation of such endangered species and threatened species...” 16 U.S.C. § 1531(b). The ESA “is the most comprehensive legislation for the preservation of endangered species ever enacted by any nation.” *Tennessee Valley Authority v. Hill*, 437 U.S. 153, 180 (1978). The Supreme Court’s review of the ESA’s “language, history, and structure” convinced the Court “beyond a doubt” that “Congress intended endangered species to be afforded the highest of priorities.” *Id.* at 174. As the Court found, “the plain intent of Congress in enacting this statute was to halt and reverse the trend toward species extinction, whatever the cost.” *Id.* at 184.

Section 2(c) of the ESA establishes that it is “...the policy of Congress that all Federal departments and agencies shall seek to conserve endangered species and threatened species and

shall utilize their authorities in furtherance of the purposes of this Act.” 16 U.S.C. § 1531(c)(1). The ESA defines “conservation” to mean “...the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this Act are no longer necessary.” 16 U.S.C. § 1532(3). Similarly, Section 7(a)(1) of the ESA directs that federal agencies to “utilize their authorities in furtherance of the purposes” of the ESA. 16 U.S.C. § 1536(a)(1); *see also Sierra Club v. Glickman*, 156 F.3d 606, 617 (5th Cir. 1998) (Section 7(a)(1) “contains a clear statutory directive (it uses the word ‘shall’) requiring the federal agencies to consult and develop programs for the conservation of” listed species); *accord Florida Key Deer v. Stickney*, 864 F.Supp. 1222, 1238 (S.D. Fla. 1994).

In order to fulfill the substantive purposes of the ESA, Federal agencies, such as USDA CCC, are required to engage in consultation with NMFS or FWS to “insure that any action authorized, funded, or carried out by such agency...is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the adverse modification of habitat of such species... determined...to be critical...” 16 U.S.C. § 1536(a)(2) (Section 7 consultation). Section 7 consultation is required for “any action [that] may affect listed species or critical habitat.” 50 C.F.R. § 402.14. Agency “action” is defined in the ESA’s implementing regulations to include “all activities or *programs* of any kind authorized, funded, or carried out, in whole or in part, by Federal agencies in the United States or upon the high seas. Examples include, but are not limited to: (a) actions intended to conserve listed species or their habitat; (b) the promulgation of regulations; (c) the granting of licenses, contracts, leases, easements, rights-of-way, permits, or grants-in-aid; or (d) *actions directly or indirectly causing modifications to the land, water, or air.*” 50 C.F.R. § 402.02. (emphasis added). *See also Pacific Rivers Council v. Thomas*, 30 F.3d 1050, 1054-55 (9th Cir. 1994), *cert. denied*, 514 U.S. 1082 (1995)(recognizing that Congress intended “agency action” to be interpreted broadly, admitting of no limitations).

When a proposed action may affect a protected species, consultation must occur and be completed *before* the federal action may take place. *Pacific Rivers*, 30 F.3d at 1056; *Thomas v. Peterson*, 753 F.2d 754, 764-65 (9th Cir. 1985). If an agency fails to consult on an action that affects listed species, all activities that “may affect” the species must be enjoined. *Pacific Rivers*, 30 F.3d at 1056-57. (“[The Forest Service’s] conclusion that these activities “may affect” the protected salmon is sufficient reason to enjoin these projects. Only after the Forest Service complies with § 7(a)(2) can any activity that may affect the protected salmon go forward.”).

Prior to entering consultation, the action agency (USDA CCC in this instance) must first prepare a biological assessment. Section 7(c)(1) of the ESA provides that “each Federal agency shall, with respect to any agency action of such agency. . . , request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action. 16 U.S.C. § 1536(c)(1). In addition, this section provides that “if the Secretary advises. . . that such species may be present, such agency shall conduct a biological assessment for the purpose of identifying any endangered species or threatened species which is likely to be affected by such action.” 16 U.S.C. § 1536(c)(1).

Although procedural, consultation is the backbone of the ESA. As the Ninth Circuit recognized, “[o]nly by requiring substantial compliance with the act’s procedures can we effectuate” congressional intent to protect species. *Sierra Club v. Marsh*, 816 F.2d at 1384 (9th Cir. 1987).

USDA cannot reasonably dispute that the BCAP affects ESA-listed species. Numerous listed species inhabit the millions of acres of forest and range lands subject to the BCAP. Yet the draft PEIS simply asserts that negative impacts to species will likely be avoided at the site-specific level.

In light of the unambiguous statutory mandates of the ESA, and the undeniable impacts of the BCAP on listed species, USDA’s failure to take even token measures of compliance with the ESA are inexplicable. First off, the USDA is utterly ignoring its affirmative conservation mandates under Sections 2(c) and 7(a)(1) of the ESA. With regards to the obligation to prepare a biological assessment under Section 7(c)(1) and enter into consultation under Section 7(a)(2), USDA is again silent.

In failing to consult USDA CCC has violated the plain language of Section 7(a)(2) of the ESA. That provision of the ESA commands that, in consultation with the FWS or NMFS, “[e]ach agency shall . . . insure that *any action* authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered or threatened species . . .” 16 U.S.C. § 1536(a)(2) (emphasis added). As the Supreme Court observed in *TVA v. Hill*, “[o]ne would be hard pressed to find a statutory provision whose terms were any plainer than those in § 7 of the Endangered Species Act.” 437 U.S. at 173. Thus, “[i]ts very words affirmatively command all federal agencies” to “insure” that “any action” by them is not likely to jeopardize any endangered species.

As the Supreme Court affirmed in *Bennett v. Spear*, 520 U.S. 154, 175 (1997), use of the word “shall” in Section 7 is an “imperative” that leaves no discretion. Similarly, in the phrase “any action,” “any” means “all,” not “some” as USDA would apparently have it mean.

This plain language interpretation of the statute is also completely consistent with the “overriding need” of Congress, as expressed throughout the ESA, “to devote whatever effort and resources were necessary to avoid further diminution of national and worldwide resources.” *TVA v. Hill*, 437 U.S. at 177 (internal citation omitted). In view of the clear statutory scheme that applies here, one need look no further than the Supreme Court’s analysis in *TVA v. Hill* to reject completely any excuse put forward by USDA for why it need not consult to “insure” that its actions are not likely to jeopardize the continued existence of listed species.

USDA’s only apparent justification for its disregard of its Section 7 mandates is that to consult on the BCAP would be premature because site-specific impacts are not yet known. This is no excuse. The Court in *Lane County Audubon v. Jamison*, 958 F.2d 290 (9th Cir. 1992) rejected an identical argument. In that case, the BLM refused to consult on its management strategies for timber harvest (TMPs). The Court described the plans as “10-year plans that ‘designate commercial forest land under BLM management in [each] district for one of several uses.’ TMPs *do not designate specific timber-sale boundaries, or require that any particular*

area be harvested. Rather, they decide land-use allocation and set the ‘annual allowable harvest’ for each district.” *Id.* at 293 (internal citations omitted, emphasis added). Despite the fact that specific location of timber sales would be decided at a future point in the planning process the Court found that the plan at issue “falls squarely within the definition of agency action set forth in 50 C.F.R. § 402.02” and enjoined all logging pending compliance with the ESA. *Id.* at 294. The BCAP is no different. The fact that the agency will need to consult in the future at other stages in the process does not absolve it of its obligations to consult on the present action of approving the BCAP.

Thank you for the opportunity to comment. We look forward to seeing our comments and suggestions incorporated in the final EIS and subsequent actions by the relevant federal agencies.

Sincerely,

A handwritten signature in black ink, appearing to read "B. Cummings", written in a cursive style.

Brendan Cummings
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