

December 18, 2018
Regular Meeting
Item # 5h

CDD

Revised Letter



Jennifer Halferty ~ District One Fred Stump ~ District Two Bob Gardner ~ District Three
John Peters ~ District Four Stacy Corless ~ District Five

BOARD OF SUPERVISORS COUNTY OF MONO

P.O. BOX 715, BRIDGEPORT, CALIFORNIA 93517

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Shannon Kendall, Clerk of the Board

Director
U.S. Fish & Wildlife Service
MAIN INTERIOR
1849 C STREET NW, ROOM 3331
WASHINGTON, DISTRICT OF COLUMBIA 20240-0001

Subject: Continuing Commitment and Assurance to Implement Conservation Actions for the Bi-State Distinct Population Segment of the Greater Sage Grouse

Dear Director:

The purpose of this letter is to reaffirm Mono County's commitment to aggressively implement conservation actions in support of maintaining and improving habitat and species viability for the Bi-State Distinct Population Segment of the Greater Sage Grouse. As previously stated in the attached June 9, 2014 letter to the Service (Attachment 1), Mono County continues to be highly engaged in the Bi-State Local Area Working Group (LAWG), Technical Advisory Committee (TAC) and Executive Oversight Committee (EOC) and remains firmly committed to completing its share of the Bi-State Action Plan.

Accomplishments since 2014

Since our 2014 commitment letter, Mono County has directed approximately \$1.7 million to sage-grouse conservation work, including setting aside funding to relocate and remove the existing landfill in the South Mono Population Management Unit (PMU) by 2023, updating the 2015 Mono County General Plan to include required mitigation measures for discretionary projects that may impact sage-grouse populations or habitat, review of other plans with sage-grouse conservation measures (e.g., Humboldt-Toiyabe National Forest Plan update, Inyo National Forest Plan update), developing a website to provide outreach and information dissemination, updating the Community Wildfire Protection Plan (CWPP) to include best practices to reduce the threat of wildfire to sage-grouse habitat, filing as intervenors on behalf of the U.S. Fish and Wildlife Service to defend the decision to withdraw the listing, reviewing ministerial permits (e.g., building permits) and working with applicants to minimize potential impacts, initiating legal action against the Los Angeles Department of Water and Power (LADWP) for dewatering a portion of the South Mono PMU prior to complying with the California Environmental Quality Act, and responding to LADWP's Notice of Preparation of and Environmental Impact Report (EIR) on the proposed dewatering project (known as the Ranch Lease

Renewal Project). Mono County has also helped convene other interested parties such as environmental organizations to collaborate on the LADWP dewatering issue.

In addition, Mono County has partnered with the Bureau of Land Management (BLM) Bishop Field Office on nearly \$225,000 of services and projects (funded by the BLM), including habitat conservation projects to restore/protect wet meadows in Long Valley and Bodie Hills, assistance coordinating and attendance at meetings (Local Area Working Group, Technical Advisory Committee, and Executive Oversight Committee), assistance with annual lek counting, editing annual reports, and engaging in conservation and management issues on lands owned by the Los Angeles Department of Water and Power (LADWP).

Future commitment

Please see the attached revised Mono County Bi-State Sage-Grouse Conservation Commitments (Attachment 2), which outlines how the agency plans to complete its share of Bi-State Action Plan conservation projects. We remain firmly committed to directing the estimated \$~~5.086~~6 million required to implement this work ~~on the Inyo and Humboldt-Toiyabe National Forests~~ and completing it over the next 5-6 years.

Additional info/Closing comments

The Executive Oversight Committee (EOC) for the Bi-State LAWG has submitted a summary of its conservation accomplishments to date under separate cover to your agency. We hope you will consider our significant accomplishments to date along with this commitment from Mono County as you evaluate development of either a final rule to list the species, or a finding that listing is no longer warranted. With this letter we wish to clearly indicate our commitment to conservation of the species and its habitats.

We will continue to maintain close relationships with your staff and our partners to prioritize funding where biological benefits are maximized. If you have any questions, please don't hesitate to contact Wendy Sugimura, Community Development Director, at (760) 924-1814 or wsugimura@mono.ca.gov.

Sincerely,

Bob Gardner
Chair

Attachments:

1. Commitment Letter dated June 9, 2014
2. Updated Mono County Bi-State Sage-Grouse Conservation Commitments (2018)

CC: U.S. Fish and Wildlife Service, Reno Office
Congressman Paul Cook
Senator Dianne Feinstein
Senator ~~Barbara Boxer~~[Kamala Harris](#)
State of California, Governor ~~Brown~~
[State of California, Governor – Elect Newsom](#)
Office State of Nevada, Governor Sisolak
Forest USFS, Humboldt-Toiyabe National Forest

BLM, Bishop Field
Town of Mammoth Lakes
Rural County Representatives of California (RCRC)
County of Alpine
[State of California, Senator Andreas Borgeas](#)
California State Association of Counties (CSAC)
USFS, Inyo National
County of Inyo

December 18, 2018

Regular Meeting

Item # 7a

Ag Commissioner

Letter

To Mono County Board of Supervisors and Agriculture Commissioner:

Assumptions were made in the analogy of pesticide drift and organics; though industry solutions for pesticide drift include space buffers, hedge-rows, appropriate timing with weather conditions, reduction of spray diameter, etc. In contrast to pesticide drift, there are many more variables to pollen drift.

The anatomy of the different cannabis species plays a vital role in understanding the dynamic of pollen drift. The production of CBD or THC essentially determines the classification of hemp or marijuana (as both are technically cannabis, I will reference the two distinct species as either hemp or marijuana), hemp contains <0.3% THC and 10% CBD, or greater; marijuana essentially has a flip of these ratios, though many strains now contain upwards of 20-30% THC. The genetics of the cultivar (hemp) or strain (marijuana) affect the qualities of the chemical contents based on the capability of the enzyme CBG to replicate either CBD or THC into the genetic template. An interesting notion, CBD binds to the CBD-2 receptor, which neurologically prevents THC from binding and transmitting; so hemp actually counters the THC high. Cannabis can further be separated into either monoecious (self-pollinating) or dioecious (male/female). Like the marijuana industry, many industrial hemp farmers mirror the cultivation techniques and now use only dioecious, feminized plants; some farmers even keep clones. Hence, no pollen! However, hemp has many seed cultivars, just as marijuana has many strains. Further, hemp has many uses: fiber/textile, food grain/fodder, CBD oil, milk, hempcrete, plastics, cosmetics, biofuel, etc. etc. Though marijuana does have many different health qualities, the general use is usually for psychotropic affects. Based on the different uses of hemp, there are specific cultivars for each of these uses, and some produce pollen. In this case, there is also a solution available.

Further, biology works against the worries of cross pollination. Hemp plants that do create pollen are large haploid cells, so much of the plant's projections are only 3 feet. However, in practicality, wind or insects could carry pollen 100 yards to 3 miles. It is an industry standard in Oregon, Colorado, and Canada that there is a buffer distance of 3 feet to 3 miles (5k) from an already existing cannabis operation based on hemp cultivar used. The IHAB and CDFA have produced a preliminary list of cultivars and the spacing requirements from other crops. And in addition to a spatial buffer, just as organic and conventional farmers can use hedges, so too can industrial hemp. A perimeter planting of tall plants, such as sunflowers, are very efficient in the capturing of pollen. Fencing is also another great option- and since most marijuana security plans include a perimeter fence, the chance of pollen drift continues to decline.

Also, there is a general assumption that if there is pollen drift that the gene flow would inherently produce a diluted marijuana strain. However, this doesn't seem to be the case in recent research. Though these plants can cross pollinate, there is either no or relatively little seed produced when this occurrence has happened. And generally, many commercial marijuana growers are not as worried about protecting the genetics of the field plant (the mother for clones are usually kept separate) as they are the loss of THC when energy is placed on producing seed. Further, this is already a problem that marijuana cultivators are prone to experience with any stress the plant has from varied light or temperature changes- the female plant will shift into a hermaphrodite to produce seed to ensure genetic flow. Essentially, a seedy flower could be as much from the marijuana as from the hemp. In addition, if a dioecious planting of seed were to generate males, a marijuana cultivator usually has a couple of weeks to cull these plants before female flowers can collect the pollen. Unfortunately, current California hemp regulations would prohibit any pruning or culling of hemp plants, but I hope it has been

seen there are many demonstratable solutions past extraction of males. This also emphasizes the need for local control of the process to provide practical solutions to the industry.

There are already industry standards in place. Both Oregon and Colorado have experimented with the two plants. Kentucky has championed the movement (and though there is no legal framework for marijuana, it is a plentiful illegal crop), but the most solid example is the Canadian market. Most all of hemp imports come from Canada. Further, Canada is also the first first-world country to legalize marijuana. This dynamic has not disrupted production. In fact, corporations such as Aurora and Canopy Growth (the largest cultivators in the world) have thrived alongside their industrial hemp counter parts. A big part of this also has to do with growing methodologies- much of Canada has a short growing season, and greenhouses are the industry standard. De facto, these enclosures restrict the flow of pollen from entering or leaving a facility. There is a common theme in Mono County in relation to climate, and I am sure all of the applicants that are/will be submitting for recreational/medicinal marijuana will have a hoop house, greenhouse, or warehouse option included; many of these will also have carbon filtration systems, HEPA filters, or fog machines which all reduce pollen drift. This methodology can also be applied for oil producing hemp cultivars.

I hope that the County Board of Supervisors provides direction to codify hemp as a permitted agriculture crop. With the recent passing of the Farm Bill, the industrial components of hemp are now Federally legal; this includes the oil production of CBD. Unlike its counter-part marijuana, hemp now has the backing of both Federal and State regulations; as long as local authorities permit the usage. Though Agricultural Research Centers are exempt, there is currently a loose framework for hemp farming. Initially, County Agriculture Commissioners to collect a \$500 application fee for the time spent processing and an annual \$900 registration fee. This is a reasonable entry to a unique crop, similar to aquaculture or fallow deer permit fees. Current California regulations include a declaration of the hemp cultivar, required testing of THC, no pruning, and no culling- this likely to deter illegal cultivation of "marijuana", though biologically unfeasible and further stymied by having to use registered hemp cultivars, which genetically produce CBD. There must also be GPS points recorded of the fields, and signage indicating "Industrial Hemp"; as well as the name and address of the farmer. I hope this crop is seen as a commodity crop like cotton, corn, or alfalfa. Thereby, a permitted use within agriculture designations and subject to the oversight of the Agriculture Commissioner based on a drafted ordinance, which could include needed conditions ie buffer distances from established marijuana grows. Industrial hemp should be given full consideration under Mono County General Plan Chapter 24, Right to Farm. This would further avoid the costly and timely process of CEQA, and enable a new crop to establish in the limited agricultural sector. The social and environmental improvements given by hemp should reduce the regulatory process needed.

Hemp can be utilized for a variety of uses as explained above, but also for its specific potential in the Eastern Sierra. As cannabis originated in the Mongolia/China regions, and most notably the Hindu Kush, the latitudinal similarities to our region make this plant a great option for our climate. In contrast to many marijuana strains, which are mostly equatorial in nature and need a more controlled climate and higher volumes of nutrients and water inputs. While most marijuana can use 3-6 AF of water; alfalfa can use 4 AF of water; industrial hemp can use only **.08 AF**. More amazing is industrial hems ability to deter pests (phytopesticide) so there is no need for crop rotation, rather, a hemp plant is a phytoremediator of the soil- up taking heavy metals and pollutants. Also, the productivity is amazing; while marijuana

generally needs a spacing of 6-8ft. between plants, hemp needs only 4 inches, and has the capacity to grow upwards of 10-12 feet in 75 days.

There is a vast history to industrial hemp in the United States. I hope there is a resurgence for the tremendous amounts of applications that are needed in a global setting plagued with climate change. There must be a shift on the reliance of cotton and tree products; on cement mining, on petroleum-based resources. A classic example is the Ford Model T- which was made from hemp plastic and used hemp fuel! A renewable resource to replace many of these applications and that is compatible to our climate opens an entirely new market to the agricultural sector.

Please find that there is an ability to have cohabitation of hemp and marijuana. There should be no vested interests in protecting an industry that doesn't yet exist. Rather, there should be an embrace of creativity and entrepreneurial solutions to some of the most complex problems that have faced humanity- it's a novel step in the right direction, and each individual action should be seen to contribute to the greater whole. However, it is a valid concern that marijuana and hemp could cross contaminate, so I would encourage the implementation of buffers, and have hedges as a best management practice. Further, as 'all' of the outdoor cultivation permits are happening in Walker, please do not blanket a regulation for the entire county, which is sparse and has many geographic barriers of isolation. If there are direct issues with the marijuana and hemp industries, then please settle these within area plans or specific ordinances to a place-based need.

I look forward to the option to apply for an industrial hemp cultivation permit. The opportunity to farm hemp is a large reason why our family moved back to this area. I would like to grow a commodity crop that has as diverse a use as any other plant available to grow. I anticipate the results of your upcoming meeting.

Sincerely,

Vanessa Arnold