

Mr. Brian Amme
PEIS Project Manager
Nevada State Office
1340 Financial Boulevard
PO Box 12000
Reno, Nevada 89520-0006

Dear Mr. Amme,

1 I am writing in response to the BLM Herbicide Use Plan. I am especially concerned that
2 of the Alternatives cited the BLM has chosen Alt. B, which would nearly triple the
amount of herbicides used throughout the West. Further, nowhere in this document does
it address the real reasons why invasive plants are so pervasive on public lands (logging,
road building, cattle grazing, ATVs, and mining). Until the BLM begins to deal with the
source of the problem, there is only going to be an increase in these heavy-handed tactics
to the great detriment of the environment.

Effects on Species

3 Amphibians are already experiencing a global decline, in part, scientists say, due to
herbicide exposure. (Amphibians uptake oxygen through the skin, which allows these
chemicals to be spread throughout their bodies). This is also the case with fish. In fact,
the Region 6 District of the US Forest Service found that 12 of the 18 herbicides the
BLM plans to use "likely to adversely effect" almost all federally Threatened,
Endangered, and Sensitive species.

4 Just to limit the discussion to only one of the warm blooded critters to be impacted by
this proposal; the sage grouse is one species that will have serious consequences. First is
the proposed use of herbicides in it's habitat and second, the planned clearing and
burning of sagebrush throughout the West.

Some of the Chemicals proposed

5 **Dicamba:** acts by mimicking auxins in the plant, resulting in abnormal cell division. It
also acts by inhibiting an enzyme found in the nervous system, acetylcholinesterase.
Inhibition prevents the smooth transition of nerve impulses. It inhibits enzymes in animal
livers that detoxify and excrete foreign chemicals. An oral dose of 3.5 oz. would kill an
average sized human. Dicamba caused reproductive problems even at extremely low
doses in laboratory tests. These adverse effects were exhibited in both mammals and
birds. Dicamba is also alarmingly mutagenic, significantly increasing the unwinding rate,
or single strand breaks, of the genetic material in rat livers. It also caused unscheduled
DNA synthesis and an increase in sister chromatid exchanges. Dicamba has also caused
mutations in bacteria. Dicamba greatly increases the risk of contracting the cancer non-
Hodgkin's lymphoma up to two decades after exposure. There are also impurities in the
products that increase the potential carcinogenicity, such as dimethylnitrosamine, which
causes cancer in lab animals. Given the potential adverse health effects, why is the BLM

proposing to use such a toxic chemical? What will the BLM do to ensure that the environment is protected from this poisonous chemical?

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Dicamba volatilizes easily from plant surfaces, particularly when temperatures are over 85°F, which are exceeded daily in the summer throughout the West. Vapors can drift up to 5-10 miles, which greatly increases the chance of contamination of nontarget plants, wildlife, water sources, streams, and areas that could be adversely effected. Another documented effect of Dicamba was that it increases the incidence of plant diseases, *Bipolaris sorokiniana*, or leaf spot disease, and the take-all infection. It also reduces germination of other plants, such as oak seedlings, and reduced the soils ability to fix nitrogen. Dicamba is also persistent in the soil, and has been documented to last as long as 13 months. Dicamba also persists longer in dry soils than in wet soils. We are extremely concerned about the toxicity, drift potential, and persistence of this chemical and expect the BLM to fully analyze the potential adverse effects that may result from using products containing Dicamba. We are also concerned that Dicamba may increase the risk of other plant diseases on the BLM.

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Dicamba also contains numerous toxic inert ingredients. Virtually all the testing that has been done on Dicamba have been on the chemical itself, not the products and their inert ingredients and contaminants. There is evidence that these other ingredients greatly increase the toxicity and the health risks. We are very concerned that these health risks are largely unknown and believe that the EIS should disclose how little we know about the health and environmental risks associated with this chemical, the other herbicides proposed for use, including the inert ingredients, and any other chemicals used on BLM land, including but not limited to rodenticides, fire retardants, fire propellants, and any other pesticides, and the potential for synergistic effects with surfactants, and between chemicals if multiple chemicals are used at the same location over time. We also believe that what we do know enough about the risks to know that the toxicity of these chemicals far outweighs any of the dubious benefits of herbicide treatments.

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TRICLOPYR. Triclopyr is a selective herbicide used to kill broadleaf plants. Two forms of triclopyr are used in herbicides. Trade names for herbicides containing triclopyr include but are not limited to Access, Crossbow, ET, Garlon, Grazon, PathFinder, Redeem, Rely, Remedy, and Turflon. The main manufacturer is Dow AgroSciences. The herbicide may be mixed with picloram or with 2,4-D to extend its utility range. While just triclopyr is known as 3,5,6-trichloro-2-pyridinyloxy acetic acid, herbicides contain either triethylamine salt of triclopyr, or the butoxyethyl ester of triclopyr. Which form and what products is the BLM proposing to use?

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Triclopyr has many different documented toxicities. Triclopyr causes an increase in breast cancer, an increase in genetic damage such as dominant lethal mutations, an increased incidence of reproductive problems, and damage to the kidneys. The ester form of triclopyr is highly toxic to fish, inhibits behaviors in frogs that help them avoid predators, and decreases the survival rate of baby birds. Triclopyr also inhibits the growth of mycorrhizal fungi, and with fixation of atmospheric nitrogen. Triclopyr is mobile in

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cont.

soil and readily contaminates wells, streams, and rivers. The major breakdown product of triclopyr (3,5,6-trichloro-2-pyridinol) disrupts normal growth and development of nervous systems and accumulates in fetal brains. We are very concerned that these same effects will occur in wildlife and people if the BLM uses this chemical on our National Forest.

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It has been documented that triclopyr can have unintended effects on plants that are not the target of the herbicide application. These effects include drift damage, genetic damage, inhibition of mycorrhizal fungi, reduction of nitrogen cycling, damage to mosses and lichens, and stimulation of algae blooms.

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2, 4-d: Oh yeah, and these chemicals dumped on the forest end up in our water. I drink water and I'm sure you do to. 2, 4-d, an herbicide that your proposal considers using, is the active ingredient in Agent Orange. Whose effects have been well illustrated. Forty years later, some of those Vietnamese kids are still being born with deformities from the massive use of this shit in Vietnam. I wonder how this will help endangered fish? Even the DEIS lists all endangered fish species as "likely to be adversely affected."

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Both 2, 4-d and dicamba were dropped from the Forest Service Region 6 herbicide report due to higher toxicity levels. And based on the Forest Service risk assessment, triclopyr, and picloram are not far behind. It would strongly suggest you research their data so that the full story can unfold on these chemicals, before the effects do.

The Effects on BLM Staff

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At present application rates, workers would be at serious risk when using diquat, 2, 4-d, bromacil, diuron, hexazinone, and tebuthiuron. As it even states in the EIS, the preferred alternative contains the most risk to applicators. It is disgusting that this is would you would choose to impose on your staff.

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Lastly, There Should be no Herbicide Use or Vehicle Use in Wilderness Areas.

It completely defeats the purpose of the designation and is completely unacceptable.

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Therefore I feel that of those alternatives cited Alternative E is the best option listed in the EIS. This proposal sensibly favors spot application. It also removes the four worst chemicals from the list, but it does still allows some seriously dangerous chemicals, such as 2, 4-d, dicamba, and triclopyr. It is sorry that the Restore Native Ecosystems Alternative was stricken and I would strongly encourage this information when proceeding with a decision.

Thank you for your time and consideration,

Gradey Proctor
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