Citizen Comments on Boulder County Open Space re:

"Integrated Weed Management Plan (IWMP)

Submitted to: Boulder County Board of County Commissioners

cc: Parks and Open Space Advisory Committee: BCPOS staff

Date: 16 April 2024

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COMMENTS:

I and many others have numerous times testified and provided detailed technical/science based comments previously on the Integrated Weed Management Plan (IWMP), at public workshops by staff, and hearings of Parks and Open Space Advisory Committee (POSAC), including comments on numerous previous draft IWMP versions put out by BCPOS. I am not alone from the public in offering serious criticisms of all of the previous IWMP drafts.

Today, the Boulder County Parks and Open Space (BCPOS) is offering a major rewrite of IWMP, labeled Draft Plan Version 3.0 for consideration by the Boulder County Board of County Commissioners (BOCC).

Unfortunately, these latest revisions by BCPOS remain significantly, even fundamentally flawed to protect our publicly owned open space lands from serious damages to the environment, public health and safety, and in particular, even life support systems and protections against increasing damage to our planetary health and climate change.

- Not only is the Version 3.0 of IWMP still seriously flawed scientifically, totally inadequate in protecting public health, biological integrity, but is now totally undefined as to what measures are to be allowed & used by BCPOS. The current Version 3.0 is even dysfunctional and ill-defined to the point of being useless in any sense as a well-defined weed management plan.
- The Version 3.0 IWMP has removed any specificity regarding what chemical weed management agents will or can be used or considered to be used. And the 3.0 version provides for no ongoing public notice, input or oversight regarding what toxins are to be considered and/or
- utilized on public open space lands. The door would be closed to any future public or even scientific input as Version 3.0 is currently written.
- Furthermore, the current and all previous versions of IWMPs have never been comprehensive with regard to the methods and materials management of weeds in Boulder County, and most notably on all of the public owned open space lands and other lands under the management

authority of Boulder County. Consequently, the current and all versions of Weed Management Plans must be expanded to include all of these other lands controlled by Boulder County. Specifically, the current IWMP is totally and massively incomplete, and ignores weed issues on all of the other lands & facilities under the legal management by Boulder County. All of these lands & facilities must also be included in a Comprehensive Integrated Weed Management Plan. To not do so is to ignore reality!

- All open space agricultural lands, leased and unleased to private operators, including specifically thousands of acres of open space croplands and grazing lands. These lands are major, even much larger users of chemical and other weed management methods, much more important than just the non-agricultural lands now proposed to be covered by any proposed version of IWMP. To not include all BCPOS ag lands in this IWMP is a total failure to deal with the reality of weed management and certainly the damage potentials from flagrant use of chemical toxins.
- In addition to the above noted deficiency in coverage, there are many other county owned and otherwise managed lands/properties under the purview of the Boulder County Commissioners that should be covered by a County IWMP, such as:
 - All county roads and rights of way (ROW)
 - All county buildings and grounds, whether owned, leased, or otherwise controlled by Boulder County (e.g. via rents of private facilities)
 - All bodies of water, natural or constructed, within and adjacent to Boulder County lands, owned or otherwise controlled.
 - All lands under conservation easements or other such contractual arrangements with private parties.

In addition to the above noted major deficiencies of the proposed IWMP, it is seriously questioned whether the Version 3.0 or any plan so far considered would be in compliance with Colorado State Statutes that require management of noxious weeds. This issue has not been thoroughly investigated by this citizen comment, but in order to be assured of full compliance with applicable Colorado state statutes, the Board of County Commissioners are strongly recommended to thoroughly investigate this matter.

Additional technical comments:

Major flaws in the Version 3.0 proposed IWMP continue to exist, and must be changed to be descriptive and acceptable to the public:

1. Many chemical toxins that affect more than target weed species have been previously proposed to be allowed and routinely applied to the public lands. (even though the Version 3.0 has totally eliminated an explicit list of proposed herbicides; leaving that totally open to discretion by BCPOS). Most of the previously proposed herbicides (in prior IWMP proposals) also have major toxic properties that simply cannot be acceptable.

- 2. BCPOS has proposed to reduce herbicide applications on open space "natural lands" by 50% by 2030. This is a deeply flawed proposal and it is unnecessary to delay at all the banning of chemical herbicides on county lands.
 - a. Instead, the ban of herbicides, must be converted to an immediate banning of all chemical herbicides, effective immediately with the approval of this IWMP and all future versions.
 - b. The only allowed herbicides that can be acceptable for use on county owned/controlled lands and fac lities are those explicitly allowed under the US Department of Agriculture National Organic Program (NOP) regulations. I repeat, there is no cause nor reason to delay the elimination of the use of toxic herbicides via even a partial phase in as proposed in Version 3.0 of IWMP.
 - c. Furthermore, as noted above, there is no reason to limit this abandonment of herbicide and other pesticide applications to just "natural lands" managed by BCCPOS (interpreted to mean lands other than crop and grazing lands). This limit which is presumed to not include the many other public lands of BCPOS, nor the other lands owned by the people of Boulder County such as all of the crop lands, grazing lands, county buildings, roads, various rights of way, etc.
- 3. Regarding "Revised aerial spray and drone policy": The policy must not be limited to removing aerial spraying by helicopter. It must also expressly not allow any spraying by helicopter and fixed wing aircraft and by drones and any other manner that can result in any drift or runoff or gaseous vaporizations, or contamination of any surface or groundwaters. The newly proposed setbacks and limitations for drone applications are wholly inadequate: In any case, paragraph # 2 above would eliminate virtually all chemical herbicides except those expressly allowed by USDA NOP rules, and identified by the recognized independent non-governmental entities that register such herbicides, as well as other classes of pesticides.
- 4. In "Remove glyphosate from list of approved herbicides with limited exceptions": It is notable that in the announcement page of BCPOS's just released Version 3,0 IWMP, it states that POSAC voted 6-2 in favor of removal of glyphosate from use by Boulder County. However, that statement and glyphosate restriction is not included anywhere in the Version 3.0 text.
 - a. Glyphosate must be explicitly disallowed for any uses on all properties owned or managed by Eoulder County.
 - b. The IWMP must explicitly include this universal prohibition of glyphosate.
 - c. The Version 2 0 IWMP had made several exceptions where glyphosate could still be used, including the following:
 - i. aquatic use in irrigation ditches
 - ii. Stump removal of invasive hardwood trees, and
 - iii. Reclamation and restoration projects.
 - d. NONE OF THESE USES FOR GLYPHOSATE ARE IN ANY WAY ACCEPTABLE, AND ALL ARE EXCEEDINGLY DANGEROUS, EVEN PROHIBITIVE TO TRANSITIONING TO CERTIFIED ORGANIC AGEICULTURE IN BOULDER COUNTY.

- e. I have previously provided to BCPOS and BOCC a detailed professional scientific literature review on this specific pesticide, roughly 80 pages and supported by 120+ scientific references. Please refer to my prior public testimony for that information.
- 5. In the most recent prior IWMP Version 2.0 several other herbicides were **explicitly removed** from approved list of allowable herbicides. **However, the latest IWMP Version 3.0 has deleted** all listings of allowable or disallowed herbicides, including the tables of characteristics of listed pesticides, leaving wide open and void any guidance as to allowed or disallowed herbicides under the current Version 3.0 IWMP.

This is deplorable and opens the door to potential ignorance of pesticide hazards and even mischief by BCPOS to use any herbicide it chooses, all without any public oversight or input in the hazards of any herbicide BCPOS staff chooses to use.

It is also very concerning that BCPOS has totally deleted nearly all mention of a technical basis and justifications for selection and use of any herbicide, which must legitimately be based upon quality scientific foundations and professional peer reviewed/unbiased documentation of associated environmental, climate, public health, threatened/endangered species vulnerabilities, food/feed safety from pesticide contamination, etc.

The new Version 4.0 is devoid of any valid science justification or methodologies POS would be required to use for selecting to use even USDA NOP weed control chemicals/products. That is a dangerous omission. While its former Version 3.0 Appendix D: Herbicide Use Tables and Appendix E Relative Toxicity Levels were grossly deficient, even unscientifically lacking & inaccurate, being over-reliant on the deeply flawed Cornell University Environmental Impact Quotient (EIQ) calculator/table values. To eliminate all of such information or description of proper & science based methodologies for determining acceptable, scientifically referenceable & safer methods and justifications for weed management from the IWMP for justifications of selections of pesticides by BCPOS is a poor, even dangerously unscientific move. Instead, BCPOS should be charged with conducting an independent legitimate unbiased scientific review for any method or product it proposes to use for weed management. So far that has not been demonstrated by BCPOS.

The cited "Additional Resources" listed in the announcement page for this current Version #.0 are unfortunately largely biased toward chemical controls of weeds, rather than non-toxic methodologies.

7. Appendix D: Herbicide Selection Process: The herbicide selection process of IWMP Version 4.0 as recommended by BCPOS is woefully inadequate, particularly die to its overreliance on the validity and pesticide registration processes used by the U.S. Environmental Protection Agency (EPA) and the routine unquestioning rubber-stamping approval of pesticides by the Colorado Department of Agriculture (CDA). Both of these government agencies are captive to and manipulated by the pesticide industry and the protocols and their lack of independent and legitimate science, including virtually total reliance on the required toxicity investigations from registrants required to obtain a pesticide registration which are heavily unscientific, and deeply flawed.

The fundamental U.S. aw, Federal Insecticide, Fungicide, Rodenticide Act (FIFRA) is badly out of date and has been progressively warped in its application by the pesticide industry, including a high level of secrecy even of the actual formulations of pesticides that are approved by EPA. The World Health Organization (WHO) does have a somewhat better reputation than U.S EPA, as do the pesticide regulatory agencies of the European Union. However, neither EPA nor CDA use WHO nor the EU for decisions about safety to health and environment when approving pesticides in the USA and Colorado, respectively.

It is notable that even the BCPOS Appendix D (of IWMP Version 3) noted that "active ingredients" of pesticides would be used to assess hazards of given pesticides. This is in fact the same flawed toxicity assessment methodology/protocol that EPA employs and that CDA unquestioningly accepts as good science. But that process is absolutely deeply flawed science and notably the other "non-active" ingredients are almost always declared as secret/business confidential information that chemical companies refuse to allow to be made public by EPA and CDA. The active ingredients are most often a very small percentage of the total formulation of pesticides actually in the purchased container, and the so-called "inactive ingredients" or "adjuvants" are simply **not inactive** in virtually all pesticide formulations, most actually being included to enhance the toxicity effects. Yet, required toxicity evaluations submitted by the pesticide manufacturers to EPA are not required to provide toxicity assessments on the full formulations as actually sold and used, hence the toxicity data and resulting registrations are scientifically bogus since they are not based on what is applied in the environment.

8. The previous reviews in IWMP Version 2.0 of statutory Powers of County Commissioners and Municipal Authority under Colorado statutes, and accompanying statutory/regulatory citations and text have been totally deleted from the IWMP Version 3.0. It is highly recommended that these be restored to the IWMP as appropriate appendices for reference for scope and legal authorities for rulemaking by Boulder County.

Respectfully submitted:

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Contact information for any desired consultation and further support to Boulder County in establishing scientifically valid rules for managing weeds or other uses of pesticides. rich@zeoponix.com