

Comments Received on Regenerative Agriculture Definition*

Comment Period: June 2024

*These are written comments received via email to RegenerativeAg@cdfa.ca.gov or through chat box via public listening sessions. Written comments submitted in the Zoom chat box during public listening sessions and work group sessions will be posted elsewhere. You may submit a written comment at any time to RegenerativeAg@cdfa.ca.gov. Comments will be posted at the end of each month.

Date	Written Comment
6/3/24	<p>I am writing to urge you to set organic agriculture as the baseline for the California Department of Food and Agriculture definition of “regenerative agriculture.” A growing body of science shows that organic agriculture is already measurably achieving the stated goals of regenerative, such as improving soil health, boosting farmers’ resilience to floods and droughts, and sequestering carbon in the soil.</p> <p>Organic also prohibits over 900 pesticides allowed in conventional agriculture. Any meaningful definition of regenerative agriculture must include eliminating the use of toxic pesticides. Research shows that all commonly used classes of pesticides harm the soil biodiversity that is the heart of regenerative agriculture. These same pesticides pose serious risks to human health, with children being the most vulnerable to exposure, and farmworkers and rural communities on the frontlines.</p> <p>Organic agriculture also prohibits all forms of genetic engineering. California’s definition of regenerative agriculture should do the same. GE crops have dramatically increased the use of toxic herbicides over the past three decades. And a novel suite of products derived from genetic engineering are being developed and deployed in agriculture, including GE insects, GE soil microbes, and gene-silencing pesticides. These technologies pose a range of risks for the environment and public health.</p> <p>California’s definition of regenerative agriculture will have broad implications for the food system in California and nationwide, as other state and federal agencies often look to California as a model. It’s crucial that our definition protects people, pollinators, and the environment and promotes organic agriculture.</p>

6/4/24	Please define regenerative agriculture with organic certification as the base.
6/5/24	<p>May I suggest that the concepts of “Organic” farming, Which are understood by most of the Farming community, be a basis for Regenerative Ag.</p> <p>To keep it simple by using known and proven practices, would save the state (taxpayers) Money.</p> <p>Most “Study Groups” spend MUCH more dollars than required. Because they have them!!</p>
6/5/24	<p>We would like to thank you and the State Board for this opportunity to provide input into this important process. We are a bulk liquid organic fertilizer manufacturer based in Gonzales, CA and have been in business since 2006 supplying our products to sustainably driven organic and conventional operations of all sizes.</p> <p>Our mission is to improve the health of our soils, seas, and skies by safely repurposing nutrient dense organic wastes into sustainable bio-fertilizers.</p> <p>Our organic products empower farmers to reduce their reliance on chemicals and pesticides by promoting soil and plant vitality, all while curbing water consumption and preventing nutrient runoff.</p> <p>The Progressive Digestion Process, our technology for making these fertilizers, serves as a powerful foundation for Regen Ag systems as it is capable of challenging chemical inputs that have proved to be toxic to our health and ecology. Our process converts the food industry’s most difficult to handle organic wastes (fish inedibles, expired meats, slaughterhouse waste, C.A.F.O. mortalities), into safe and nutritious organic bio-fertilizers that feed both the plants and soil unlike their chemical counterparts.</p> <p>Since our inception we have diverted over 30 million pounds of food waste from entering our landfills and have recycled it into a product which replenishes our nation’s nutrient depleted soils. We believe it is critical that the definition of regenerative will support the progress that has been made in our organic industry to curb chemical usage while solving many additional climate challenges along the way.</p>

We agree with the Environmental Farming Act Science Advisory Panel (EFA SAP) who cited that soil health and biodiversity are core principles, as well as cultural practices, farmer well-being, community relations, human health, and farmer innovation as elements of regenerative agriculture.

Allowing synthetic inputs in regenerative programs conflicts with many of these principles. For example:

- Environmental: Synthetic inputs are derived from fossil fuels and contribute to catastrophic biodiversity collapse and toxic pollution. Synthetic fertilizers and pesticides disrupt healthy soil practices like decomposition and nutrient cycling and harm soil microbial and invertebrate communities.
- Human Health: Synthetic pesticide exposure is linked to Parkinson's disease, cancer, Attention Deficit Disorder (ADD), impaired neurobehavioral development, diabetes, and asthma, just to name a few diseases that are well documented.
- Social: Synthetic pesticide manufacturing, storage, and application disproportionately harm Brown and Black communities.¹³ California EPA has found that pesticide use is the pollution burden with the greatest racial, ethnic, and income disparities in California.¹⁴ Latino children are 91% more likely to attend schools with the highest pesticide exposure.

Organic certification is the only government program that prohibits the use of synthetic inputs and thus regenerates soil and community health. Moreover, organic farmers adopt whole farm regenerative systems. They must create an organic system plan that outlines every component of the farm from agronomic practices, natural resource conservation, and sustainable pest management to recordkeeping, on-farm processing, marketing, and listing out every material the farmer anticipates using. Organic certification demands farmers consider human health as much as soil or economic health. While organic certification is a starting point of a regenerative system, it is not the finish line. Farmers continue to move beyond organic certification under the Regenerative Organic Certified (ROC) program to implement worker welfare standards.

We ask the Task Force to create a definition for regenerative ag that will be grounded in organic principles to foster these important considerations of environmental health, soil health, and human health

	<p>by prohibiting any synthetically derived inputs in regenerative systems. We look forward to participating in the following discussions and have faith that the State Board will come to a decision on a definition that will encompass all above mentioned elements.</p>
<p>6/6/24</p>	<p>I'm writing to urge you to include registered and certified organic agriculture as the foundation of your definition of regenerative agriculture. Regeneration of farm and ranch ecosystems must begin with the elimination of synthetic pesticides and genetically modified organisms, both of which are fundamental tenets of organic agriculture. Organic farmers have long been restoring on-farm biodiversity with conservation cover, hedgrows, cover crops, and a suite of practices that steward soil health and biology. Organic is regenerative!</p> <p>As an organic farmer, I interact regularly with consumers who are confused about third-party certifications and marketing claims. I fear that public perception of the term regenerative may turn out similar to public perception of the term sustainable; consumers think it is a good thing and equate it with Organic, when in truth there is no system of verification backing the claim and therefore it has little meaning at all!</p> <p>Organic farmers must invest the extra time and money that organic production, recordkeeping, and certification require. Please do not dilute their already thin profit margins by adding an additional marketing claim to compete against organic. The best way forward for agriculture, and for the goals outlined by regenerative and organic production systems, is to include organic as a foundational component when defining regenerative agriculture.</p>
<p>6/6/24</p>	<p>I am writing to encourage the state to not make Regenerative Farming a separate category outside of and separate from the certification for Organic Farming. At the core of regenerative farming is our relationships between our soils and the farmers who tend them. It would be a travesty to begin a separate regenerative certification outside of the scope and requirements of organic because of the damage to the diverse micro-biome that lives in the soils that is caused by herbicides, fungicides and insecticides allowed in NON-organic operations. Regenerative agriculture is a part of the goal of organic agriculture and to allow a operation to be certified "Regenerative" while still using chemicals that destroy soil health and keeps organic matter from being "digested" to become stable humus in the soil is to miss the point of increasing organic matter in our state's soils. It is not merely "organic matter" that we need to be increasing in our soils, but it is the increase of humus that we need to increase so as to feed and fuel a highly active living and growing micro-biome in our soils. The living micro-biome in our soils is made up of a diversity of living fauna as well as living flora. Worms, enzymes, bacteria, microbes, fungi, roots and</p>

	<p>humus all make up an interdependent system that ultimately will encourage plant health, productivity and resilience. No soil microbiome can survive non-organic chemicals.</p> <p>Regenerative Certification should become the prize that Certified Organic producers should strive for. Like a badge of real-world performance, Regenerative Organic should be the label earned when Organic producers double their organic humus in the soil and reduce their overall dependency on exterior crop protection materials due to optimizing plant health. Permaculture is a farming system which encourages onsite independence from exterior inputs which can be a result of regenerative farming practices and systems.</p> <p>In addition to soil and plant health, the social ramifications of focusing on developing on-farm relationships with the consumers of our produce that Regenerative principals encourage will be a restoration of trust between the producers and consumers of our produce and will contribute in a positive way toward the mental and physical health of our entire state and nation and planet.</p> <p>In conclusion, Organic Certification must be the "ground floor" and beginning point for all who would like to become certified Regenerative. Regenerative practices must become the highest level of accomplishment for Organic producers and not the watered-down feel-good certification of conventional producers who simply want to add a token good feeling as they spray their glyphosate on their "roundup ready" crops.</p>
<p>6/6/24</p>	<p>We grow, raise, process, manufacture, and sell certified organic food and fiber as well as represent groups that support organic agriculture in California. We ask the Regenerative Agriculture Task Force (Task Force) to adopt a definition of regenerative agriculture that starts with certified organic.</p> <p>You cannot regenerate and rely on synthetic inputs. We agree with the Environmental Farming Act Science Advisory Panel (EFA SAP) that regeneration stands on four pillars: environmental, human health, social, and economic. Synthetic inputs conflict with three of the pillars.</p> <ul style="list-style-type: none"> • Environmental: Synthetic inputs are derived from fossil fuels and contribute to catastrophic biodiversity collapse and toxic pollution. Synthetic fertilizers and pesticides disrupt healthy soil processes like decomposition and nutrient cycling and harm soil microbial and invertebrate communities.

- Human Health: Synthetic pesticide exposure is linked to neurodegenerative diseases like Parkinson’s disease, cancer, Attention Deficit Disorder and other neurobehavioral problems, diabetes, asthma, endocrine disruption, reproductive disorders, and other serious health harms.
- Social: Synthetic pesticide manufacturing, storage, and application disproportionately harm Brown and Black communities.¹⁵ California EPA has found that pesticide use is the pollution burden with the greatest racial, ethnic, and income disparities in California.¹⁶ Latino children are 91% more likely to attend schools with the highest pesticide exposure.¹⁷

Organic certification is the only government program that prohibits the use of synthetic inputs and thus regenerates community health.¹⁸ Moreover, organic farmers adopt whole farm regenerative systems. They must create an organic system plan that outlines every component of the farm from agronomic practices, natural resource conservation, and sustainable pest management to recordkeeping, on-farm processing, marketing, and listing out every material the farmer anticipates using.¹⁹ Organic certification demands farmers consider human health as much as soil or economic health. While organic certification is a starting point of a regenerative system, it is not the finish line. Farmers continue to move beyond organic certification under the Regenerative Organic Certified (ROC) program to implement worker welfare standards, including living wages and safe working conditions.²⁰ ROC is unique because it is the only private certification program with an agreement with USDA to use the term organic because it builds on organic standards.

At the same time, farmers do not regenerate overnight. Being a regenerative farmer is hard. The term does not yet apply to most farmers in California. It requires adopting whole farm regenerative systems with environmental, human health, and economic benefits. While the bar of being regenerative is high, many farmers are on the pathway to becoming regenerative, and farmers at every stage should receive recognition for their progress and contributions. We recommend the Task Force adopt the below regenerative pathway that both reserves the definition of regenerative for farmers who adopt regenerative systems and establishes a regenerative pathway that recognizes farmers at each step.

This pathway establishes a framework that builds on existing State programs that support regenerative practices. Farmers enrolled in the Healthy Soils Program or Alternative Manure Management Program are implementing climate-smart, regenerative practices that benefit the environment. Farmers implementing sustainable pest management strategies are adopting regenerative practices and reducing synthetic inputs with environmental and human health benefits. These programs focus on a single aspect of the farm. The shift to adopting a regenerative system indicates that a farmer not only implements a series of practices but also considers the whole farm system.

While many farmers approach their operations holistically regardless of certifications, the State must rely on third-party, verified systems of farming to remain accountable to the public. A State definition of regenerative agriculture should create opportunities for farmers by channeling public dollars to public programs, whether state, federal, or Tribal. Our regenerative pathway establishes a rubric for how the State can distribute incentives based on verification and public benefit. The following examples highlight the pathway in practice:

- The State could create regenerative acreage targets. A regenerative acreage target would encompass all land that is certified organic, regenerative organic certified, and managed by Indigenous Ecological Knowledge.
- The State could provide schools, hospitals, and other institutions with additional funding to procure regenerative food. The State could tier funds based on the pathway. For example, a school would receive a 1x increase for procuring food from farmers enrolled in the Healthy Soils Program and a 3x increase for sourcing organic food.
- The State could establish direct payments or a tax credit to incentivize regenerative farming. The State could provide a 1x tax credit for farmers enrolled in the Healthy Soils Program and a 4x tax credit for Regenerative Organic Certified farmers.
-

While many details still need to be worked out, the regenerative pathway offers a practical framework that ties public investment to verification and public benefit. We understand CDFA may be hesitant to codify a definition that incorporates programs that may change over time. This discussion is best suited to the legislative process, where stakeholders and policymakers can weigh in on the exact language to

	<p>be enacted. We ask the Task Force to be as explicit as possible in their recommendation by including our pathway. Referencing existing programs removes ambiguity and minimizes room for interpretation, thereby ensuring the Task Force provides clear guidance to CDFA that moves beyond EFA SAP's general framework.</p> <p>We offer this pathway to create a more inclusive, broader tent that recognizes farmers at every step to regeneration. Our intention is to pave a path forward. However, we must also be clear that a definition of regenerative agriculture not grounded in organic certification will undermine the organic market and could put organic farmers out of business. Organic farmers cannot compete with regenerative farmers who are subsidized by the State but not held to the same high bar. Moreover, a loose definition of regenerative agriculture will erode trust in the organic label. Consumers buy organic food for health reasons and because it is pesticide free and environmentally friendly.</p> <p>Businesses already use regenerative labels to tap into this consumer demand for values-based products but without strict standards or third-party verification. A State definition could legitimize these regenerative labels at the grocery store, exacerbating consumer confusion and jeopardizing consumers' willingness to pay for organic. This, in turn, undermines the State's ability to reach its climate target of 10% organic cropland by 2030.</p> <p>We ask the Task Force to adopt the regenerative pathway to maintain the integrity of regenerative and organic farming while also recognizing the broader contributions of farmers throughout California. Thank</p>
6/8/24	Regenerative Agriculture starts with ORGANIC. Period!
6/11/24	<p>When I think of regenerative, I think of soil. But there's a propaganda campaign using "regenerative" to describe cattle grazing. Given the harms caused by cattle grazing and by raising feed for cattle, cattle cannot be part of any credible definition of regenerative.</p> <p>As Aldo Leopold wrote in <i>A Sand County Almanac</i>, "A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise." By that definition, livestock grazing is wrong for our land, waters, and even climate.</p>

There is a lot of science about the environmentally damaging effects of livestock grazing. From that scientific literature, I conclude that commercial livestock grazing and the associated extraction of grasses, forage, and water, and biomass when cattle are shipped out, is inconsistent with science-based conservation.

Here is a list of scientifically documented harmful effects of commercial livestock grazing (including holistic, regenerative, restorative, passive season-long, and other livestock grazing).

Harmful Effects

- introduction of invasive species
- disease transmission
- increase in fire danger
- increased soil exposure, drying, compaction, erosion, and sedimentation
- off-road vehicle trails, with associated noise, speeds, erosion, compaction, sedimentation
- construction of roads
- trucks and other motorized vehicles creating unauthorized roads
- construction of facilities, such as cabins, water lines, and fences
- damage to riparian areas, wetlands, and watersheds
- damage to streamflow regimes
- diminished water quantity as well as quality
- surface water pollution
- damage to aquatic habitat and species
- cumulative contributions to the desertification of the public land
- loss of fish and wildlife, both reduction of population and loss of species
- displacement of wildlife
- fragmentation of wildlife habitat
- disruption of wildlife migration
- slaughter of predatory species, such as bears and wolves
- disturbance of bird breeding, roosting and feeding
- removal of native flora species, such as pinyon juniper
- degradation of native plant communities
- reduction of nature's carbon storage capability
- methane emissions and carbon releases through livestock handling and transportation
- exacerbation of climate stresses and thereby contributing to climate change

	<ul style="list-style-type: none"> • public subsidies for commercial operations on public lands • unfair advantage given to subsidized operations versus operations on only private land • unsustainable production of agricultural commodities on public lands • general over-burdening of fragile arid lands • exclusion of other uses, including habitat and wildlife conservation • reduction of public access to public lands • loss of solitude and foot-powered recreation • interference with post-fire habitat restoration • failure of land stewards to document trespass violations, overstocking, and other harms • failure of land stewards to enforce trespass, overstocking, and other regulations • politicization of public land stewardship • the amount land and water diverted to raising feed for the livestock during periods when not grazing on public lands, and associated use of chemical fertilizers, pesticides, and herbicides, as well as carbon and methane emissions • commercial marketing of unhealthy diet rich in meats • cumulative impacts over time • cumulative impacts of multiple harms • cumulative impacts of multiple harms over time <p>Add the harms of raising cattle feed, transporting cattle, CAFOs/large feed lots, and meat processing plants, plus the public health problems from eating too much red meat, and the result is clear: Cattle are not part of a credible definition of regenerative agriculture.</p>
6/12/24	<p>In the Name of Regenerative Agriculture, Let us Unite</p> <p>Regenerative agriculture is a powerful movement that is redefining our collective relationship with the land and with each other. It offers a transformative approach to agriculture that nurtures the soil, revitalizes rural communities, and promotes health for people and the planet.</p> <p>As we stand on the cusp of what could be the most significant and rapid transformation in agricultural history, we urge this movement to take a stand to protect the integrity of regenerative practices. It is imperative that true regeneration and its profound impact on our planet remain accessible to everyone.</p> <p>Defining 'Regenerative' Agriculture</p>

The California Department of Food and Agriculture Listening Sessions have elicited diverse opinions regarding the definition of 'regenerative.' All parties have advocated for a standard that prevents the 'greenwashing' of regenerative claims, thereby ensuring long term consumer trust in Certified Regenerative products. We believe that we must pave the way for regenerative agriculture to fulfill its true potential: revitalizing living ecosystems by restoring the water, carbon, and nutrient cycles. This approach enhances soil health, biodiversity, nutrient density, and economic outcomes.

Commitment to Honesty and Transparency

Regenified's verification and certification program brings honesty and transparency to the supply chain through verification and certification, ensuring confidence and trust in the point of origin and the supply chain journey.

Inclusivity and Empowerment

The regenerative agriculture movement embraces inclusivity and empowerment. It engages all of us and recognizes that meaningful change requires widespread participation and a shared commitment to continuous, measured progress.

Building Resilience and Vitality

Regenerative agriculture can build resilience in our agricultural systems and restore vitality in our communities. It promotes soil health and healthy communities and instills a deeper connection to the land, with its emphasis on the interdependence of human well-being and ecological balance.

Supporting USDA Organic Certification

Regenified supports entities pursuing USDA Organic Certification, a well-established federal standard codified in 2002. We recognize the need for a systemic approach to reduce and minimize all forms of disturbance—mechanical, synthetic, and biological.

Strategic Vision for the Future

To maintain the status quo is simply not enough and lacks strategic vision. We advocate for inclusivity, meeting people where they are, and requiring them to make continuous progress. This approach enables a myriad of farms and ranches—whether conventional or holding certified

	<p>labels such as USDA Organic—to transition to verified regenerative practices.</p> <p>This movement is driven by the collective will to make a profound, positive and urgently needed impact on our world, uniting diverse stakeholders instead of dividing them.</p> <p>Together, let us unite in the name of regenerative agriculture to foster a future where the land, our communities, and our planet flourish.</p>
6/14	<p>Soil health outcomes should be at the core of regenerative agriculture. Virtually all other farming systems focus on crop outcomes or crop inputs, but none focus on soil health, community health, and worker protections like regenerative farming.</p> <p>Regenerative farming should be allowed and recognized when it takes place on any soil. Regenerative farming practices should be available to any farm of any size operated by any owner. Agriculture is not a monolith but a diverse and dynamic industry with many different practices and philosophies serving diverse stakeholders. In order to achieve the BEST outcomes, it is imperative to create the space for creative agricultural professionals to take steps to improve soil health without obstacles.</p> <p>The definition of regenerative agriculture needs to be inclusive. I am opposed to the notion that regenerative must also be organic. Organic agriculture has played a valuable role in our food system for the last 45 years, but it is still a niche, occupying an estimated 3.6% of acres in California today. The organic first mantra is also not inclusive, and this approach will dramatically limit the experimentation and adoption of regenerative practices on the 96% of non-organic farmland in the state. Organic first (or any other certification) is nothing more than a barrier to entry for non-certified farmers. Furthermore, there are farmers who could qualify for organic certification but have chosen not to; why should they be forced to become organic to continue their regenerative practices? Regenerative practitioners should be allowed to glean the most beneficial aspects of any farming system that could improve their land and community. If they also choose to be certified as something in addition to regenerative, that's their business.</p>

	<p>Personally, the soil in this state would benefit if organic was required to be regenerative first...</p>
6/14	<p>I understand that the CDFA is in the process of defining what regenerative agriculture means, and I wanted to weigh in. Organic agriculture is not just an essential piece of the regenerative puzzle, it is THE essential piece. It is only with organic practices that we can keep our soil healthy and sustainable, capture carbon and keep our waterways clean. Conventional agriculture's use of artificial fertilizers and pesticides kills the microbiome of our soil, adds to our carbon problem, pollutes our ground and surface water and causes dead zones in our waterways. Please define organic as the base, the very first ingredient, the fundamental requirement for regenerative agriculture! Thank you very much.</p>
6/17	<p>Hopefully you'll define 'regenerative' ag as certified organic.</p>
6/17	<p>My definition of Regenerative Ag. is that it heals and restores the land and ecosystems.</p>
6/18	<p>Restoration Ecology and Landscape Ecology are taught in many of our Universities and Colleges. The key component of these essential courses and practices is the critical role of our native grazers and browsers (including elk, deer, pronghorn and more) in the long term protection and restoration of our native plant species and native landscape!</p> <p>Non-native exotic species including domestic livestock degrade the native landscape, destroy the native perennial bunch grasses and other native species, introduce exotic grass and other nonnatives as well as degrade the riparian corridors.</p> <p>In areas where the domestic livestock have been removed, the native grazers and browsers have been observed restoring the native landscape.</p>
6/18	<p>I am very concerned about this issue and think a meaningful, precise, and applicable definition will be critical for safeguarding environmental impacts.</p> <p>Specifically, as regards livestock agriculture, I am concerned that "regenerative agriculture" is often nothing more than a greenwashing campaign, like "clean coal." Many people enjoy meat and dairy and are</p>

	<p>eager to find justifications for its continuance. Furthermore, the industry itself is of course very interested in effective Public Relations and emphasizing good news about mitigated impacts while deemphasizing or ignoring known environmental impacts. As far as I can tell, “regenerative ranching” is something of a fairytale. Frequently when there is a study that shows increased carbon sequestering (e.g., from rotational grazing), or reduced methane emissions (e.g. from mixing red seaweed into cattle feed) the results are cherry-picked and exaggerated.</p> <p>For example, there are studies about increased carbon in soils after the introduction of rotational grazing, which omit context such as reasons to believe the beneficial trends are likely to be short-lived. Another example is studies about the effect of red seaweed on cattle methane emissions which do not factor in the sourcing and transportation of the food, nor its impacts on wherever it is grown. Other examples are easy to find.</p> <p>Furthermore, it seems to me that words like “regenerative” and “restorative” are often used favorably in comparison to some undisclosed but dismal previous state of the land in question. For example, taking intensive cattle feed lots, decreasing the number of animals, and moving them around a bit often allows soils to capture more carbon and repair to some degree. However, to call this situation “regenerative” would be to mislead the consumer and the public. Therefore, “regenerative” should not be granted to any practice (or change in practice) which marks only a small relative improvement but is still overall an extractive and impactful practice. If a cattle ranch introduces rotational grazing and this allows the land to move from 10% to 20% (or 30% or 40%) of its carbon sequestering potential (while still causing erosion, water quality issues, attracting invasive species, and displacing wild habitat), it would be misleading to call that practice or product “regenerative.”</p> <p>It is only natural that a large and powerful industry such as livestock agriculture should amplify benefits and ignore social costs. Therefore, you should seek to draft a definition of “regenerative” that is, as much as possible, immune from misleading greenwashing. Otherwise, you will be enabling such practices at the expense of the environment, the public, and the truth. In summary, the definition should be comprehensive of impacts (not cherry-picked) and subject to some objective standard (not relative standard) of environmental impacts.</p>
6/18	<p>Regenerative agriculture recognizes that our soil is a living ecosystem comprising billions of diverse microorganisms. Regenerative agriculture supports practices that enhance the ability of soils to store, transform, and cycle nutrients in the soil, grow healthier food, retain more water,</p>

	<p>and better absorb carbon that can help slow or reverse the impacts of climate change. In short, if we take care of our soils, our farms prosper, more water is conserved, and therefore more water is available for beneficial uses, and our environment thrives.</p> <p>Under the broad umbrella of regenerative, there has been alot of talk about ranching/grazing as such. From what i can glean, ranching/grazing is only regenerative when the cows can be moved so that the land they have been on can be left to rest. This may work for small operations, but not for large ones. The soil is probably the most impacted from cows and soil is key to regenerative agriculture. The term appears in many places now, and it almost seems like green-washing. It sounds good but impractical and impossible for most big ranching/grazing operations.</p>
6/28/24	<p>Regenerative agriculture should include prioritizing and promoting native wildlife, clean air and water. I am concerned, specifically with regards to livestock agriculture, that “regenerative agriculture” is nothing more than a greenwashing campaign, like “clean coal.” The realities of livestock grazing are in direct contradiction to the goals of regenerative agriculture.</p> <p>The Department’s stated goals include fostering “climate smart, resilient and regenerative food systems” that “improve agriculture’s effect on the environment, encourage wise stewardship of water and natural resources, eliminate waste and are regenerative, e.g., practices that enhance ecosystems and improve the land.” At current rates of beef and dairy production, cattle grazing does none of these things, and makes it nearly impossible to genuinely reach these goals.</p> <p>Decades of research demonstrate the damages wrought by livestock grazing. Beef and dairy are the leading source of agricultural greenhouse gas emissions, water use, land use, and manure pollution in California and beyond, as well as lethal management of native wildlife like wolves who are vital to the health of our ecosystems.</p> <p>Regenerative agriculture is a euphemism when applied to livestock production. Climate scientists say food system reform must include massive reductions in meat and dairy production, especially from grazing animals. Grazing cattle not only don’t permanently sequester carbon in the ground at scale: they are also a top source of methane emissions in the United States (methane is more than 80 times more</p>

potent than carbon in the short term) as well as nitrous oxide. This is not regenerative agriculture. If a cattle ranch introduces rotational grazing and this allows the land to move from 10% to 20% (or 30% or 40%) of its carbon sequestering potential (while still causing erosion, water quality issues, attracting invasive species, and displacing wild habitat), it would be misleading to call that practice or product “regenerative.”

Grazing cattle also require an enormous amount of land. Grass-fed cattle production is the leading source of global deforestation, driving devastating habitat loss and species extinctions – a threat to biodiversity that is further exacerbated by targeted wildlife killing programs.

Large and powerful industry such as livestock agriculture often amplify benefits and ignore social/environmental costs. Drafting a definition of “regenerative” that is immune from misleading greenwashing is imperative. Otherwise, you will be enabling such practices at the expense of the environment, the public, and the truth. The definition of regenerative agriculture should be comprehensive of impacts (not cherry-picked) and subject to some objective standard (not relative standard) of environmental impacts.

--	--