Comments Received on Regenerative Agriculture Definition* Comment Period: December, 2023 – January, 2024 *These are written comments received via email to RegenerativeAg@cdfa.ca.gov. 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 through May 2024. Comments will be posted at the end of each month.	
Date	**Written Comment**
12/6/2023	Please have certified organic as the *baseline*: California and the federal government have invested millions in organic agriculture - $10 million in CDFA's organic transition program, $300 million in USDA's organic transition initiative, and $1.85 million in organic research and extension; Policy is making organic accessible to all producers. Millions of dollars are flowing across the state to expand organic and USDA is continuing to streamline the certification process; Please build on this exciting work in our definition of regenerative, and do not create a competing and misleading term; This will help the public and consumers know there is a verifiable and third party certified baseline that does not allow the use of petroleum derived chemicals and synthetic inputs. Any other definition will allow greenwashing and also be unfair to farmers who have invested in organic practices and certification — a significant investment and commitment — and have reasonably relied upon on the price premium that it offers.
12/6/2023	Conventional herbicides and pesticides should not be allowable in a regenerative system. Chemical use degrades the benefits of a no till carbon fixing system. If you want to cast a big net, and conventional farmers who stop tilling need a carrot, give them "no-till" as the first step in their pathway to regenerative organic. To bow down to big ag is a mistake here. I fear this is a runway to a new greenwashing term to replace "sustainable" in the marketplace. As more and more consumers are enlightened to the fact that a "sustainable" model can include the use of pesticides, this word sustainable is losing credibility. If consumers learn that pesticides are allowable in "regenerative" farming, this term will also lose credibility, which would be a real shame. Is the word sustainable defined by the CDFA as well? How would these two definitions differ? My neighbor is "sustainable", does not till, but does use plenty of synthetic chemicals. The farm has no life. It is not regenerating. I can guarantee they will tout the fact that they are regenerative. There must be a clear line when it comes to the use

	of chemicals. There is accountability in the term organic and regenerative takes organic a step further. Increasing regenerative organic acreage should be the goal for the CDFA.
12/7/2023	We are a very small urban market farm growing on about 2/3 of an acre and grossing under $100k in annual sales. Very small for a commercial operation, but it is how we earn our living and support our family. My partner and I have both been growing mostly in the Sacramento area for 15-20 years each, at various farms (some certified Organic, some not) and have been on our current site for just over 6 years. Previously I ran my own very similarly scaled operation in Yolo county for an additional 6 years, so personally I have been running my own farm business for 12 years now. In both instances, I have found it not worth my while to obtain Organic certification. In a very very small operation, where we work directly with chefs and sell directly to consumers (farm stand, farmers market, etc), we do not find the "Organic" label to have major benefit to our price point or our sales numbers. Furthermore, running a small business (especially a farm) is incredibly time consuming and labor intensive, and the added administrative burden of seeking funding to cover costs, keeping records, and managing inspections...it's just not worth it. So after my first several years of being on the fence, I have been comfortable and confident for maybe 8-10 years now that Organic certification is just not a good fit for us. I have several local (small scale) farmer friends who are in similar or related positions. In one instance, a growers who IS Certified Organic so that he might sell to a local grocery chain at a good price point, was told my their Organic inspector that he could not use locally grown rice straw as mulch unless he can source Certified Organic straw (not readily available, and prohibitively expensive even by the semi-load). Opting for plastic (a common "Organic" practice) over an actual (small "o") organic mulch seems to me the exact wrong approach and another excellent reason for me to forgo certification on my own operation. So we are NOT Certified Organic and not planning to be any time soon. At the same time, our practices are above and beyond what any reasonable definition of "regenerative" might entail. No-till, compost & cover crops, high diversity, integrated animals, life affirming labor practices (we're self employed and have no employees), and yes, real deal organic mulches covering every inch of soil, from various local sources (rice straw, coffee chaff, wood chips) NONE of which are Certified Organic. Our soil is so incredibly biologically

	active by this point that our need for these mulches has actually increased with time...they disappear in no time, being digested by the soil organisms sometimes in a matter of weeks. However the state defines "Regenerative" in the end, I hope that they can take into account that Organic Certification is not a good fit for all operations, including my own. A few ideas, to hopefully reduce greenwashing and prevent corporations from taking advantage: - Exemptions in Organic Certification for smaller businesses - Requirements that farm practices are continually integrating new regenerative practices or improving those they already practice (ex: ongoing reduction in chemical applications, tillage, etc year over year) - Using objective metrics like annual SOM levels measurements to observe improvement (or lack thereof) over time.
12/10/2023	I have attached a paper I wrote recently with two colleagues which might interest you. It was published by the University of Barcelona and is aimed at the European Union's agricultural policies. In spite of this it may have some points that could be applied in California. Firstly we have clearly separated regenerative farming and organic farming. That does not mean a farmer cannot do both but they are clearly different in their objectives. Regernative Farming aims firstly to restore the organic matter in the soil so it absorbs more rainfall more quickly, retains moisture and nutrients. Erosion is reduced. A further aim is to restore landscapes. We also believe the reduced cost of production makes it commercial viable. However there are costs involved in the transition which require support. Organic Farming aims to protect the consumer from the many harmful chemicals that are routinely applied to crops within the current conventional farming system. It is very important but different. We also believe that regenerative farming needs public support. Trying to "sell" it to consumers will be difficult. They have an organic label, vegan labels, animals welfare labels and many others because even organic wine is divided into subdivisions. The Chianti Classico Model.

	This may still have relevance in California even if it is not tied to a state subsidy. The model is not well understood outside Europe. It does not get a mention in most economic textbooks. It is not a joint stock company. It is not a cooperative. It is more than an association with a trade mark because it has government involvement to give it greatly increased credibility. It has considerable relevance to regenerative farming because it allows flexibility. It is extremely difficult to define regenerative farming in a single set of rules. In different regions and with different soils priorities vary. The Chianti Classico model is different from Champagne or Parma Ham yet they are all within the framework of European laws that define “protected names.” It is adaptable to local requirements. It is very popular among farmers as it shifts some of the marketing power back from the processors to the farmers. For example there are many large multinational companies involved in the production of Champagne but they are still totally dependent on the growers in that region of France. They can and do make champagne elsewhere in the world but it has to be called something else.
12/11/2023	1. CDFA has an historical opportunity to recognize the indigenous role in creating and developing regenerative agriculture. Please read: https://bioneers.org/decolonizing-regenerative-agriculture-indigenous-perspective/ https://www.rainforest-alliance.org/insights/the-indigenous-roots-of-regenerative-agriculture/ Please find a meaningful way to recognize the importance of this knowledge to our current cultural and scientific understanding of regenerative agriculture. 2. Regenerative agriculture is a direct response to shortfalls under the National Organic Program. The bottom line is that regenerative should go beyond what is required for organic certification.
1/6/2024	Who I Am: Background and Experience I am a young professional who has grown up in California and moved to the Central Valley to study agriculture. I hold a degree in Ecology from UC Santa Cruz and have hands-on experience working in UC Davis research labs, focusing on soil and plant sampling in California's Central Valley. My industry experience includes R&D in sustainable nitrogen delivery to crops using symbiotic bacteria. I am currently pursuing a Master's in Environmental

	Management at the University of San Francisco, aiming to shape environmental policies around California agriculture. I hope my practical experience in sustainable agriculture, both in academia and industry, can provide insightful contributions to this discussion. What is Regenerative Agriculture? Regenerative agriculture goes beyond the concept of sustainability. It addresses the harsh reality that our agricultural soils are heavily depleted of organic carbon and microbial life. In the 19th century, our soils had about 10% organic matter; today, they have dropped to 1-2%. Thus, regenerative agriculture implies a rebuilding process, enhancing soil productivity and reducing inputs over time. The critical aspect here is the year-on-year improvement in soil quality and productivity. The Need to Measure: A Yardstick for Success and Associated Challenges There is no single solution for successful regenerative agriculture. Practices considered beneficial, like growing cover crops, can be negated by excessive tillage or pesticide use. It's crucial to understand that the context-dependent nature of farming means not every strategy is ideal for all. Hence, relying solely on management practices to gauge success is not sufficient. Outcome-based measurements, while valuable, present economic challenges and uncertainties. The variability of California's agriculture further complicates this, as does the lack of consensus on what qualities to measure. The Proposed Solution A practical yardstick for success in regenerative agriculture is the ability to cultivate high- yielding, healthy, and naturally pest-resistant crops with minimal inputs. Success can be gauged by comparing yields to county averages and tracking the reduction in NPK fertilizers and pesticides over time. California should focus on documenting these inputs. This approach doesn't require labor-intensive field measurements or scientific consensus on soil and plant metrics. Tracking yields and chemical inputs for each farm will indicate whether California agriculture is becoming more regenerative. Additionally, this approach addresses the dangers these chemicals pose to communities and the environment. Conclusion Embracing this framework will not only serve as a measure of success in regenerative agriculture but will also ensure safer handling and tracking of hazardous agricultural chemicals. This is an essential step toward a healthier and more sustainable agricultural future for California. Thank you for considering my perspectives on this crucial matter. I appreciate the opportunity to contribute to the dialogue surrounding regenerative agriculture in California. I believe that together, we can foster a more sustainable and prosperous agricultural future for our state.

1/13/2024	I would like to have the opportunity to comment on establishing the definition of Regenerative and to keep the definition from going the way of Natural, with no set term to what the definition really means and who qualifies to use it on their label. My name is Gina Bella Colfer. I have been a Pest Control Advisor and Certified Crop Advisor on the Central Coast of CA for 35 years. I have worked for different Pest Control and Grower operations over those years, and have come to an understanding that Organic Farming and restricting the use of synthetic chemistries that rely on synthetic and petrochemicals is the future of Ag for CA. The environmental effects of these chemistries are tragic, and the mindset of the “clean” field is destroying our ecosystem by limiting biodiversity both above and below ground to a point where we are drastically changing our ecosystem services. A grower who wants to be Regenerative but is still in the conventional mindset will need time and assistance to get to that first step of organic, weening themselves from the synthetic chemistries, which is not an easy deal. Think of an addict trying to quit cold turkey from whatever the addiction is, not very easy and a lot of support, love and money is needed through the journey to ensure success. Organic as a certificate has the teeth of the Federal Gov’t, whereas all the other certifications that are on the market are checklists that can be done from a desk. I want to ensure that Regenerative does not go the way of Sustainable where it is a checklist that can be greenwashed easily. I believe Regenerative should be a tiered system where you earn your levels of success by the practices that are implemented on the farm. These should not be qualified by expensive tests that are required, because not all scientists believe in one method over another to measure success, it should be by what is implemented, not by measuring carbon or microbes. If you build it, they will come, and that is what we should be concentrating on, building biodiversity, and measuring the reduced inputs and money that is saved in the long run, not money spent on expensive test that small growers cannot afford or interpret. Use a soil compaction pentameter and a shovel for soil health and before and after pictures for insectary and hedgerow plantings and on the ground audits. Tiered system: Bronze is when the grower starts the journey to commit to transitioning away from synthetics and has implemented their first cover crop and planted habitat. Silver: A system is in place with biodiversity above and below ground but synthetics are still part of the system because it takes time to transition from one way of doing something to another.

	Gold: Organic certification plus cover cropping, interplanting and habitat biodiversity on the farm. Platinum or Diamond: Gold plus social justice built in.
1/18/2024	I took away the following: a tiered approach might be a way to reflect the complexity and variety of circumstances between regions, crops, styles, and socio-economic factors. the organic framework can be a stepping stone and an example, since it has been in place for decades and benefits from existing infrastructure - but it might also constrain regenerative to a subset of organic and limit its potential for adoption, both from farmers and consumers Key questions that remained open for further exploration: About the value of establishing a definition I assume the point of the definition is to delineate the purview of future legislation and policies. - By providing a common definition of Regenerative agriculture, the State offers clear direction for concerted efforts from the industry and adjacent stakeholders in California. The transition will undoubtedly be complex and resource-intensive, and a shared understanding of this North Star is a prerequisite for its progress and success. - California has influence beyond its borders, literally and also as a role model, and the definition at the State level can provide guidance and jurisprudence for other institutions. About the breadth and format of definition: - How might it be dynamic now and overtime? For instance, it might need to be revised yearly or bi-yearly to accommodate for change and innovation and unforeseen or new dimensions (for instance: might a budget be allocated for yearly review and updates?) Similarly, I would like to express some concerns about overgeneralization and simplification inherent to a pithy definition that will be solely word-based. Perhaps in addition to being a tiered definition, there can be a dynamic representation on at least 3 dimensions: this is just a quick proposal here: 1) overall level of adherence to principles

	2) categories of principles adhered to, and to what extent 3) progress and milestones achieved - How might it be systemic and reflect all stakeholders? Besides land and farmers' needs, the definition encompasses the ultimate recipient: the human who eats, their health, and well-being. Please see the 7 pillars of "regenerative eating" as an example. - How might the tiered definition provide incentives toward continual improvement? Similarly, how might the farmers entering the transition phase (for instance in having secured financing) benefit from a special status or mention to signal their effort (as in a "Tier 0")? - How might economic and access considerations for individuals be reflected in the definition or a subsequent CDFA project? For example, how will this definition impact WIC recipients and what they have access to? How does it impact State procurement policies for public institutions? Beyond UCs, also all State buildings, cafeterias, prisons, hospitals? - How might the learnings from Organic be taken into account? The Organic movement is 70+ yrs old, and California is one of the major growers. However, it still only covers 1% of land and represents 6% of purchases in the US overall. I worry that tying "regenerative" to "organic" , as well intentioned and practical as it might be, could deter a lot of the market from purchasing because it is not mainstream and the higher price points deterred and turned away much of the public. The organic farmers movement is a big business and should be taken into consideration. But we should not make it mandatory for conventional farmers, who are still the overwhelming majority, to abide by the organic framework, as it exists today. Or perhaps this is a signal that reforming the organic certification system is timely. So that it does not create situations such for when the Trefethen winery abandoned their certification process because they found the restrictions of organic too constraining and even contrary to their values (in this case, it was about the addition of gypsum which was mandated to come from newly-mined gypsum, whereas the farm would have rather used gypsum from recycled drywall) This was shared in a private conversation I had with Lorenzo Trefethen, co-CEO of the winery, a few months back. - How might the definition provide the basis for uniting language and stewardship among the public?

	Regenerative could be a mechanism to rally different communities behind the fact that we're all in for the planet, and each other. Organic has a class, status, and privilege built in which is automatically exclusive and hierarchical. Regenerative can be a unifying way to make communities traditionally unable to or self-excluding from the participation to the fight against climate change.
1/31/2024	We are CCOF certified organic farmers in northern California. We firmly stand behind the Regenerative Organic Alliance's (ROA) Regenerative Organic Certified (ROC) process. We believe we go above and beyond the federal organic standards as we think farming can do so much for the environment, society, and the financial stability of farms and communities. Please adopt all of their standards and approaches for how the CDFA should define regenerative agriculture in California. We would like the CDFA to adopt an approach that is "applicable, relevant, and useful for California Agriculture; to lead to positive impacts on California’s environmental, social, human health, economic, and climate goals; to provide measurable and verifiable outcomes; to allow for context specific outcomes; and to build soil health as a foundational element," per the Environmental Farming Act Science Advisory Panel’s framework. Moreover, we strongly believe that labor standards are a crucial component of defining regenerative agriculture in our state. Dropping the labor standards was the major concession made to the agribusiness when the federal organic standards were adopted in the 1990's. It has led to the continued abuse and exploitation of farm laborers, especially in California and certainly in some organically certified farms. This cannot be allowed to happen again for the Regenerative Ag definition in California. Please do not forget the people who actually make farming possible: the workers in the fields. Please, at a minimum, adopt labor standards such as those defined by the ROA's ROC guidelines.
1/31/2024	I was encouraged to comment on defining ‘regeneration agriculture , ‘ RA, and would like to make one key point. All the practices (planting cover crops, improving soil characteristics with amendments and tillage, preserving pollinators, etc.) commonly associated with RA are the concepts that nobody can disagree about , they are all beneficial in the long run. Yet, our agriculture is a rapid cycling operation with high-input-high-output model that allows intensive crop production that keeps the demand-supply chains active and generates income. Planning for the long term requires investment , it has been done decades ago in Europe , where governments subsize such practices; and in the US Midwest, where farmers were paid to put aside parts of their crop land to grow/restore native grassland (by the Conservation Reserve program). Any farming operation would like to be regenerative if they can afford it. It is a long-term investment and either consumer will have to absorb the extra cost of the lengthy

	transition or the state or fed subsidies are needed. Nobody will farm at a loss even with a prospect of having a more sustainable system in 10-20-30 years.