#### Comment 1 for Public Workshop: 2022 Scoping Plan Update – Natural and Working Lands Technical Workshop (nwl-2021-tech-ws) - 1st Workshop.

First Name: Andrew Last Name: Mutziger

Email Address: amutziger@co.slo.ca.us

Affiliation: SLO Co. Air Pollution Control District

Subject: Policy Changes for Disposal of Ag Woody Waste & Dead & Dying Trees that Sequester Carbon

Comment:

During today's NWL Workshop presentation, CARB asked whether it is clear what they need for policy objectives. My comment is relevant to the dead, above ground biomass in the NWL inventory and policy changes that will result in carbon sequestration and co-benefits.

Although we know San Joaquin Valley will phase out agricultural burning, growers in the rest of the state will continue to burn woody ag waste. Dead and dying trees in forests may also be managed through burning. If these ag and forest woody materials are not burned, they will often lose their carbon over time through natural degradation.

However, there are disposal methods of these woody wastes that preserve carbon. Changes to California policies for managing these materials can drive on the ground, implementable actions to help NWL meet its target. For example, there are better ways to burn than traditional methods (top lit conservation & kiln burns, carbonizers, and pyrolysis systems) that sequester carbon in the form of biochar and have co-benefits of criteria pollutant emission reductions. Further, the produced biochar has beneficial uses (e.g. biochar can be integrated into CDFA's Healthy Soils program with co-benefits such as improved water holding capacity).

While your current focus on existing research to inform the NWL target setting is important, also important is for CARB to infuse pending and future research that improves the portfolio of NWL carbon sink strategies. There are observations and sound theory that the biochar producing alternative burning methods provide GHG and criteria pollutant emission reductions and carbon sequestration. What are the quantified benefits is the question and CAPCAO is part of a near shovel ready proposal (see attached file entitled "LowEmissionBurnProposalToCARBresearchConceptCall.msg") to help answer that question.

Would you please weigh in on how CARB intends to integrate pending or future knowledge to help drive California policy changes that improve NWL's contribution to the State's carbon neutrality goal? Also, are alternative burn methods like I have outlined in this comment on CARB's current NWL list of strategies and if not, what is the prospect of them being added to the NWL portfolio of solutions?

Sincerely, Andy Mutziger Division Manager Planning, Monitoring & Grants SLO County Air Pollution Control District

Attachment: www.arb.ca.gov/lists/com-attach/1-nwl-2021-tech-ws-AGxQOQN1VmAKYQdu.msg

 $Original\ File\ Name: Low Emission Burn Proposal To CAR Bresearch Concept Call. msg$ 

Date and Time Comment Was Submitted: 2021-07-20 16:58:15

#### Comment 2 for Public Workshop: 2022 Scoping Plan Update – Natural and Working Lands Technical Workshop (nwl-2021-tech-ws) - 1st Workshop.

First Name: Daniel Last Name: Chandler

Email Address: dwchandl@gmail.com Affiliation: 350 Humboldt (unofficial)

Subject: The scope needs to be expanded to include underwater resources

Comment:

The slides in the presentation today say that underwater resources are not tracked and considered.

As you no doubt know, coastal waters sequester huge amounts of carbon, but can be disturbed by human activity. Farther out kelp and microalgae are great sequesterers. https://sitn.hms.harvard.edu/flash/2019/how-kelp-naturally-combats-global-climate-change/

Human activities can disturb the sea bed too, unfortunately. Trawling was recently found to release about as much carbon, from dragging nets, as air travel does. Sala, E., Mayorga, J., Bradley, D. et al. Protecting the global ocean for biodiversity, food and climate. Nature 592, 397-402 (2021). https://doi.org/10.1038/s41586-021-03371-z

The 30 by 30 initiative is clear that both land and ocean resources need to be conserved. I believe strongly that your natural and working lands also needs to take into account underwater resources.

Thank you for considering these points.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2021-07-20 17:06:52

#### Comment 3 for Public Workshop: 2022 Scoping Plan Update – Natural and Working Lands Technical Workshop (nwl-2021-tech-ws) - 1st Workshop.

First Name: Garlynn Last Name: Woodsong

Email Address: garlynn@woodsongassociates.com

Affiliation: Woodsong Associates

Subject: Clear cuts and climate change

Comment:

Why would you ever put clear cuts on a list of management strategies to produce positive climate outcomes? Hopefully, you would only do this for modeling of a BAU scenario? Clear cuts are antithetical to sequestering carbon, rebuilding ecosystems, protecting water quality, preventing wildfire, or restoring rural economies sustainably. We should NEVER AGAIN allow clear cuts on forest lands. SELECTIVE HARVEST must be the new management practice framework for ALL of our forest lands' this may requires state legislation to enact statewide on the ground action to change harvest practices in favor of solving for forest health, wildlife habitat, sustainable harvest, and carbon sequestration. There's plenty of research that supports this (such as this: https://clarknow.clarku.edu/2013/10/18/new-clark-study-on-clearcuts-shows-surprisingtrends-in-carbon-water/), but it's important to follow the money; a lot of pro-clearcut research has been published, funded by the timber industry, that doesn't represent solid science as the conclusions were drawn prior to the research being conducted.

#### Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2021-07-21 09:37:33

#### Comment 4 for Public Workshop: 2022 Scoping Plan Update – Natural and Working Lands Technical Workshop (nwl-2021-tech-ws) - 1st Workshop.

First Name: Garlynn Last Name: Woodsong

Email Address: garlynn@woodsongassociates.com

Affiliation: Woodsong Associates

Subject: Grey water for NWL restoration in urbanized areas

Comment:

For urban areas, CARB needs to lean into grey water for turbo-charging carbon sequestration during a time of widespread water scarcity. This needs to include legalizing kitchen sinks to greywater, switching to a permissive from a restrictive regulatory framework, providing incentives for system installation, and following the lead of world leaders in greywater, including Australia. We know from the science that increased water availability results in increased tree growth and thus increased carbon sequestration during wet years; so can CARB spin up a statewide greywater incentive and streamlining program, based on first principles, then order a monitoring program to develop more specific information on program performance over time? See attached for a sampling of the evidence showing the safety of kitchen sinks in greywater systems, from Australia.

Attachment: www.arb.ca.gov/lists/com-attach/4-nwl-2021-tech-ws-VDZQN1YIVW0GZQBy.pdf

Original File Name: Barker\_2013\_a probabilistic model of norovirus disease burden associated with greywater irrigation.pdf

Date and Time Comment Was Submitted: 2021-07-21 09:45:51

#### Comment 5 for Public Workshop: 2022 Scoping Plan Update – Natural and Working Lands Technical Workshop (nwl-2021-tech-ws) - 1st Workshop.

First Name: Dan Last Name: Silver

Email Address: dsilverla@me.com Affiliation: Endangered Habitats League

Subject: Policy, Threats, and Mechanisms for Shrublands

Comment:

Thank you for the opportunity to comment.

Endangered Habitats League suggests soil and vegetation carbon sequestration as a POLICY OBJECTIVE for shrublands. THREATS to this ecosystem are conversion to carbon-intensive developed uses as well as type-conversion to annual weeds due to wildfire and counterproductive vegetation treatments such as prescribed fire and vegetation removal outside of defensible space for structures. MECHANISMS to sequester carbon include land protection via acquisition. Property acquisition will preclude conversion to developed uses as well as provide co-benefits of ecological resilience and adaptation. There should be some metric to capture the benefit of avoided carbon emissions from conversion to development. Note that conservation easements have a limited role due to landowner preference.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2021-07-21 11:32:50

## Comment 6 for Public Workshop: 2022 Scoping Plan Update – Natural and Working Lands Technical Workshop (nwl-2021-tech-ws) - 1st Workshop.

First Name: John Last Name: Andersen

Email Address: jandersen@mendoco.com

Affiliation: Humboldt and Mendocino Redwood Companies

Subject: Comments on 2022 Scoping Plan Update - NWLs

Comment:

CARB,

Please see attached comments related to the 2022 Scoping Plan Update and Natural and Working Lands.

John Andersen Director, Forest Policy Humboldt and Mendocino Redwood Companies

Attachment: www.arb.ca.gov/lists/com-attach/6-nwl-2021-tech-ws-B2RSNQBzVWRVDAZo.pdf

Original File Name: CARB NWL Comment.pdf

Date and Time Comment Was Submitted: 2021-07-27 14:27:52

# Comment 7 for Public Workshop: 2022 Scoping Plan Update – Natural and Working Lands Technical Workshop (nwl-2021-tech-ws) - 1st Workshop.

First Name: Sylvia Last Name: Regan

Email Address: sregan@biologicaldiversity.org Affiliation: Center for Biological Diversity

Subject: Center for Biological Diversity Comments Re: Public Workshop: 2022 Scoping Plan Update

Comment:

Please accept the attached comments submitted by the Center for Biological Diversity regarding Public Workshop: 2022 Scoping Plan Update - Natural and Working Lands Technical Workshop; nwl-2021-tech-ws.

Thank you, Sylvia Regan

Attachment: www.arb.ca.gov/lists/com-attach/7-nwl-2021-tech-ws-VGZRZlAOWTpSYwFe.pdf

Original File Name: 21 07 29 CBD comments on NWL workshop for scoping plan.pdf

Date and Time Comment Was Submitted: 2021-07-29 09:43:43

## Comment 8 for Public Workshop: 2022 Scoping Plan Update – Natural and Working Lands Technical Workshop (nwl-2021-tech-ws) - 1st Workshop.

First Name: Tyler Last Name: Madary

Email Address: tmadary@rctc.org

Affiliation: Western Riverside County RCA

Subject: RCA Public Comment

Comment:

Please see the attached public comment from Aaron Hake, Interim Regional Conservation Deputy Executive Director for the Western Riverside County Regional Conservation Authority.

Attachment: www.arb.ca.gov/lists/com-attach/8-nwl-2021-tech-ws-BXdVMFExV1sCdAh9.pdf

Original File Name: RCA Public Comment.7.20.21 workshop.pdf

Date and Time Comment Was Submitted: 2021-07-29 14:19:48

## Comment 9 for Public Workshop: 2022 Scoping Plan Update – Natural and Working Lands Technical Workshop (nwl-2021-tech-ws) - 1st Workshop.

First Name: J Last Name: Jordan

Email Address: jjordan@leadershipcounsel.org

Affiliation: Leadership Counsel for Justice & Account

Subject: Pesticide reduction strategies must be included

Comment:

Good afternoon, Please find comments attached from Leadership Counsel for Justice & Accountability. Feel free to reach out with any questions or concerns to myself or Shayda Azamian at sazamian@leadershipcounsel.org

-J

Attachment: www.arb.ca.gov/lists/com-attach/9-nwl-2021-tech-ws-VjdWJVI0VVkKPwFe.pdf

Original File Name: Aug 3\_NWL Scoping Plan letter LCJA.pdf

Date and Time Comment Was Submitted: 2021-07-30 14:15:27

#### Comment 10 for Public Workshop: 2022 Scoping Plan Update – Natural and Working Lands Technical Workshop (nwl-2021-tech-ws) - 1st Workshop.

First Name: Kari Last Name: Flores

Email Address: karif@ix.netcom.com

Affiliation: Organic Farmer

Subject: Climate Change and Ag Lands

Comment:

Please include support for organic agriculture in the state's plans to address climate change, including the Natural and Working Lands strategy and 2022 Scoping Plan. The state can maximize the benefits of organic agriculture by expanding markets for organic producers, supporting farmers' transition to organic, and providing more research and technical assistance. Organic is a proven climate solution with a UC Davis study finding that organic soils can store 14 times more carbon than non-organic soils. In addition, organic farmers produce food without the use of synthetic pesticides or fertilizers, protecting community health and the state's most vulnerable populations. As an organic farmer of 20 years, I can tell you there is no need for "conventional" pesticides and herbicides! Please make anyone who wants to poison the environment with toxic chemicals be inspected, regulated and pay extra fees. Those of us who are (and have been) voluntarily doing the right thing shouldn't be burdened more for trying to help save the planet for future generations. Thank you!

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2021-07-30 14:45:13

#### Comment 11 for Public Workshop: 2022 Scoping Plan Update – Natural and Working Lands Technical Workshop (nwl-2021-tech-ws) - 1st Workshop.

First Name: Gina Last Name: Colfer

Email Address: gcolfer@wilburellis.com

Affiliation: Wilbur Ellis

Subject: Natural and Working Lands

Comment:

Good Day,

My name is Gina Colfer. I am a CCA/PCA on the Central Coast of CA. I have worked in organic and non-organic agriculture over 30 years and see first hand the benefits of farming organically. The biggest factor is the elimination of synthetic pesticides. An organic grower depends more on cultural practices and some non-synthetic interventions to control various pests. When you remove synthetics from the soil, the microbiome is able to survive, and with proper management, thrive. Growers need to be encouraged to farm more holistically without the threat of total crop loss from some outbreak of a pest. I believe some sort of insurance or safety net of some kind be offered to the grower who decides to transition to organic. This would need to last until the soil is regenerated and able to help the plant withstand stressors. It is also important to incorporate reduced tillage and cover crops into the system to build organic matter in the soil. This needs to be incentivized to the grower without them having to write a grant. Thank you for your consideration, Gina Colfer Key Account Manager Wilbur Ellis Co.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2021-07-30 16:03:11

# Comment 12 for Public Workshop: 2022 Scoping Plan Update – Natural and Working Lands Technical Workshop (nwl-2021-tech-ws) - 1st Workshop.

First Name: Ara

Last Name: Marderosian

Email Address: ara@sequoiaforestkeeper.org

Affiliation:

**Subject: Comments** 

Comment:

See attached.

Attachment: www.arb.ca.gov/lists/com-attach/13-nwl-2021-tech-ws-AGNcNQRoAD5WNQdp.pdf

Original File Name: comments.pdf

Date and Time Comment Was Submitted: 2021-08-02 12:31:03

## Comment 13 for Public Workshop: 2022 Scoping Plan Update – Natural and Working Lands Technical Workshop (nwl-2021-tech-ws) - 1st Workshop.

First Name: Jan Last Name: Dietrick

Email Address: jdietrick9@gmail.com

Affiliation: 350 Ventura County Climate Hub

Subject: Comments on CARB 2022 Scoping Plan on Natural and Working Lands

Comment:

Our comment was emailed to the Ombudsman because of difficulty uploading on the webform. We are trying now to submit on the form. Sorry for possible duplication.

Attachment: www.arb.ca.gov/lists/com-attach/14-nwl-2021-tech-ws-W2hUZwMyVloAcANg.docx

Original File Name: 350 VCCH Comment AB 32 Scoping NWL.docx

Date and Time Comment Was Submitted: 2021-08-02 16:53:07

# Comment 14 for Public Workshop: 2022 Scoping Plan Update – Natural and Working Lands Technical Workshop (nwl-2021-tech-ws) - 1st Workshop.

First Name: Rebekah Last Name: Weber

Email Address: rweber@ccof.org

Affiliation: CCOF

Subject: CCOF Comment on NWL Workshop

Comment:

Please find comment letter attached.

Attachment: www.arb.ca.gov/lists/com-attach/16-nwl-2021-tech-ws-UjFcOVM9BzJRCANg.pdf

Original File Name: CCOF Comment Letter\_Final.pdf

Date and Time Comment Was Submitted: 2021-08-02 19:59:40

# Comment 15 for Public Workshop: 2022 Scoping Plan Update – Natural and Working Lands Technical Workshop (nwl-2021-tech-ws) - 1st Workshop.

First Name: Gary Last Name: Rynearson

Email Address: grynearson@greendiamond.com Affiliation: Green Diamond Resource Company

Subject: Submission of Comments on Natural and Working Lands

Comment:

Attached please find Green Diamond Resource Company's comments on the Natural and Working Lands.

Thank you, Gary C. Rynearson

Attachment: www.arb.ca.gov/lists/com-attach/17-nwl-2021-tech-ws-UTZUNlEiVmYKU1Ix.docx

Original File Name: GDRC Comment Letter 8-3-21.docx

Date and Time Comment Was Submitted: 2021-08-03 12:28:11

# Comment 16 for Public Workshop: 2022 Scoping Plan Update – Natural and Working Lands Technical Workshop (nwl-2021-tech-ws) - 1st Workshop.

First Name: Marc Last Name: Landgraf

Email Address: mlandgraf@openspaceauthority.org Affiliation: Santa Clara Valley Open Space Authority

Subject: Comments to NWL elements of 2022 Scoping Plan Update

Comment:

Dear CA Air Resources Board Staff,

Please find attached our comment letter regarding the NWL aspects of the 2022 Scoping Plan Update. We appreciate this opportunity to comment. Please don't hesitate to contact us with any questions.

Best regards, Marc

Attachment: www.arb.ca.gov/lists/com-attach/18-nwl-2021-tech-ws-WikHYgdwADwLfgVk.pdf

Original File Name: SCVOSA CARB Scoping Plan letter 08 03 21.pdf

Date and Time Comment Was Submitted: 2021-08-03 13:01:07

# Comment 17 for Public Workshop: 2022 Scoping Plan Update – Natural and Working Lands Technical Workshop (nwl-2021-tech-ws) - 1st Workshop.

First Name: david Last Name: bezanson

Email Address: bezanpsy3506@hotmail.com

Affiliation:

Subject: Natural and Working Lands workshop 20 July 2021

Comment:

See attached file for comments. If you are unable to read the pdf, let me know and I can submit a docx.

Attachment: www.arb.ca.gov/lists/com-attach/19-nwl-2021-tech-ws-BWsCZQB1BCJXIwlo.pdf

Original File Name: NATURAL AND WORKING LANDS.pdf

Date and Time Comment Was Submitted: 2021-08-03 13:18:28

## Comment 18 for Public Workshop: 2022 Scoping Plan Update – Natural and Working Lands Technical Workshop (nwl-2021-tech-ws) - 1st Workshop.

First Name: William Last Name: Stewart

Email Address: billstewart@berkeley.edu Affiliation: University of California Berkeley

Subject: Comments on how forests and forest products are addressed in NWL scoping plan

Comment:

ARB Staff and Board, Please see the attached comments on specific improvements to how annual carbon sequestration (not the easier to measure historical sequestration) in forests and forest products can be measured to be more in line with current IPCC methods.

Attachment: www.arb.ca.gov/lists/com-attach/21-nwl-2021-tech-ws-USYFalc6VmlRPglo.docx

Original File Name: William Stewart UCB comments on NWL scoping plan.docx

Date and Time Comment Was Submitted: 2021-08-03 14:25:15

# Comment 19 for Public Workshop: 2022 Scoping Plan Update – Natural and Working Lands Technical Workshop (nwl-2021-tech-ws) - 1st Workshop.

First Name: Greg Last Name: Kester

Email Address: gkester@casaweb.org

Affiliation: California Association of Sanitation Age

Subject: Comments on Natural and Working Lands Presentation and Scoping Plan

Comment:

Please find at the attached link comments from the California Association of Sanitation Agencies on the July 20th presentations on Natural and Working Lands and the 2022 Scoping Plan Update.

Attachment: www.arb.ca.gov/lists/com-attach/22-nwl-2021-tech-ws-ADhSeVdlWScLPwY3.pdf

Original File Name: 8-3-21 CASA Comments on NWL Presentations.pdf

Date and Time Comment Was Submitted: 2021-08-03 14:36:28

# Comment 20 for Public Workshop: 2022 Scoping Plan Update – Natural and Working Lands Technical Workshop (nwl-2021-tech-ws) - 1st Workshop.

First Name: Ana

Last Name: Garza-Beutz

Email Address: agarza-beutz@sdge.com

Affiliation: SDG&E

Subject: SDG&E Comments on Natural and Working Land Workshop Comment:

Comment:

See attached.

Attachment: www.arb.ca.gov/lists/com-attach/23-nwl-2021-tech-ws-VCcGZAdhVmBSCwc1.pdf

Original File Name: SDGE 2022 Scoping Plan NWL Wrshp Comments.pdf

Date and Time Comment Was Submitted: 2021-08-03 15:10:59

# Comment 21 for Public Workshop: 2022 Scoping Plan Update – Natural and Working Lands Technical Workshop (nwl-2021-tech-ws) - 1st Workshop.

First Name: Taylor Last Name: Roschen

Email Address: troschen@cfbf.com Affiliation: California Farm Bureau

Subject: 2022 Scoping Plan Update Technical Workshop NWL

Comment:

Public Comment-California Farm Bureau

Attachment: www.arb.ca.gov/lists/com-attach/24-nwl-2021-tech-ws-UTJTM1Y1ADUFXAJh.pdf

Original File Name: CFBF Comment Letter NWL Technical Workshop.pdf

Date and Time Comment Was Submitted: 2021-08-03 15:35:19

## Comment 22 for Public Workshop: 2022 Scoping Plan Update – Natural and Working Lands Technical Workshop (nwl-2021-tech-ws) - 1st Workshop.

First Name: Julia Last Name: Levin

Email Address: jlevin@bioenergyca.org

Affiliation: Bioenergy Association of California

Subject: BAC Comments on NWL for 2022 Scoping Plan

Comment:

Attached please find the Bioenergy Association of California's comments on the Natural and Working Lands presentation from July 20, 2021.

Attachment: www.arb.ca.gov/lists/com-attach/25-nwl-2021-tech-ws-BmQAZ1AyWVUBZAZp.pdf

Original File Name: BAC Comments on NWL in 2022 Scoping Plan.pdf

Date and Time Comment Was Submitted: 2021-08-03 16:05:52

# Comment 23 for Public Workshop: 2022 Scoping Plan Update – Natural and Working Lands Technical Workshop (nwl-2021-tech-ws) - 1st Workshop.

First Name: Sarah Last Name: Aird

Email Address: sarah@pesticidereform.org Affiliation: Californians for Pesticide Reform

Subject: Pesticides & Organic Farming Must Be Included in the 2022 Scoping Plan Update

Comment:

Please find attached a Scoping Plan comment letter from Pesticide Action Network and Californians for Pesticide Reform.

Attachment: www.arb.ca.gov/lists/com-attach/26-nwl-2021-tech-ws-Wz1SPVE+BTdQOgFe.pdf

Original File Name: FINAL CPR PAN Scoping Plan Written Comments 080321.pdf

Date and Time Comment Was Submitted: 2021-08-03 16:25:28

# Comment 24 for Public Workshop: 2022 Scoping Plan Update – Natural and Working Lands Technical Workshop (nwl-2021-tech-ws) - 1st Workshop.

First Name: Cedric Last Name: Twight

Email Address: ctwight@spi-ind.com Affiliation: Sierra Pacific Industries

Subject: 2022 Scoping Plan Update - Natural and Working Lands

Comment:

See attached comments regarding NWL

Attachment: www.arb.ca.gov/lists/com-attach/28-nwl-2021-tech-ws-UiEGcF01BQlVPAZk.pdf

Original File Name: SPI\_Objectives\_ARB\_NWL\_ScopingPlan\_comments\_8-3-2021.pdf

Date and Time Comment Was Submitted: 2021-08-03 16:31:53

# Comment 25 for Public Workshop: 2022 Scoping Plan Update – Natural and Working Lands Technical Workshop (nwl-2021-tech-ws) - 1st Workshop.

First Name: Noelle Last Name: Cremers

Email Address: ncremers@wineinstitute.org

Affiliation: Wine Institute

Subject: 2022 Natural and Working Lands Scoping Plan Comments

Comment:

Please see the attached comments. Thanks for the opportunity to

provide input.

Attachment: www.arb.ca.gov/lists/com-attach/29-nwl-2021-tech-ws-BnVXMlA+U3AHaFM9.pdf

Original File Name: Scoping Plan NWL Comments final 8-3-21.pdf

Date and Time Comment Was Submitted: 2021-08-03 16:41:37

## Comment 26 for Public Workshop: 2022 Scoping Plan Update – Natural and Working Lands Technical Workshop (nwl-2021-tech-ws) - 1st Workshop.

First Name: Lena Last Name: Brook

Email Address: lbrook@nrdc.org

Affiliation: NRDC

Subject: Comments re: July 20th NWL Scoping Plan Workshop

Comment:

I am pleased to offer the attached comments in response to the July 20th Scoping Plan Natural and Working Lands workshop.

Best, Lena

Attachment: www.arb.ca.gov/lists/com-attach/30-nwl-2021-tech-ws-B2kFcQdiBDRQCQBq.pdf

Original File Name: NRDC July 20 NWL Scoping Plan Workshop Comments 08.03.21.pdf

Date and Time Comment Was Submitted: 2021-08-03 17:04:38

# Comment 27 for Public Workshop: 2022 Scoping Plan Update – Natural and Working Lands Technical Workshop (nwl-2021-tech-ws) - 1st Workshop.

First Name: Catherine Last Name: Dodd PhD RN

Email Address: Catherine.dodd@gmail.com

Affiliation: CAAlliance of Nurses for Healthy Environ

Subject: comments on Working Lands Scoping plan

Comment:

Please find attached letter

Attachment: www.arb.ca.gov/lists/com-attach/31-nwl-2021-tech-ws-UzBcOwR3UGFVDFMg.pdf

Original File Name: CARB Scoping Plan letter 8.3.21- 1.pdf

Date and Time Comment Was Submitted: 2021-08-03 17:09:01

# Comment 28 for Public Workshop: 2022 Scoping Plan Update – Natural and Working Lands Technical Workshop (nwl-2021-tech-ws) - 1st Workshop.

First Name: Moises Last Name: Cisneros

Email Address: moises.cisneros@sierraclub.org

Affiliation: Sierra Club

Subject: Public Comments: Desert Carbon Sequestration Modeling

Comment:

Thank you for the opportunity to submit comments on behalf of a coalition of groups and individuals.

Attachment: www.arb.ca.gov/lists/com-attach/32-nwl-2021-tech-ws-B2RSNVMgUWBWD1Q3.pdf

Original File Name: CARB Comments Letter Aug 3-.pdf

Date and Time Comment Was Submitted: 2021-08-03 17:15:16

#### Comment 29 for Public Workshop: 2022 Scoping Plan Update – Natural and Working Lands Technical Workshop (nwl-2021-tech-ws) - 1st Workshop.

First Name: Evan Last Name: Edgar

Email Address: evan@edgarinc.org Affiliation: California Compost Coalition

Subject: Include the cost-effective metrics LLL Report in 2030 modeling

Comment:

#### CARB:

'Regenerative Agriculture' includes farming and grazing practices that, among other benefits, reverse climate change by rebuilding soil organic matter with compost and biochar, and restoring degraded soil biodiversity, resulting in both carbon drawdown and improving the water cycle. Lawrence Livermore Lab's January 2020 report, 'Getting to Neutral - Options for Negative Carbon Emissions in California', featured natural solutions, including compost and biochar application sequestering carbon into the soils, leading to carbon neutrality by 2045; these programs are noted among the most cost-effective solutions. CARB needs to include the cost-effective information from this report into the AB 32 Scoping Plan modeling and metrics for 2030.

Compost production and use is being viewed as contributing to carbon neutrality at CARB's Natural and Working Lands Workshops and in policy documents. The 'Draft California 2030 Natural and Working Lands Climate Change Implementation Plan' looks to double agricultural compost and mulch use. It is important that the CARB Board prioritize healthy soils in its climate change and environmental policy leadership to provide long-term resiliency and position California for economic recovery. California's recycling and composting industry can drive significant investment and job growth, creating 125,000 new green jobs on the pathway toward stabilizing the falling statewide recycling rate, while concurrently reducing between 20 and 30 million metric tons of greenhouse gases. According to established research, soil can act as a vast carbon sink to help balance out greenhouse gases, withholding up to three times as much carbon as is found in the atmosphere

To get to carbon neutrality, compost and biochar use present carbon negative options that need to be included into the modeling and metrics for 2030 and 2045.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2021-08-03 18:53:05

#### Comment 30 for Public Workshop: 2022 Scoping Plan Update – Natural and Working Lands Technical Workshop (nwl-2021-tech-ws) - 1st Workshop.

First Name: Claire Last Name: Broome

Email Address: cvbroome@gmail.com

Affiliation: Emory University

Subject: CARB NWL must include a net GHG removal scenario

Comment:

What are we missing?

A sufficiently aggressive, but necessary target. The current projection that California NWL will produce up to 400 MMT of net emissions (no net removal) by 2100 should result in a coordinated campaign of planning, implementation and evaluation to

accelerate NWL sequestration.

At least one of the scenarios to be considered should achieve net removal of emissions from Natural and Working Lands (NWL) by 2050.

This will not be achieved by business-as-usual; however, the scale of the climate crisis and a cost-effective approach to meeting California's climate goals requires that CARB, CDFA, and CNRA model such a scenario.

As documented again in the August 2, 2021 CARB workshop on Engineered Carbon Removal, carbon sequestration from Natural and Working Lands is substantially more cost-effective than sequestration using Engineered Carbon Removal or Direct Air Capture methods. In addition, Natural and Working Lands sequestration has the potential to be near term feasible and scalable.

What are the biggest threats to NWL that must be included in modeling?

While the importance of stakeholder involvement in the process was emphasized at the workshop, it is ultimately CARB's responsibility to assure the appropriate use of policy level levers and incentives to achieve California's climate goals. Not all stakeholders will necessarily be in agreement—they should not hold veto power over such a critical objective.

Reaching an aggressive target for NWL sequestration will require refining the strategies and GHG consequences, investing targeted resources, and improving our models—using greater geographic detail and independent verification to assure that long-term sequestration is accomplished.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2021-08-03 19:36:05

# Comment 31 for Public Workshop: 2022 Scoping Plan Update – Natural and Working Lands Technical Workshop (nwl-2021-tech-ws) - 1st Workshop.

First Name: Laurie Last Name: Wayburn

Email Address: lwayburn@pacificforest.org

Affiliation: Pacific Forest Trust

Subject: Comments on Natural and Working Lands Technical Workshop

Comment:

Please see attached file.

Attachment: www.arb.ca.gov/lists/com-attach/35-nwl-2021-tech-ws-AXFcPAN2BQkCZwlm.pdf

Original File Name: PFT Comments on ARB NWL Target Scoping Workshop.pdf

Date and Time Comment Was Submitted: 2021-08-03 20:16:54

#### Comment 32 for Public Workshop: 2022 Scoping Plan Update – Natural and Working Lands Technical Workshop (nwl-2021-tech-ws) - 1st Workshop.

First Name: Jim Last Name: Stewart

Email Address: drjimstewart@gmail.com

Affiliation:

Subject: Fix errors in 39 million tons of forest carbon credits documented in the CarbonPlan report Comment:

Dear Adam and Team, What a great team and an impressive plan! But it is so scary that you are projecting up to 400 MMT of net emissions (no net removal) from NWL by 2100. Please document the sources of these net emissions, as it was not clear from your slides.

However, new Scoping Plan must fix the errors in the 39 million tons of forest carbon credits documented in the CarbonPlan report Systematic over-crediting of forest offsets

(https://carbonplan.org/research/forest-offsets-explainer), and reported in detail at

https://insideclimatenews.org/news/05052021/the-climate-solution-actually-adding-millions-of-tons-of-co2-into-the-atmosphere/.

In fact, how can you justify any forest offsets, while forests are net emitters?

SB 1383 requires diversion of organic wastes, which produces millions of tons of nutrient-rich compost and digestate that could be distributed on grasslands to increase soil sequestration. How can you factor that increased soil sequestration into your plan?

It is disappointing that you are focusing 85% of your time on analyzing carbon losses in forests and shrublands, because as you know AB and SB 32 require consideration of co-benefits, which are obvious for urban forests.

In addition, coastal wetlands and seagrass meadows (and kelp forests) have huge co-benefits in terms of coastal protection and fishery nurseries. How are you considering co-benefits in CARB staff time?

Here are some links to recent review articles on sequestration in seagrass (doi: 10.3389/fmars.2019.00317) and kelp (DOI: 10.1038/s43247-021-00177-9). Thanks, Jim Stewart, PhD

#### Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2021-08-03 21:11:38

## Comment 33 for Public Workshop: 2022 Scoping Plan Update – Natural and Working Lands Technical Workshop (nwl-2021-tech-ws) - 1st Workshop.

First Name: Janet Last Name: Cox

Email Address: janet@350siliconvalley.org

Affiliation: 350 Silicon Valley

Subject: 350 Silicon Valley's comments on Natural and Working Lands Technical Workshop

Comment:

Apparently my file did not upload. Trying again...

Thank you!

Janet Cox Legislation Director 350 Silicon Valley

Attachment: www.arb.ca.gov/lists/com-attach/38-nwl-2021-tech-ws-VTZVPFA8UW9QM1I8.pdf

Original File Name: Comments-CARB-NWL08032021.pdf

Date and Time Comment Was Submitted: 2021-08-03 21:42:25

#### Comment 34 for Public Workshop: 2022 Scoping Plan Update – Natural and Working Lands Technical Workshop (nwl-2021-tech-ws) - 1st Workshop.

First Name: Hari Last Name: Lamba

Email Address: hlamba101@gmail.com Affiliation: Brighter Climate Futures

Subject: Natural Working Lands Carbon Absorption & GHG Emissions Reductions

Comment:

Considering that Greenhouse Gas Emissions in terms of carbon dioxide, methane and nitrous oxide are going up globally and in California, every effort must be made to maximize the carbon absorption of natural working lands and reduce the emissions of other greenhouse gases. I commend CARB for its comprehensive efforts through modeling and otherwise to determine where the greatest benefit would be. In regard to the overall strategy, it is my judgement that:

- 1. Coastal ecosystem carbon should be included and considered as the carbon absorption potential of say sea grasses (such as Eel grass at Point Molate in the San Francisco Bay) is immense it is estimated that such grasses have and average of about 12 feet of carbon rich soil underneath them. As such, using existing grasses as nurseries and transplanting them all along the California coast would pay enormous dividends, both in terms of long-term carbon absorption and ocean biodiversity.
- 2. In all of the moist coastal forests and in the areas burned out by wildfires, and aggressive strategy needs to be pursued to add at least 3 million Hectares (about 11,600 square miles) of new forest with diverse species this should include agroforestry and urban forestry. The layout design of these newly forested areas should be that these are segmented in such way so as to make it easier to control wildfires by our fire fighters in the future, while still connected enough to provide wildlife crossings from different areas. The practice of clear cutting by timber contractors should be ended in all forest areas (federal and state) as this practice ahs been shown to make wildfires more severe and to have an adverse effect on biodiversity.
- 3. A deliberate focus must be brought to bear on all animal agriculture as this contributes immensely to methane emissions, both in enteric fermentation and in emissions from manure lagoons. Agriculture on both agricultural land that is used to provide feed to animals and direct animal concentrated feed operations should be reduced by 50% by 2045.
- 4. The practice of expanding cattle ranch areas into wildlife preserves, such as the Tule Elk reserve near Point Reyes just north of San Francisco city, should be banned.
- 5. The practice of offering Carbon Offsets to companies in California so they can meet their requirements under the Cap & Trade program, or other such programs, should be discontinued as these are of dubious value. WE ARE NOT GOING TO START REDUCING GHG EMISSIONS UNLESS ALL CARBON EMISSIONS ARE REDUCED AT EVERY SOURCE. The practice of allowing carbon and other emissions elsewhere so that they can be absorbed in forests and shrublands is highly uncertain and should be discontinued. Besides the locations where the emissions are allowed usually suffer from the bad health effects of such pollution.
- 6. Greenhouse Gas Emissions wherever they occur, mainly due to fossil fuel combustion, need to be reduced in a quantitatively adequate fashion in all sectors of the economy, so as to be Zero by 2045. The carbon absorption in Natural Working Lands should be counted as a bonus that goes to help the global need to start

reducing the carbon dioxide in the atmosphere from its current high of 420 ppm (parts per million).

The above comments are based substantially on the transformation "plan" proposed for the global level and for the US and California in my book, "Brighter Climate Futures - A Global Energy, Climate & Ecosystem Transformation", Dr. Hari Lamba, Regent Press, Berkeley, CA, Sep 2020

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2021-08-03 22:06:10

# Comment 35 for Public Workshop: 2022 Scoping Plan Update – Natural and Working Lands Technical Workshop (nwl-2021-tech-ws) - 1st Workshop.

First Name: Natalie Last Name: Nax

Email Address: natalie@caleec.com

Affiliation:

**Subject: Comments** 

Comment:

See attached.

Attachment: www.arb.ca.gov/lists/com-attach/40-nwl-2021-tech-ws-VjsAdFM9U3NQMlIN.docx

Original File Name: MROSD - CARB Scoping Plan Update Letter - 2021-09-28.docx

Date and Time Comment Was Submitted: 2021-09-29 11:08:50

There are no comments posted to Public Workshop: 2022 Scoping Plan Update – Natural and Working Lands Technical Workshop (nwl-2021-tech-ws) that were presented during the Workshop at this time.