Comment 1 for Workshop on NWL Carbon Sequestration Modeling for Scoping Plan (sp2030nwlmodeling-ws) - 1st Workshop.

First Name: Susan Last Name: Robinson

Email Address: srmw@comcast.net

Affiliation: epfw

Subject: forest carbon

Comment:

1 During the presentation a comment was made that forest management practices do not influence fire - this is incorrect - even aged tree plantations notoriously have severe fire mortality due to their structure and even crowns and rapidly spread fire and little survives

2. Is the massive amount of tree root carbon being considered and counted as soil carbon or in some other way?

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2016-12-14 14:02:19

Comment 2 for Workshop on NWL Carbon Sequestration Modeling for Scoping Plan (sp2030nwlmodeling-ws) - 1st Workshop.

First Name: Matt Last Name: Gregori

Email Address: mgregori@semprautilities.com

Affiliation: SoCalGas

Subject: Comments on Natural and Working Lands C Sequestration Model

Comment:

Can cost be included in the model? I.e. different management practices have different costs. Those differences affect tge viability of certain practices. Also, it will allow comparison to other sequestration technologies.

What management practices were considered? Is it possible to include practices that are not available now but may be available in 5-10 years? E.g. land application of biochar (from pyrolysis of biomass) to farmland.

Future presentations should clearly state the goal of the model. If there are targets for increasing carbon stocks, those should be stated clearly as well.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2016-12-15 11:16:27

Comment 3 for Workshop on NWL Carbon Sequestration Modeling for Scoping Plan (sp2030nwlmodeling-ws) - 1st Workshop.

First Name: Miriam Last Name: Morrill

Email Address: mmorrill@blm.gov Affiliation: BLM California State Office

Subject: Consolidated BLM CA comments

Comment:

The comments below are consolidated from various BLM CA State Office program specialists.

First of all, it surprised me that the standard deviation of baseline carbon density was so high (over half the total estimated):2010 total carbon density (MgC/ha): 5,238 MMTC +- 2,907 ---> so how can the model work well with so much deviation in baseline?

And there were several items not included in the model that seem pretty important (in bold below).

Climate/atmosphere effects

- ecosystem carbon accumulation
- wildfire risk but wildfire area is prescribed
- ullet post-disturbance reforestation
- · Spatially explicit baseline burned area by land category
- Spatially explicit baseline managed private forest area by land category

And the last item I'm curious about is what is causing desert loss - they don't give an explanation for this in the presentation.

I'm curious as well, regarding desert losses. Good point on the deviation, but wide ranges are imaginable.

I'm certain these are easy guesses, and they might be dwarfed by scale, and perhaps you are just curious about WHICH parameters were used, but my thoughts include:

Fire conversion of difficult (to impossible - black brush for example-) reclamation of Mojave systems/annual conversion and increased aridity/diversity losses resulting from diminishing/changing water tables/sedimentation/water uses on non-federal lands in riparian systems, urban/suburban conversion, and/or plant veg community shifts from rising temps.

I stood in a central section of the Mormon Wilderness area in Nevada and looked out over a million acres of unseeded '05/'06 fire-impacted mojave landscape now in "monocultures" of Phyllaria, red brome, or denuded blowing sandy soils. Desert shrub communities are not showing signs of recovering. Pockets of extant

mojave plant communities exist, but given the new fire/annual production cycles now in place, it's imaginable that either.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2016-12-21 11:50:59

Comment 4 for Workshop on NWL Carbon Sequestration Modeling for Scoping Plan (sp2030nwlmodeling-ws) - 1st Workshop.

First Name: Joshua Last Name: Hanthorn

Email Address: jhanthorn@defenders.org

Affiliation: Defenders of Wildlife

Subject: LBNL Comments-Defenders of Wildlife

Comment:

Please see attached comments. Thank you!

 $Attachment: \ https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach/5-ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach/5-ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach/5-ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach/5-ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach/5-ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach/5-ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach/5-ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach/5-ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach/5-ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach/5-ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach/5-ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach/5-ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach/5-ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach/5-ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach/5-ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach/5-ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach/5-ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach/files/BARCU/barc$

sp2030nwlmodeling-ws-AW1VMQNsUG8AWQFs.pdf

Original File Name: LBNL Modeling Comments-Defenders of Wildlife.pdf

Date and Time Comment Was Submitted: 2017-01-10 17:54:23

Comment 5 for Workshop on NWL Carbon Sequestration Modeling for Scoping Plan (sp2030nwlmodeling-ws) - 1st Workshop.

First Name: Calla Rose Last Name: Ostrander

Email Address: callarose@gmail.com

Affiliation: John Wick

Subject: Vision and Deployment in Modeling for Natural and Working Lands

Comment:

To Whom It May Concern,

Please see the attached comments with regards to the Natural and Working Lands section of the AB32 Scoping Plan update.

Attachment: https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach/7-sp2030nwlmodeling-ws-WzUGYVUgU3UEcAFg.docx

Original File Name: Natural and Working Lands Scoping Plan Comments_Wick.docx

Date and Time Comment Was Submitted: 2017-01-12 13:03:21

Comment 6 for Workshop on NWL Carbon Sequestration Modeling for Scoping Plan (sp2030nwlmodeling-ws) - 1st Workshop.

First Name: Susan Last Name: Robinson

Email Address: srmw@comcast.net Affiliation: Sierra Club & EPFW

Subject: Comments on Carbon Modeling Workshop

Comment:

Please see attached comment letter

Attachment: https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach/8-sp2030nwlmodeling-ws-VjBTOgZ1AzUFcAl9.pdf

Original File Name: Forest Modeling Comments Sierra Club Ca and EPFW fnl.pdf

Date and Time Comment Was Submitted: 2017-01-13 10:03:20

Comment 7 for Workshop on NWL Carbon Sequestration Modeling for Scoping Plan (sp2030nwlmodeling-ws) - 1st Workshop.

First Name: Michelle Last Name: Passero

Email Address: mpassero@tnc.org

Affiliation:

Subject: TNC comments on Carbon Modeling Workshop

Comment:

Please accept the attached comments from The Nature Conservancy in response to the December 14th carbon modeling workshop. Thank you.

Attachment: https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach/9-sp2030nwlmodeling-ws-USVROVU3VVkCZwJi.pdf

Original File Name: TNC_CarbonModelingWorkshop_Final.pdf

Date and Time Comment Was Submitted: 2017-01-13 14:06:51

Comment 8 for Workshop on NWL Carbon Sequestration Modeling for Scoping Plan (sp2030nwlmodeling-ws) - 1st Workshop.

First Name: Shaye Last Name: Wolf

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

Subject: comments from CBD on CALAND model

Comment:

These comments on the California Natural and Working Lands Carbon Model (CALAND) presented at the ARB workshop on December 14, 2016 are submitted on behalf of the Center for Biological Diversity. Please contact us if you have any questions. Thanks you.

Attachment: https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach/10-sp2030nwlmodeling-ws-UmNQYVAOWTtQCQc2.pdf

Original File Name: 17 1 13 Center comments CALAND model final.pdf

Date and Time Comment Was Submitted: 2017-01-13 16:06:53

Comment 9 for Workshop on NWL Carbon Sequestration Modeling for Scoping Plan (sp2030nwlmodeling-ws) - 1st Workshop.

First Name: Jeanne Last Name: Merrill

Email Address: jmerrill@calclimateag.org

Affiliation: California Climate & Agriculture Network

Subject: NWL Modeling Comments - Need for Better Farmland Data - Scenarios

Comment:

Please find out comments attached.

 $Attachment: \ https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach/11-sp2030nwlmodeling-ws-UD5TIIY7BwsAawNs.docx$

Original File Name: NWL Modeling - CalCAN Comments - 1-13-16- FINAL.docx

Date and Time Comment Was Submitted: 2017-01-13 16:12:22

Comment 10 for Workshop on NWL Carbon Sequestration Modeling for Scoping Plan (sp2030nwlmodeling-ws) - 1st Workshop.

First Name: Shaye Last Name: Wolf

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

Subject: references for comment letter

Comment:

I have attached a zip file of the references cited in our letter on the California Natural and Working Lands Carbon Model (CALAND), submitted on behalf of the Center for Biological Diversity. Please contact us if you have any questions. Thank you.

Attachment: https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach/12-sp2030nwlmodeling-ws-W2pSYwZYBWcHXgU0.zip

Original File Name: 17 1 13 Center references CALAND model.zip

Date and Time Comment Was Submitted: 2017-01-13 16:06:53

Comment 11 for Workshop on NWL Carbon Sequestration Modeling for Scoping Plan (sp2030nwlmodeling-ws) - 1st Workshop.

First Name: Abby Last Name: Halperin

Email Address: ahalperin@pacificforest.org

Affiliation: Pacific Forest Trust

Subject: Pacific Forest Trust Comments on the NWL Carbon Modeling Workshop

Comment:

Please find Pacific Forest Trust Comments on the NWL Carbon Modeling Workshop attached.

Attachment: https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach/13-sp2030nwlmodeling-ws-AXFUMwRmBT9SMgVs.pdf

Original File Name: Pacific Forest Trust Comments on NWL Carbon Modeling Workshop.pdf

Date and Time Comment Was Submitted: 2017-01-13 16:33:15

Comment 12 for Workshop on NWL Carbon Sequestration Modeling for Scoping Plan (sp2030nwlmodeling-ws) - 1st Workshop.

First Name: Robert Last Name: Parkhurst

Email Address: rparkhurst@edf.org Affiliation: Environmental Defense Fund

Subject: EDF Comments on NWL Modeling for Scoping Plan Jan 14 2017

Comment:

Please see attached comments from EDF.

 $Attachment: \ https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach/14-sp2030nwlmodeling-ws-B2JXNQdgUFxVMFM8.pdf$

Original File Name: EDF Comments on NWL Modeling for Scoping Plan Jan 14 2017.pdf

Date and Time Comment Was Submitted: 2017-01-13 16:43:00

Comment 13 for Workshop on NWL Carbon Sequestration Modeling for Scoping Plan (sp2030nwlmodeling-ws) - 1st Workshop.

First Name: Laura

Last Name: Rosenberger Haider

Email Address: lauragreen.rosenberger@gmail.com

Affiliation:

Subject: Carbon Sequestration

Comment:

Comments on AB 32 Scoping Plan: Carbon Sequestration: To sequester more carbon, I am recommending the planting of Mesquite Trees in the grasslands and vacant land of Central Valley and Eastern CA. Mesquite trees can sequester up to 8 tons of carbon per hectare annually. They are drought resistant with roots 450 feet deep. They are most productive with decent rainfall or irrigation, but Mesquites can crop on as little as 4" of rainfall Mesquites are Nitrogen-fixing, therefore they don't annually. require nitrogen fertilizer which requires an input of energy and the burning of fuel. (from Permaculture Activist, May 2011 issue, article: Stabilizing the Climate with Permanent Agriculture by Eric Toensmeier & Dave Jacke) Mesquite pods are edible and a good source of potassium, zinc, calcium, and magnesium and is a sweetener. Since it is a traditional staple food of Native Americans, they would be motivated to help plant it. This tree should not be planted over aquifers that are polluted with fracking wastewater. My Second choice for Central Valley is the Acacia tree because it loses its leaves in the rainy season so crops planted underneath can get sun

For Northern California and the mountains, I would recommended planting sugar maple trees (Acer Saccharum) because they could accumulate 1300 Kg/year/ha (from Jonathan Brooks of Hope College, Holland, MI.) Some trees sequester three times as much carbon as others. A Hazelnut & Chestnut hybrid with 9 nuts per burr from Badgersett Research Corp is good. The Black Walnut can be used where people do not want a lot of weeds.

Near the Southern Coast of CA, passion fruit trees would be better, since they thrive in tropical climates.

(To be continued later)

Attachment: https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach/15-sp2030nwlmodeling-ws-AmEFbFE9WGYGZVQ6.docx

Original File Name: Comments on AB 32 Scoping Plan.docx

Date and Time Comment Was Submitted: 2017-01-13 17:13:29

Comment 14 for Workshop on NWL Carbon Sequestration Modeling for Scoping Plan (sp2030nwlmodeling-ws) - 1st Workshop.

First Name: Gary Last Name: Hughes

Email Address: ghughes@foe.org Affiliation: Friends of the Earth - US

Subject: Comment on Carbon Sequestration Modeling

Comment:

Thank you for your attention to the attached comment letter.

 $Attachment: \ https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach/16-sp2030nwlmodeling-ws-AWcCa1QwVCpWJQh7.pdf$

Original File Name: FOE-US_carb+cnra_commentltr_dec14carbonsequestmodelworkshop.pdf

Date and Time Comment Was Submitted: 2017-01-13 19:05:17

Comment 15 for Workshop on NWL Carbon Sequestration Modeling for Scoping Plan (sp2030nwlmodeling-ws) - 1st Workshop.

First Name: Margaret Last Name: Reeves

Email Address: mreeves@panna.org Affiliation: Pesticide Action Network

Subject: Comments on the California Natural and Working LANDs Carbon Model

Comment:

We strongly urge ARB to update the model and go way beyond the simple inclusion of no-till and cover cropping to include multiple carbon farming agricultural practices, many of which we have identified in the attached comments.

Attachment: https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach/17-sp2030nwlmodeling-ws-VSVRNgRrBAgHYgR0.pdf

Original File Name: PAN,CPR on C sequest model Jan17.pdf

Date and Time Comment Was Submitted: 2017-01-14 09:00:51

Comment 16 for Workshop on NWL Carbon Sequestration Modeling for Scoping Plan (sp2030nwlmodeling-ws) - 1st Workshop.

First Name: Evan Last Name: Edgar

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

Subject: Compost Use on Irrigated Crop Lands needs to be indentified Comment:

The following is recommended with supportive information:

- \bullet Include Irrigated Cropland (compost use) in the model with a low and high management scenario of 40,000 acres per year and 80,000 acres per year
- Grasslands compost amendment (state/private) -- Require CalTrans and Department of General Services and other state agencies to use compost following current state law and increase by over 10,000 acres per year
- Have CalRecycle prepared the Fourth Assessment of California Compost and Mulch-Producing Infrastructure for 2017
- Link compost use on irrigated croplands to the implementation of the Five Pillars programs by diverting organics form landfills to mitigate methane and producing compost to support the Healthy Soil Initiative and
- Starting 2018, have compost use (bulk and organic) be included in the County Crop Report and have CDFA and CalRecycle report compost use

Attachment: https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach/18-sp2030nwlmodeling-ws-UzAFYFQ2WVUEYwlr.pdf

Original File Name: CCC AB 32 Working Lands Comments 011417.pdf

Date and Time Comment Was Submitted: 2017-01-14 14:49:28

Comment 17 for Workshop on NWL Carbon Sequestration Modeling for Scoping Plan (sp2030nwlmodeling-ws) - 1st Workshop.

First Name: Karen Last Name: Maki

Email Address: karenmaki@comcast.net

Affiliation:

Subject: Comments on Natural and Working Lands Sector

Comment:

My main comments are:

- 1. We urgently need to sequester more carbon now. The 2045 and 2055 from page 6 in the model presentation is too late to help us with the climate crisis. We need to be doing less logging and/or thinning.
- 2. We need more current information. the information from the current model comes from 2010, and doesn't include the recent drought and beetle infestations.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2017-01-14 14:54:48

Comment 18 for Workshop on NWL Carbon Sequestration Modeling for Scoping Plan (sp2030nwlmodeling-ws) - 1st Workshop.

First Name: Ara

Last Name: Marderosian

Email Address: ara@sequoiaforestkeeper.org

Affiliation: Sequoia ForestKeeper

Subject: CARB Natural Working Lands Modeling

Comment:

Mary D. Nichols, Chair Members of the Board California Environmental Protection Agency California Air Resources Board 1001 "I" Street Sacramento, CA 95814

Subject: CARB Workshop on NWL Carbon Sequestration Modeling for Scoping Plan due January 14, 2017

Dear Chairperson Nichols, Members of the Board, and Staff;

Please accept the attached comments, on CARB Natural Working Lands Modeling due January 14th at 5 PM submitted on behalf of Sequoia ForestKeeper (SFK), Wasteful Unreasonable Methane Uprising, and Ventura County Climate Hub.

Attachment: https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach/20-sp2030nwlmodeling-ws-AHNRMVA6UV1VMAlm.pdf

Original File Name: SFK concerns about CARB Natural Working Lands Modeling2.pdf

Date and Time Comment Was Submitted: 2017-03-09 12:53:37

There are no comments posted to Workshop on NWL Carbon Sequestration Modeling for Scoping Plan (sp2030nwlmodeling-ws) that were presented during the Workshop at this time.