Comment 1 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: Matthew
Last Name: Keene
Email Address: Matthew.Keene@live.com
Affiliation:

Subject: capandtradeprf14
Comment:

```
I am concerned with the proposed amendments regarding rice
cultivation. I agree that methane levels should be reduced, but the
proposed changes increase nitrogen levels. Nitrogen is more of a
concern in regards to ground level air pollution. There are
numerous CARB programs aimed at reducing oxides of nitrogen (NOXs)
and this seems contradictory. In addition, what will this program
of increased periodicity of drainage do to water consumption? Thank
you for the ability to be heard.

V/R,
-Matthew Keene
```

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2014-11-21 09:08:24

No Duplicates.

Comment 2 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: Mike
Last Name: Mielke
Email Address: mmielke@svlg.org
Affiliation: Silicon Valley Leadership Group

Subject: Rice Offsets Protocol
Comment:

```
Please find attached Silicon Valley Leadership Group's support for
the Rice Offsets Protocol.
```

Attachment: www.arb.ca.gov/lists/com-attach/3-capandtradeprf14-B3QFdVE8BzMBWABy.docx

Original File Name: SVLG Rice protocol offsets support letter on letterhead.docx

Date and Time Comment Was Submitted: 2014-12-01 15:56:15

No Duplicates.

Comment 3 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: Adrian
Last Name: Miller
Email Address: amiller@orminc.com
Affiliation:

Subject: Comments on CAPANDTRADEPRF14
Comment:

```
Please see attached letter.
```

Attachment: www.arb.ca.gov/lists/com-attach/4-capandtradeprf14-WjUHc1A8VVkEYQBv.doc

Original File Name: ORM Comment Letter to ARB 12-2-14.doc

Date and Time Comment Was Submitted: 2014-12-02 12:47:17

No Duplicates.

Comment 4 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: Christopher
Last Name: Newton
Email Address: cnewton@green-assets.com
Affiliation:

Subject: Comments on the Proposed Amendments to the Compliance Offset Protocol for U.S. Forest
Comment:

```
Please find the attached letter regarding proposed amendments to
the Compliance Offset Protocol for U.S. Forest Projects.

Respectfully,

Christopher Newton
Chief Executive Officer
Green Assets, Inc.
```

Attachment: www.arb.ca.gov/lists/com-attach/5-capandtradeprf14-VTYHbl0xUG5QMwln.pdf

Original File Name: Comments on the Proposed Forest Offset Project Protocol Amendments.pdf

Date and Time Comment Was Submitted: 2014-12-05 12:16:14

No Duplicates.

Comment 5 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: Tom
Last Name: Partin
Email Address: ckaneshige@amforest.org
Affiliation:

Subject: AFRC Comments on U.S. Forest Projects Compliance Offset Protocol
Comment:

```
Attached are the American Forest Resource Council's comments.
```

Attachment: www.arb.ca.gov/lists/com-attach/7-capandtradeprf14-VjdUNAFyU2NXDgNg.pdf

Original File Name: AFRC Comments on U.S. Forest Projects Compliance Offset Protocol 12-10-14.pdf

Date and Time Comment Was Submitted: 2014-12-10 14:41:24

No Duplicates.

Comment 6 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: Roger
Last Name: Williams
Email Address: rwilliams@bluesource.com
Affiliation: Blue Source LLC

Subject: Blue Source comment letter regarding proposed changes to forest projects protocol
Comment:

```
Thank you in advance for considering the attached comment letter as
part of the Board review process.

Roger Williams
President
Blue Source LLC
```

Attachment: www.arb.ca.gov/lists/com-attach/8-capandtradeprf14-VjRWPFYiAzUKU1Aj.pdf

Original File Name: Blue Source Comments re ARB Forestry Protocol Revisions_final.pdf

Date and Time Comment Was Submitted: 2014-12-11 15:13:12

No Duplicates.

Comment 7 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: Richard
Last Name: Scharf
Email Address: rscharf@esinc.cc
Affiliation: Environmental Services, Inc.

Subject: Comments on proposed rice protocol
Comment:

1. During ALM project verifications, the farmers are very concerned about revealing too much information to the general public and other farmers. These disclosures were not as inclusive and revealing as the ones required in the rice protocol. A system to obscure some information from the general public, perhaps by making OPOs anonymous to all but ARB, the project developer, verifier and consultant, should be devised.

2. Waiting for additional information on bailing rice straw residue as a project activity is wise. What would the destination of the straw be? What are the repercussions to SOC when crop residues are gleaned from rice fields? However, we urge active research to resolve the issue, and include baling as an activity if studies demonstrate no adverse environmental effects.

3. It is not clear whether every field must be verified at each verification. If so, a sampling of fields to be visited by verifiers, using methods similar to the risk analysis method in the CAR protocol, should be considered.

4. During the pilot verification program, please consider studying the possibilities of holding verifications over several eligible crop years, rather than each one.

5. Enacting early drainage activities in preparation for harvest requires that verification bodies send crop experts into each field to verify the stage of growth of the rice at the time of field drainage. Unpredictable growing conditions may require that the crop expert visit fields two or more times to first document the stage of crop growth, and then to document the degree of drainage in the field. The stated purpose for verifying the stage of growth is to ensure that rice yields do not suffer as a result of the new management practice. This requirement seems unnecessarily onerous. It will increase verification costs significantly and potentially interfere with farming operations if the verification body is delayed for unforeseen reasons.

The requirement to verify the stage of crop growth during growing operations puts the verifier in an awkward position of being a crop consultant instead of an unbiased third party.

Maintaining crop yield should be left entirely to the grower. Carbon offset credits are unlikely to reach a price that would tempt a farmer to reduce crop yields in order to develop them. Since yield must be reported, why not apply a deduction in offset

credits when there is a significant decrease in yield for weather conditions of that growing season?

In addition, time-stamped photos are already depended upon to document the timing of drainage operations. Perhaps a method can be devised to remotely monitor and document the growth stage of the crop without a series of costly early site visits, if proving the growth stage at the time of field drainage is indispensable.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2014-12-12 07:09:41

No Duplicates.

Comment 8 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: Derik
Last Name: Broekhoff
Email Address: derik@climateactionreserve.org
Affiliation: Climate Action Reserve

Subject: Comments on Rice Cultivation COP and Proposed Updates to the Forest COP
Comment:

```
Please see the attached document for the Climate Action Reserve's
comments regarding the proposed Rice Cultivation Project Compliance
Offset Protocol and proposed updates to the U.S. Forest Project
Compliance Offset Protocol.
```

Attachment: www.arb.ca.gov/lists/com-attach/10-capandtradeprf14-VTYFYgR3Ul5VMAZp.pdf

Original File Name: CAR Comments on Forest COP Proposed Updates and Proposed Rice Cultivation COP.pdf

Date and Time Comment Was Submitted: 2014-12-12 16:08:18

No Duplicates.

Comment 9 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: Steve
Last Name: Shaffer
Email Address: steven.shaffer@sbcglobal.net
Affiliation: American Farmland Trust

Subject: Rice Cultivation Projects Compliance Offset ProtocolMethane
Comment:

```
Please see attached comments regarding the Rice Cultivation
Projects Compliance Offset Protocol from American Farmland Trust.
```

Attachment: www.arb.ca.gov/lists/com-attach/11-capandtradeprf14-AmNVPlUxUXBWOQdO.docx

Original File Name: American Farmland Trust comments to CARB 20141212.docx

Date and Time Comment Was Submitted: 2014-12-14 16:54:29

No Duplicates.

Comment 10 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: Alexandra
Last Name: Leumer
Email Address: aleumer@tnc.org
Affiliation:

Subject: TNC
Comment:

```
The Nature Conservancy appreciates the opportunity to provide the
attached comments on the California Air Resources Board Proposed
Rice Cultivation Project Protocol.
```

Attachment: www.arb.ca.gov/lists/com-attach/12-capandtradeprf14-UiZQOFAyUFwGclM6.pdf

Original File Name: TNC Rice Protocol comment letter 12 15 14.pdf

Date and Time Comment Was Submitted: 2014-12-15 10:56:18

No Duplicates.

Comment 11 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: Robert
Last Name: Parkhurst
Email Address: rparkhurst@edf.org
Affiliation: Environmental Defense Fund

Subject: EDF Comments on ARB Rice Cultivation Protocol
Comment:

```
Please accept these comments on behalf of the Environmental Defense
Fund.  We look forward to the California Air Resources Board
Meeting on December 18.  Feel free to reach out to us with any
questions you have regarding these comments.
```

Attachment: www.arb.ca.gov/lists/com-attach/13-capandtradeprf14-UzZTMQdgAw8GY1c4.pdf

Original File Name: EDF Comments on ARB Rice Cultivation Protocol.pdf

Date and Time Comment Was Submitted: 2014-12-15 10:56:27

No Duplicates.

Comment 12 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: David
Last Name: Ford
Email Address: davidforf27@gmail.com
Affiliation: L&C Carbon LLC

Subject: Comments of Proposed Revisions to Compliance Offset Protocol for U.S. Forest Projects
Comment:

```
Please see attached letter containing comments on ARB's proposed
revisions to Compliance Offset Protocol for U.S. Forest Projects
and Cap and Trade Regulations.
```

Attachment: www.arb.ca.gov/lists/com-attach/14-capandtradeprf14-WzddBFc1UFxWMwFg.pdf

Original File Name: L&C Carbon_Comments_Forest Protocol Proposed Revisions_12_15_2014.pdf

Date and Time Comment Was Submitted: 2014-12-15 11:16:34

No Duplicates.

Comment 13 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: William
Last Name: Stewart
Email Address: billstewart@berkeley.edu
Affiliation: University of California Berkeley

Subject: 3 math inconsistencies in the proposed Forest amendments that should be clarified
Comment:

```
A letter on 3 mathematical inconsistencies is attached.
William Stewart
```

Attachment: www.arb.ca.gov/lists/com-attach/15-capandtradeprf14-BnUAcgdjV3MAZwd1.pdf

Original File Name: Stewart dec 15 2104 arb comment letter.pdf

Date and Time Comment Was Submitted: 2014-12-15 11:31:19

No Duplicates.

Comment 14 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: David
Last Name: Phillips
Email Address: dphillips@chugach.com
Affiliation: Chugach Alaska Corporation

Subject: IFM Protocol Admendments
Comment:

```
Attached are Chugach Alaska Corporation's comments regarding the
Air Resources Board suggested IFM Protocol Amendments.
```

Attachment: www.arb.ca.gov/lists/com-attach/16-capandtradeprf14-AGNQNwZYUWMHaAd1.pdf

Original File Name: CA Air Resources Board Hearing Letter 12 15 2014.pdf

Date and Time Comment Was Submitted: 2014-12-15 11:43:31

No Duplicates.

Comment 15 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: Kaarsten
Last Name: Turner Dalby
Email Address: kaarsten@forestlandgroup.com
Affiliation: The Forestland Group, LLC

Subject: Proposed forestry protocol changes
Comment:

Dear Chairperson Nichols:

The Forestland Group, LLC manages over 3.5 million acres of naturally regenerating hardwood forests in 20 US states and four countries. We are the fourth largest private landowner in the United States, and we were the first TIMO to certify our entire portfolio under the FSCTM principles and criteria. We have already registered the largest offset project listed on the ARB. We believe that our forest management objectives are compatible with the current forestry protocol and are contemplating developing additional projects. However, the proposed changes to the forestry protocol would make it impossible for us to do so.

While we generally support the proposed Regulatory Review Update, we are concerned with the following provisions:

1. New Basil Area Standards and Associated Buffered Areas

The imposition of this requirement will make it practically impossible to develop a forestland carbon project which is not located within California and certain other limited areas of the Pacific Northwest.

2. Modified method for establishing Minimum Baseline Levels (“MBL”) for IFM projects with Initial Carbons Stocking above Common Practice

The proposed new method for determining MBL for IFM projects with initial carbon stocking above Common Practice will make many contemplated carbon projects unfeasible. Landowners will be reluctant to develop forest carbon projects on their most highly stocked acreage and will thereby forego the meaningful climate benefits which would result from preventing aggressive harvesting on these tracts.

3. The Common Practice values update for private IFM projects

Proposed new Common Practice values do not accurately reflect forest stocking which results from practical “common practice” forest management because the values fail to account for the cyclical effects of the timber market on wood product demand and forest stocks.

* * *

In addition to the concerns outline above, as I relayed in a meeting to ARB staff last December, we remain concerned with the current definition of a “Forest Owner” and an Offset Project Operator. We strongly believe that these definitions should be modified to reflect the reality with respect to forest ownership over the long term. We typically own our forests for a period of 10 to 15 years, during which time we may develop a carbon project. At the end of this investment period, we typically sell the property, and it may often be sold in several parcels to different buyers. If the selling TIMO has placed a carbon project on the property, it is appropriate for buyers to assume their respective obligations with respect to the project. They should not be expected, however, to become jointly and severally liable for the failure of an unrelated party to comply with the Protocol in the future.

Chapter 3.5.1 of the Protocol also requires that a new owner of timberlands must agree to take over the forest project responsibilities and commitments or the project will be terminated and offsets must be retired in an amount equal to or in excess of those which have been issued. This requirement restricts the ability of a timberland owner to sell land which is included in the project for at least 100 years. This has the practical effect of greatly eliminating the number of forest projects which are considered. We believe that forest owners should be allowed to sell or transfer a portion of a forest project free and clear of the forest project responsibilities and commitments provided that the OPO or APD has undertaken additional verification prior to the sale which updates the project baseline, confirms the amount of ARBOCs attributable to the portion of the project which is being sold and withdrawn, and, if the number of ARBOCs exceed a materiality threshold, then the OPO or APD would be required to retire a sufficient number of ARBOCs to account for those attributable to the conveyed property.

We greatly appreciate the serious thought and effort which the ARB has devoted to the Regulatory Review Update and hope you will consider the foregoing comments to further refine the Update so that it will further incentivize the development of forest projects.

Kind Regards,
Kaarsten Turner Dalby
Vice President
The Forestland Group, LLC

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2014-12-15 12:34:10

No Duplicates.

Comment 16 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: George
Last Name: Gentry
Email Address: george.gentry@bof.ca.gov
Affiliation: Board of Forestry and Fire Protection

Subject: Comment US Forestry Project Offset Protocols
Comment:

```
Comments from Board of Forestry and Fire Protection
```

Attachment: www.arb.ca.gov/lists/com-attach/18-capandtradeprf14-UTAGclU2BwsFYARr.pdf

Original File Name: arb comment 12-15-14.pdf

Date and Time Comment Was Submitted: 2014-12-15 12:12:15

No Duplicates.

Comment 17 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: Steven
Last Name: Brink
Email Address: steveb@calforests.org
Affiliation: California Forestry Association

Subject: U.S. Forest Protocol
Comment:

```
Comments from California Forestry Association are attached
```

Attachment: www.arb.ca.gov/lists/com-attach/19-capandtradeprf14-BTRRYwY2AGEGMVRg.docx

Original File Name: 141214_CFA_to_ARB_comment_on_changes_to_forest_protocol.docx

Date and Time Comment Was Submitted: 2014-12-15 12:54:24

No Duplicates.

Comment 18 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: Elizabeth
Last Name: Nussbaumer
Email Address: enussbaumer@fwwatch.org
Affiliation: Food & Water Watch

Subject: Offsets Are A False Solution
Comment:

On behalf of Food & Water Watch (FWW), a national advocacy organization headquartered in Washington, DC, and our approximately 100,000 members, supporters and activists in California, I write to express our opposition to the Proposed Amendments to Sections 95802, 95973, 95975, 95976, 95981, 95985, and 95990, title 17, California Code of Regulations (CCR) under consideration for the December 18, 2014 public hearing. This comment specifically addresses the issue of offsets – the proposed Rice Cultivation Compliance Offsets, as well as the proposed updates to the U.S. Forest Compliance Offset Protocol.

Attachment: www.arb.ca.gov/lists/com-attach/20-capandtradeprf14-AWdUPQFvBzABWANc.pdf

Original File Name: Food & Water Watch Comment 121514.pdf

Date and Time Comment Was Submitted: 2014-12-15 13:12:21

No Duplicates.

Comment 19 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: Monica
Last Name: McBride
Email Address: monica@c-agg.org
Affiliation:

Subject: Rice Protocol Comments
Comment:

```
Dear ARB,

Please see attachment for the Coalition of Agricultural Greenhouse
Gases' comments on ARB's draft of the Rice Cultivation Offset
Protocol dated 10/28/2014.  We look forward to continuing to follow
the developments related to this protocol.

Regards,
Monica
```

Attachment: www.arb.ca.gov/lists/com-attach/21-capandtradeprf14-WjlcdwNjU2dXNgZZ.docx

Original File Name: C-AGG FINAL Comments on ARB Rice Cultivation Protocol.docx

Date and Time Comment Was Submitted: 2014-12-15 13:40:03

No Duplicates.

Comment 20 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: Steve
Last Name: Dettman
Email Address: steve.dettman@eraecosystems.com
Affiliation: Era Ecosystem Services

Subject: Comments on US Forest Protocol Revisions
Comment:

```
To Whom It May Concern,

Era Ecosystem Services is pleased to provide our comment letter in
response to the revised US Forest Protocol. We would also like to
strongly endorse the comment letter drafted and submitted by Blue
Source on this same topic.

All the best,

Era Ecosystem Services
```

Attachment: www.arb.ca.gov/lists/com-attach/22-capandtradeprf14-Wj9cKFExVFgKaQZl.pdf

Original File Name: Era Ecosystem Services Comments on US Forest Protocol Revisions Posted 2....pdf

Date and Time Comment Was Submitted: 2014-12-15 13:58:42

No Duplicates.

Comment 21 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: William
Last Name: Murray
Email Address: cmurray@nafoalliance.org
Affiliation: National Alliance of Forest Owners

Subject: Comments on the Compliance Offset Protocol: U.S. Forest Projects
Comment:

```
Attached please find the comments of the National Alliance of
Forest Owners on the Compliance Offset Protocol: U.S. Forest
Projects.

Dave Tenny
President & CEO
```

Attachment: www.arb.ca.gov/lists/com-attach/23-capandtradeprf14-AmNSJlY1BwtQMAlm.pdf

Original File Name: ARB Forest offset protocol comments-2014.pdf

Date and Time Comment Was Submitted: 2014-12-15 14:04:05

No Duplicates.

Comment 22 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: Jessica
Last Name: Orrego
Email Address: jorrego@winrock.org
Affiliation:

Subject: Comments on Proposed Amendments to US Forests Compliance Offset Protocol
Comment:

```
Please see attached comments.
```

Attachment: www.arb.ca.gov/lists/com-attach/24-capandtradeprf14-BmdRNFIhBAhXMlc4.pdf

Original File Name: ACR comments to ARB on Proposed Forestry Protocol December 2014 FINAL.pdf

Date and Time Comment Was Submitted: 2014-12-15 13:56:58

No Duplicates.

Comment 23 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: Edward
Last Name: Murphy
Email Address: emurphy@spi-ind.com
Affiliation: Sierra Pacific Industries

Subject: ARB Hearing Dec 18th US Forest Protocol Comments
Comment:

```
Please find SPI comments attached.
```

Attachment: www.arb.ca.gov/lists/com-attach/25-capandtradeprf14-AXICdFA4Ag5XJAl6.pdf

Original File Name: SPI US Forest Protocol Comments.pdf

Date and Time Comment Was Submitted: 2014-12-15 14:12:39

No Duplicates.

Comment 24 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: Jonathan
Last Name: Pomp
Email Address: jpomp@esinc.cc
Affiliation:

Subject: Comments on the Proposed Updates to the US Forests Compliance Offset Protocol
Comment:

```
See attachment.

Thank You for your consideration.
```

Attachment: www.arb.ca.gov/lists/com-attach/26-capandtradeprf14-AmdcKVQ8V1sFdlUm.pdf

Original File Name:
ESI_USForest_Protocol_December2014_Updates_Comments_FINAL_2014-12-15.pdf

Date and Time Comment Was Submitted: 2014-12-15 14:33:59

No Duplicates.

Comment 25 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: Gary
Last Name: Rynearspn
Email Address: grynear@greendiamond.com
Affiliation: Green Diamond Resource Co

Subject: Proposed revisions to U.S. Forest Management Protocol
Comment:

```
letter attached.
Thank you
```

Attachment: www.arb.ca.gov/lists/com-attach/27-capandtradeprf14-VCRVIVQ6UXIAaQV2.pdf

Original File Name: ProposedRevisions.pdf

Date and Time Comment Was Submitted: 2014-12-15 14:41:07

No Duplicates.

Comment 26 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: Stephen
Last Name: Levesque
Email Address: slevesque@campbellglobal.com
Affiliation: Campbell Global

Subject: Proposed changes to US Forest Projects Compliance Offset Protocol
Comment:

```
Please see attached document
```

Attachment: www.arb.ca.gov/lists/com-attach/28-capandtradeprf14-VjVdPANdWWtQJAdl.pdf

Original File Name: CG ARB Comment 12152014.pdf

Date and Time Comment Was Submitted: 2014-12-15 14:38:54

No Duplicates.

Comment 27 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: Katie
Last Name: Sullivan
Email Address: sullivan@ieta.org
Affiliation: IETA

Subject: IETA Comments on Regulation Amendments and Protocols for Rice & Forestry
Comment:

```
Many thanks, in advance, for considering the attached comments as
part of the ARB Board review process. Please do not hesitate to
contact me, if you have questions or further information requests
related to IETA's attached submission.

Warm Regards,

Katie Sullivan
North America & Climate Finance Director
IETA
```

Attachment: www.arb.ca.gov/lists/com-attach/29-capandtradeprf14-AGkGZVAlBzUHXgJx.pdf

Original File Name: IETA Submission to ARB_Proposed Reg and Protocol Mods_15Dec2014.pdf

Date and Time Comment Was Submitted: 2014-12-15 14:45:39

No Duplicates.

Comment 28 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: W. James
Last Name: Wagoner
Email Address: jwagoner@bcaqmd.org
Affiliation: Butte County Air Quality Mgmt. District

Subject: Rice Cultivation Protocol
Comment:

```
Please see attached comment letter.
```

Attachment: www.arb.ca.gov/lists/com-attach/30-capandtradeprf14-BmRcOQRkACJXPAlt.pdf

Original File Name: BCAQMD Rice Protocol Comment 12152014.pdf

Date and Time Comment Was Submitted: 2014-12-15 15:16:19

No Duplicates.

Comment 29 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: Matthew
Last Name: Plummer
Email Address: m3pu@pge.com
Affiliation: Pacific Gas and Electric Company

Subject: Pacific Gas and Electric Company's Comments on the Air Resources Board's Proposed
Comment:

```
Pacific Gas and Electric Company (PG&E) appreciates the opportunity
to comment on the Air Resources Board's (ARB) 45-Day amendments to
the Cap-and-Trade Regulation, which adopt a new Rice Cultivation
Projects Compliance Offset Protocol (Rice Protocol) and expands the
existing Forest Projects Protocol(Forest Protocol), among other
changes.
```

Attachment: www.arb.ca.gov/lists/com-attach/31-capandtradeprf14-BnZXNgNdBTMAWQlq.pdf

Original File Name: PG&E Cap-and-Trade Comments Rice Protocol.pdf

Date and Time Comment Was Submitted: 2014-12-15 15:27:36

No Duplicates.

Comment 30 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: James
Last Name: Daley
Email Address: jad.daley@tpl.org
Affiliation: The Trust for Public Land

Subject: Proposed Revisions to Compliance Offset Protocol for U.S. Forest Projects
Comment:

```
To Whom It May Concern,

Please find attached comments from The Trust for Public Land
regarding proposed changes to the Compliance Offset Protocol for
U.S. Forests.

Sincerely,

Jad Daley, Director
Climate Conservation Program
The Trust for Public Land
```

Attachment: www.arb.ca.gov/lists/com-attach/32-capandtradeprf14-BmVVPFI+AD5WNVI8.pdf

Original File Name: Comments of the Trust for Public Land.ARB Compliance Offset Protocol for US Forests.Final.pdf

Date and Time Comment Was Submitted: 2014-12-15 15:36:15

No Duplicates.

Comment 31 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: Edie
Last Name: Sonne Hall
Email Address: edie.sonnehall@weyerhaeuser.com
Affiliation: Weyerhaeuser Company

Subject: proposed changes to ARB Forest Protocol
Comment:

```
Thank you for the opportunity to comment on the proposed amendments
to the ARB Compliance Offset Protocol for US Forest Projects.
Comments are attached.
```

Attachment: www.arb.ca.gov/lists/com-attach/33-capandtradeprf14-UyRcP1UtADZQJFU9.pdf

Original File Name: Weyerhaeuser comments to ARB proposed changes.pdf

Date and Time Comment Was Submitted: 2014-12-15 15:33:40

No Duplicates.

Comment 32 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: Mark
Last Name: Doumit
Email Address: mdoumit@wfpa.org
Affiliation:

Subject: California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms
Comment:

```
Please see attached comments from the Washington Forest Protection
Association.
```

Attachment: www.arb.ca.gov/lists/com-attach/34-capandtradeprf14-AGNUMwdqUmhQMFM8.pdf

Original File Name: California EPA Dec 15 2014.pdf

Date and Time Comment Was Submitted: 2014-12-15 15:48:33

No Duplicates.

Comment 33 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: Michael
Last Name: Coté
Email Address: mcote@rubycanyoneng.com
Affiliation: Ruby Canyon Engineering

Subject: RE: Comments on Forest Protocol Revisions and Verifier Guidance on Regulatory Compliance
Comment:

```
Please see our attached comments.
```

Attachment: www.arb.ca.gov/lists/com-attach/35-capandtradeprf14-AnBTIAZlWHIGXwlq.pdf

Original File Name: Ruby Canyon Engineering_Public Comments_ARB_15December2014.pdf

Date and Time Comment Was Submitted: 2014-12-15 15:47:18

No Duplicates.

Comment 34 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: William
Last Name: VanDoren
Email Address: wvandoren@sig-gis.com
Affiliation: Rs. Scientist, Spatial Informatics Grp.

Subject: Comments on Proposed Rev. to Compliance Offset Protocol for U.S. Forest Projects
Comment:

```
To whom it may concern,

Please accept the attached letter and comments from myself and Dr.
Charles Kerchner, on the Proposed Revisions to Compliance Offset
Protocol for U.S. Forest Projects and Cap and Trade Regulation, on
behalf of Spatial Informatics Group (SIG).

Thank you for your consideration,
William VanDoren
```

Attachment: www.arb.ca.gov/lists/com-attach/36-capandtradeprf14-WzoBdV0+UV0DYwRr.pdf

Original File Name: ARB_FOP_Changes_SIG_Comments_FINAL_20141215.pdf

Date and Time Comment Was Submitted: 2014-12-15 15:49:46

No Duplicates.

Comment 35 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: Tony
Last Name: Brunello
Email Address: tbrunello@calstrat.com
Affiliation: On Behalf of CE2 Capital

Subject: Re: Definition of regulatory compliance under the ARB Mine Methane Capture Protocol
Comment:

```
Greetings,

Attached is a comment letter I would like to submit on behalf of
CE2 Capital Partners.

Thank you.
```

Attachment: www.arb.ca.gov/lists/com-attach/37-capandtradeprf14-VWdcaldnVjEKIQIz.pdf

Original File Name: 2014-12-15 MMC Comment Letter to ARB.pdf

Date and Time Comment Was Submitted: 2014-12-15 16:20:19

No Duplicates.

Comment 36 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: Brian
Last Name: Shillinglaw
Email Address: bshillinglaw@newforests-us.com
Affiliation: New Forests

Subject: Comments on Proposed Forest Offset Protocol Changes
Comment:

```
Comments from New Forests on the proposed changes to the Forest
Offset Protocol are attached.

Thank you for considering our comments.
```

Attachment: www.arb.ca.gov/lists/com-attach/38-capandtradeprf14-AWdXMlMiBAhXPQls.pdf

Original File Name: FCP letter to ARB re FOP amendments 121514 Final.pdf

Date and Time Comment Was Submitted: 2014-12-15 16:24:14

No Duplicates.

Comment 37 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: Kyle
Last Name: Holland
Email Address: kholland@ecopartnersllc.com
Affiliation:

Subject: Comments on Proposed Changes to Compliance Offset Protocol U.S. Forest Projects
Comment:

```
Please see attached document, "ecoPartners - Dec14 comments on
changes to COP.pdf".
```

Attachment: www.arb.ca.gov/lists/com-attach/39-capandtradeprf14-Wj9RNFwyACMHYAd1.pdf

Original File Name: ecoPartners - Dec14 comments on changes to COP.pdf

Date and Time Comment Was Submitted: 2014-12-15 16:24:59

No Duplicates.

Comment 38 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

This comment was posted then deleted because it was unrelated to the Board item or it was a duplicate.

Comment 39 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: Tony
Last Name: Brunello
Email Address: tbrunello@calstrat.com
Affiliation: On Behalf of Oxbow Mining, LLC

Subject: Re: Definition of regulatory compliance under the ARB Mine Methane Capture Protocol
Comment:

```
Greetings,

Attached is a comment letter I would like to submit on behalf of
Oxbow Mining, LLC.

Thank you.
```

Attachment: www.arb.ca.gov/lists/com-attach/41-capandtradeprf14-WjUCfARnV2tWJwNc.pdf

Original File Name: Oxbow Letter to CARB.pdf

Date and Time Comment Was Submitted: 2014-12-15 16:34:55

No Duplicates.

Comment 40 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: Michael
Last Name: Jostrom
Email Address: mike.jostrom@plumcreek.com
Affiliation: Plum Creek Timber Company

Subject: Comments
Comment:

```
Please see attached comment letter.
```

Attachment: www.arb.ca.gov/lists/com-attach/42-capandtradeprf14-UiJdOFIMBzdSO1M+.docx

Original File Name: PC comments to CARB (12-15-2014).docx

Date and Time Comment Was Submitted: 2014-12-15 16:34:05

No Duplicates.

Comment 41 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: Sean
Last Name: Carney
Email Address: scarney@finitecarbon.com
Affiliation: Finite Carbon

Subject: Finite Carbon Public Comments 12-14-2014
Comment:

Sunday December 14, 2014
Chairman Mary Nichols and ARB Staff
Air Resources Board, California Environmental Protection Agency
1001 I Street
Sacramento, CA 95812

Dear Chairman Nichols:

Finite Carbon is an active participant in the California compliance offset market. We are currently developing 15 improved forest management projects projected to deliver over 10 million offsets by 2020 – more than 5 percent of the anticipated offset supply needed by the program.

We have enclosed several comments which we hope the Air Resources Board will take into consideration as it seeks to improve the forest carbon offset protocol and establish new forest management policy in California and the rest of the United States.
We thank you for your consideration and would be happy to answer any questions you may have.

Sincerely,

Sean Carney
President
Finite Carbon Corporation
484-‐586-‐3092
scarney@finitecarbon.com

Attachment: www.arb.ca.gov/lists/com-attach/43-capandtradeprf14-VzECbQZpUmhQIgFk.pdf

Original File Name: Finite Carbon Forest Compliance Protocol Public Comments 12-14-2014.pdf

Date and Time Comment Was Submitted: 2014-12-15 16:35:37

No Duplicates.

Comment 42 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: Alastair
Last Name: Handley
Email Address: alastair@carboncreditsolutions.ca
Affiliation: Carbon Credit Solutions

Subject: Rice comments
Comment:

```
Comments on the rice protocol are in the attached document.
```

Attachment: www.arb.ca.gov/lists/com-attach/44-capandtradeprf14-AXNWOVAyVmBSC1Mw.pdf

Original File Name: Rice comments.pdf

Date and Time Comment Was Submitted: 2014-12-15 16:39:19

No Duplicates.

Comment 43 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: Aaron
Last Name: Strong
Email Address: alstrong@stanford.edu
Affiliation: Stanford University

Subject: Comments on draft Rice Cultivation Projects Compliance Offset Protocol
Comment:

```
Please find attached comments on the draft Rice Cultivation
Projects Compliance Offset Protocol.
```

Attachment: www.arb.ca.gov/lists/com-attach/45-capandtradeprf14-USJTIVAwBTgEZFc4.pdf

Original File Name: Stanford University Comments on draft Rice Cultivation Project offset protocol_121514.pdf

Date and Time Comment Was Submitted: 2014-12-15 16:45:00

No Duplicates.

Comment 44 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: Tom
Last Name: Gaman
Email Address: tgaman@forestdata.com
Affiliation: East-West Forestry Associates

Subject: Proposed forestry protocol
Comment:

I have read and I do want to support all of the detailed comments made by Roger Williams of BlueSource, and I want to commend Mr. Williams for his consideration and efforts relative to commenting upon the proposed rules.

I am a registered forester, an ARB certified lead verifier and also a forest project verifier. I have also worked with land owners who wish to develop forestry projects, some of whom are deterred by the restrictive nature of the forestry protocols.

Thank you for the opportunity to comment.

Tom Gaman, RPF 1776
Inverness, CA 94937-0276

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2014-12-15 16:31:15

No Duplicates.

Comment 45 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: Paul
Last Name: Buttner
Email Address: pbuttner@calrice.org
Affiliation:

Subject: Comments on Rice Protocol (capandtradeprf14)
Comment:

```
Please find attached comment letter submitted by the California
Rice Commission.
```

Attachment: www.arb.ca.gov/lists/com-attach/47-capandtradeprf14-AWJSJlQ2VloBcwdo.pdf

Original File Name: CRC to ARB (Rice Protocol)-Dec2014(Final).pdf

Date and Time Comment Was Submitted: 2014-12-15 16:36:20

No Duplicates.

Comment 46 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: Leslie
Last Name: Durschinger
Email Address: leslie.durschinger@terraglobalcapital.com
Affiliation: Terra Global Capital, LLC

Subject: Rice Protocol Public Comments
Comment:

```
Please accept the attached public comments on the Rice Offset
Protocol from Terra Global
```

Attachment: www.arb.ca.gov/lists/com-attach/48-capandtradeprf14-UiZWNQZ1V3YCZQhX.pdf

Original File Name: Terra Global Comments on ARB Compliance Offset Protocol Rice Cultivation Projects FINAL.pdf

Date and Time Comment Was Submitted: 2014-12-15 16:47:49

No Duplicates.

Comment 47 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: Paul
Last Name: Mason
Email Address: pmason@pacificforest.org
Affiliation:

Subject: Corrected Comments from PFT on Forest protocol changes
Comment:

```
Please replace the prior comments with this version.  The only
difference is the addition of an item 5 that urges expansion to
include Alaska sooner rather than later.
```

Attachment: www.arb.ca.gov/lists/com-attach/49-capandtradeprf14-VCQCYgRxU18CZwRr.pdf

Original File Name: PFT corrected comments on FPP Dec 15.pdf

Date and Time Comment Was Submitted: 2014-12-15 16:54:22

No Duplicates.

Comment 48 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: Lauren
Last Name: Nichols
Email Address: lnichols@winrock.org
Affiliation:

Subject: ACR comments to ARB on Proposed Rice Protocol - Dec. 15, 2014
Comment:

```
Please find attached comments from ACR.
```

Attachment: www.arb.ca.gov/lists/com-attach/50-capandtradeprf14-B2ZdOF0uWFQFYABv.pdf

Original File Name: ACR comments to ARB on Proposed Rice Protocol December 2014.pdf

Date and Time Comment Was Submitted: 2014-12-15 16:57:20

No Duplicates.

Comment 49 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: Zane
Last Name: Haxtema
Email Address: zhaxtema@scsglobalservices.com
Affiliation:

Subject: Comments regarding proposed protocol changes
Comment:

```
Please see enclosed.
```

Attachment: www.arb.ca.gov/lists/com-attach/52-capandtradeprf14-BnUBZFUnBwsLbANx.pdf

Original File Name: SCS_ARB_ProtocolComments_121514-2.pdf

Date and Time Comment Was Submitted: 2014-12-15 17:01:51

No Duplicates.

Comment 50 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 45 Day.

First Name: Tom
Last Name: Vessel
Email Address: tvessels@vesselscoalgas.com
Affiliation: Vessel Coal Gas, Inc.

Subject: Re: Definition of regulatory compliance under the ARB Mine Methane Capture Protocol
Comment:

Greetings,

Please see my attached comments to ARB regarding the MMC Protocol.

Attachment: www.arb.ca.gov/lists/com-attach/53-capandtradeprf14-AmdcLARgAyNRJAVg.pdf

Original File Name: evessels@vesselscoalgas com_20141212_172408 (3).pdf

Date and Time Comment Was Submitted: 2014-12-15 16:59:12

No Duplicates.

Comment 1 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14). (At Hearing)

First Name: Alex
Last Name: Rau
Email Address: Non-web submitted comment
Affiliation: Climate Wedge

Subject: Climate Wedge's Comments on the June 20, 2014 Updated Informal Discussion Draft
Comment:

```
Please see attached comments.
```

Attachment: www.arb.ca.gov/lists/com-attach/54-capandtradeprf14-AWBXPQZiUHsKUwBy.pdf

Original File Name: Alex Rau - 14-10-4 Written Submission 12-18-2014.pdf

Date and Time Comment Was Submitted: 2014-12-22 11:52:48

No Duplicates.

Comment 2 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14). (At Hearing)

First Name: Christopher
Last Name: Brown
Email Address: Non-web submitted comment
Affiliation: Feather River AQMD

Subject: Amendments to the CA Cap on GHG Emissions and Market-Based Compliance Mechanisms
Comment:

```
Please see attached comments.
```

Attachment: www.arb.ca.gov/lists/com-attach/55-capandtradeprf14-BmVRPwBzVG4LfgF1.pdf

Original File Name: Christopher Brown - 14-10-4 Written Submission 12-18-2014.pdf

Date and Time Comment Was Submitted: 2014-12-22 11:52:48

No Duplicates.

Comment 3 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14). (At Hearing)

First Name: Christie
Last Name: Pollet-Young
Email Address: Non-web submitted comment
Affiliation: SCS Global Services

Subject: Comments Regarding Proposed Modifications to Compliance Offset Protocols
Comment:

```
Please see attached comments.
```

Attachment: www.arb.ca.gov/lists/com-attach/56-capandtradeprf14-VjVRP1YlUGoBdFQg.pdf

Original File Name: Christie Pollet-Young - 14-10-4 Written Submission 12-18-2014.pdf

Date and Time Comment Was Submitted: 2014-12-22 11:52:48

No Duplicates.

Comment 4 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14). (At Hearing)

First Name: Brian
Last Name: Kleinhenz
Email Address: Non-web submitted comment
Affiliation: Sealaska Corp

Subject: Comments re changes to Compliance Offset Protocol for US Forest Projects
Comment:

```
see attached
```

Attachment: www.arb.ca.gov/lists/com-attach/95-capandtradeprf14-USIHZFc3WGdXMAl6.pdf

Original File Name: Sealaska Corporation Comments re Compliance Offset Protocol for US Forest Projects.pdf

Date and Time Comment Was Submitted: 2015-06-26 14:49:06

No Duplicates.

Comment 5 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14). (At Hearing)

First Name: Robert
Last Name: Parkhurst
Email Address: Non-web submitted comment
Affiliation: Environmental Defense Fund

Subject: Rice Cultivation Projcts Compliance Offset Protocol
Comment:

```
see attached
```

Attachment: www.arb.ca.gov/lists/com-attach/96-capandtradeprf14-WykCbVAyUWdSCwBj.pdf

Original File Name: Rice Cultivation Projects Compliance Offset Protocol.pdf

Date and Time Comment Was Submitted: 2015-06-26 15:48:28

No Duplicates.

Comment 1 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 15-1.

First Name: Richard
Last Name: Saines
Email Address: richard.saines@bakermckenzie.com
Affiliation: Baker & McKenzie LLP

Subject: Climate Wedge LLC Comments
Comment:

```
Please see attached comments from Climate Wedge LLC.
```

Attachment: www.arb.ca.gov/lists/com-attach/57-capandtradeprf14-WzhTOVY+BDoLbAVx.pdf

Original File Name: Climate Wedge LLC Comments.pdf

Date and Time Comment Was Submitted: 2015-06-03 10:37:17

No Duplicates.

Comment 2 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 15-1.

First Name: Constance
Last Name: Best
Email Address: cbest@pacificforest.org
Affiliation: Pacific Forest Trust

Subject: CAPANDTRADEPRF14 - Group Letter on Forest Protocol Amendments
Comment:

```
Please consider the comments from this group of 15 organizations
prior to adoption of any changes to the Forest Protocol.
```

Attachment: www.arb.ca.gov/lists/com-attach/58-capandtradeprf14-UTBdKVc0BwsDaQJh.pdf

Original File Name: ARB lComments on Forest Protocol Update 060315.pdf

Date and Time Comment Was Submitted: 2015-06-03 14:32:31

No Duplicates.

Comment 3 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 15-1.

First Name: Gary
Last Name: Gero
Email Address: gary@climateactionreserve.org
Affiliation: Climate Action Reserve

Subject: Comments on Modified Text
Comment:

```
We are pleased to provide the attached comments in support of the
proposed action.
```

Attachment: www.arb.ca.gov/lists/com-attach/59-capandtradeprf14-WzgHYFYlAAxVMARr.pdf

Original File Name: CAR Comments on Rice and Forest Updates.pdf

Date and Time Comment Was Submitted: 2015-06-03 16:57:51

No Duplicates.

Comment 4 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 15-1.

This comment was posted then deleted because it was unrelated to the Board item or it was a duplicate.

Comment 5 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 15-1.

First Name: Todd
Last Name: Shuman
Email Address: tshublu@yahoo.com
Affiliation: Concerned Citizen

Subject: Comment on The Compliance Offsets Protocol - Rice Cultivation Projects
Comment:

To CARB,

The Compliance Offsets Protocol - Rice Cultivation Projects currently relies upon a Methane GWP of 21, referenced through Table A-1, p 52 of the Regulation for the Mandatory Reporting of Greenhouse Gas Emissions.

The use of such a Methane GWP Coefficient does not accord with the latest IPCC Methane GWP coefficients, which are 28 and 34 for a 100 year interval and 84 and 86 for a 20 year interval. Use of the Methane GWP 21 grossly underestimates the global warming impact of methane, and any cap and trade program needs to update the methane GWP expeditiously to be legally and ethically tenable. I do not see an intent to “update expeditiously” expressed in the document I have reviewed today.

I am pasting a long chunk of text from Robert Howarth's seminal 2014 publication as support for my claims above. It includes some material about natural gas as a fuel but then moves forcefully into reasons for why shorter time frames and higher methane GWPs should be considered, and used, in assessing methane's impact upon our already rapidly-warming planet.

To conclude, I urge the CARB to address seriously the current artificial deflation of methane GWP coefficients and methane global warming impact that is currently reflected in this rule making process for rice cultivation

Sincerely,

Todd M Shuman, 2260 Camilar Dr. Camarillo, CA 93010 8095.987.8203

A bridge to nowhere: methane emissions and the greenhouse gas footprint of natural gas
Robert W. Howarth Department of Ecology & Evolutionary Biology, Cornell University, Ithaca, New York 14853

2014 The Author. Energy Science & Engineering published by the Society of Chemical Industry and John Wiley & Sons Ltd.

Received: 4 March 2014; Revised: 18 April 2014; Accepted: 22 April 2014

The GWP of Methane

While methane is far more effective as a greenhouse gas than carbon dioxide, methane has an atmospheric lifetime of only 12 years or so, while carbon dioxide has an effective influence on atmospheric chemistry for a century or longer [34]. The time frame over which we compare the two gases is therefore critical, with methane becoming relatively less important than carbon dioxide as the timescale increases. Of the major papers on methane and the GHG for conventional natural gas published before our analysis for shale gas, one modeled the relative radiative forcing by methane compared to carbon dioxide continuously over a 100-year time period following emission [2], and two used the global warming approach (GWP) which compares how much larger the integrated global warming from a given mass of methane is over a specified period of time compared to the same mass of carbon dioxide.

Of the two that used the GWP approach, one showed both 20-year and 100-year GWP analyses [3] while another used only a 100-year GWP time frame [4]. Both used GWP values from the Intergovernmental Panel on Climate Change (IPCC) synthesis report from 1996 [35], the most reliable estimates at the time their papers were published. In subsequent reports from the IPCC in 2007 [36] and 2013 [34] and in a paper in Science by workers at the NASA Goddard Space Institute [37], these GWP values have been substantially increased, in part, to account for the indirect effects of methane on other radiatively active substances in the atmosphere such as ozone (Table 2). In Howarth et al. [8], we used the GWP approach and closely followed the work of Lelieveld and colleagues [3] in presenting both integrated 20 and 100 year periods, and in giving equal credence and interpretation to both timescales.

We upgraded the approach by using the most recently published values for GWP at that time [37]. These more recent GWP values increased the relative warming of methane compared to carbon dioxide by 1.9-fold for the 20-year time period (GWP of 105 vs. 56) and by 1.6-fold for the 100-year time period (GWP of 33 vs. 21; Table 2). Our conclusion was that for the 20-year time period, shale gas had a larger GHG than coal or oil even at our low-end estimates for methane emission (Fig. 1); conventional gas also had a larger GHG than coal or oil at our mean or high-end methane emission estimates, but not at the very low-end range for methane emission (the best-case, low-emission scenario). At the 100-year timescale, the influence of methane was much diminished, yet at our high-end methane emissions, the GHG of both shale gas and conventional gas still exceeded that of coal and oil (Fig. 1). Of nine new reports on methane and natural gas published in 9 months after our April 2011 paper [8], six only considered the 100-year time frame for GWP, two used both a 20- and 100-year time frame, and one used a continuous modeling of radiative forcing over the 0–100 time period (Table 2). Of the six papers that only examined the 100-year time frame, all used the lower GWP value of 25 from the 2007 IPCC report rather than the higher value of 33 published by Shindell and colleagues in 2009 that we had used; this higher value better accounts for the indirect effects of methane on global warming.

Many of these six papers implied that the IPCC dictated a focus on the 100-year time period, which is simply not the case: the IPCC report from 2007 [36] presented both 20- and 100-year GWP values for methane.

And two of these six papers criticized our inclusion of the 20-year time period as inappropriate [14, 17]. I strongly disagree with this criticism. In the time since April 2011 I have come increasingly to believe that it is essential to consider the role of methane on timescales that are much shorter than 100 years, in part, due to new science on methane and global warming presented since then [34, 41, 42],
briefly summarized below. The most recent synthesis report from the IPCC in 2013 on the physical science basis of global warming highlights the role of methane in global warming at multiple timescales, using GWP values for 10 years in addition to 20 and 100 years (GWP of 108, 86, and 34, respectively) in their analysis [34]. The report states that “there is no scientific argument for selecting 100 years compared with other choices,” and that “the choice of time horizon . . .. depends on the relative weight assigned to the effects at different times” [34].

The IPCC further concludes that at the 10-year timescale, the current global release of methane from all anthropogenic sources exceeds (slightly) all anthropogenic carbon dioxide emissions as agents of global warming; that is, methane emissions are more important (slightly) than carbon dioxide emissions for driving the current rate of global warming. At the 20- year timescale, total global emissions of methane are equivalent to over 80% of global carbon dioxide emissions. And at the 100-year timescale, current global methane emissions are equivalent to slightly less than 30% of carbon dioxide emissions [34] (Fig. 3). This difference in the time sensitivity of the climate system to methane and carbon dioxide is critical, and not widely appreciated by the policy community and even some climate scientists. While some note how the longterm momentum of the climate system is driven by carbon dioxide [15], the climate system is far more immediately responsive to changes in methane (and other short-lived radiatively active materials in the atmosphere, such as black carbon) [41].

The model published in 2012 by Shindell and colleagues [41] and adopted by the United Nations [42] predicts that unless emissions of methane and black carbon are reduced immediately, the Earth’s average surface temperature will warm by 1.5°C by about 2030 and by 2.0°C by 2045 to 2050 whether or not carbon dioxide emissions are reduced. Reducing methane and black carbon emissions, even if carbon dioxide is not controlled, would significantly slow the rate of global warming and postpone reaching the 1.5°C and 2.0°C marks by 15–20 years. Controlling carbon dioxide as well as methane and black carbon emissions further slows the rate of global warming after 2045, through at least 2070 [41, 42] (Fig. 4).

Why should we care about this warming over the next few decades? At temperatures of 1.5–2.0°C above the 1890–1910 baseline, the risk of a fundamental change in the Earth’s climate system becomes much greater [41–43], possibly leading to runaway feedbacks and even more global warming. Such a result would dwarf any possible benefit from reductions in carbon dioxide emissions over the next few decades (e.g., switching from coal to natural gas, which does reduce carbon dioxide but also increases methane emissions). One of many mechanisms for such catastrophic change is the melting of methane clathrates in the oceans or melting of permafrost in the Arctic. Hansen and his colleagues [43, 44] have suggested that warming of the Earth by 1.8°C may trigger a large and rapid increase in the release of such methane. While there is a wide range in both the magnitude and timing of projected carbon release from thawing permafrost and melting clathrates in the literature

[45], warming consistently leads to greater release. This release can in turn cause a feedback of accelerated global warming [46].

To state the converse of the argument: the influence of today's emissions on global warming 200 or 300 years into the future will largely reflect carbon dioxide, and not methane, unless the emissions of methane lead to tipping points and a fundamental change in the climate system. And that could happen as early as within the next two to three decades. An increasing body of science is developing rapidly that emphasizes the need to consider methane's influence over the decadal timescale, and the need to reduce methane emissions. Unfortunately, some recent guidance for life cycle assessments specify only the 100-year time frame [47, 48], and the EPA in 2014 still uses the GWP values from the IPCC 1996 assessment and only considers the 100-year time period when assessing methane emissions [49]. In doing so, they underestimate the global warming significance of methane by 1.6-fold compared to more recent values for the 100-year time frame and by four to fivefold compared to the 10- to 20-year time frames.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-06-03 18:37:46

No Duplicates.

Comment 6 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 15-1.

First Name: Ara
Last Name: Marderosian
Email Address: ara@sequoiaforestkeeper.org
Affiliation: Sequoia ForestKeeper.org

Subject: California Cap On Greenhouse Gas Emissions and Market-Based Compliance Mechanisms
Comment:

California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms for Methane will establish a regulation that has fixed the methane GWP at 21, which conflicts with the best available science.

The Compliance Offsets Protocol - Rice Cultivation Projects uses a Methane GWP of 21, referenced through Table A-1, p 52 of the Regulation for the Mandatory Reporting of Greenhouse Gas Emissions.

The use of such a Methane GWP Coefficient is not in accord with the latest IPCC Methane GWP coefficients, which are 28 and 34 for a 100 year interval and 84 and 86 for a 20 year interval. Use of the Methane GWP 21 grossly underestimates the global warming impact of methane, and any cap and trade program needs to update the methane GWP expeditiously to be legally and ethically tenable. An intent to update expeditiously this methane GWP is not expressed in the document.

Pasted below as Exhibit A is a long segment of text from Robert Howarth's seminal 2014 publication (attached) as support for my claims above. It includes some language about natural gas as a fuel but then moves into reasons for why shorter time frames and higher methane GWPs should be considered in assessing methane's impact upon climate change.

To conclude, I urge the CARB to address seriously the current artificial deflation of methane GWP coefficients and methane global warming impact that is currently reflected in this rule making process for rice cultivation.

Please keep on the list to receive all communications on this issue.

Respectfully submitted,

Mr. Ara Marderosian
Sequoia ForestKeeper®
P.O. Box 2134
Kernville, CA 93238
(760) 376-4434
www.sequoiaforestkeeper.org

Exhibit A

A bridge to nowhere: methane emissions and the greenhouse gas footprint of natural gas

Robert W. Howarth Department of Ecology & Evolutionary Biology, Cornell University, Ithaca, New York 14853

2014 The Author. Energy Science & Engineering published by the Society of Chemical Industry and John Wiley & Sons Ltd.

Received: 4 March 2014; Revised: 18 April 2014; Accepted: 22 April 2014

Pages 6-9

The GWP of Methane

While methane is far more effective as a greenhouse gas than carbon dioxide, methane has an atmospheric lifetime of only 12 years or so, while carbon dioxide has an effective influence on atmospheric chemistry for a century or longer [34]. The time frame over which we compare the two gases is therefore critical, with methane becoming relatively less important than carbon dioxide as the timescale increases.

Of the major papers on methane and the GHG for conventional natural gas published before our analysis for shale gas, one modeled the relative radiative forcing by methane compared to carbon dioxide continuously over a 100-year time period following emission [2], and two used the global warming approach (GWP) which compares how much larger the integrated global warming from a given mass of methane is over a specified period of time compared to the same mass of carbon dioxide. Of the two that used the GWP approach, one showed both 20-year and 100-year GWP analyses [3] while another used only a 100-year GWP time frame [4]. Both used GWP values from the Intergovernmental Panel on Climate Change (IPCC) synthesis report from 1996 [35], the most reliable estimates at the time their papers were published. In subsequent reports from the IPCC in 2007 [36] and 2013 [34] and in a paper in Science by workers at the NASA Goddard Space Institute [37], these GWP values have been substantially increased, in part, to account for the indirect effects of methane on other radiatively active substances in the atmosphere such as ozone (Table 2).

In Howarth et al. [8], we used the GWP approach and closely followed the work of Lelieveld and colleagues [3] in presenting both integrated 20 and 100 year periods, and in giving equal credence and interpretation to both timescales. We upgraded the approach by using the most recently published values for GWP at that time [37]. These more recent GWP values increased the relative warming of methane compared to carbon dioxide by 1.9-fold for the 20-year time period (GWP of 105 vs. 56) and by 1.6-fold for the 100-year time period (GWP of 33 vs. 21; Table 2).

Our conclusion was that for the 20-year time period, shale gas had a larger GHG than coal or oil even at our low-end estimates for methane emission (Fig. 1); conventional gas also had a larger GHG than coal or oil at our mean or high-end methane emission estimates, but not at the very low-end range for methane emission (the best-case, low-emission scenario). At the 100-year timescale,

the influence of methane was much diminished, yet at our high-end methane emissions, the GHG of both shale gas and conventional gas still exceeded that of coal and oil (Fig. 1). Of nine new reports on methane and natural gas published in 9 months after our April 2011 paper [8], six only considered the 100-year time frame for GWP, two used both a 20- and 100-year time frame, and one used a continuous modeling of radiative forcing over the 0–100 time period (Table 2). Of the six papers that only examined the 100-year time frame, all used the lower GWP value of 25 from the 2007 IPCC report rather than the higher value of 33 published by Shindell and colleagues in 2009 that we had used; this higher value better accounts for the indirect effects of methane on global warming.

Many of these six papers implied that the IPCC dictated a focus on the 100-year time period, which is simply not the case: the IPCC report from 2007 [36] presented both 20- and 100-year GWP values for methane. And two of these six papers criticized our inclusion of the 20-year time period as inappropriate [14, 17]. I strongly disagree with this criticism. In the time since April 2011 I have come increasingly to believe that it is essential to consider the role of methane on timescales that are much shorter than 100 years, in part, due to new science on methane and global warming presented since then [34, 41, 42], briefly summarized below. The most recent synthesis report from the IPCC in 2013 on the physical science basis of global warming highlights the role of methane in global warming at multiple timescales, using GWP values for 10 years in addition to 20 and 100 years (GWP of 108, 86, and 34, respectively) in their analysis [34]. The report states that “there is no scientific argument for selecting 100 years compared with other choices,” and that “the choice of time horizon . . .. depends on the relative weight assigned to the effects at different times” [34]. The IPCC further concludes that at the 10-year timescale, the current global release of methane from all anthropogenic sources exceeds (slightly) all anthropogenic carbon dioxide emissions as agents of global warming; that is, methane emissions are more important (slightly) than carbon dioxide emissions for driving the current rate of global warming. At the 20- year timescale, total global emissions of methane are equivalent to over 80% of global carbon dioxide emissions. And at the 100-year timescale, current global methane emissions are equivalent to slightly less than 30% of carbon dioxide emissions [34] (Fig. 3). This difference in the time sensitivity of the climate system to methane and carbon dioxide is critical, and not widely appreciated by the policy community and even some climate scientists. While some note how the longterm momentum of the climate system is driven by carbon dioxide [15], the climate system is far more immediately responsive to changes in methane (and other short-lived radiatively active materials in the atmosphere, such as black carbon) [41].

The model published in 2012 by Shindell and colleagues [41] and adopted by the United Nations [42] predicts that unless emissions of methane and black carbon are reduced immediately, the Earth’s average surface temperature will warm by 1.5°C by about 2030 and by 2.0°C by 2045 to 2050 whether or not carbon dioxide emissions are reduced. Reducing methane and black carbon emissions, even if carbon dioxide is not controlled, would significantly slow the rate of global warming and postpone reaching the 1.5°C and 2.0°C marks by 15–20 years. Controlling carbon dioxide as well as methane and black carbon emissions further slows the

rate of global warming after 2045, through at least 2070 [41, 42] (Fig. 4).

Why should we care about this warming over the next few decades? At temperatures of 1.5–2.0°C above the 1890–1910 baseline, the risk of a fundamental change in the Earth's climate system becomes much greater [41–43], possibly leading to runaway feedbacks and even more global warming. Such a result would dwarf any possible benefit from reductions in carbon dioxide emissions over the next few decades (e.g., switching from coal to natural gas, which does reduce carbon dioxide but also increases methane emissions). One of many mechanisms for such catastrophic change is the melting of methane clathrates in the oceans or melting of permafrost in the Arctic. Hansen and his colleagues [43, 44] have suggested that warming of the Earth by 1.8°C may trigger a large and rapid increase in the release of such methane. While there is a wide range in both the magnitude and timing of projected carbon release from thawing permafrost and melting clathrates in the literature [45], warming consistently leads to greater release. This release can in turn cause a feedback of accelerated global warming [46].

To state the converse of the argument: the influence of today's emissions on global warming 200 or 300 years into the future will largely reflect carbon dioxide, and not methane, unless the emissions of methane lead to tipping points and a fundamental change in the climate system. And that could happen as early as within the next two to three decades. An increasing body of science is developing rapidly that emphasizes the need to consider methane's influence over the decadal timescale, and the need to reduce methane emissions.

Unfortunately, some recent guidance for life cycle assessments specify only the 100-year time frame [47, 48], and the EPA in 2014 still uses the GWP values from the IPCC 1996 assessment and only considers the 100-year time period when assessing methane emissions [49]. In doing so, they underestimate the global warming significance of methane by 1.6-fold compared to more recent values for the 100-year time frame and by four to fivefold compared to the 10- to 20-year time frames.

Attachment: www.arb.ca.gov/lists/com-attach/62-capandtradeprf14-Vz9QOVQiV2UKfgVx.pdf

Original File Name: Howarth_2014_ESE_methane_emissions.pdf

Date and Time Comment Was Submitted: 2015-06-03 20:02:43

No Duplicates.

Comment 7 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 15-1.

First Name: Roger
Last Name: Williams
Email Address: rwilliams@bluesource.com
Affiliation:

Subject: Blue Source comments re: forest protocol revisions
Comment:

```
Thank you in advance for consideration of our attached comments.

Roger Williams
President
Blue Source
```

Attachment: www.arb.ca.gov/lists/com-attach/63-capandtradeprf14-UDJcNgF1ADZXDlIh.pdf

Original File Name: Blue Source Forest Protocol Revisions Comment Letter 6_3_15.pdf

Date and Time Comment Was Submitted: 2015-06-03 21:18:39

No Duplicates.

Comment 8 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 15-1.

First Name: Ara
Last Name: Marderosian
Email Address: ara@sequoiaforestkeeper.org
Affiliation: Sequoia ForestKeeper.org

Subject: California Cap On Greenhouse Gas Emissions and Market-Based Compliance Mechanisms
Comment:

A joint UN-industry effort to look at methane says methane is 86 times more powerful than CO2 as a greenhouse gas, which means he/they are relying on the 20-year GWP form the IPCC 2013 report.

There is also an effort to get the International Standards Organization (ISO) to set a standard for methane in lifecycle assessments that would reflect actual endpoints, such as a global warming of 1.5 or 2 deg C. That essentially would call for the 20-year GWP as well. The US component to the ISO has recommended adoption of such a new standard, which would replace the decades old 21 value.

http://www.un.org/climatechange/summit/wp-content/uploads/sites/2/2014/07/INDUSTRY-Oil-and-Gas-Methane-Partnership-Action-Statement-and-Plan.pdf

The California Air Resources Board must seriously consider these global studies and research.

Respectfully submitted,

Mr. Ara Marderosian
Sequoia ForestKeeper®
P.O. Box 2134
Kernville, CA 93238
(760) 376-4434
www.sequoiaforestkeeper.org

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-06-04 07:40:01

No Duplicates.

Comment 9 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 15-1.

First Name: Katie
Last Name: Sullivan
Email Address: sullivan@ieta.org
Affiliation: IETA

Subject: IETA Comments on Proposed Updates to Compliance Offset Protocols
Comment:

```
Many thanks for considering the attached comments responding to
ARB's 15-Day proposed updates to California's Rice and Forestry
Compliance Offset Protocols.

Please contact me, if you have questions or require further
information related to IETA's attached submission.

Best,

Katie Sullivan
North America & Climate Finance Director
IETA
```

Attachment: www.arb.ca.gov/lists/com-attach/65-capandtradeprf14-AWhVNgF0UGIDWlQn.pdf

Original File Name: IETA Submission to ARB_15-Day Proposed Reg and Protocol Mods_4June2015.pdf

Date and Time Comment Was Submitted: 2015-06-04 08:22:43

No Duplicates.

Comment 10 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 15-1.

First Name: Ralph
Last Name: Moran
Email Address: ralph.moran@bp.com
Affiliation:

Subject: Revisions to the US Forestry Protocol
Comment:

```
Submitted on behalf of a coalition of companies
```

Attachment: www.arb.ca.gov/lists/com-attach/66-capandtradeprf14-AmNVPlUxUXBWOQdn.pdf

Original File Name: June 2015 Board Meeting Forestry Offsets Coalition Letter.pdf

Date and Time Comment Was Submitted: 2015-06-04 08:54:29

No Duplicates.

Comment 11 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 15-1.

First Name: David
Last Name: Phillips
Email Address: dphillips@chugach.com
Affiliation: Chugach Alaska Corporation

Subject: Comments on the Forest Protocol
Comment:

```
Chugach Alaska Corporation submits the attached comments regarding
the proposed U.S. Forest Compliance Offset Protocol updates.

Sincerely,

David Phillips
Land and Resources Manager
Chugach Alaska Corporation
```

Attachment: www.arb.ca.gov/lists/com-attach/67-capandtradeprf14-UjRROFUmUGZQJQN3.pdf

Original File Name: Forest Compliance Protocol Comments June 2015.pdf

Date and Time Comment Was Submitted: 2015-06-04 11:49:59

No Duplicates.

Comment 12 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 15-1.

First Name: Debbie
Last Name: Reed
Email Address: dreed@drdassociates.org
Affiliation: C-AGG

Subject: Comments on Compliance Offset Protocol Rice Cultivation Projects Proposed 15-Day Modificat
Comment:

```
Please find comments submitted jointly by C-AGG and IETA on the
Compliance Offset Protocol Rice Cultivation Projects Proposed
15-Day Modifications.
```

Attachment: www.arb.ca.gov/lists/com-attach/68-capandtradeprf14-BWZWfV09WGxRMARb.pdf

Original File Name: C-AGG Comments on ARB Rice Cultivation Protocol 6-4-2015.pdf

Date and Time Comment Was Submitted: 2015-06-04 12:58:15

No Duplicates.

Comment 13 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 15-1.

First Name: Todd
Last Name: Shuman
Email Address: tshublu@yahoo.com
Affiliation: Concerned Citizen

Subject: CARB Rice Cultivation Cap and Trade Protocol
Comment:

I wish to add a short supplemental comment to my previous comments about the Rice Cultivation (Cap and Trade-related) protocol.

Philip Swanson, who is associated with a UN-led industry partnership, is reported to have asserted that the GWP of Methane is 84 -- which is the 2013 IPCC (5th) methane GWP for the 20 year interval, without feedbacks incorporated. If someone associated with a UN-led industry partnership is using a methane GWP of 84, then so should the CARB with regard to the rice cultivation protocol and all other protocols (both presently approved and to be considered in the future) that relate to methane.

Sincerely, Todd Shuman, Camarillo, CA

http://www.watoday.com.au/environment/climate-change/methane-emissions-raise-doubts-about-gas-industrys-climate-advantage-20150603-ghg9qu.html
by Tara Patel, June 4, 2015

Methane emissions raise doubts about gas industry's climate advantage

Philip Swanson, administrator of a United Nations-led industry partnership aimed at curbing leakage of the primary component of natural gas, presented at the World Gas Conference in Paris. [In][h]is presentation at the World Gas Conference in Paris on Tuesday. . . . He stated "This is a reputational issue for the industry," Swanson said. Methane is 84 times more potent than carbon dioxide, another greenhouse gas, and yet data on emissions during production and transport of natural gas "are still patchy."

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2015-06-04 12:46:59

No Duplicates.

Comment 14 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 15-1.

First Name: Steve
Last Name: Brink
Email Address: steveb@calforests.org
Affiliation:

Subject: California Forestry Association Comment Letter
Comment:

```
The California Forestry Association (Calforests) is concerned that
the proposed amendments to the U.S. Forest Protocol fell short of
simply adding clarity to the existing Protocol.  See attached
comment letter.
```

Attachment: www.arb.ca.gov/lists/com-attach/70-capandtradeprf14-BmVQOQdrWWcFZgln.pdf

Original File Name: Comment Ltr re US Forest Protocols Amdnts to CARB.pdf

Date and Time Comment Was Submitted: 2015-06-04 13:01:36

No Duplicates.

Comment 15 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 15-1.

First Name: Brian
Last Name: Nowicki
Email Address: bnowicki@biologicaldiversity.org
Affiliation: Center for Biological Diversity

Subject: Comments regarding the Forest Protocol 15-day changes
Comment:

```
Please accept these comments submitted on behalf of the Center for
Biological Diversity regarding the proposed 15-day modifications to
the Compliance Offset Protocol for U.S. Forest Projects ("Forest
Protocol") as part of the Amendments for the California Cap On
Greenhouse Gas Emissions and Market-Based Compliance Mechanisms.
```

Attachment: www.arb.ca.gov/lists/com-attach/71-capandtradeprf14-VjVXNAZpUXYHZABy.pdf

Original File Name: Center letter re Forest Protocol 15 day (06 04 2015).pdf

Date and Time Comment Was Submitted: 2015-06-04 13:27:50

No Duplicates.

Comment 16 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 15-1.

First Name: Shahira
Last Name: Esmail
Email Address: shahira.esmail@terraglobalcapital.com
Affiliation: Terra Global Capital, LLC

Subject: Comments on ARB Compliance Offset Protocol Rice Cultivation Projects
Comment:

```
Please accept the attached public comments on the Compliance Offset
Protocol Rice Cultivation Projects from Terra Global.
```

Attachment: www.arb.ca.gov/lists/com-attach/72-capandtradeprf14-BXFcP1AjVXQGYQVa.pdf

Original File Name: Terra Global Comments on ARB Compliance Offset Protocol Rice Cultivation Projects May 2015 FINAL.pdf

Date and Time Comment Was Submitted: 2015-06-04 13:44:24

No Duplicates.

Comment 17 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 15-1.

First Name: Alexandra
Last Name: Leumer
Email Address: aleumer@tnc.org
Affiliation:

Subject: TNC Support of Inclusion of Alaska in Cap and Trade Program
Comment:

```
Please see the attached letter of support for the inclusion of
Alaska in the compliance offset program.

Thank you for the opportunity to comment.

Alex Leumer, The Nature Conservnacy
```

Attachment: www.arb.ca.gov/lists/com-attach/73-capandtradeprf14-Wy9cNFw+Aw8LflAl.pdf

Original File Name: TNC support of Alaska in forest protocol_fnl.pdf

Date and Time Comment Was Submitted: 2015-06-04 13:55:42

No Duplicates.

Comment 18 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 15-1.

First Name: Jonathan
Last Name: Pomp
Email Address: jpomp@esinc.cc
Affiliation: Environmental Services, Inc.

Subject: ESI's Comments on the Proposed Modifications to the Compliance Offset Protocol for U.S.
Comment:

```
See attached.  Thank You for your time and consideration.
```

Attachment: www.arb.ca.gov/lists/com-attach/74-capandtradeprf14-AWRQJQNrBQlXJFMg.pdf

Original File Name:
ESI_USForest_Protocol_June2015_Updates_Comments_FINAL_20150604.pdf

Date and Time Comment Was Submitted: 2015-06-04 14:22:33

No Duplicates.

Comment 19 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 15-1.

First Name: Gary
Last Name: Rynearson
Email Address: grynear@greendiamond.com
Affiliation: Green Diamond Resource Co

Subject: Letter to Ms. Mary Nichols
Comment:

Attachment: www.arb.ca.gov/lists/com-attach/75-capandtradeprf14-VDlRNgR3WXMHXlM9.pdf

Original File Name: Mary Nichols letter.pdf

Date and Time Comment Was Submitted: 2015-06-04 14:27:23

No Duplicates.

Comment 20 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 15-1.

First Name: Robert
Last Name: Parkhurst
Email Address: rparkhurst@edf.org
Affiliation: Environmental Defense Fund

Subject: EDF comments on Rice Cultivation Projects Compliance Offset Protocol
Comment:

```
Please accept the attached comments from EDF on the Rice
Cultivation Projects Compliance Offset Protocol.
```

Attachment: www.arb.ca.gov/lists/com-attach/76-capandtradeprf14-VjNcPgRjU18KbwJt.pdf

Original File Name: EDF Comments on Rice Cultivation Protocol.pdf

Date and Time Comment Was Submitted: 2015-06-04 14:28:37

No Duplicates.

Comment 21 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 15-1.

First Name: Brian
Last Name: Nowicki
Email Address: bnowicki@biologicaldiversity.org
Affiliation: Center for Biological Diversity

Subject: Comments regarding the Rice Protocol 15-day changes
Comment:

```
Please accept these comments submitted on behalf of the Center for
Biological Diversity regarding the proposed 15-day modifications to
the Compliance Offset Protocol for Rice Cultivation projects ("Rice
Protocol") as part of the Amendments for the California Cap On
Greenhouse Gas Emissions and Market-Based Compliance Mechanisms.
```

Attachment: www.arb.ca.gov/lists/com-attach/77-capandtradeprf14-WjkGZQNsByAFZgFz.pdf

Original File Name: Center letter to ARB re Rice Prot (06 04 2015).pdf

Date and Time Comment Was Submitted: 2015-06-04 15:04:32

No Duplicates.

Comment 22 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 15-1.

First Name: Mik
Last Name: McKee
Email Address: mmckee@climatetrust.org
Affiliation: The Climate Trust

Subject: Comments on the proposed revisions to ARB's Forest Protocols
Comment:

```
The Climate Trust is pleased to submit the attached comments on the
proposed revisions to ARB's U.S. Forest Protocols.
```

Attachment: www.arb.ca.gov/lists/com-attach/78-capandtradeprf14-WzhSOAZuBzlRNgZy.docx

Original File Name: Climate Trust comments on proposed revisions to ARB Forest Protocol.docx

Date and Time Comment Was Submitted: 2015-06-04 15:16:59

No Duplicates.

Comment 23 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 15-1.

First Name: John
Last Name: Kadyszewski
Email Address: jkadyszewski@winrock.org
Affiliation:

Subject: Comments on Proposed Revisions to Compliance Offset Protocol for U.S. Forest Projects
Comment:

```
Please see attached.  Thank you for the opportunity to submit
comments.
```

Attachment: www.arb.ca.gov/lists/com-attach/79-capandtradeprf14-UDEFYANwV1tSNwFu.pdf

Original File Name: ACR comments to ARB on Proposed Forestry Protocol June 4 2015.pdf

Date and Time Comment Was Submitted: 2015-06-04 15:15:19

No Duplicates.

Comment 24 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 15-1.

First Name: Gary
Last Name: Gero
Email Address: gary@climateactionreserve.org
Affiliation:

Subject: Joint Comments on Forest Protocol Update
Comment:

```
Thank you for the opportunity to provide comments. A joint letter
providing suggested technical adjustments to the Forest Protocol is
attached.
```

Attachment: www.arb.ca.gov/lists/com-attach/80-capandtradeprf14-VT9SO1Q8Az4CcFQL.pdf

Original File Name: Joint Comments on ARB Forest Protocol Updates.pdf

Date and Time Comment Was Submitted: 2015-06-04 15:20:30

No Duplicates.

Comment 25 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 15-1.

First Name: Shahira
Last Name: Esmail
Email Address: shahira.esmail@terraglobalcapital.com
Affiliation: Terra Global Capital, LLC

Subject: Comments on ARB Compliance Offset Protocol Rice Cultivation Projects
Comment:

```
Please accept the attached comments from Terra Global on the
Compliance Offset Protocol Rice Cultivation Project.
```

Attachment: www.arb.ca.gov/lists/com-attach/81-capandtradeprf14-VyMHZFQnVXQCZQdY.pdf

Original File Name: Terra Global Comments on ARB Compliance Offset Protocol Rice Cultivation Projects May 2015 FINAL.pdf

Date and Time Comment Was Submitted: 2015-06-04 15:33:19

No Duplicates.

Comment 26 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 15-1.

First Name: Lauren
Last Name: Nichols
Email Address: lnichols@winrock.org
Affiliation:

Subject: Comments to ARB on Proposed Regulation Order June 2015
Comment:

```
Please find attached comments from ACR.
```

Attachment: www.arb.ca.gov/lists/com-attach/82-capandtradeprf14-BWRUMVUmAg4DZlQ7.pdf

Original File Name: ACR comments on ARB Rice Protocol in Proposed Regulation Order June2015.pdf

Date and Time Comment Was Submitted: 2015-06-04 15:28:57

No Duplicates.

Comment 27 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 15-1.

First Name: Sean
Last Name: Carney
Email Address: scarney@finitecarbon.com
Affiliation: President

Subject: Comments on Proposed Revisions to the Compliance Offset Protocol for U.S. Forest Projects
Comment:

Dear Members of the Board:

Finite Carbon is an active participant in the California compliance offset market and is currently developing 19 improved forest management projects for the program.

We have chosen to join two letters supported by 20 organizations to request that the Air Resources Board remove from consideration three critical items from the proposed revision to the protocol and form a technical working group to review them further:

1.Modified Even-aged Management requirements – Chapter 3.1(a)(4)(A-E)
2.Modified Minimum Baseline Level determination process for IFM projects with initial stocking above common practice – Chapter 5.2.1
3.Modified Common Practice figures and the associated shift in “high” vs “low” site class delineation - Assessment Area Data File associated with the Regulatory Review Update of the Forest Protocol and Appendix F(d)

However, given the current process underway, we have provided several comments on these issues and our recommendations for alternative language which I have attached.

We thank you for your consideration and would be happy to answer any questions you may have.

Sincerely,

Sean Carney

Attachment: www.arb.ca.gov/lists/com-attach/83-capandtradeprf14-VDJdMgFuWGIDcVQx.pdf

Original File Name: Finite Carbon Forest Compliance Protocol Public Comments 6-4-2015.pdf

Date and Time Comment Was Submitted: 2015-06-04 16:02:43

No Duplicates.

Comment 28 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 15-1.

First Name: Peter
Last Name: Browning
Email Address: pbrowning@rubycanyoneng.com
Affiliation: Ruby Canyon Engineering, Inc.

Subject: Comments on Proposed Revision to Compliance Protocol for US Forest Projects
Comment:

```
We appreciate the opportunity to submit comments. Please see the
attached letter.
```

Attachment: www.arb.ca.gov/lists/com-attach/84-capandtradeprf14-WigAcwRnUnhRCFMw.pdf

Original File Name: Ruby Canyon Engineering_15_Day_Comments_June42015.pdf

Date and Time Comment Was Submitted: 2015-06-04 16:12:35

No Duplicates.

Comment 29 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 15-1.

First Name: Gerald
Last Name: Secundy
Email Address: jerrys@cceeb.org
Affiliation:

Subject: CCEEB Comments
Comment:

```
CCEEB comments regarding 15-day Notice of Public Availability of
Modified Text and Availability of Additional Documents for the
Amendments to the California Cap on Greenhouse Gas Emissions and
Market-Based Compliance Mechanisms.
```

Attachment: www.arb.ca.gov/lists/com-attach/85-capandtradeprf14-AWIHYlE1VmAGYlQL.pdf

Original File Name: CCEEB letter on ARB Forestry Protocol Common Practices_6-4.pdf

Date and Time Comment Was Submitted: 2015-06-04 16:19:29

No Duplicates.

Comment 30 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 15-1.

First Name: Aaron
Last Name: Strong
Email Address: alstrong@stanford.edu
Affiliation: Stanford University

Subject: Comments on the Compliance Offset Protocol Rice Cultivation Projects
Comment:

```
Attached to this message please find our comments on the amendments
to the Market-Based Compliance Mechanisms, specifically focusing on
the updates to the Compliance Offset Protocol for Rice Cultivation
Projects.

Sincerely,
Aaron Strong and Barbara Haya
```

Attachment: www.arb.ca.gov/lists/com-attach/86-capandtradeprf14-WikBcwZmWWQHZwNs.docx

Original File Name: Stanford University Comments on draft Rice Cultivation Project offset protocol_060415.docx

Date and Time Comment Was Submitted: 2015-06-04 16:25:41

No Duplicates.

Comment 31 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 15-1.

First Name: Edward
Last Name: Murphy
Email Address: emurphy@spi-ind.com
Affiliation: Sierra Pacific Industries

Subject: comments on the Forest Protocol Updates
Comment:

```
see attached pdf file.  Thank You
```

Attachment: www.arb.ca.gov/lists/com-attach/88-capandtradeprf14-AHNXIQFpUFwEYQRr.pdf

Original File Name: SPI comments to ARB protocol_060415.pdf

Date and Time Comment Was Submitted: 2015-06-04 16:28:35

No Duplicates.

Comment 32 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 15-1.

First Name: Kyle
Last Name: Holland
Email Address: kholland@ecopartnersllc.com
Affiliation: ecoPartners

Subject: Comments on Proposed Changes to Compliance Offset Protocol U.S. Forest Projects
Comment:

```
Please see attached document, "ecoPartners - Jun14 comments on
changes to COP.pdf".
```

Attachment: www.arb.ca.gov/lists/com-attach/89-capandtradeprf14-VTBXMlY4AyADZAd1.pdf

Original File Name: ecoPartners - Jun15 comments on changes to COP.pdf

Date and Time Comment Was Submitted: 2015-06-04 16:32:42

No Duplicates.

Comment 33 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 15-1.

First Name: Christie
Last Name: Pollet-Young
Email Address: cpollet-young@scsglobalservices.com
Affiliation:

Subject: Comments Related to the Verification of Forest Compliance Projects
Comment:

```
Dear ARB,

Please see the attached letter with comments about the most recent
revision of the Forest Compliance Offset Protocol. We thank you for
the opportunity to comment and look forward to speaking with you
should you have and questions or concerns.

All the best,
Christie Pollet-Young
```

Attachment: www.arb.ca.gov/lists/com-attach/90-capandtradeprf14-UyBQNVEjUl5WPAdi.pdf

Original File Name: SCS Letter to ARB_060415.pdf

Date and Time Comment Was Submitted: 2015-06-04 16:36:28

No Duplicates.

Comment 34 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 15-1.

First Name: Constance
Last Name: Best
Email Address: cbest@pacificforest.org
Affiliation:

Subject: PFT Comments on Proposed Forest Protocol Amendments
Comment:

```
Please find our letter attached.  Let me know if you have any
difficulty with the attachment.
```

Attachment: www.arb.ca.gov/lists/com-attach/91-capandtradeprf14-B3dTM1wpUV0AZVI9.pdf

Original File Name: PFT Comments on Proposed Forest Protocol Amendments.pdf

Date and Time Comment Was Submitted: 2015-06-04 16:34:35

No Duplicates.

Comment 35 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 15-1.

First Name: Michael
Last Name: Wang
Email Address: mike@wspa.org
Affiliation: Western States Petroleum Association

Subject: Forestry Offsets Protocol
Comment:

```
Letter Attached
```

Attachment: www.arb.ca.gov/lists/com-attach/92-capandtradeprf14-UyRRJAFwUGIGXwZg.docx

Original File Name: WSPA Forestry Offsets 06042014A letterhead.docx

Date and Time Comment Was Submitted: 2015-06-04 16:41:27

No Duplicates.

Comment 36 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 15-1.

First Name: Paul
Last Name: Buttner
Email Address: pbuttner@calrice.org
Affiliation: California Rice Commission

Subject: Comments on Rice Protocol Portion of Rulemaking
Comment:

```
Attached are the comments from the California Rice Commission on
the rice protocol.
```

Attachment: www.arb.ca.gov/lists/com-attach/93-capandtradeprf14-WzhRJQBiVFgGYwNs.pdf

Original File Name: CRC Comments (Rice Protocol)-June2015PDF.pdf

Date and Time Comment Was Submitted: 2015-06-04 16:31:16

No Duplicates.

Comment 37 for Cap and Trade Protocols for Rice and Forestry (capandtradeprf14) - 15-1.

First Name: Emily
Last Name: Warms
Email Address: ewarms@newforests-us.com
Affiliation:

Subject: Forest Protocol Comments
Comment:

Thank you

Attachment: www.arb.ca.gov/lists/com-attach/94-capandtradeprf14-UjxUN1QiUV1QMFQ7.pdf

Original File Name: New Forests public comments FOP changes June 04 2015.pdf

Date and Time Comment Was Submitted: 2015-06-04 17:00:37

No Duplicates.