

May 11, 2016

Ms. Sara Nichols  
California Air Resources Board  
California EPA  
1001 I Street  
P.O. Box 2815  
Sacramento, CA 95814

Submitted via ARB comments webpage:

[http://www.arb.ca.gov/lispub/comm2/bcsubform.php?listname=scoplan2030ags&comm\\_period=1](http://www.arb.ca.gov/lispub/comm2/bcsubform.php?listname=scoplan2030ags&comm_period=1)

**Re: Public Workshop on the Agriculture Sector to Inform the 2030 Target Scoping Plan Update**

Dear Ms. Nichols:

Please accept the following feedback from Environmental Defense Fund (EDF) in response to the public solicitation for comments on the Workshop on the Agriculture Sector to Inform the 2030 Target Scoping Plan Update (hereforward “Workshop”), which took place in Fresno, California on April 27, 2016.

EDF acknowledges and appreciates the hard work that has gone into updating the Scoping Plan and the efforts to solicit input from agricultural stakeholders. EDF is committed to promoting science-based solutions for farmers, ranchers and landowners to participate in the plan to address climate change and bring greenhouse gas emissions to 40% below 1990 levels by 2030.

Overall, the Workshop on the Agriculture Sector identified and prioritized the states’ best opportunities to incorporate agricultural solutions; however, it is important that the Scoping Plan Update provide more detail on the role for agriculture, specifically the role for the cap-and-trade market to play in driving research and implementation of practices that reduce greenhouse gas emissions. The following comments and suggestions reflect our expertise in market-based solutions and agriculture.

■ **General comments**

EDF appreciates and agrees with the vision outlined during the Workshop presentation by the California Department of Food and Agriculture (CDFA) to “Protect, Enhance, Innovate, Develop, and Align”<sup>1</sup> If we’re going to meet the nation’s growing needs for food and water, we are going to have to do it in ways that improve the ecosystems that serve us.

■ **Collaborate in conducting research with US Department of Agriculture (USDA)**

The Workshop presentations did not identify the opportunity of the state to leverage and partner with USDA on their research. We are aware that ARB is currently working with USDA on solutions and encourage the ARB to highlight the role USDA’s programs can be leveraged in meeting the state’s climate targets.

On February 5, 2014, Secretary Vilsack announced the locations of seven “Climate Hubs” throughout the United States. These hubs serve to coordinate and disseminate the latest research and technology developed by national and state agencies to the producers who can implement them. As the Workshop presenters stressed the need for additional information and support for quantification of agricultural mitigation and sequestration, we urge coordination of research with the Southwest Climate hub and sub-hub (located in Los Cruces, New Mexico and Davis, California).

On July 31, 2014, USDA published a report entitled *Quantifying Greenhouse Gas Fluxes in Agriculture and Forestry: Methods for Entity-Scale Inventory* which “provides uniform scientific methods for quantifying the changes in greenhouse gas emissions and carbon storage from various land management and conservation activities.” We encourage the Scoping Plan team to review this report and consider the methods identified when quantifying climate change benefits of agricultural practices.

One way to do that is through the COMET-FARM™ tool. The methodologies in the recent USDA report have been integrated into COMET-FARM™, a whole farm and ranch carbon and greenhouse gas accounting system developed by Colorado State University in conjunction with the Natural Resource Conservation Service and USDA. As described on its website “The tool guides you through describing your farm and ranch management practices including alternative future management scenarios. Once complete, a report is generated comparing the carbon changes and greenhouse gas emissions between your current management practices and future scenarios.” Workshop presenters mentioned efforts to expand the functionality of COMET-FARM™ and COMET-Planner™ tools to incorporate California crops. We support this expansion and

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<sup>1</sup> Agriculture Vision and Goal Setting, Presentation 2, Public Workshop on the Agriculture Sector to Inform Development of the 2030 Target Scoping Plan Update, Fresno, CA, April 27, 2016 (Slide 22) <http://www.arb.ca.gov/cc/scopingplan/meetings/04272016/presentation.pdf>

encourage continued coordination with the COMET-FARM™ team.

■ **Incentivize agriculture’s participation in environmental markets**

EDF believes that transformational environmental change comes from harnessing the power of environmental markets. In the 1990’s, EDF helped design and implement the acid rain trading program under the Clean Air Act Amendments of 1990. Under this market-based plan, sulfur emissions have gone down faster than predicted and at one-fourth of the projected cost.

We are now turning our attention to expanding environmental markets for agriculture through leveraging the offset provisions in California’s cap-and-trade program. We believe that the development of offset protocols for farmers and ranchers offers an opportunity to reduce greenhouse gas emissions and increase carbon sequestration while at the same time feeding the nation. On June 25, 2015, ARB adopted the Rice Cultivation Projects Compliance Offset Protocol<sup>3</sup>, demonstrating the role that agriculture can play in reducing emissions. With this precedent, we encourage ARB to consider additional agricultural protocols, including protocols that support the climate smart agriculture practices outlined on slide 23 of the Workshop presentation.<sup>4</sup> The methodologies outlined in the USDA’s *Quantifying Greenhouse Gas Fluxes in Agriculture and Forestry: Methods for Entity-Scale Inventory* and the suggestions in the 2104 Nicholas Institute reports commissioned by ARB entitled *Information Support for a Greenhouse Gas Reduction Strategy for California Agriculture*<sup>5</sup> provide a good starting point for the economically and environmentally-feasible options.

■ **Involve producers in the development of targets**

The state, particularly through the California Department of Food and Agriculture (CDFA), has done an excellent job involving producers in the research and implementation of new resource efficient agricultural practices. We encourage the state to continue to engage producers in the development of targets to inform the 2030 Scoping Plan.<sup>6</sup>

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<sup>3</sup> <http://www.arb.ca.gov/newsrel/newsrelease.php?id=736>

<sup>4</sup> Agriculture Vision and Goal Setting, Presentation 2, Public Workshop on the Agriculture Sector to Inform Development of the 2030 Target Scoping Plan Update, Fresno, CA, April 27, 2016 (Slide 23) <http://www.arb.ca.gov/cc/scopingplan/meetings/04272016/presentation.pdf>

<sup>5</sup> <https://nicholasinstitute.duke.edu/focal-areas/technical-working-group-agricultural-greenhouse-gases-t-agg/california-project>.

<sup>6</sup> Agriculture Vision and Goal Setting, Presentation 2, Public Workshop on the Agriculture Sector to Inform Development of the 2030 Target Scoping Plan Update, Fresno, CA, April 27, 2016 (Slide 11) <http://www.arb.ca.gov/cc/scopingplan/meetings/04272016/presentation.pdf>

We appreciate the hard work that went into the development of the Scoping Plan Update and we look forward to having the Board adopt the Update later this year. IN developing the next draft of the Update, the importance of a comprehensive suite of voluntary incentives and options that support agricultural mitigation and sequestration cannot be understated. According to CDFA, "California agriculture is a \$42.6 billion dollar industry that generates at least \$100 billion in related economic activity."<sup>7</sup> This industry has a large potential to be part of both the mitigation and adaptation solution in the state. The suite of incentives included in the Scoping Plan Update should explicitly include partnerships with USDA; the use of environmental markets to drive innovation and cost-effective GHG reductions; and an active role for agriculture and agricultural stakeholders in the development of goals and targets.

We thank ARB for the opportunity to offer comments. We look forward to continued collaboration with ARB and other stakeholders throughout the design and implementation of the Scoping Plan Update.

Sincerely,



Robert Parkhurst  
Director, Agriculture Greenhouse Gas Markets  
Environmental Defense Fund

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<sup>7</sup> "CDFA History". California Department of Food and Agriculture. <https://www.cdfa.ca.gov/CDFA-History.html>, retrieved May 11, 2016.