

Letter  
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**From:** Puja Batra  
**To:** CAP  
**Subject:** Climate Action Plan (CAP) Public Review PDS2015-POD-15-002, PDS2016-GPA-16-007, LOG NO. PDS2016-ER-16-00-003  
**Date:** Monday, September 25, 2017 2:05:58 PM

Ms. Maggie Soffel, Land Use & Environmental Planner  
 Planning & Development Services  
 5510 Overland Ave, Suite 310  
 San Diego CA 92123  
 email: [CAP@sdcountry.ca.gov](mailto:CAP@sdcountry.ca.gov) <[CAP@sdcountry.ca.gov](mailto:CAP@sdcountry.ca.gov)>

September 25, 2017

RE: Climate Action Plan (CAP) Public Review PDS2015-POD-15-002, PDS2016-GPA-16-007, LOG NO. PDS2016-ER-16-00-003

Dear Ms. Soffel:

Thank you for the opportunity to provide comments on the County of San Diego's Draft Climate Action Plan. As you know, we have been engaged in an effort to highlight the potential that agriculture in the unincorporated county has for carbon sequestration. Below, we outline several comments on the CAP regarding agriculture and open space.

178-1

First, we recognize the many methodological challenges with getting agricultural soils baseline. Given this difficulty, there is currently no way of knowing if agriculture in the county is a net GHG source or a net sink at this point. This uncertainty should be acknowledged in the CAP, because unlike several other parts of California, most croplands in San Diego County are orchard trees, which are among the best carbon sequestration strategies for agriculture. Agriculture holds a lot of potential to not only reduce its own footprint, as has been estimated in the CAP, but also to offset emissions of other sectors as their reduction strategies ramp up. We are not suggesting that other sectors' emissions reductions can or should be replaced by carbon farming, but instead that it be considered an interim strategy, and/or potentially as an offset mechanism for a small percentage of total emissions. We appreciate that the CAP twice recognizes the potential role of carbon farming, but we feel it should be given more prominence in the CAP as a means of GHG mitigation. Even if only as a "support measure" at this point, it can be listed in several other places.

178-2

Removal of orchard trees due to the rising costs of agriculture (specifically water) over last decade has resulted in loss of carbon storage and sequestration. These trees contribute GHG mitigation, food security, income generation, and constitute a major part of our agricultural economy. It is more important for both mitigation and resilience purposes, to reduce losses of existing orchard trees rather than focus on planting new trees. New trees take decades to reach the levels of carbon storage and sequestration potential that existing trees have. According to recent findings, long-term studies of hundreds of tree species have shown that sequestration by larger (older) trees is higher than that of smaller (younger) trees in absolute numbers *as well as rate*. This means the bigger the tree, the faster it adds biomass, and the faster it sequesters carbon. Investments in drivers of orchard tree loss, such as developing recycled water for agriculture and applying significantly lower water costs for its use by farmers, will help curtail losses of our existing sequestration in croplands. It will also increase potable water availability for other uses. This is a resilience strategy and a mitigation strategy that will provide an immensely valuable economic boost to our declining agricultural sector.

178-3

## Response to Comment Letter I78

**Puja Batra, Ph.D.**  
**September 25, 2017**

- I78-1** The comment provides introductory remarks. No further response is required.
- I78-2** The comment states the CAP should give more emphasis to carbon farming and the County should consider carbon farming an interim strategy or offset mechanism. The role of carbon farming as a potential strategy to reduce GHG emissions is acknowledged on pages 3-13 and 3-76 of the Draft CAP. The County will continue to evaluate carbon farming as a potential reduction strategy in future CAP updates. Please also see the Master Response 11 on carbon sequestration. This comment does not address the adequacy of the Draft SEIR. However, the comment will be included in the Final EIR and made available to the decision makers prior to a final decision on the proposed project.
- I78-3** The comment suggests the development of recycled water infrastructure for agricultural areas as a resiliency and mitigation strategy for increased carbon sequestration. The County supports recycled water infrastructure where feasible and will continue to coordinate with individual water districts who would implement such infrastructure. Further, the County acknowledges the benefits of increased carbon sequestration through Strategy A-2 (see page 3-83) which focuses on increased carbon sequestration through increased residential tree planting with priority given to areas served by recycled water and greywater infrastructure, and increased County tree planting. Refer to Master Response 11 related to carbon sequestration. This comment does not address the adequacy of the Draft SEIR. The comment will be included in the Final EIR and made available to the decision makers prior to a final decision on the proposed project.

The fertilizer component of agricultural baseline in the CAP does not have a reduction strategy associated with it. Compost application actually reduces the need for fertilizer while also sequestering carbon. It also builds water holding capacity, has several other farming benefits, and will provide a market for compost produced under the new Zero Waste Plan (which is part of the CAP strategy for waste reduction). The GHG reductions from compost can be estimated using an online tool that was actually developed by the state of California, i.e., CDFA's compost planner. Setting specific targets for fertilizer use reduction, listing compost use as a strategy, will reduce GHG's, build County commitment to soil friendly practices that have several resilience co-benefits, and will build momentum and interest in wider application of carbon farming practices.

178-4

We hope that the County will commit to carbon farming demonstration projects done on County-owned lands, as well as partner with farmers to implement and measure effects of carbon farming practices. The County will then be well-positioned in future revisions of the CAP to include carbon farming as an enforceable measure once the state has finalized its guidance on methods for estimating baseline emissions from soils.

178-5

Specifically with respect to the tree planting strategy, it is not linked in the CAP explicitly to agricultural practices. It is for residential trees and County owned land, the latter which may or may not be farmland. No assumptions are listed for this strategy in Appendix C, so it is unclear what survivorship rates are assumed or whether water requirements have been factored in. Residential trees *planted* at the rate of 2 per residence may not actually see any survivorship. Any tree planting strategy should require ensuring the survivorship of 2 trees per residence, up to age 3 (after which time we assume a tree requires much less maintenance.) This required survivorship rate requires a higher planting rate.

178-6

Finally, it does not appear that wildfire was factored into the baseline emissions. In past years, wildfire GHG's have been estimated by EPIC (2008), and they can be major contributors to GHG's in years of catastrophic fires. While open space/agricultural emissions are very difficult to fully account for, the major categories of emissions such as wildfire should be included in baseline.

178-7

Agriculture has contributed enormously to San Diego County, culturally, economically, and through "ecosystem services" such as carbon sequestration, moderation of urban heat, protection of watershed processes, and several others. The current need to mitigate GHG's and build resilience provides an opportunity to recognize the valuable role that farm and rangelands play in our quality of life, and also to incentivize climate-friendly land management practices in ways that will help boost a declining agricultural sector. Doing so will also act to strengthen the ties between the rural and urban parts of the unincorporated county.

178-8

We look forward to working with you to build a climate-friendly, resilient county. Thank you very much for your commitment to this process.

Kind regards,

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**178-4** The comment states that compost application to agricultural soils would reduce fertilizer applications and lead to GHG reductions. The County acknowledges this comment. This comment does not address the adequacy of the Draft SEIR. The comment will be included in the Final EIR and made available to the decision makers prior to a final decision on the project.

**178-5** The County acknowledges their hope for the County to commit to participating in demonstration projects and measure the effects of carbon farming. The County acknowledges this comment. This comment does not address the adequacy of the Draft SEIR. The comment will be included in the Final EIR and made available to the decision makers prior to a final decision on the project.

**178-6** The County acknowledges opinions regarding the rate at which trees should be planted for GHG Reduction Measures A-2.1 and A-2.2 to ensure the appropriate survival rate. These measures are described on pages 3-84 through 3-87 of the Draft CAP and supporting quantification is provided on page 25 of Attachment 1 to Appendix C. This comment does not address the adequacy of the Draft SEIR. The comment will be included in the Final EIR and made available to the decision makers prior to a final decision on the project.

**178-7** The comment states that wildfire emissions should be included in the emissions baseline. While wildfires do create GHG emissions, the County does not include these emissions in the inventory because the emissions fluctuate year to year and are not a direct result of County activities.

The County CAP is focused on measuring and reducing emissions that are attributed directly to the behaviors and activities attributed to county residents and businesses and government operations to determine how the County can achieve its fair share of State reduction goals. Incorporating emissions from wildfires on an annual basis would potentially result in major emissions increases or decreases in each inventory year which would not reflect County actions to reduce day-to-day emissions. The commenter mentioned the

incorporation of wildfire emissions in EPIC's San Diego County GHG Inventory. EPIC's methodology was to use the average emissions seen from wildfires in the County from 1990-2007 and apply it to 2008 (EPIC 2013). This methodology is not consistent with the methodology used in the County CAP, which is to measure emissions that occur during the inventory year. Furthermore, using a 17-year average for each subsequent inventory may not reflect reductions due to adopted fire prevention efforts.

While wildfires do occur because of human activity, and are occurring at an increasing rate due to climate change, it is not a predictable or consistent anthropogenic source for the purposes of achieving the State's GHG reduction goals. CARB's inventory of statewide emissions does not include this source to determine compliance with reduction goals. The County is, however, vulnerable to increasing wildfire risk due to increasing heat and drought from climate change. These issues are addressed in the vulnerability assessment and adaptation plan within the CAP.

**I78-8** The comment offers concluding remarks and opinion. This comment does not address the adequacy of the Draft SEIR. The comment will be included in the Final EIR and made available to the decision makers prior to a final decision on the project.