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November 13, 2015

Mary Nichols, Chair  
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Submitted electronically:

[http://www.arb.ca.gov/lispub/comm2/bcsubform.php?listname=investplan2-  
ws&comm\\_period=1](http://www.arb.ca.gov/lispub/comm2/bcsubform.php?listname=investplan2-<br/>ws&comm_period=1)

Re: California Wastewater Climate Change Group and California Association of Sanitation Agencies Comments on the Cap-and-Trade Auction Proceeds Draft Second Investment Plan (Fiscal Years 2016-17 through 2018-2019)

Dear Chairman Nichols and Board Members:

The California Wastewater Climate Change Group (CWCCG) and California Association of Sanitation Agencies (CASA) appreciate the opportunity to comment on the Cap-and-Trade Auction Proceeds Draft Second Investment Plan (Draft Investment Plan). The CWCCG and CASA are statewide groups of municipalities that collect and treat over 90 percent of municipal wastewater in California, many of whom also provide recycled water services and actively participate in the beneficial use of biosolids and biogas. Our joint mission is to address climate change policies, initiatives, and challenges through a unified voice advocating for wastewater community perspectives. Our members are focused on helping the State achieve its multiple mandates and goals by 2030 and beyond, including:

- Reducing carbon dioxide equivalent emissions to 40% below 1990 levels
- Providing 50% of the State's energy needs from renewable sources
- Reducing carbon intensity of transportation fuel used in the State by 10 percent
- Diverting organic waste from landfills
- Increasing soil carbon under the Healthy Soils Initiative and Forest Carbon Plan
- Reducing short-lived climate pollutant (SLCP) emissions

CWCCG and CASA agree with ARB that publicly owned (wastewater) treatment works (POTWs) are part of the solution. In addition to providing the essential public service of cleaning water and treating biosolids, the wastewater sector can maximize resource recovery from a wide array of waste streams and potential end-products. POTWs can do this while reducing the release of SLCPs and by maximizing the use of existing infrastructure (i.e., anaerobic digesters, power generating units, and biosolids treatment facilities). **We estimate that the wastewater sector has existing excess capacity to co-digest upwards of 75% of the food waste and fats, oils, and grease (FOG) currently being landfilled.**

This makes wastewater projects immediate, cost effective, and extremely competitive candidates for funding through Cap-and-Trade auction proceeds.

CalRecycle and the California Department of Food and Agriculture estimate that \$100 million over the next five years are needed to build the necessary infrastructure in the waste sector to meet the landfill organic diversion goals. We believe this number to be too low, and in fact, waste industry representatives have estimated that the real number will be between \$1 and \$2 billion by 2020. This number includes new composting and anaerobic digestion facilities, however, it does not include what is needed for POTWs to modify their infrastructure to accept diverted organic waste. This indicates that there is a very significant funding gap if the SLCP Reduction Strategy goals are to be met. We recommend that ARB prioritize Cap-and-Trade auction proceeds toward this infrastructure, especially the funding for POTWs that are willing to utilize their excess digester capacity to accept diverted organic waste. These types of projects are cost effective when compared to building new anaerobic digestion facilities, and will kick-start the management of organic waste sooner than new infrastructure projects.

Please refer to our comment letters on the Second Investment Plan Concept Paper and the Draft SLCP Reduction Strategy for more detailed discussion on wastewater projects.

We strongly support the inclusion of wastewater related projects as part of the Second Investment Plan, and recommend wastewater projects (and their co-benefits) be made more explicit in the listed investment concepts. POTWs are capable of contributing toward multiple statewide goals utilizing approaches that optimize use of incentive funds while maximizing air quality, climate, soil, and water quality co-benefits. POTWs can:

- Significantly reduce emissions of methane by maximizing the use of existing anaerobic digesters and compost facilities through the receipt and management of hauled-in organic waste for co-digestion and co-composting.
- Sequester carbon in soil through the application of biosolids to agricultural land, thereby avoiding use of fossil fuel-intense inorganic fertilizer while improving soil health, crop yields, and water holding capacity.
- Increase the productive use of the captured methane through power generation, on-site heating needs, pipeline injection, or conversion to transportation fuel.
- Directly use biosolids to reclaim fire ravaged land and reduce the potential severity of future wild fires (the primary source of black carbon).

In addition to the co-benefits listed above, many POTWs are located near or in the midst of disadvantaged communities - improvements to increase efficient operation, reduce flaring (wasting) a renewable resource (biomethane), and contribute to other greenhouse gas emissions reducing projects will directly benefit these communities.

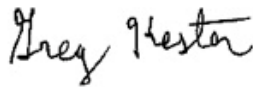
In summary, support and funding are needed to advance these practices (which constitute the “low hanging” fruit in the reduction of SLCPs), as well as advancing research on emerging technologies (e.g., through demonstration projects and/or pilot programs). We recommend allocation of Cap-and-Trade auction proceeds to the State Water Resources Control Board as a key source of funding for POTW projects.

Specific edits to the Draft Investment Plan are provided in Appendix A for your consideration.



Again, CWCCG and CASA appreciate the opportunity to provide comments on the Draft Investment Plan and look forward to working with ARB and other agencies moving forward. Please contact us if you have any questions at (916) 446-0388 or via email at [gkester@casaweb.org](mailto:gkester@casaweb.org) and [sdeslauriers@carollo.com](mailto:sdeslauriers@carollo.com). We welcome the opportunity to further discuss the wastewater community's position in helping ARB proactively achieve the commendable State goals and mandates for 2020, 2030, and 2050.

Sincerely,



Greg Kester  
CASA Director of Renewable Resources Program



Sarah A. Deslauriers, P.E.  
CWCCG Program Manager

cc: Mary Nichols - Chair, ARB  
Wade Crowfoot, Martha Guzman-Aceves, Graciela Castillo-Krings – Governor Brown's Office  
Mike Tollstrup, Ryan McCarthy – ARB  
Fran Spivy-Weber, Felicia Marcus, Dorene D'Adamo, Tom Howard, Scott Couch, Annalisa Kihara,  
Johnny Gonzales – Board Members, SWRCB  
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Ashley Conrad-Saydah - CalEPA  
Julia Levin – Executive Director, BAC  
Greg Kester – Director of Renewable Resource Programs, CASA  
Bobbi Larson – Executive Director, CASA

**Appendix A**

<b>Category</b>	<b>CWCCG/CASA Comments/Recommendations</b>
General	POTWs are referenced inconsistently (and at times erroneously) throughout the Draft Investment Plan as water agencies, water utilities, sanitation agencies, waste agencies, wastewater treatment facilities, water treatment plants, etc. We recommend they be referenced as <b>Publicly Owned Treatment Works (POTWs)</b> throughout the Draft Investment Plan to eliminate confusion.
Page 44, 1st Paragraph	<p>The third and fourth sentences contain incorrect information. To correct the statements, we recommend rewording them as follows:</p> <p>"Addressing this need will require utilizing organic matter on-site, or redirecting organic matter sent to municipal waste facilities (including landfills) <del>and wastewater treatment plants</del>, to composting and anaerobic digestion <u>facilities (including sanitation agencies)</u> — to create renewable energy and other useful products, including amendments that improve agricultural soil health. <u>Biogas can</u><del>The</del> generate on-site renewable energy, can fuel local transportation needs (including powering landfill and dairy trucks) or can be injected into gas pipelines for use in other locations.</p>
Page 44, 4th Paragraph	<p>Organic waste should be diverted <del>to</del> sanitation agencies (or "wastewater treatment" as it is referred to in the first sentence) for processing and generating useful byproducts. The new sentence should read:</p> <p>"There are also additional opportunities for achieving GHG emission reductions from utilizing the resources from the organic waste, whether it is generated from natural and working lands, or diverted from landfills <del>or wastewater treatment.</del>"</p>
Transportation & Sustainable Communities	Figure 12 (Page 33), under Alternative Fuels and Infrastructure, <b>POTWs</b> should be listed as Potential Recipients for incentives for in-State production of low carbon intensity renewable fuels.
Clean Energy & Energy Efficiency	<p>Figure 14 (Page 30), under Low-Carbon Water System, <b>POTWs</b> should be listed as Potential Recipients for incentives for renewable energy generation, improved energy efficiencies (including pumps, turbines, and existing desalination plants), and reduced demand for carbon-intensive water.</p> <p>The first bullet under Low-Carbon Water System should read:  "Support renewable energy generation by water agencies, <del>and</del> water suppliers, <u>and including</u> wastewater treatment facilities."</p>
Natural Resources & Waste Diversion	<p>Figure 16 (Page 45), under Protect and Grow Carbon Stocks on Natural and Working Lands, <b>POTWs</b> should be listed as Potential Recipients for incentives to:</p> <ul style="list-style-type: none"> <li>– Improve management and restoration activities on public and private natural and working lands to improve carbon sequestration.</li> <li>– Support net GHG emission reductions and carbon sequestration on agricultural and rangelands, including healthy soils practices.</li> </ul> <p>Figure 16 (Page 45), under Reduce Methane Release from Organic Waste, <b>POTWs</b> should be listed as Potential Recipients for incentives for the following projects:</p> <p>While not in the jurisdiction of POTWs, communities served by septic tank systems looking to convert to centralized systems or potential expansion of municipal systems to install collection systems for areas using septic systems should be considered in this category of investment concept.</p> <p>The co-benefits of these types of projects include: decrease in vented methane from septic tanks; increase in digested solids leading to an increase in biogas generation for onsite power generation, pipeline injection, or conversion to transportation fuel; increase in production of biosolids which are a soil amendment that can be land applied to improve soil health resulting in carbon sequestration in the soil below and offset the use of fossil fuel intense inorganic fertilizer.</p>