

California Wastewater Climate Change Group (CWCCG): Issues Updates

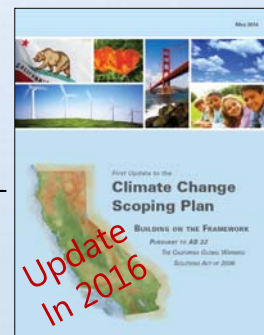


©2015 Camilo Engineers

Governor's 2030 target: GHG levels 40% below 1990 levels

Governor's Office - "Five Pillars"

- Renewable energy sources from 33% to 50%
- Reduce short-lived climate pollutants
- 50% reduction in petroleum use in vehicles
- Double energy efficiency at existing buildings
- Increase carbon sequestration on farms and rangelands, and in forests and wetlands



©2015 Camilo Engineers

Issues we were considering last time:

- Mitigation
 - AB 32 Scoping Plan Goals
 - SB 605: short-lived climate pollutant reduction strategy
 - BAAQMD and POTW GHGs
- Adaptation
 - State Adaptation Plan (Implementation Action Plans)
 - AB 2516: online sea level rise database
- Continued coordination with NACWA, WEF, BAC, and others
 - Biomass “carbon neutrality”

Mitigation

The “Top 3” AB 32 Scoping Plan goals are:

Water

- By 2015, develop incentives for resource-recovery wastewater treatment projects
- By 2016, modify state and regional water board policies and permits to achieve conservation, water recycling, stormwater reuse, and wastewater-to-energy goals

Waste

- Funding/incentivizing in-state infrastructure:
 - Cap-and-Trade Investment Plan
 - Loan, grant, and payment programs
 - Low Carbon Fuel Standard (mesophilic digestion at POTWs)
 - CPUC proceedings (e.g., biogas from anaerobic digestion and Renewable Market Adjusting Tariff)
 - Offset protocols (recycling, composting, anaerobic digestion)

Short-Lived Climate Pollutant Reduction Strategy (DRAFT)

Draft
Short-Lived Climate Pollutant Reduction Strategy

September 2015

ARB still sees the wastewater sector as part of the solution for methane reduction...

California Environmental Protection Agency
 Air Resources Board

Key issues to address in the Short-Lived Climate Pollutant Reduction Strategy

- Making use of existing anaerobic digestion capacity and planning for future capacity with plant upgrades
 - ‘Requiring’ the capture and utilization of biogas
- Funding allocation (to build initial infrastructure)
 - CalRecycle: \$100M per year for five years
 - CDFA: \$100M per year for five years
 - Not expanding Cap-and-Trade Program coverage
- Biogas utilization
- Biosolids/digestate utilization
 - Discusses use of compost and ‘other’ soil amendments, but does not state biosolids
 - Plan to eliminate ‘organics’ from landfills by 2025
 - Healthy Soils Initiative to identify research needs – ARB and CDFA to collaborate with other agencies including water districts

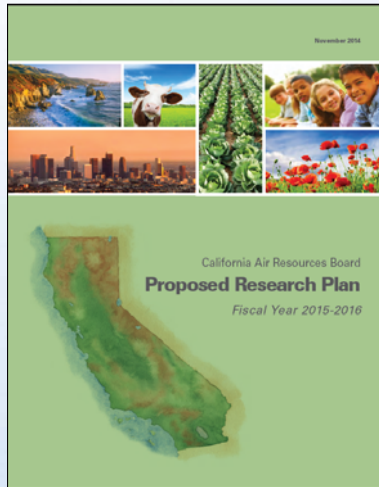
CASA
estimated
existing
capacity can
take 75% of
organic
stream!

Bay Area AQMD Board wants to see GHG reductions from POTWs

- BAAQMD Board wants to move faster on POTW related issues than ARB:
 - Develop a baseline (with fugitive and process GHG emissions)
 - Identify which sources to reduce first
 - Discuss digester gas production “limit”
- CWCCG and BACWA Air Issues and Regulations Committee met with BAAQMD staff:
 - Provided background on POTWs for new staff and state regulations and legislation (cross media issues)
 - BAAQMD wants to continue collaborating with us and begin coordinating with ARB staff
 - BAAQMD is very interested in land application of biosolids for the agriculture sector



Proposed Research for FY 2015-16: Add'l & Uncertain N₂O Emission Sources



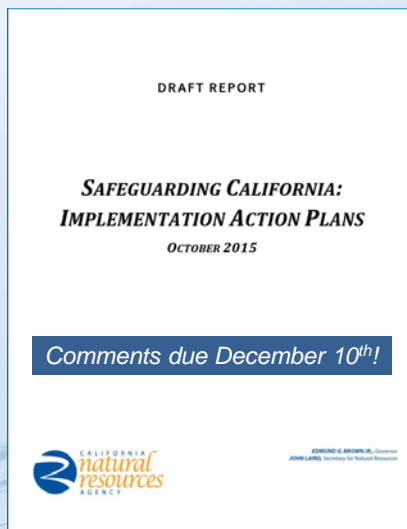
- \$400k study over 30 months
- Goal: Develop N₂O emissions estimates and/or emission factors for landfills, golf courses, and POTWs
- CWCCG and CASA met with ARB staff and provided:
 - Information on typical CA solids management strategies
 - Assistance on developing and delivering a survey to better characterize liquids treatment across CA – ARB staff reviewing

*We need your help
responding to the survey!*

Adaptation

Gov Brown's Executive Order also called for CA to adapt to impacts of climate change – latest effort is led by CNRA...

- By sector (10)
 - Agriculture
 - Biodiversity and Habitat
 - Emergency Management
 - Energy
 - Forestry
 - Land Use & Community Development
 - Oceans & Coastal Resources & Ecosystems
 - Public Health
 - Transportation
 - Water

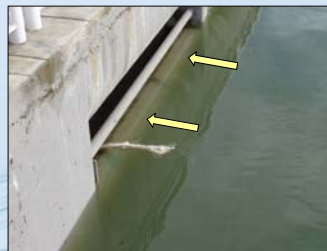


CWCCG's original concerns carried into the implementation action plans...

- Failed to emphasize vulnerability of the wastewater facilities and infrastructure – focused on water supply!
- CWCCG provided info on:
 - Existing overall condition of facilities, impacts expected, and a range of estimated costs/funding needed
 - Planning challenges
 - How the wastewater community can contribute to the overall resilience of other sectors (agriculture, energy, forestry, and transportation)
- Not much change in focus in draft action plans, we will comment on this! Met face-to-face with the assistant secretary for climate change at the CNRA, JR DeLaRosa, to discuss our concerns...

State is creating an online sea level rise planning database (per AB 2516)

- No \$ allocated to Ocean Protection Council and CA Natural Resources Agency
- Existing studies/data from state level public (SWRCB and RWQCBs) & private agencies
- Survey **by July 1, 2015**
<http://www.opc.ca.gov/2015/05/slr-database/>
- Information to feed into:
 - 5-year Infrastructure Plan
 - *Safeguarding California* Plan
 - CA Sea Level Rise Guidance Document
http://www.opc.ca.gov/webmaster/ftp/pdf/docs/2013_SLR_Guidance_Update_FINAL1.pdf



©2013 Ocean Protection Council

Coordination with
NACWA, WEF, etc...

©2013 Ocean Protection Council

Biomass “carbon neutrality” to comply with existing source performance standards?

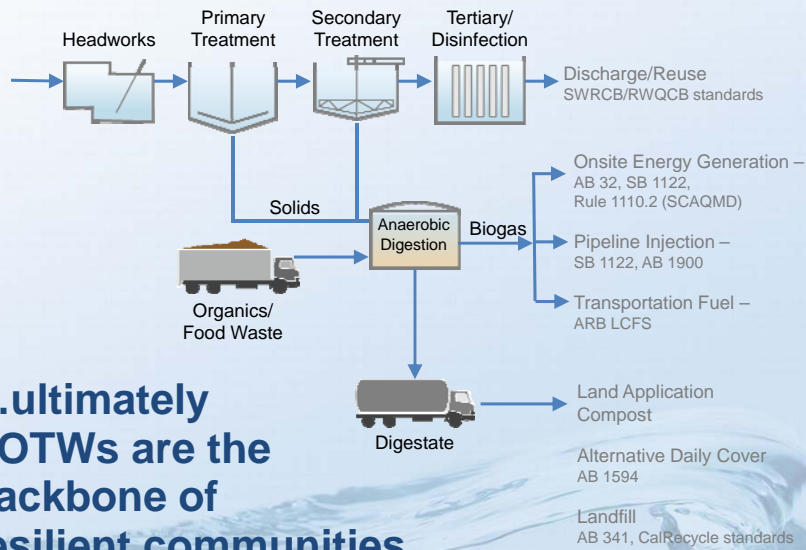
- Rather than give states the go-ahead to use biomass as a compliance tool in the final ESPS under the Clean Power Plan, EPA is:
 - Reviewing the appropriateness and basis for determining qualified biomass feedstock or feedstock categories
 - seeking comment on a pre-approved list of biomass materials
- EPA's focus is on “developing a biomass permitting rule that is intended to contain a permanent exemption” for certain types of biomass
- CWCCG supporting NACWA in leading the effort



Questions?

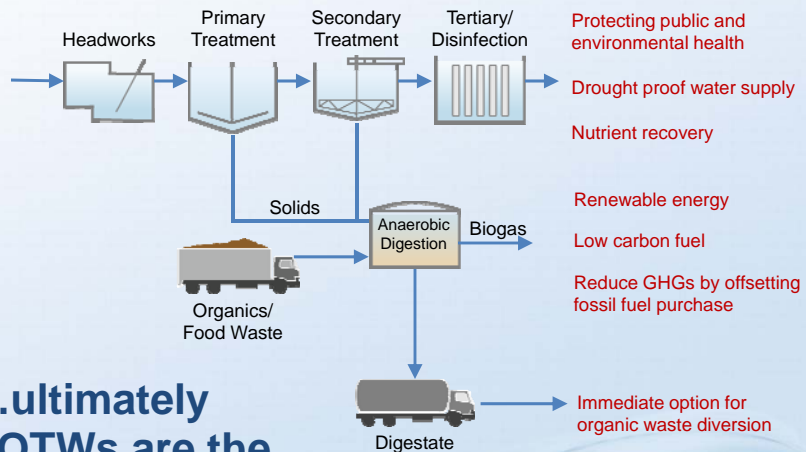
Sarah Deslauriers
Program Manager
California Wastewater Climate Change Group
(925) 977-3148
sdeslauriers@carollo.com
<http://www.casaweb.org/>

While climate change is presenting challenges to the state and POTWs...



...ultimately
POTWs are the
backbone of
resilient communities

While climate change is presenting challenges to the state and POTWs...



...ultimately
POTWs are the
backbone of
resilient communities