California Wastewater Climate Change Group (CWCCG): Hot Topics Update







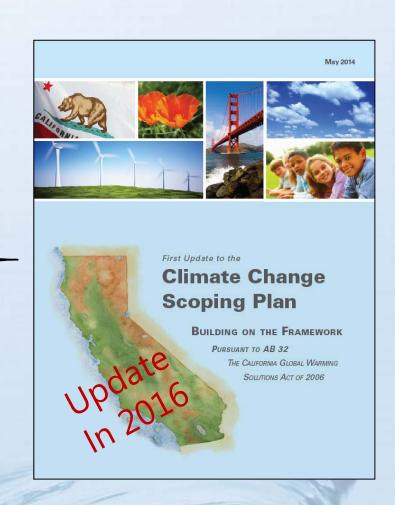




Governor's 2030 target: GHG levels 40% below 1990 levels

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



The "Top 3" AB 32 Scoping Plan goals:

- 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
- 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)

Issues we worked on in 2015:

Mitigation

- SB 605: short-lived climate pollutant reduction strategy
- Bay Area AQMD on POTW greenhouse gases
- Adaptation
 - State Adaptation Plan (Adaptation Strategy & Implementation Action Plans)
 - AB 2516: Online sea level rise database









Mitigation

Short-Lived Climate Pollutant Reduction Strategy includes POTWs as part of the solution

- Making use of existing anaerobic digestion capacity and planning for future capacity with plant upgrades
- Funding allocation (to build initial infrastructure)
 - CalRecycle: \$100 M per year (for 5 years)
 - CDFA: \$100 M per year (for 5 years)
- Biogas utilization
- Biosolids/digestate utilization
 - 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

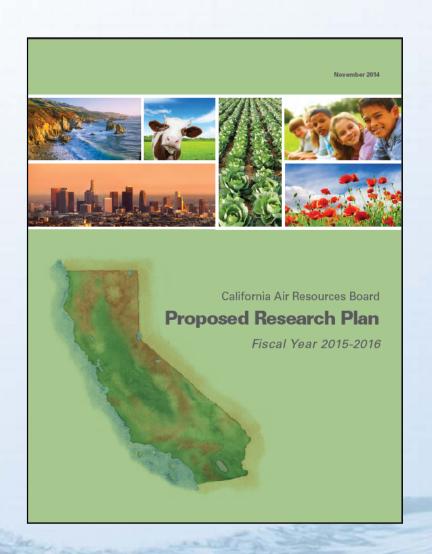
CASA
estimated
existing
capacity can
take 75% of
organic
stream!

Bay Area AQMD Board wants to see GHG reductions from POTWs

- Push 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, CASA, and BACWA Air Issues and Regulations Committee met with BAAQMD staff:
 - Provided wastewater "101" to new staff and summarized state regulations and legislation (cross media issues)
 - BAAQMD is open to collaborating with us and begin coordinating with ARB staff
 - BAAQMD wants to explore land application of biosolids ine the agriculture sector



ARB's proposed research for FY 2015-16 on N₂O emission sources postponed



- Goal to develop N₂O emissions estimates and/or emission factors for landfills, golf courses, and POTWs (solids and liquids)
- CWCCG and CASA met with ARB staff and provided:
 - Information on typical solids management strategies
 - Drafted a survey (to characterize liquids treatment across CA) and ARB staff are reviewing

We will need your help responding to the survey!

 Your feedback will also inform the CA Nitrogen Assessment by UC Davis and the Healthy Soils Initiative

Adaptation

Gov Brown's Executive Order also called for CA to adapt to impacts of climate change

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

DRAFT REPORT

SAFEGUARDING CALIFORNIA: IMPLEMENTATION ACTION PLANS

OCTOBER 2015



EDMUND G. BROWN JR., Governo OHN LAIRD, Secretary for Natural Resource

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

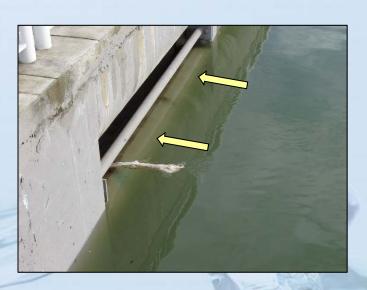
- Failed to emphasize vulnerability of the wastewater facilities and infrastructure – focus is on water supply
- CWCCG provided info on:
 - Existing condition of facilities, impacts expected, and a range of estimated costs/funding needed
 - Planning challenges
 - The wastewater community's role in contributing to the resilience of other sectors (agriculture, energy, forestry, and transportation)
- Met face-to-face with the assistant secretary for climate change at the CNRA, JR DeLaRosa, to discuss our concerns
- State agencies to report back by June 2016

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/2 013 SLR Guidance Update FINAL1.pdf





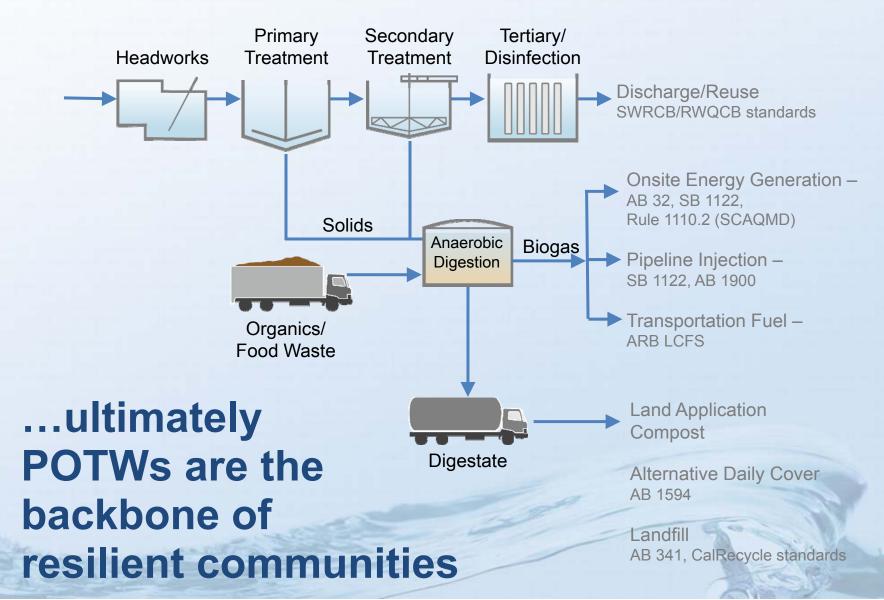
Questions?

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Next CWCCG meeting: January 26th

(Attend via phone or at one of Carollo's Offices in Orange County, Sacramento, and Walnut Creek)

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



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

