
Bay Area Biosolids Coalition: Meeting

December 1st, 2025

A. Welcome/Introductions

B. Status of October Action Items – Program Management Team, Research Subgroup, Website Subgroup

- Ongoing – maintain website and post regularly on News & Events site (Website Subgroup)
- Ongoing – Explore potential research partnership opportunities, as they arise (Research Subgroup)
- Ongoing – provide regular updates on regulations and other drivers impacting biosolids beneficial use (Program Management Team, CASA, etc.)
- ☐ Continue coordination with BACWA on communications strategy (Website Subgroup)
- ☐ Provide summary of BABC funded/supported research to date (Research Subgroup)
- ☐ Continue coordination with BluumBio about potential research partnership (Research Subgroup)
- ☐ Continue coordination with John Hopkins University about potential research partnership (Research Subgroup)

B. Status of October Action Items – Member Agencies

- ☐ Contact Lorien Fono if interested in:
 - ☐ Contributing additional funds to Phase 2 National PFAS Study
- ☐ Contact Program Management Team or Christine Polo if interested in:
 - ☐ Participating in foam fractionation pilot at the WEST Center.
 - ☐ Being featured in agency highlight on the website.
 - ☐ Serving as co-chair or in the website or research subgroups.
- ☐ Contact Nitin Goel and Christine Polo if interested in:
 - ☐ Learning more about potential solids regionalization project at Central San.

Contacts:

- Lorien Fono: lfono@bacwa.com
- Program Management Team: babcprogrammanager@carollo.com
- Christine Polo: cpolo@carollo.com
- Nitin Goel: NGoel@centralsan.org

C. Strategic Plan Goals – Progress Updates



Communicate the value of biosolids for the purposes of increasing understanding, support, and market demand for biosolids

Advance independent scientific research on the safety and efficacy of biosolids to inform science-based regulations, guidelines and best management practices

Support and expand biosolids land application in the Bay Area

Support the development of diverse, cost-effective, and reliable all-weather biosolids projects for the Bay Area



**BAY AREA
BIOSOLIDS
COALITION**

1. Communicate the Value of Biosolids

News & Events Posts on BABC website*:

- Upcoming posts:
 - **Biosolids: A Sustainable Fertilizer Alternative (Dec)**
 - Land application site photos
 - Research on biosolids benefits:
 - **Improve soil biodiversity and wildlife benefits**
 - **Improve crop productivity**
 - **Reduce irrigation**
 - Microbial bioremediation of PFAS
 - Agency highlights:
 - San Jose, West County, SFPUC
 - **Let us know if interested!**

*See BABC website at: <https://www.bayareabiosolids.com/>



1. Communicate the Value of Biosolids

Updates in blue bold.
Key points highlighted.

BACWA/BABC Collaboration

- How to better use <https://baywise.org/>, and <https://www.bayareabiosolids.com/> to educate the public about biosolids benefits and safety.
- Coordination meeting on Sep 11th:
 - Participation from 12 member agencies, 4 consultants/vendors, CASA, and SF Bay RWQCB.
 - Overall consensus:
 - Strong need to communicate about biosolids benefits to the public.
 - Need for proactive and balanced PFAS communications.

Toilets Aren't Trash Cans!

Did you know that so-called "flushable" wipes aren't flushable at all? Learn what can and can't be flushed.



What happens after I flush my Toilet?

When you flush a toilet, wash your dishes, or take a shower, that water (called wastewater) flows through sewers to a wastewater treatment facility where it is cleaned before being discharged into the Bay.

Snippet from Baywise.org, BACWA's public-facing, educational website.

1. Communicate the Value of Biosolids

BACWA/BABC Collaboration

- BACWA PFAS Forum on Nov 18th led by Lorien Fono, BACWA
 - Regulatory Update by Mary Cousins, BACWA
 - Reviewed regulatory development and potential future regulations from different areas (drinking water, fish, air, etc.), which could lead to wastewater regulations.
 - PFAS Communications by Emily Barnett, Central San
 - Reviewed 2023 poll on Californians knowledge and concern level about PFAS. ~24% were aware of PFAS; 43% were concerned, increased to 56% with minor additional info.
 - PFAS Communication Tools by Zoe Lake, EBMUD
 - Reviewed Spring 2025 PFAS ads campaign, which linked to Baywise website.
 - PFAS Advocacy by Spencer Saks, CASA
 - Reviewed CASA's regulatory advocacy. Document with 100+ links: <https://casaweb.org/wp-content/uploads/2025/11/CASA-Actions-on-PFAS.pdf>
 - Source Control Science by Diana Lin, SFEI
 - Reviewed PFAS Sources to Solutions research, which will measure PFAS in priority products, wastewater and stormwater, and identify potential solutions

Updates in blue bold.
Key points highlighted.

Slides available at:
<https://bacwa.org/bacwa-pfas-forum-11-18-2025-presentations/>



BAY AREA
BIOSOLIDS
COALITION

1. Communicate the Value of Biosolids

BACWA/BABC Collaboration

■ *Priorities and Next Steps:*

– *Enhance communications about the value of biosolids*

- Action: Civic Edge is rewriting info on biosolids benefits from <https://www.bayareabiosolids.com/> to post on <https://baywise.org/>. May produce social media vignettes for agencies to post.
- Action: Engage farmers to discuss the value of biosolids (BABC). **Do any member agencies have connections to farmers?**
- **Action: BABC writing website posts featuring research that demonstrates biosolids benefits.**

– *Develop messaging and media strategy about PFAS in biosolids*

- Action: BACWA will present to the Board in December about findings from Nov 18 PFAS forum and get direction on next steps.

C. Strategic Plan Goals – Progress Updates



Communicate the value of biosolids for the purposes of increasing understanding, support, and market demand for biosolids

Advance independent scientific research on the safety and efficacy of biosolids to inform science-based regulations, guidelines and best management practices

Support and expand biosolids land application in the Bay Area

Support the development of diverse, cost-effective, and reliable all-weather biosolids projects for the Bay Area



**BAY AREA
BIOSOLIDS
COALITION**

2. Advance Scientific Research

Available Funds

Updates in blue bold.
Key points highlighted.

Available Funds ~
\$197,000

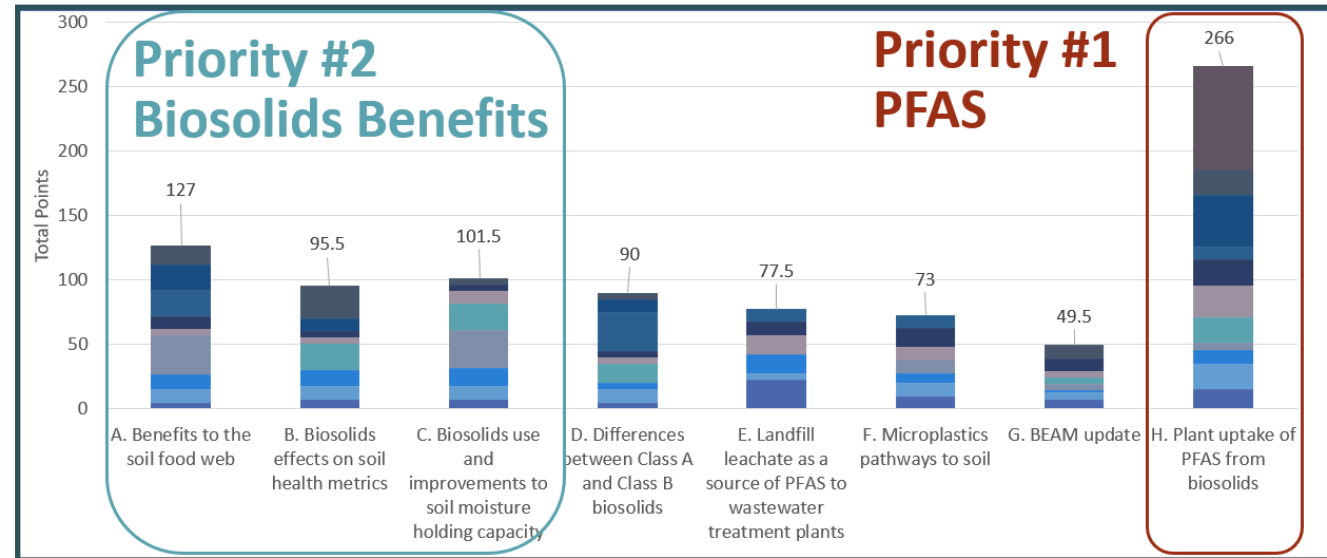
National Collaborative
PFAS Project – Phase 2

\$50,000

- Thank you to BABC and Santa Rosa for donating!
- Thank you to BACWA for handling the logistics!
- **Contact Lorien if interested in donating!**

Other ideas?

\$147,000



2. Advance Scientific Research

Potential Research Opportunities

Updates in blue bold.
Key points highlighted.

- BABC Research Subgroup investigating other opportunities:
 - BluumBio PFAS bioremediation pilot
 - ~~Participate in WEST Center foam fractionation pilot~~
 - Support projects that lost EPA funding – **Prof. Carsten Prasse at John Hopkins**
 - **Potential collaboration with Mary Martis and Dr. Linda Lee on PFAS removal through thermal drying.**



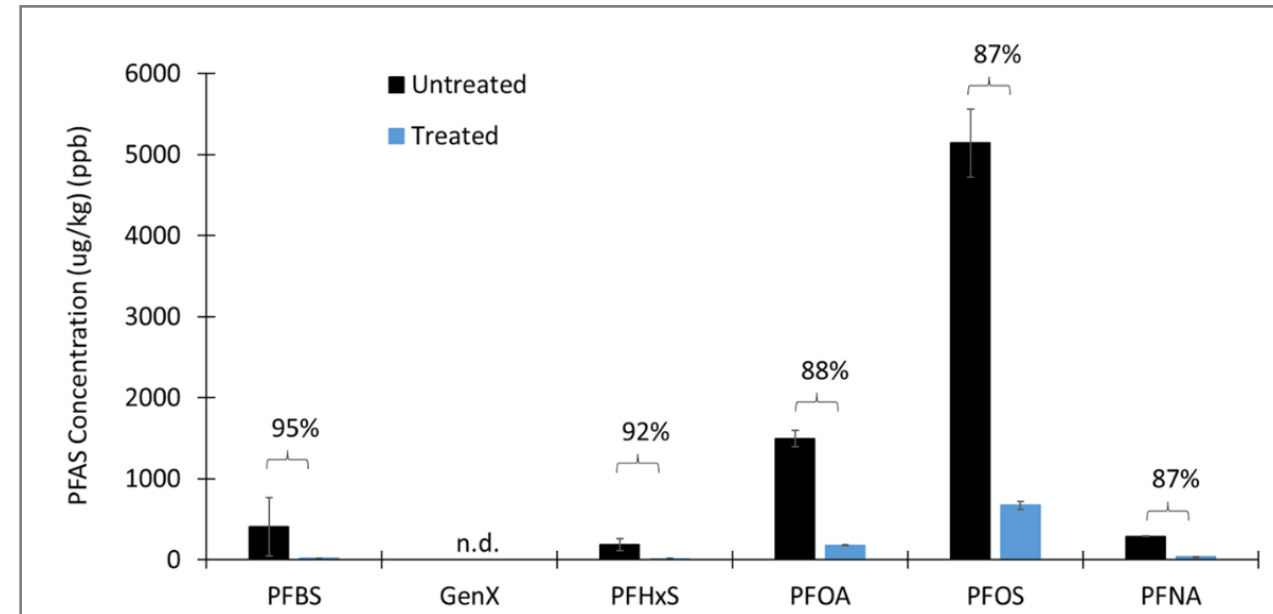
2. Advance Scientific Research

Potential Research Opportunities

Updates in blue bold.
Key points highlighted.

■ BluumBio PFAS bioremediation pilot

- Showed promising results in a lab study of soil that had received biosolids. 30-day treatment resulted in 87-95% decrease in PFAS →
- **Conducting field trial at Tubbs Island:**
 - Funded by EPA & NIH
 - 1-year field trial
 - 2 control plots + 2 treatment plots
 - Budget: \$50k
- **Consider trial at Solano County?**
- **Next steps:**
 - **Research Subgroup to get more details on scope and estimated cost at full-scale.**



2. Advance Scientific Research

Potential Research Opportunities

Updates in blue bold.
Key points highlighted.

■ Support projects that lost EPA funding

- Meeting on Oct 1st with Prof. Carsten Prasse, John Hopkins University
 - Project aims to proactively identify unknown contaminants in biosolids that may be regulated in the future (“the next PFAS”).
 - Project started in 2021 and identified 43 compounds to be evaluated for toxicity potential, soil migration, and plant uptake.
 - Initial research covering identification and prioritization of compounds is published: <https://pmc.ncbi.nlm.nih.gov/articles/PMC11381038/pdf/nihms-2011911.pdf>
 - Research was cut short by ~\$300k and 1-1.5 years.
 - **Current status:**
 - **Waiting for scope and budget from Prof. Carsten & team.**
 - **Considering running the 43 compounds through Dr. McAvoy’s Risk Assessment Model**

2. Advance Scientific Research

Potential Research Opportunities

PFAS Removal through Thermal Drying

Mary Martis, Dr. Linda Lee, and Pam Racey

2. Advance Scientific Research

Potential Research Opportunities

Updates in blue bold.
Key points highlighted.

- **Fate of PFAS through thermal drying**
 - **Next steps:**
 - **Decide whether to vote.**
 - **If yes, vote during and after this meeting.**
 - **Get back to research team by Jan 1st, 2026**

Decision-Making Process*

For research funding contributions, payments would not increase, so only Majority Vote is needed.

- **Each Member Agency (POTW Member) has 1 vote.**
 - Associates do not vote.

Majority Vote

For decisions not resulting in “Material Action”

Unanimous Vote

For decisions resulting in “Material Action”

- **“Material Action” =**
 - Any action that creates or increases a payment, obligation, debt, or liability of any Member (e.g., contract for additional evaluation or for funding a regional facility, increasing dues).

**From Section 3 in Amended JEPA, dated July 1st, 2012.*

3. Support and Expand Biosolids Land Application



Support and expand biosolids land application in the Bay Area

- Track regulations, funding programs, research, and media that could impact biosolids land application in the Bay Area
 - Regulations on PFAS and other emerging contaminants that could limit land application
 - SB 1383 and county ordinances that may limit or expand local land application
 - Zero emission vehicle (ZEV) regulations as they relate to biosolids hauling
 - Regulations and funding programs that could impact anaerobic digestion and biogas use (methane emissions, LCFS, IRA, ZEV requirements)
 - Zero waste, soil health, and climate programs that could incentivize use of biosolids
 - Local media on biosolids safety and benefits
 - Research on biosolids safety (PFAS, etc.) and biosolids benefits

3. Support and Expand Biosolids Land Application

PFAS Regulations for the Wastewater Sector

Mary Cousins

3. Support and Expand Biosolids Land Application

Updates in blue bold.
Key points highlighted.

■ PFAS (National)

- **Draft Risk Assessment – EPA reviewing comments**
- **Effluent Guidelines & POTW Survey – no updates/on hold**
- **PFAS Liability Protection Act – on hold. EPA press release recognizing that passive receivers should not be held liable: <https://content.govdelivery.com/accounts/USEPAAO/bulletins/3df5d7d>**
- **NACWA released Biosolids PFAS Legislative Guide: <https://nacwa.realmagnet.land/2025-11-04-biosolids-pfas-legislative-guide>**

■ PFAS (California)

- **BACWA Phase 3 PFAS Study “PFAS Sources to Solutions”**
 - **To monitor stormwater, as well as commercial, residential, and industrial sources.**
 - **Won’t focus on biosolids other than to repeat prior sampling to track long-term trends.**
 - **To sign up for December kick-off meeting (exact date and time TBD), fill out this form: <https://docs.google.com/forms/d/e/1FAIpQLSeqd9QVQQVUDgiovQxMvcY6C9Ix3NIAI8T1AGXPC1ev2NYLfg/viewform>**

■ PFAS (Other States)

- **Potential 5-year moratorium of land app in NY early next year. Early bills expected from PA, MD.**

3. Support and Expand Biosolids Land Application

■ CalRecycle Funding for Codigestion Projects

Updates in blue bold.
Key points highlighted.

- Projects need to be build-ready and encumbered by late winter/early spring.
- Any process supporting food waste codigestion: pre-processing, anaerobic digestion, biogas use.
- <https://www2.calrecycle.ca.gov/PublicNotices/Details/4913>
- Contact Sarah Deslauriers if interested.

■ CARB Advanced Clean Fleets

- Amendments include: 1) vehicles no longer have to >13 years too apply for exemptions, 2) more vetting of ZEV manufacturers, etc.
- ACF no longer applies to public fleets.
- This round of amendments did not include near ZEVs like RNG; will consider in the next round of amendments. 14 sign-on's from utilities on CASA letter requesting inclusion of RNG.

■ CalRecycle Zero Waste Plan

- CASA's comments: https://casaweb.org/wp-content/uploads/2025/11/FINAL_CASA_Comments_CalRecycle-ZeroWastePlan-2025-10-176.pdf

■ CARB Carbon Sequestration

- Released 250-page document. CASA working on response. Want to know more about benefits of biosolids beyond carbon sequestration.

4. Support Development of Biosolids Projects

Central San's Regionalization Evaluation

Updates in blue bold.
Key points highlighted.

- Central San evaluating regionalization to serve the region by providing a PFAS solution for Bay Area agencies.
- Upgrading from Multiple Hearth Furnaces (MHFs) to Fluidized Bed Incinerators (FBIs).
- FBIs to be operational by 2042.
- Both the existing MHFs and the future FBIs recover energy and use the ash as a soil amendment.
- Evaluating regionalization opportunities for both the long-term (future FBIs) and the near-term (existing MHFs).
- If interested, please contact Nitin Goel (NGoel@centralsan.org) and Christine Polo (cpolo@carollo.com).



D. Other Updates

Updates in blue bold.
Key points highlighted.

- Recent events:
 - **Oct 29th CASA Innovative Technology Seminar.** Link to slides: <https://casaweb.org/resources/speaker-presentations/>
 - **Nov 18th BACWA PFAS Forum.** Link to slides: <https://bacwa.org/bacwa-pfas-forum-11-18-2025-presentations/>
 - **Nov 19th Bioenergy Association of California Fall meeting** featuring presentation on converting biosolids to renewable shipping fuels.
- Other updates?

E. Action Items – Program Management Team, Research Subgroup, Website Subgroup

Updates in blue bold.
Key points highlighted.

- Ongoing – maintain website and post regularly on News & Events site (Website Subgroup)
- Ongoing – Explore potential research partnership opportunities, as they arise (Research Subgroup)
- Ongoing – provide regular updates on regulations and other drivers impacting biosolids beneficial use (Program Management Team, CASA, etc.)
- ☐ Continue coordination with BACWA on communications strategy (Website Subgroup)
- ☐ Provide summary of BABC funded/supported research to date (Research Subgroup)
- ☐ Continue coordination with BluumBio about potential research partnership (Research Subgroup)
- ☐ Continue coordination with John Hopkins University about potential research partnership (Research Subgroup)
- ☐ **Begin voting on PFAS Removal through Thermal Drying** (Program Management Team)

E. Action Items – Member Agencies

Updates in blue bold.
Key points highlighted.

- ☐ Contact Lorien Fono if interested in:
 - ☐ Contributing additional funds to Phase 2 of National PFAS Study
- ☐ Contact Program Management Team or Christine Polo if interested in:
 - ☐ Participating in foam fractionation pilot at the WEST Center.
 - ☐ Being featured in agency highlight on the website.
 - ☐ Serving as co-chair or in the website or research subgroups.
- ☐ Contact Nitin Goel and Christine Polo if interested in:
 - ☐ Learning more about potential solids regionalization project at Central San.
- ☐ **Fill out form if interested in participating in BACWA's PFAS Study – Phase 3:**
 - ☐ <https://docs.google.com/forms/d/e/1FAIpQLSeqd9QVQQVUDgiovQxMvcY6C9Ix3NIAI8T1AGXPC1ev2NYLfg/viewform>

Contacts:

- Lorien Fono: lfono@bacwa.com
- Program Management Team: babcprogrammanager@carollo.com
- Christine Polo: cpolo@carollo.com; Nitin Goel: NGoel@centralsan.org



BAY AREA
BIOSOLIDS
COALITION

F. Upcoming Events

Updates in blue bold.
Key points highlighted.

- BABC:
 - Feb 9th at 10 am to 12 pm (virtual)
 - **Apr 13th at 10 am to 12 pm (in-person/virtual hybrid; location TBD)**
- BACWA:
 - **Dec 12th BACWA Board Meeting**
 - **Dec (exact date and time TBD) Kickoff Meeting for Phase 3 PFAS Study.**
 - Full list of BACWA meetings: <https://bacwa.org/events/month/2025-08/>
- CASA:
 - **Dec 4th CASA Holiday Party at IEUA (hybrid)**
 - **Jan 13th to 16th CASA Winter Conference, SoCal**
 - Full list of CASA meetings: <https://casaweb.org/https-casaevents-memberclicks-net-winter-conference/casa-events-meetings/>
- Other?



BAY AREA
BIOSOLIDS
COALITION

G. Adjourn for all... Thank You!



**BAY AREA
BIOSOLIDS
COALITION**