
Bay Area Biosolids Coalition: Meeting

February 9th, 2026

A. Welcome/Introductions



**BAY AREA
BIOSOLIDS
COALITION**

Updates in blue bold.
Key points highlighted.

B. Status of December Action Items – Program Mgmt. 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)
- ❑ **Contact farmers to gauge interest in creating videos about biosolids benefits** (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)~~



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Key points highlighted.

B. Status of December Action Items – Member Agencies

- Vote on research support/partnership opportunities**
- ~~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.~~
 - Serving as co-chair or in the website or research subgroups.**
 - Being featured in agency highlight on the website.
- ~~Contact Nitin Goel and Christine Polo if interested in:~~
 - ~~Learning more about potential solids regionalization project at Central San.~~

Contacts:

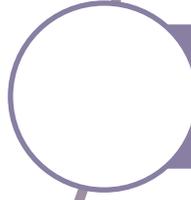
- ~~Lorien Fono: lfono@bacwa.com~~
- Program Management Team: babcprogrammanager@carollo.com
- Christine Polo: cpolo@carollo.com
- ~~Nitin Goel: NGoel@centralsan.org~~



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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
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1. Communicate the Value of Biosolids

News & Events Posts on BABC website*:

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



12/19/25

Biosolids: A Sustainable Fertilizer Alternative

Biosolids have long been shown to be a good substitute for traditional synthetic fertilizers. This post summarizes a study that compared the application of biosolids to synthetic fertilizers for four different crops at four application rates. This and other research show that biosolids can support soil health and plant growth as well as or better than synthetic fertilizers.

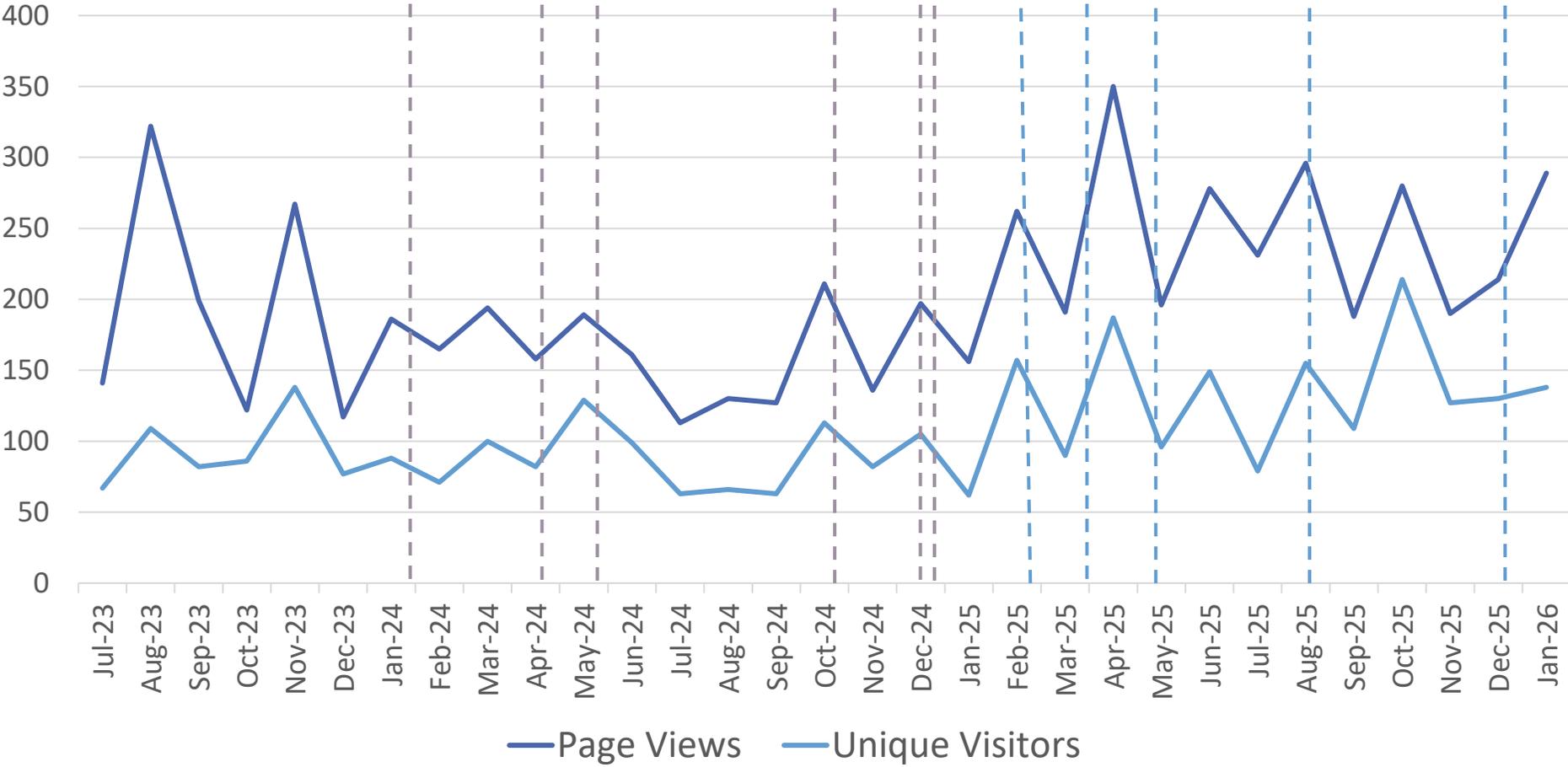
*See BABC website at: <https://www.bayareabiosolids.com/>



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1. Communicate the Value of Biosolids

Website Analytics



2024:

- **Jan 9:** Biosolids Product Profile – Dried
- **April 12:** BEAM
- **May 13:** Biosolids Product Profile – Class A
- **Oct 23:** Restoring fire impacted lands
- **Dec 9:** PFAS Resources
- **Dec 18:** BACWA Biosolids Survey

2025:

- **Feb 28:** Mine reclamation
- **Mar 31:** Agency Highlight: Vallejo FWD
- **May 5:** PFAS uptake to oats
- **Aug 12:** National PFAS migration to groundwater
- **Dec 19:** Sustainable fertilizer alternative



1. Communicate the Value of Biosolids

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BACWA/BABC Collaboration

- Purpose:
 - How to better use <https://baywise.org/>, and <https://www.bayareabiosolids.com/> to educate the public about biosolids benefits and safety.
- Progress so far:
 - Coordination meeting on Sep 11
 - BACWA PFAS forum on Nov 18 (<https://bacwa.org/bacwa-pfas-forum-11-18-2025-presentations/>)
 - **BABC wrote website post on biosolids benefits research.**
 - **Civic Edge developed draft content on biosolids fundamentals for baywise.org. BABC members reviewed and provided feedback.**
 - **BACWA presented to the Board in December about findings from PFAS forum and got direction on next steps.**

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.



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1. Communicate the Value of Biosolids

BACWA/BABC Collaboration

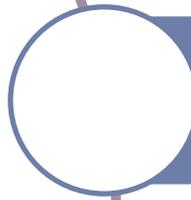
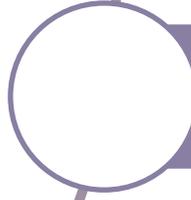
- Next Steps:
 - **Civic Edge to finalize and post content on biosolids fundamentals. May produce social media vignettes for agencies to post.**
 - **BABC to engage farmers to discuss the value of biosolids. Zach Kay, Jennifer Harrington, and Jim Dunbar have connections.**
 - **BABC to write additional website posts featuring research that demonstrates biosolids benefits.**
 - **Longer term: BACWA Communications Steering Committee to develop an outreach strategy about biosolids and PFAS in FY27.**



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2. Advance Scientific Research

Updates in blue bold.
Key points highlighted.

Summary of Projects BABC has Supported

- Projects BABC has Supported:
 - 2017-2018: UC-Merced Research of Carbon Sequestration from Biosolids Land App – **\$50,000**
 - 2020-2023: UC-Davis Research Evaluating Potential Plant Uptake of PFAS – **\$64,500**
 - 2022-2023: VT C-Sequestration Meta-Analysis – Indirect (member participation in review)
 - National Collaborative PFAS Study, Phase I Potential for PFAS Migration to GW – **\$25,000**
 - EPA Evaluation of Pollutants in Biosolids – Member participation
 - Biosolids Emissions Assessment Model (BEAM) – **\$5,000**
 - National Collaborative PFAS Study, Phase II Plant Uptake – **\$50,000**

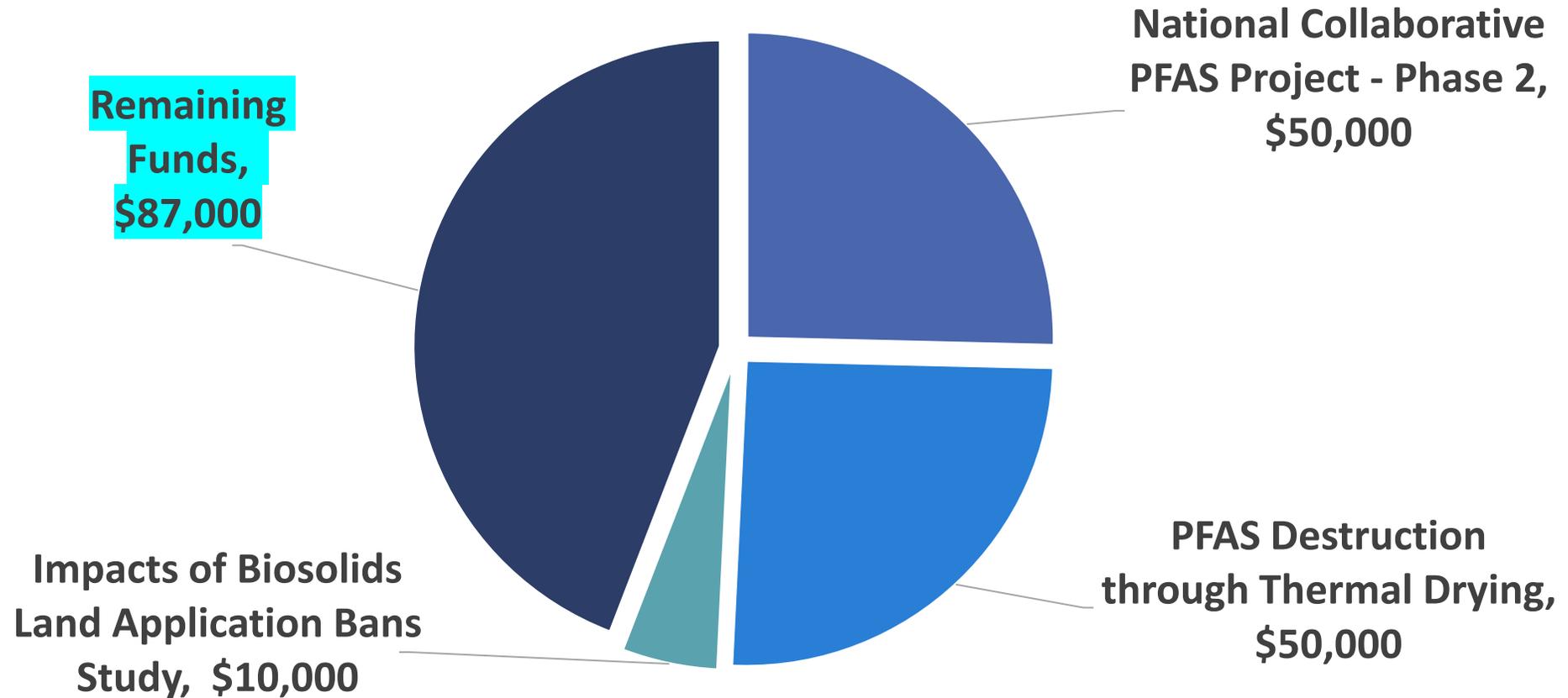
Example description. Descriptions for each project are being developed for inclusion on the website.

- **UC Merced Research of Carbon Sequestration from Biosolids Land Application**
 - Contribution: BABC contributed \$50,000 and connected researchers with sampling sites.
 - Team: Dr. Rebecca Ryals and her research group at UC Merced.
 - Goal: Evaluate carbon sequestration on ranches in Northern California that land apply biosolids to improve soil fertility.
 - Status: Complete. Project conducted 2017-2018.
 - Finding: Biosolids increased soil organic carbon content.
 - Publications:
 - Research paper: <https://access.onlinelibrary.wiley.com/doi/10.1002/jeq2.20270>
 - BABC website post: <https://www.bayareabiosolids.com/news-events/tbzyzsngnr3ps7a3ypwsq221rebula>

2. Advance Scientific Research

Voting Updates & Remaining Funds

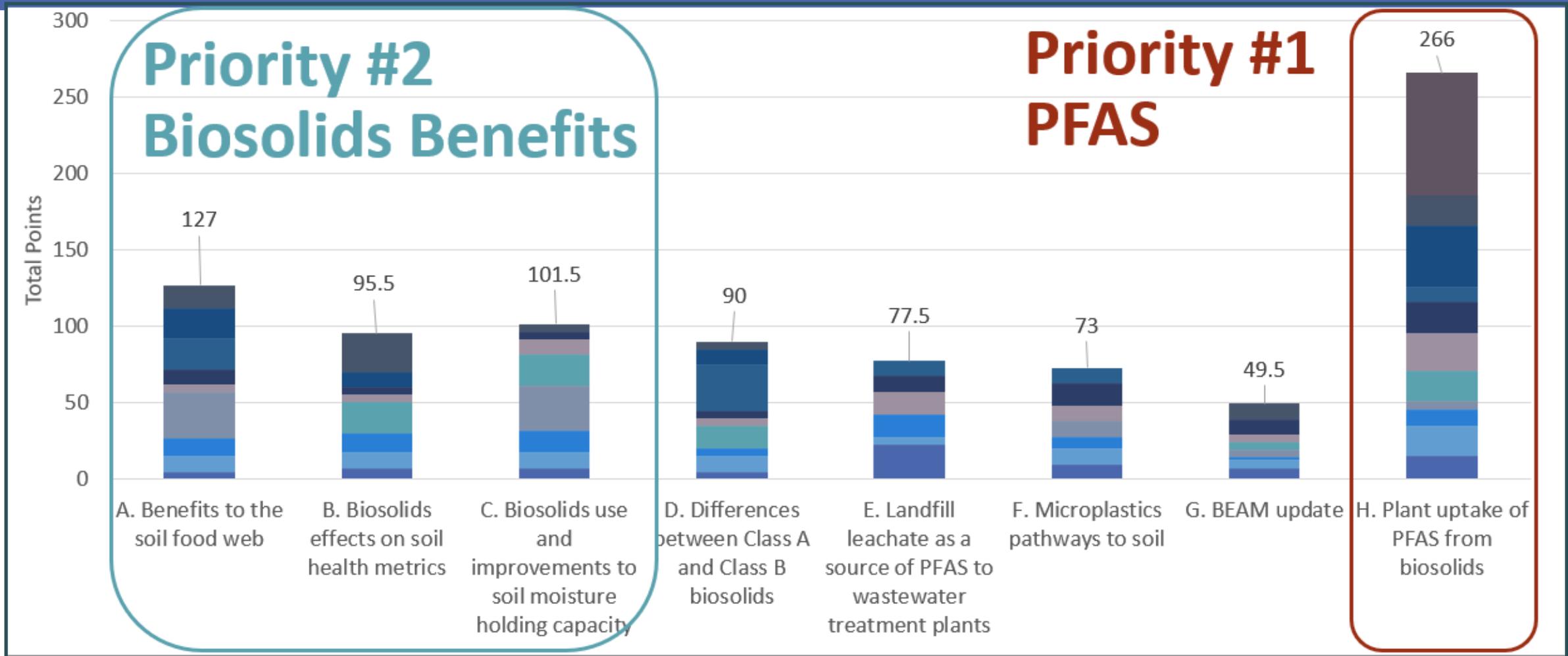
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2. Advance Scientific Research

Research Priorities

Updates in blue bold.
Key points highlighted.

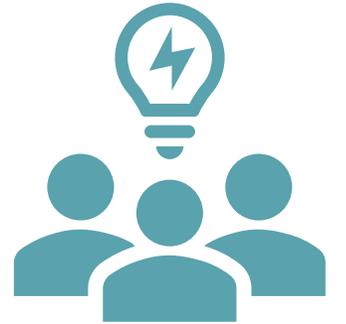


2. Advance Scientific Research

Potential Research Opportunities

Updates in blue bold.
Key points highlighted.

- BABC Research Subgroup investigating other opportunities:
 - Bluumbio PFAS bioremediation pilot
 - ~~Support projects that lost EPA funding – Prof. Carsten Prasse at John Hopkins~~
 - **More to come**



2. Advance Scientific Research

Potential Research Opportunities

Microbial Remediation of PFAS-Impacted Biosolids

Jordan Baker, Ph.D., Bluumbio

2. Advance Scientific Research

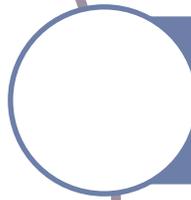
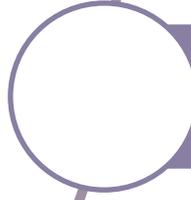
Other Research We're Tracking

Updates in blue bold.
Key points highlighted.

- **National Collaborative PFAS Study – Phase 1**
 - Published Dec 2025.
 - <https://www.sciencedirect.com/science/article/abs/pii/S0048969725028372?dgcid=author>
- **Solano County study on PFAS by Trihydro**
 - Published Dec 2025.
 - https://www.solanocounty.gov/archival-document?document=https://content.solanocounty.gov/sites/default/files/2025-12/202512_SolanoPFAS_RPT.pdf&ad=aHR0cHM6Ly9jb250ZW50LnNvbGFub2NvdW50eS5nb3Yvc2l0ZXMvZGVmYXVsdC9maWxlcy8yMDI1LlTEyLzlwMjUxMI9Tb2xhbW9QRkFTX1JQVC5wZGY=&title=Archival%20document:%20EH%20Technical%20-%20Trihydro%20Study%20of%20The%20Fate%20of%20PFAS%20in%20Biosolids%20After%20Land%20Application%20-%20December%202025
 - Solano County Board meeting on Feb 26 at 2-4 pm hybrid (in-person and virtual). **Seeking attendees.**
- **BACWA/SFEI Phase 3 PFAS Study “PFAS Sources to Solutions”**
 - To monitor stormwater, as well as commercial, residential, and industrial sources.
 - Held kickoff on Dec 16 and study questions discussion on Jan 22.
 - **Still welcoming members.**
 - Doesn't seem like they will retest biosolids.

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3. Support and Expand Biosolids Land Application



Support and expand biosolids land application in the Bay Area

- Track regulations, funding programs, 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

3. Support and Expand Biosolids Land Application

- PFAS (EPA/National)
 - Draft Risk Assessment
 - Comment period ended on August 2025.
 - House Appropriations Bill FY26 stipulates no funds to be used for Draft Risk Assessment – **Passed, awaiting President signature.**
 - **Discussions with USEPA Admin Jess Kramer and Assistant Admin Peggy Browne**
 - **Peggy Browne participated in meeting at WEFTEC. NACWA met with both on Nov 13.**
 - **Seem generally positive and supportive of wastewater sector.**
 - **Want to make corrections to the Draft Risk Assessment.**
 - Effluent Guidelines & POTW Study
 - POTW Study originally scheduled to start in early 2025. **On hold.**

Updates in blue bold.
Key points highlighted.



3. Support and Expand Biosolids Land Application

- PFAS (EPA/National - continued)

- PFAS Liability Protection Act (H.R.1267)

- Introduced on Feb 2025. **On hold.**

- **CERCLA section 102(a) Framework Rule**

- **Sept 2025 press release <https://www.epa.gov/newsreleases/trump-epa-announces-next-steps-regulatory-pfoa-and-pfos-cleanup-efforts-provides>. No further details yet.**
- **Affirmed commitment to keep PFOS and PFOA as hazardous substances and acknowledging that passive receivers should not be held liable.**
- **Developing framework for hazardous substance designation, including accounting for costs.**

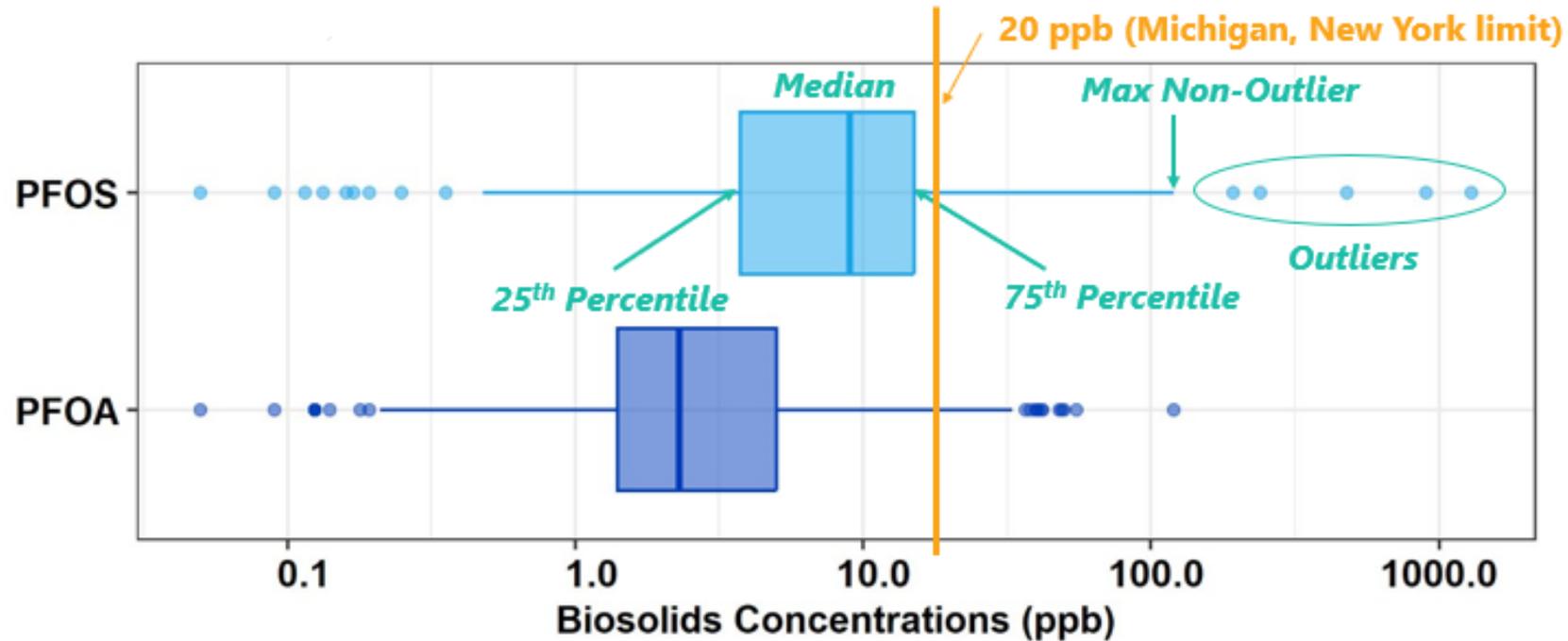
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3. Support and Expand Biosolids Land Application

■ PFAS (California)

- No limits restricting biosolids use this year.
- SB 682 (broad PFAS ban) vetoed by governor.
- SB 454 (PFAS mitigation funds) vetoed by governor.

Updates in blue bold.
Key points highlighted.



Source: California Geotracker, 2024
Values < MDL assumed MDL/2

3. Support and Expand Biosolids Land Application

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■ PFAS (Other)

– NACWA Biosolids PFAS Legislative Guide:

- <https://nacwa.realmagnet.land/2025-11-04-biosolids-pfas-legislative-guide>

– Databases of state PFAS actions:

- ECOS: <https://www.ecos.org/documents/ecos-compendium-of-state-pfas-actions/>
- Safer States: https://www.saferstates.org/bill-tracker/?toxic_chemicals=PFAS&issue_sectors=Biosolids/Sludge&status=Introduced&year=2025:2025

– Proposed legislations in other states:

- **NY anti-biosolids legislation.**
- **TX 3 anti-biosolids bills died.**
- **HB 2640 – Arizona bill would ban any fertilizer containing any amount of PFAS. Same as last year’s bill that didn’t pass.**

– **Maine statement urging states to weigh biosolids disposal options before banning land application:**

- <https://insideepa.com/pfas-news/maine-official-urges-states-weigh-biosolids-disposal-options-ban>

3. Support and Expand Biosolids Land Application

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- CalRecycle SB 1383
 - Currently, only compost qualifies for procurement. AB 643 to expand to CDFA certified fertilizer. **BABC considering letter of support.**
 - Article 2 interpretation: What constitutes reduction in landfill disposal?
<https://calrecycle.ca.gov/organics/slcp/recyclingfacilities/article2/>
- CalRecycle Anaerobic Digestion Study
 - Re-evaluating codigestion capacity.
- **CalRecycle Funding for Codigestion Projects**
 - 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.**
- CalRecycle Zero Waste Plan
 - **CASA's comments:** https://casaweb.org/wp-content/uploads/2025/11/FINAL_CASA_Comments_CalRecycle-ZeroWastePlan-2025-10-176.pdf

Decision-Making Process*

- **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

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■ CARB Advanced Clean Fleets

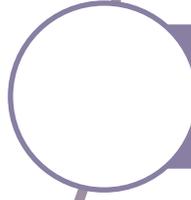
- ACF composed of 4 regulations: 3 apply to manufacturers (private & public) and 1 applies to public fleets (State and Local Agency Fleets & High Priority and Federal Fleets).
- **Amendments include: 1) vehicles no longer have to be >13 years to apply for exemptions, 2) more vetting of ZEV manufacturers (since many have gone bankrupt), 3) 100% replacement with ZEVs requirement delayed from 2030 to 2027.**
- **ACF no longer applies to private and drayage vehicles.** Although still in limbo due to litigation between State and Federal.
- **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.** Did introduce low-NOx vehicle definition.

■ CARB Carbon Sequestration

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

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D. Recent & Upcoming Events

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Key points highlighted.

- Recent events:
 - Feb 2-5th US Composting Council Conference
 - Jan 29th Nature-Based Solutions Summit
 - Jan 13th to 16th CASA Winter Conference, SoCal (slides will be posted on website)
 - Dec 12th BACWA Board Meeting
 - SFEI Phase 3 PFAS Study - kickoff on Dec 16th and study questions discussion on Jan 22nd
 - Nov 18th BACWA PFAS Forum. <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.
 - Oct 29th CASA Innovative Technology Seminar. <https://casaweb.org/resources/speaker-presentations/>
- Other updates?



D. Recent & Upcoming Events

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- BABC/BACWA:
 - Apr 13th at 10 am to 12 pm (in-person/virtual hybrid; **location TBD**)
 - **June 8th at 10 am to 12 pm (virtual)**
 - Full list of BACWA meetings: <https://bacwa.org/events/month/2025-08/>
 - **Feb 11th SFEI/BACWA PFAS Phase 3 – Continued Discussion of Study Design**
- CASA:
 - **Feb 11th BACEN (Biosolids, Air, Climate, Energy, and Nutrient) webinar**
https://us02web.zoom.us/webinar/register/WN_Vood1wLrRmWTfQdd2NcjFw#/registration
 - **Feb 24th DC Policy Forum (CASA meeting with EPA in Washington, DC)**
 - Full list of CASA meetings: <https://casaweb.org/https-casaevents-memberclicks-net-winter-conference/casa-events-meetings/>



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■ Other:

- **Feb 10th WEF Federal Policy Wrap-Up webcast**

<https://nam10.safelinks.protection.outlook.com/?url=https%3A%2F%2Fengage.wef.org%2FMTUwLUFGUy05OTkAAAGfziZxO-dmw2C5OFum8ZhC94dVMNdLQN6YRuI9AZvw-TvCGimM6DJSvMjsQF2tmQZ9I3wFlr4%3D&data=05%7C02%7Ccpolo%40carollo.com%7Ce1fbfb320427400f8c6608de64e8e314%7Cf50354a04a5a4fa1b18f8d1efb41b024%7C0%7C0%7C639059148613390210%7CUnknown%7CTWFpbGZsb3d8eyJFbXB0eU1hcGkiOnRydWUsIlYiOiIwLjAuMDAwMCIsIlAiOiJXaW4zMilSkFOljoiTWFpbGlldUljoyfQ%3D%3D%7C0%7C%7C%7C&sdata=ftFI12PfqXNKPuWJIT%2FrQhLX1Cz00tCt6z4D3kJNmGE%3D&reserved=0>

- **Feb 11th SFEI PFAS Phase 3 Discussion of Study Design** (contact Diana Lin diana@sfei.org)

- **Feb 13th National Academies’ assistance to USDA “Building a Framework for Addressing PFAS on Agricultural Land” report release webinar**

<https://www.nationalacademies.org/projects/DELS-BANR-24-03/event/46333>

- **Feb 26th Solano County Board Meeting to discuss biosolids PFAS study**

- **Feb 26th Screening of “Unless Something Goes Terribly Wrong” at UC Berkeley (Water for People fundraiser)** https://www.waterworks.careers/usgtw_berkeley

- **March 11-12th California Bioresources Summit, UC Davis**

<https://na.eventscloud.com/ereg/index.php?eventid=869798&>



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

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- 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.)
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- Contact Program Management Team or Christine Polo if interested in:
 - Serving as co-chair or in the website or research subgroups.**
 - Interested in attending the Feb 26th Solano County Board Meeting to discuss biosolids PFAS study**
 - Being featured in agency highlight on the website.

Contacts:

- Program Management Team: babcprogrammanager@carollo.com
- Christine Polo: cpolo@carollo.com



**BAY AREA
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F. Adjourn for Associates... Thank You!



**BAY AREA
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G. Member Agencies Discussion



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H. Adjourn for All... Thank You!



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