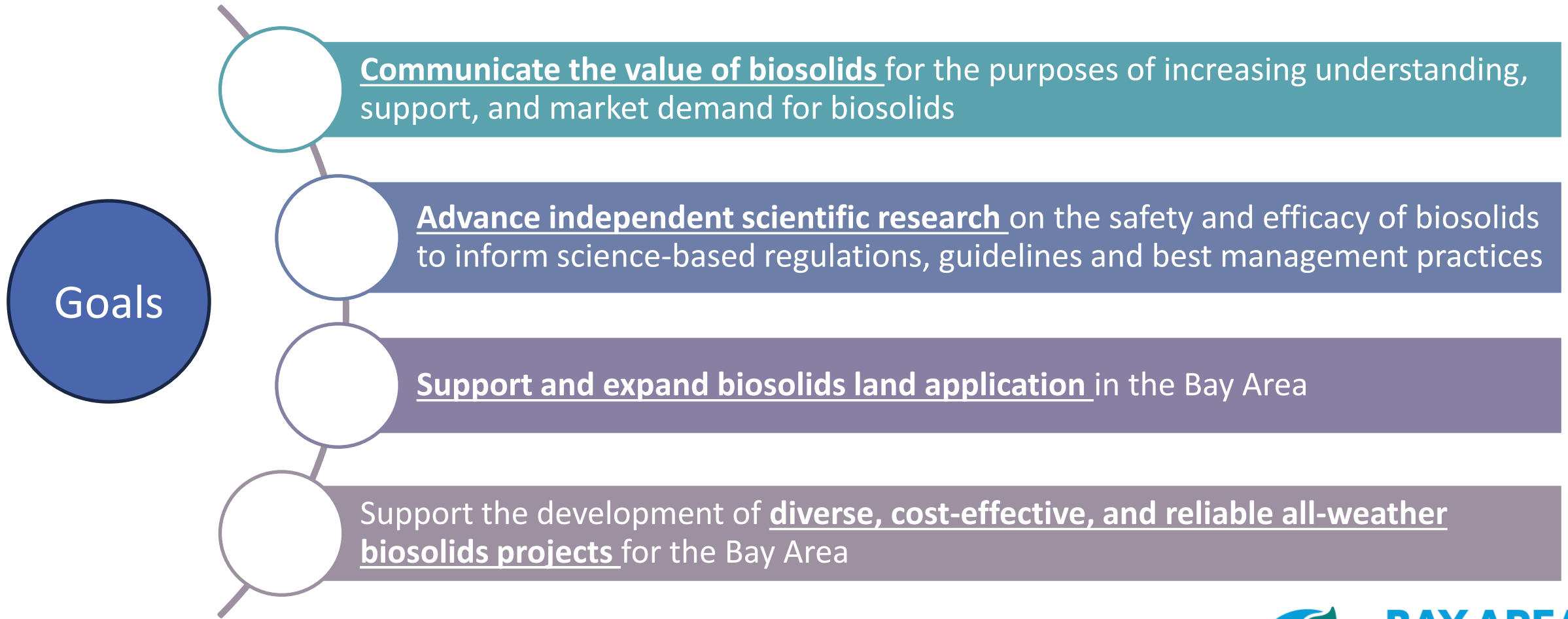

Bay Area Biosolids Coalition: Meeting

August 10th, 2026

A. Welcome/Introductions

B. Strategic Plan Goals – Progress Updates



BAY AREA
BIOSOLIDS
COALITION

1. Communicate the Value of Biosolids

Updates in blue bold.
Key points highlighted.

BABC Website Updates:

- **Recent posts*:**
 - See screenshot →
- Planned posts:
 - Biosolids benefits:
 - Land application site photos
 - Improve crop productivity
 - Reduce irrigation
 - Agency highlights:
 - San Jose, West County, SFPUC
 - **Let us know if interested!**
 - **BABC-supported research**



8/6/26

How Biosolids Can Benefit Wildlife and Ecosystem Health

Biosolids are widely recognized for their benefits to soil health, vegetation growth, and land restoration. Beyond these well-established benefits, research shows that biosolids can also support wildlife and ecosystem health by enhancing habitat structure and food



4/27/26

How Microbes Could Remediate PFAS-Containing Biosolids

Per- and polyfluoroalkyl substances (PFAS) are a growing environmental concern due to their widespread use, persistent chemical stability, and human health toxicity. As biosolids PFAS regulations continue to evolve, the need for reliable, sustainable solutions to manage PFAS

*BABC website posts: <https://www.bayareabiosolids.com/news-events>



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1. Communicate the Value of Biosolids

BABC Website Updates:

- New website section* describing all research projects BABC has supported or is supporting.



The BABC is committed to advancing the future of biosolids through meaningful research and innovation.

We actively support and fund projects to stay ahead of evolving regulations and emerging technologies, ensuring high-quality, proactive, and sustainable service for all San Francisco Bay Area residents.

Below is a list of active and completed research projects the BABC has funded over the years.

Updates in blue bold.
Key points highlighted.

PFAS Removal Through Thermal Drying

- **Contribution:** BABC contributed \$50,000.
- **Team:** Led by Mary Martis, Parsons Corporation and Dr. Linda Lee, Purdue University.
Goal: Investigate operating conditions that maximize PFAS removal and better understand fate of PFAS in a full-scale thermal dryer.
- **Status:** Active. Conducted in 2025 - 2027.

Data-Driven Defense Against Biosolids Land Application Bans

- **Contribution:** BABC contributed \$10,000.
- **Team:** National collaboration of biosolids agencies including Mid-Atlantic Biosolids Association, Northwest Biosolids, and California Association of Sanitation Agencies.
- **Goal:** Provide policymakers information on the impacts of landfilling biosolids so they can consider that in their decisions to propose or support policies that ban biosolids land application due to PFAS.
- **Status:** Active. Conducted in 2025 - 2026.

National Collaborative PFAS Project Phase 2 - Crop Uptake of PFAS Following Land Application of Biosolids

- **Contribution:** BABC contributed \$50,000 and some members will provide research sites and samples.
- **Team:** Dr. Ian Pepper and his research team at the University of Arizona Water & Energy Sustainable Technology (WEST) Center.
- **Goal:** Investigate crop uptake of PFAS in soils with a history of land applied municipal biosolids.
- **Status:** Active. Conducted in 2025 - 2026.

*BABC-supported research: <https://www.bayareabiosolids.com/research>



1. Communicate the Value of Biosolids

BACWA/BABC Collaboration

- Purpose: How to best use Baywise* and BABC website to educate the public about biosolids benefits and safety.
- Updates:
 - **Biosolids page on Baywise just went live! →**
 - **BABC to cross-post on BABC website.**
 - **Agencies encouraged to post on social media (see draft post on next slide).**



Link: <https://baywise.org/what-are-biosolids/>

Updates in blue bold.
Key points highlighted.

Benefits of Biosolids

Biosolids are a powerful natural resource that have benefits for the planet and people. Biosolids help:



Enhance soil health

- Biosolids return nutrients and organic matter to soil that would otherwise go to a landfill.
- Biosolids improve soil structure which helps it to retain water and nutrients, making the land more resilient to erosion and drought.



Grow better crops

- By adding nutrients and improving soil quality, biosolids increase crop quality and farm yields.
- Biosolids supply all essential nutrients crops and plants need, including nitrogen and phosphorus.

* <https://baywise.org/> is BACWA's public-facing, educational website.



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1. Communicate the Value of Biosolids

BACWA/BABC Collaboration

Draft social media post and graphics:

<https://docs.google.com/document/d/1bwri6YHqwqueRHatFtVYQx06DjimpizzX-2-e4fllWOQ/edit?tab=t.0>

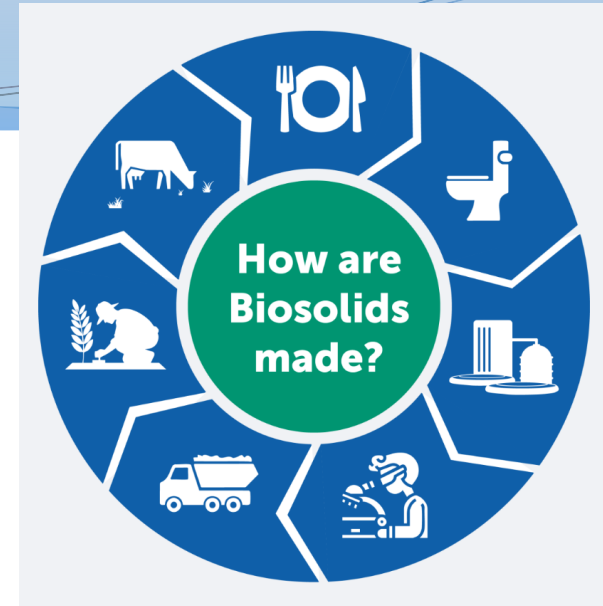
When you flush a toilet, that water flows through sewers to a wastewater treatment facility like ours where the solids are separated from wastewater and go through further treatment processes. The result? Biosolids. A safe, nutrient-rich soil-like resource with multiple benefits for soil health, crop growth, and fighting climate change.

[our org] is one of over 40 clean water agencies across the Bay Area operating 16,000 miles of sewers that help turn “waste” into a valuable resource as we collect and clean billions of gallons of water every year!

Check out baywise.org to learn more about how clean water agencies in the Bay Area are on the front lines of environmental stewardship of the San Francisco Bay. Watch our feed for more Get Bay Wise posts.

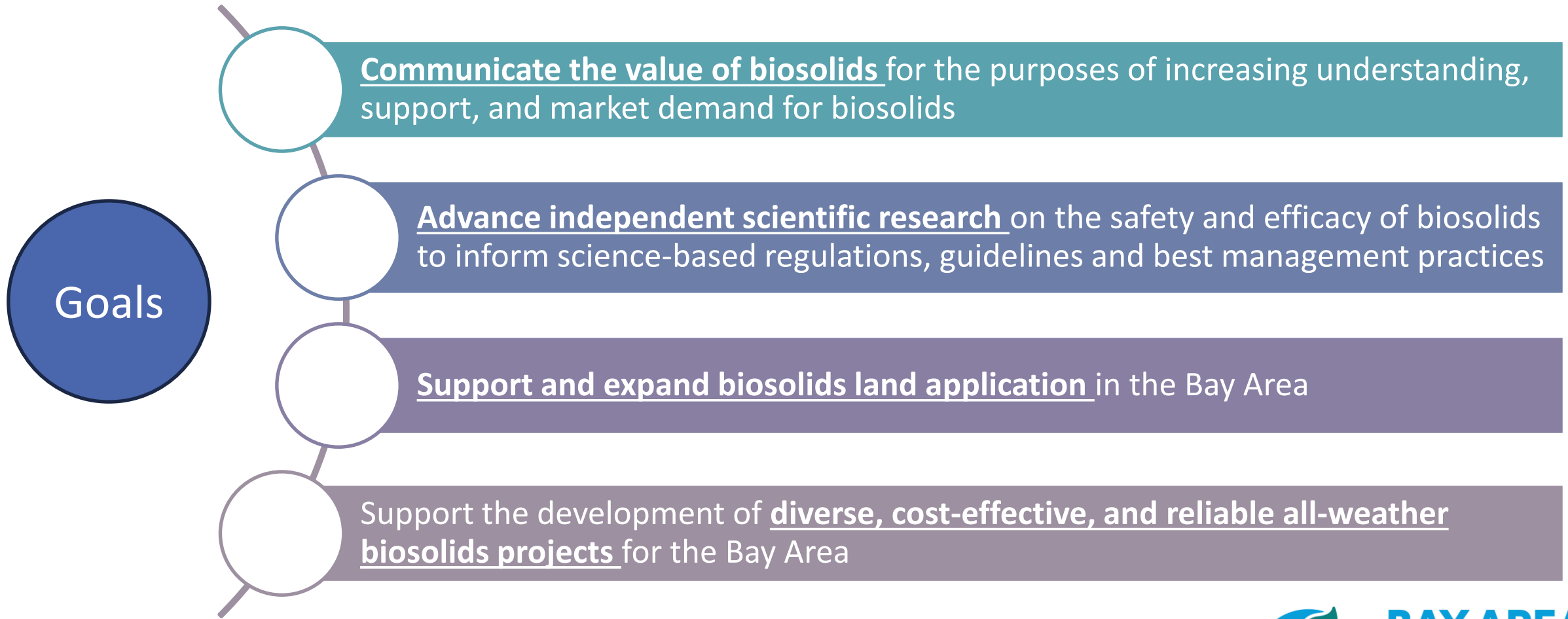


Please review and provide feedback.



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B. Strategic Plan Goals – Progress Updates

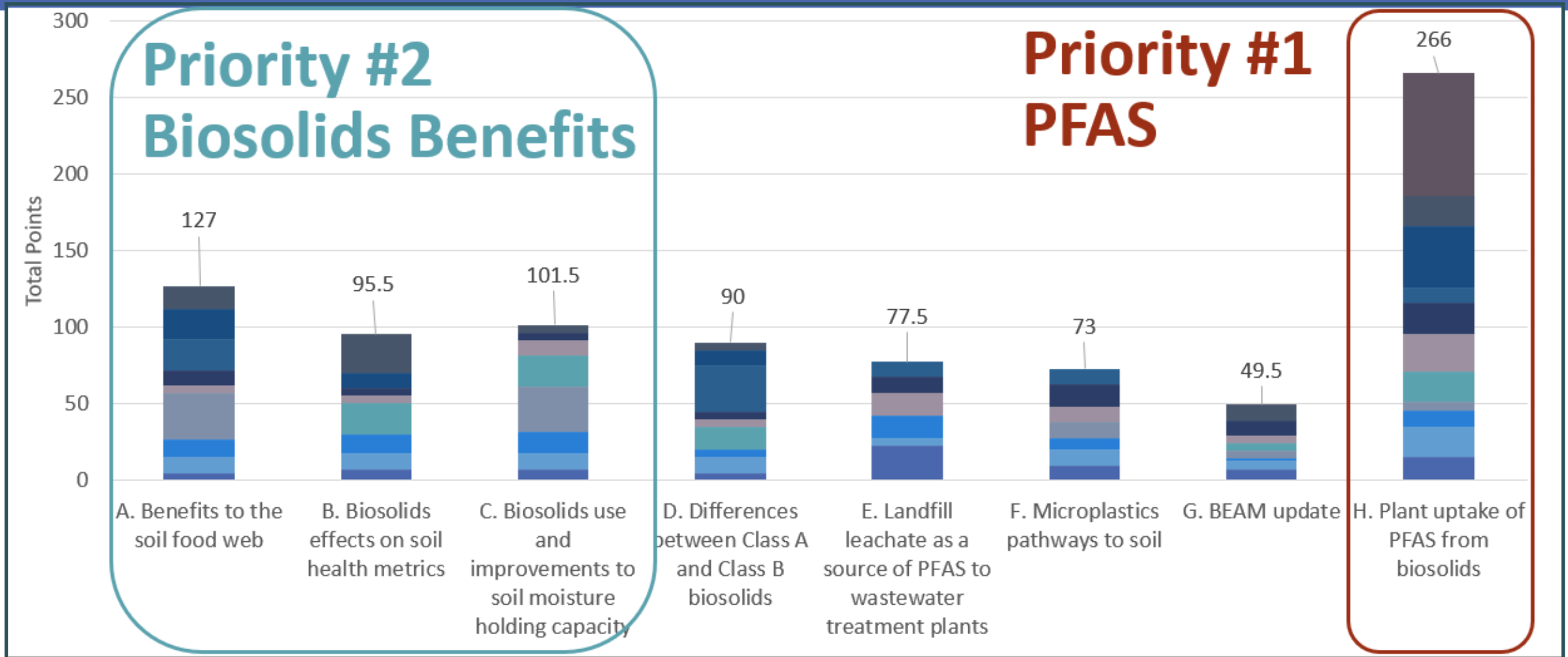


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2. Advance Scientific Research

Research Priorities

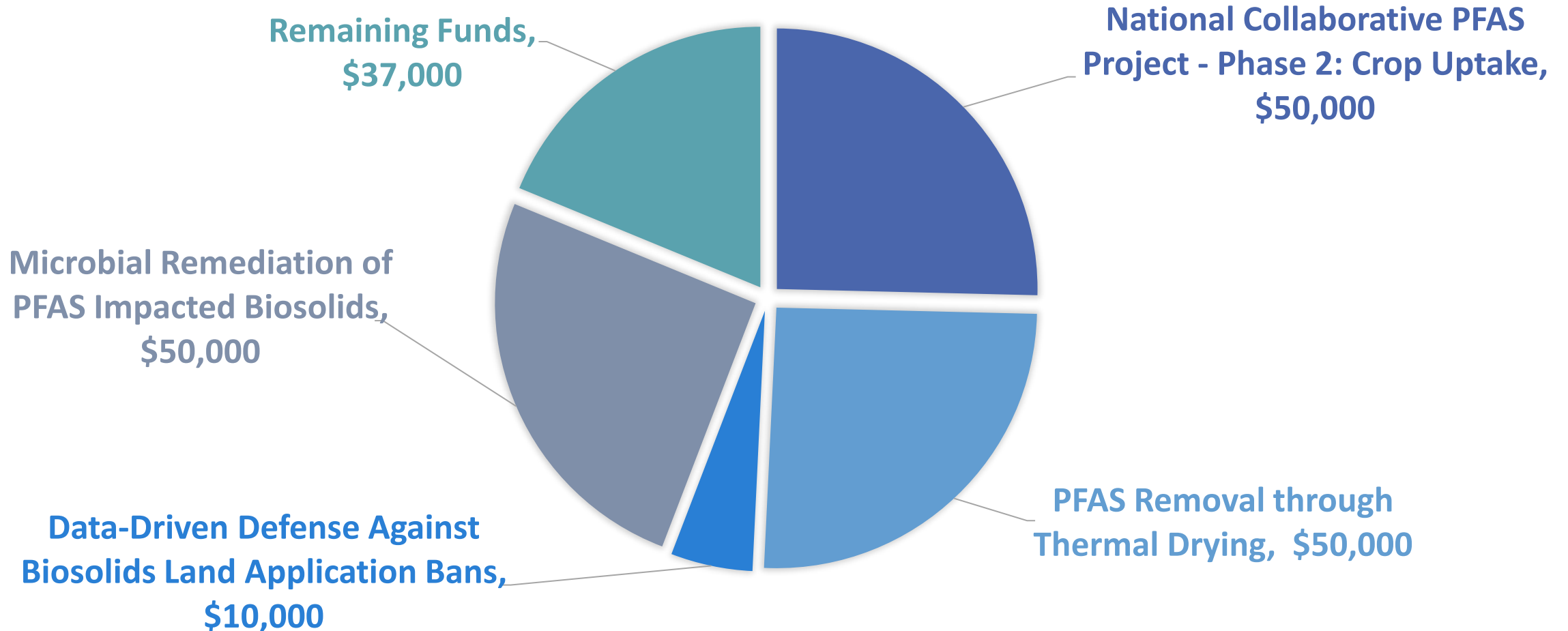
Updates in blue bold.
Key points highlighted.



2. Advance Scientific Research

Research BABC is Actively Supporting

Updates in blue bold.
Key points highlighted.



2. Advance Scientific Research

Research BABC is Actively Supporting

Updates in blue bold.
Key points highlighted.

Data-Driven Defense Against Biosolids Land Application Bans: California Cost and Capacity Findings

Mary Lou Romero (Brown & Caldwell)
& Pooja Oberoi (Carollo Engineers)

2. Advance Scientific Research

Research BABC is Actively Supporting

Updates in blue bold.
Key points highlighted.

National Collaborative PFAS Project – Phase 2 Finding and Phase 3 Research Plan

Dr. Ian Pepper (The WEST Center, University of Arizona)

2. Advance Scientific Research

Other Research We're Tracking

Updates in blue bold.
Key points highlighted.

- **Standardization of PFAS TOP Assay**
 - USGS-funded research led by Fuhar Dixit at University of Tennessee.
 - Seeking split samples (i.e., if agency already collecting samples, consider sending a portion to his team for analysis).
 - Seeking samples from wastewater agencies that receive landfill leachate.
- BACWA/SFEI Phase 3A PFAS Study “PFAS Sources to Solutions”
 - Test PFAS in wastewater influent and effluent, not biosolids.
 - **Final sampling plan sent in Jul 2026. All samples analyzed via EPA Method 1633; some via TOP.**
 - **Primary study questions:**
 1. **What are the concentrations of various PFAS subgroups (legacy and newer PFAS) in influent and effluent?**
 2. **Are there observed temporal trends in wastewater?**
 - **Additional questions:**
 1. **What are relative PFAS loadings from POTWs to the San Francisco Bay compared to urban stormwater runoff?**
 2. **Can specific PFAS fingerprints be identified to link to upstream sources?**

2. Advance Scientific Research

Other Research We're Tracking

Updates in blue bold.
Key points highlighted.

- **Water Research Foundation (WRF):**
 - **Funding opportunities for 2 biosolids-related topics.**



● Research Priority Program

5413 - Comparison of PFAS Loading to Agricultural Systems

- Report per- and polyfluoroalkyl substance (PFAS) concentrations from a variety of agricultural inputs, including animal manures, fertilizers, pesticides, biosolids, and composts.
- Compare impact of the various agricultural inputs on PFAS concentration in the soil profile over short and medium...

Upcoming Grant

🏆 **USD \$400,000**



● Research Priority Program

5421 - Intensifying Anaerobic Digestion: Downstream Impacts and Thermal Treatment Compatibility

- Identify effective methods for intensifying anaerobic digestion (AD) to maximize methane production, volatile solids destruction, and biogas yield, while minimizing footprint and expansion needs.
- Characterize impacts of intensification on digester kinetics and stability, the physical/chemical properties of the...

Apply by **09/14/2026**

🏆 **USD \$350,000**

Link: <https://portal.waterrf.org/outbound-grants>

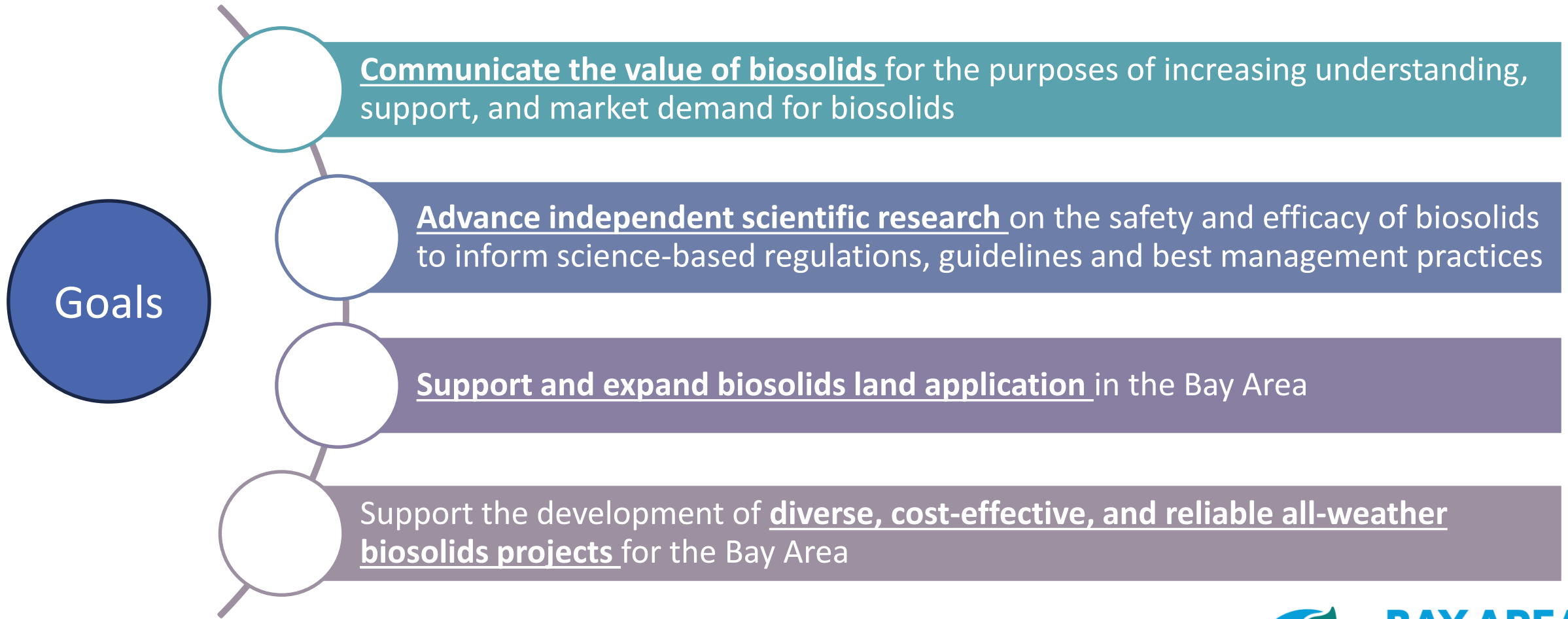
2. Advance Scientific Research

Other Research We're Tracking

Updates in blue bold.
Key points highlighted.

- Solano County Study on PFAS in Biosolids by Trihydro
 - Dec 2025: report published (see 4th link under “Biosolids Reports”):
<https://www.solanocounty.gov/government/resource-management/environmental-health/water-protection-waste-management-technical-services/biosolids-landspreading-program>
 - Feb 2026: several BABC members attended meeting and provided comments.
 - Apr 2026: BABC submitted comment letter.
 - **Jun 2026: report was included as attachment at the Solano County Board of Supervisors meeting.**
 - **No action since.**
- University of Arizona WEST Center Foam Fractionation Pilot
 - Jan 2026 update: <https://west.arizona.edu/news/pilot-study-evaluates-pfas-treatment-technologies-west-center>

B. Strategic Plan Goals – Progress Updates



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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 beneficial use in the Bay Area
 - PFAS and other emerging contaminant regulations that could limit land application.
 - SB 1383 and county ordinances that could limit or expand local land application .
 - Regulations and funding programs that could impact anaerobic digestion and biogas use (e.g., SB 1383, potential BAAD/CARB methane emission limits, CARB ZEV requirements, CARB LCFS credits and federal RIN credits and IRA funding).
 - Zero waste, healthy soils, carbon capture, and climate resilience 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 Guidance for Reducing Risks from PFAS in Biosolids**
 - Released on Jul 1st, 2026.
 - Virtual listening session on Aug 12th and 18th.
 - Comments due Sep 4th.
- Destruction and Disposal of PFAS Guidance
 - Version 3 released on Apr 20th, 2026.
 - Underground injection, landfills, and thermal treatment.
 - CASA provided comment letter.
- PFAS CERCLA Liability Exemption for Passive Receivers
 - 45 organizations signed support letter submitted in May 2026.

Updates in blue bold.
Key points highlighted.

3. Support and Expand Biosolids Land Application

■ PFAS (Other States)

- New York S5759C/A6192
 - Would place a 5-year moratorium on biosolids land application.
 - **Did not pass; but was close.**
- Virginia SB 386/HB 1443
 - **Revised from ban to tiered limits.**
- Florida SB 290
 - **Only Class AA biosolids allowed.**

Updates in blue bold.
Key points highlighted.

3. Support and Expand Biosolids Land Application

■ PFAS (Source Control - California)

Updates in blue bold.
Key points highlighted.

– AB 1306 PFAS in Pesticides

- Would fully ban PFAS use in pesticides by 2035 and require transparency in labeling until then.
- https://www.leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=202520260AB1603

– Department of Toxic Substances Control (DTSC) targeting PFAS in floor maintenance products (i.e., polishes, waxes, etc.)

- DTSC's plan to list as priority product could lead to a product ban.
- <https://dtsc.ca.gov/scp/proposed-priority-product-floor-maintenance-products-containing-pfass/>

3. Support and Expand Biosolids Land Application

Updates in blue bold.
Key points highlighted.

■ CARB Advanced Clean Fleets (ACF)

– Final package released on Jul 29th, 2026:

<https://ww2.arb.ca.gov/rulemaking/2025/acfab1594>

- **No longer includes contracted vehicles.** Includes only vehicles “dispatched” by a public agency; where “dispatch” means to provide directions for routing.
- **Wastewater facilities may be eligible for Captive Biofuel (i.e. CNG from digester gas) Use Exemption,** but exemption is limiting. CASA advocating for expanding exemption.

■ CalRecycle SB 1383

– Advancing slowly. Air district permitting recognized as a barrier.

– AB 643 (2026):

- Would broaden procurement requirement from compost only to CDFA certified fertilizers.
- **BABC submitted support letter on Apr 14th, 2026.**

– Impacts of CARB’s ACF

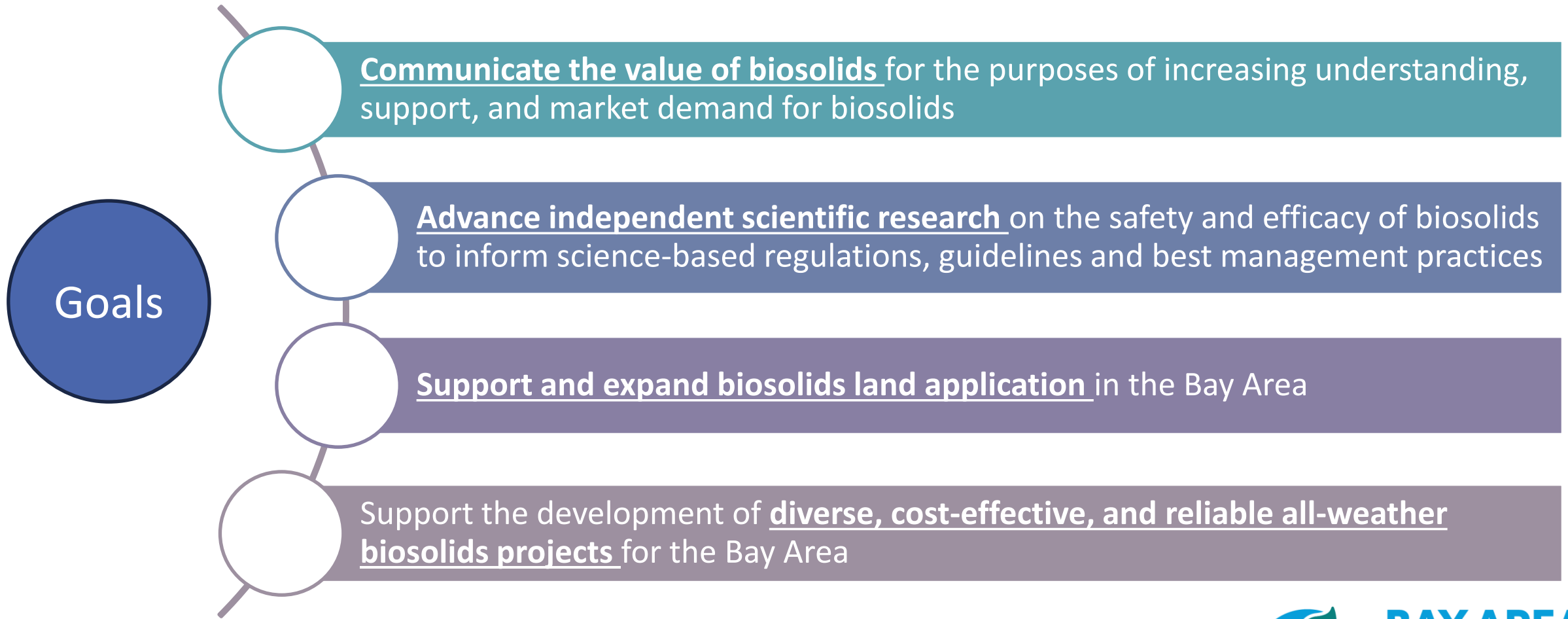
- **CASA shared impacts with CalRecycle and toured City of Roseville.**

3. Support and Expand Biosolids Land Application

Updates in blue bold.
Key points highlighted.

- CalRecycle Zero Waste Plan
 - Released Feb 2026: <https://calrecycle.ca.gov/zerowasteplan/>
 - Includes wastewater facilities and highlights available AD capacity.
- CARB Carbon Capture, Removal, Utilization and Storage Program (SB 905)
 - **Biosolids deep well injection and recovery of biomethane may be included as carbon sequestration.**
- CDFA Climate Resilience Strategy for California Agriculture
 - Released Mar 2026:
<https://www.cdfa.ca.gov/climate/#:~:text=The%20Climate%20Resilience%20Strategy%20for,a%20direction%20for%20future%20action.>
 - **Supports researching biosolids land application benefits and food waste codigestion.**
 - **Supports energy recovery.**

B. Strategic Plan Goals – Progress Updates



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4. Support Biosolids Projects

Potential Regional Solutions

Updates in blue bold.
Key points highlighted.

- Montezuma Wetlands Project
 - **Deep injection of biosolids beneath the Montezuma Wetlands in Solano County.**
 - **Biosolids anaerobically biodegrade; methane is captured in deep porous saline formation, resulting in carbon sequestration.**
 - **Meeting on Aug 13th. Let us know if interested in joining.**
 - **Presentation at Oct 5th BABC meeting.**
- Other regional solutions?

C. Recent Events

Updates in blue bold.
Key points highlighted.

- May 11-14th WEF Residuals, Biosolids and Treatment Technology Conference in Kansas City, MO
- May 15th BACWA Annual Members Meeting in Berkeley, CA
 - **Presentations & additional resources:** <https://bacwa.org/bacwa-annual-members-meeting-2026/>
- Jul 8-10th Midwest Biosolids Association Annual Conference in Milwaukee, WI
 - **Presentations:** <https://www.mwbiosolids.org/2026-annual-conference>
- Jul 12-16th USDA W5170 Research Committee & Mid-Atlantic Biosolids Association (MABA) Summer Symposium in Albany, NY
- Aug 4-7th CASA Annual Conference in Napa, CA
 - **Statewide Biosolids Meeting: Lorien provided BACWA/BABC updates.**



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C. Upcoming Events

Updates in blue bold.
Key points highlighted.

- BABC Meetings (2nd Monday every other month):
 - **Oct 5th** at 10 am to 12 pm, followed by lunch and tour (in-person/virtual hybrid at City of Santa Rosa)
 - **Dec 14th** at 10 am to 12 pm (virtual)
- Other Events:
 - Aug 12th and 18th EPA virtual listening sessions on Draft Guidance for Reducing Risks from PFAS in Biosolids <https://www.epa.gov/biosolids/draft-guidance-reducing-risk-perfluorooctanoic-acid-pfoa-and-perfluorooctane-sulfonic>
 - Aug 28th deadline for CWEA 2027 Conference proposals <https://www.cwea.org/news/call-for-presenters-p3s27/>
 - Sep 26-30th WEFTEC in New Orleans, LA <https://www.weftec.org/>
 - Sep 28-30th Northwest Biosolids BioFest in Chelan, WA <https://nwbiofest.org/>
 - Oct 21st CASA Innovative Technology Seminar in Davis, CA
 - BACWA events calendar: <https://bacwa.org/events/>



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D. April Action Items

Updates in blue bold.
Key points highlighted.

- ☐ **Website Subgroup** – update website; coordinate with BACWA on communications strategy
 - ☐ ~~Continue supporting development of Baywise biosolids fundamentals website~~
- ☐ **Research Subgroup** – support research on biosolids benefits and safety
 - ☐ ~~Continue coordination with BluumBio about potential research partnership~~
 - ☐ Explore potential research opportunities, as they arise.
 - ☐ ~~Send email requesting voting on funding BluumBio research (PM Team)~~
- ☐ **Steering committee / PM Team** – other efforts

D. August Action Items

Updates in blue bold.
Key points highlighted.

- ☐ **Website Subgroup** – update website; coordinate with BACWA on communications strategy
 - ☐ **Post one website post before the Oct BABC meeting.**
 - ☐ **Add BluumBio/San Mateo project to BABC-supported research projects page.**
 - ☐ **Cross-link to Baywise’s new biosolids page in BABC website.**
 - ☐ **Review draft social media post about Baywise’s new biosolids page.**
- ☐ **Research Subgroup** – support research on biosolids benefits and safety
 - ☐ **Continue coordination with 4 ongoing BABC-supported research projects.**
 - ☐ Explore potential research opportunities, as they arise.
- ☐ **Steering committee / PM Team** – other efforts
 - ☐ **Investigate potential Montezuma Wetlands regional biosolids project.**



**BAY AREA
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D. April Action Items

Updates in blue bold.
Key points highlighted.

☐ Member agencies –

- ☐ Contact PM Team or Christine Polo if interested in:
 - ☐ Serving as co-chair or in the website or research subgroups.
 - ☐ Being featured in agency highlight on the website.
 - ☐ **~~Hosting the Aug 10th BABC meeting.~~**
 - ☐ **~~Vote on funding BluumBio research~~** (original member agencies)

Contacts:

- PM Team (Christine, John, and Elaine): babcprogrammanager@carollo.com
- Christine Polo: cpolo@carollo.com



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D. August Action Items

Updates in blue bold.
Key points highlighted.

☐ Member agencies –

- ☐ Contact PM Team or Christine Polo if interested in:
 - ☐ Serving as co-chair or in the website or research subgroups.
 - ☐ Being featured in agency highlight on the website.
 - ☐ **Joining the Aug 13th meeting about the Montezuma Wetlands project.**
 - ☐ **Hosting the Feb 8th, Apr 12th, or Jun 14th, 2027 BABC meetings.**

Contacts:

- PM Team (Christine, John, and Elaine): babcprogrammanager@carollo.com
- Christine Polo: cpolo@carollo.com



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E. Adjourn for All... Thank You!

12-1 pm: Lunch

*Thanks to
Synagro and
Carollo!*

1-2 pm: Tour

*Thanks to West
County
Wastewater!*



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