BACWA Biosolids Survey 2021

for Calendar Years 2018, 2019, and 2020

BACWA is continuing to track regional biosolids trends using this survey, following on previous surveys completed in 2016 and 2018. Please take a few minutes to answer the following questions regarding your agency's biosolids activities in calendar years 2018, 2019, and 2020. BACWA will compile the responses and distribute to all members.

The intent of this survey is to quantify specific biosolids information from Bay Area agencies to track industry trends for the following issues:

- Biosolids production volumes
- Treatment and dewatering technologies
- End use and disposal options
- Hauling and tipping costs
- Agency challenges
- Compliance with California's Short-Lived Climate Pollutants Reduction Strategy (SB-1383)
- Marketing and public outreach

A separate survey has been distributed regarding Methane and Volatile Organic Compound (VOC) management. BACWA appreciates your support in responding to both surveys.
Thank you!

* 1 Name of Agency

* 2 Name of respondent

* 3 Respondent email address

4 What technology does your agency use to produce and/or treat biosolids? (Select all that apply)

- [ ] Anaerobic Digestion (Thermophilic)
- [ ] Anaerobic Digestion (Mesophilic)
- [ ] Thermal hydrolysis (at my facility)
- [ ] Composting (at my facility)
- [ ] Air Drying
- [ ] Lime stabilization
- [ ] Pond or Lagoon stabilization
- [ ] Pyrolysis
- [ ] Incineration
- [ ] Hauling to another facility for further treatment via Thermal Hydrolysis (e.g., Lystek)
- [ ] Hauling to another facility for further treatment via Composting
- [ ] Other (please specify)

This section asks about **wet tons** of biosolids produced in 2018, 2019, and 2020.

Please provide answers in units of wet tons, based on the treatment provided at your facility.

Indicate the quality and quantity produced at your facility. If additional treatment occurred at another facility, you may include a note. For example, if you produced 100 wet tons of Class B biosolids that received further treatment offsite to Class A, list it under Class B and include a note like "Treated offsite to Class A."

* 5 How many **wet tons** of biosolids did your facilities produce in 2018?

Class A or A-EQ, Wet Tons

Class B, Wet Tons

Other quality**, Wet Tons

Notes

* 6 How many **wet tons** of biosolids did your facilities produce in 2019?

Class A or A-EQ, Wet Tons

Class B, Wet Tons

Other quality**, Wet Tons

Notes

* 7 How many **wet tons** of biosolids did your facilities produce in 2020?

Class A or A-EQ, Wet Tons

Class B, Wet Tons

Other quality**, Wet Tons

Notes

8 If you answered "Other Quality**" in questions 5-7, what quality was produced?

* 9 Please identify your facility's dewatering process from the list below

- [ ] Centrifuge
- [ ] Belt Filter Press
- [ ] Indirect Dryer
- [ ] Direct Dryer
- [ ] Drying Bed
- [ ] Screw Press
- [ ] Biodryer (e.g., Bioforcetech)
- [ ] Other (please specify)

10 If desired, please give more detail about your dewatering process, for example - flow, polymer type, or polymer dose.

* 11 Please list your dewatering equipment or dryer manufacturer.

* 12 What are the main challenges your agency faces with biosolids use and disposal? Please choose all that apply to your agency and prioritize your choices. Please rank, with #1 being the most important.

Rising costs

Public perception/relations

Hauling distance

Space for drying operations

Regulatory Restrictions on using Biosolids for Alternative Daily Cover (SB 1383)

Local restrictions on land application

Securing sustainable use and disposal options

Wet weather impeding drying operations

Public health concerns regarding biosolids land application (PFAS, microplastics, pathogens, etc.)

13 If desired, please add further explanations about the challenges your agency faces with biosolids.

14 What does your agency plan to do with your biosolids in 2021?

- ○ Same plan/strategy as 2020
- ○ Our agency will implement changes as described below.

Describe changes

15 Which of these most closely describes your agency's status with respect to preparing for implementation of SB 1383?

Background: SB 1383 does not impose special requirements directly on POTWs. Instead, it discourages the use of biosolids for Alternative Daily Cover by classifying this use as landfilling, and requiring a 75% diversion of organics (including biosolids) from landfills by 2025. Implementation of SB 1383 is expected to result in reduced reliance on Alternative Daily Cover as a disposal method. It is also expected to increase use of POTW anaerobic digesters for co-digestion of food waste.

Link to More Information about SB 1383 (prepared by CASA)

- ○ **No impacts.** SB 1383 will not significantly impact biosolids management at my agency.
- ○ **Still Planning.** My agency is still determining whether and how to support implementation of SB 1383.
- ○ **Changes underway.** My agency is planning changes to organics receiving or biosolids disposal to support SB 1383.
- ○ **Done.** My agency has already made changes in organics receiving or biosolids disposal to support SB 1383.

16 How is your agency responding to SB 1383's limits on landfill use and disposal? (Check all that apply)

- [ ] SB 1383 will not significantly impact biosolids management at my agency
- [ ] Adding a **receiving station** for diverted organic waste
- [ ] Entering into **contracts** to accept diverted organic waste
- [ ] Adding **digester capacity** for organics co-digestion at the plant
- [ ] Improving biosolids **treatment technology** at the plant to expand use and disposal options
- [ ] Increasing reliance on **land application** in lieu of other disposal options
- [ ] Increasing the volume of biosolids **sent to another facility or third party for additional treatment** (i.e., Lystek)
- [ ] Please elaborate on your agency's plans.

17 Please check all that apply regarding biosolids product marketing and branding.

- [ ] We market our own biosolids product(s).
- [ ] A third party such as Lystek or Synagro markets our biosolids product(s).
- [ ] We do not market biosolids product(s) currently, but have plans to do so in the future.
- [ ] We currently or have plans in the future to brand our biosolids product(s).
- [ ] We do not currently or have any plans in the future to market our biosolids product(s).

18 Does your agency do biosolids outreach/education? If yes, how? (Check all that apply)

- [ ] Social media (Twitter, Youtube, Facebook, etc.)
- [ ] Agency website or bill inserts
- [ ] Print media
- [ ] No, we do not publicize our biosolids program, but we do publicize our other services.
- [ ] No, we do not publicize any of our services.
- [ ] Other (please specify)

* 19 Please explain below how your agency manages biosolids staffing.

How many Full Time Equivalent (FTE) staff are required for biosolids management?

Please describe the roles of staff assisting with biosolids management.

20 If you would like to receive notice of the survey results and be added to the BACWA Biosolids Committee listserv, please include your name and email address or those of your staff.

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The fields below allow you to input information for each destination where you sent biosolids in 2020. You may enter as many destinations as applicable for your agency.

If you prefer to enter this information into an Excel table, you can download a blank template and email the file to mcousins@bacwa.org

21 Alternate submittal

- [ ] I plan to email the Excel file to Mary (mcousins@bacwa.org) instead of filling out this form

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Destination 1

Location of end use	
Type of end use (ADC, landfill disposal, land application, compost, onsite disposal, incineration, Lystek, other)	
Tons of wet weight sent to destination in 2020	
Percent solids (%)	
Class of solids (A or A-EQ, B, other)	
One-way hauling distance (miles)	
Cost $/ton (hauling + tipping + other fees)	
Any flat fees	
Other information you would like to share about this destination	

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Destination 2

Location of end use	
Type of end use (ADC, landfill disposal, land application, compost, onsite disposal, incineration, Lystek, other)	
Tons of wet weight sent to destination in 2020	
Percent solids (%)	
Class of solids (A or A-EQ, B, other)	
One-way hauling distance (miles)	
Cost $/ton (hauling + tipping + other fees)	
Any flat fees	
Other information you would like to share about this destination	

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Destination 3

Location of end use	
Type of end use (ADC, landfill disposal, land application, compost, onsite disposal, incineration, Lystek, other)	
Tons of wet weight sent to destination in 2020	
Percent solids (%)	
Class of solids (A or A-EQ, B, other)	
One-way hauling distance (miles)	
Cost $/ton (hauling + tipping + other fees)	
Any flat fees	
Other information you would like to share about this destination	

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Destination 4

Location of end use	
Type of end use (ADC, landfill disposal, land application, compost, onsite disposal, incineration, Lystek, other)	
Tons of wet weight sent to destination in 2020	
Percent solids (%)	
Class of solids (A or A-EQ, B, other)	
One-way hauling distance (miles)	
Cost $/ton (hauling + tipping + other fees)	
Any flat fees	
Other information you would like to share about this destination	

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Destination 5

Location of end use	
Type of end use (ADC, landfill disposal, land application, compost, onsite disposal, incineration, Lystek, other)	
Tons of wet weight sent to destination in 2020	
Percent solids (%)	
Class of solids (A or A-EQ, B, other)	
One-way hauling distance (miles)	
Cost $/ton (hauling + tipping + other fees)	
Any flat fees	
Other information you would like to share about this destination	

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Destination 6

Location of end use	
Type of end use (ADC, landfill disposal, land application, compost, onsite disposal, incineration, Lystek, other)	
Tons of wet weight sent to destination in 2020	
Percent solids (%)	
Class of solids (A or A-EQ, B, other)	
One-way hauling distance (miles)	
Cost $/ton (hauling + tipping + other fees)	
Any flat fees	
Other information you would like to share about this destination	

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Destination 7

Location of end use	
Type of end use (ADC, landfill disposal, land application, compost, onsite disposal, incineration, Lystek, other)	
Tons of wet weight sent to destination in 2020	
Percent solids (%)	
Class of solids (A or A-EQ, B, other)	
One-way hauling distance (miles)	
Cost $/ton (hauling + tipping + other fees)	
Any flat fees	
Other information you would like to share about this destination	

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Destination 8

Location of end use	
Type of end use (ADC, landfill disposal, land application, compost, onsite disposal, incineration, Lystek, other)	
Tons of wet weight sent to destination in 2020	
Percent solids (%)	
Class of solids (A or A-EQ, B, other)	
One-way hauling distance (miles)	
Cost $/ton (hauling + tipping + other fees)	
Any flat fees	
Other information you would like to share about this destination	