

BIOSOLIDS UPDATE



Board of Public Utilities Meeting
October 18, 2018



OUR FUTURE IN EVERY DRÖP

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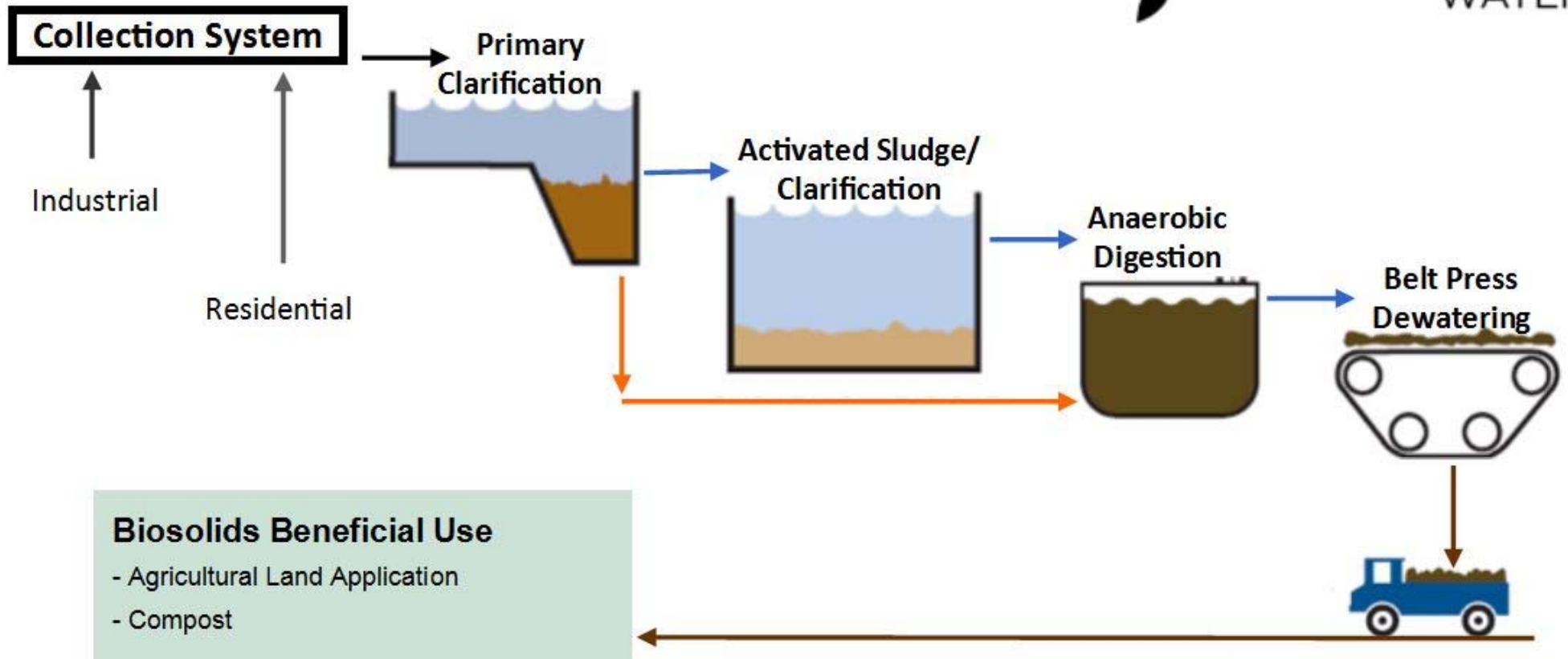
Presentation Outline

- Current Biosolids Operation
- Current Challenges
- Upcoming Challenges
- Potential Opportunities

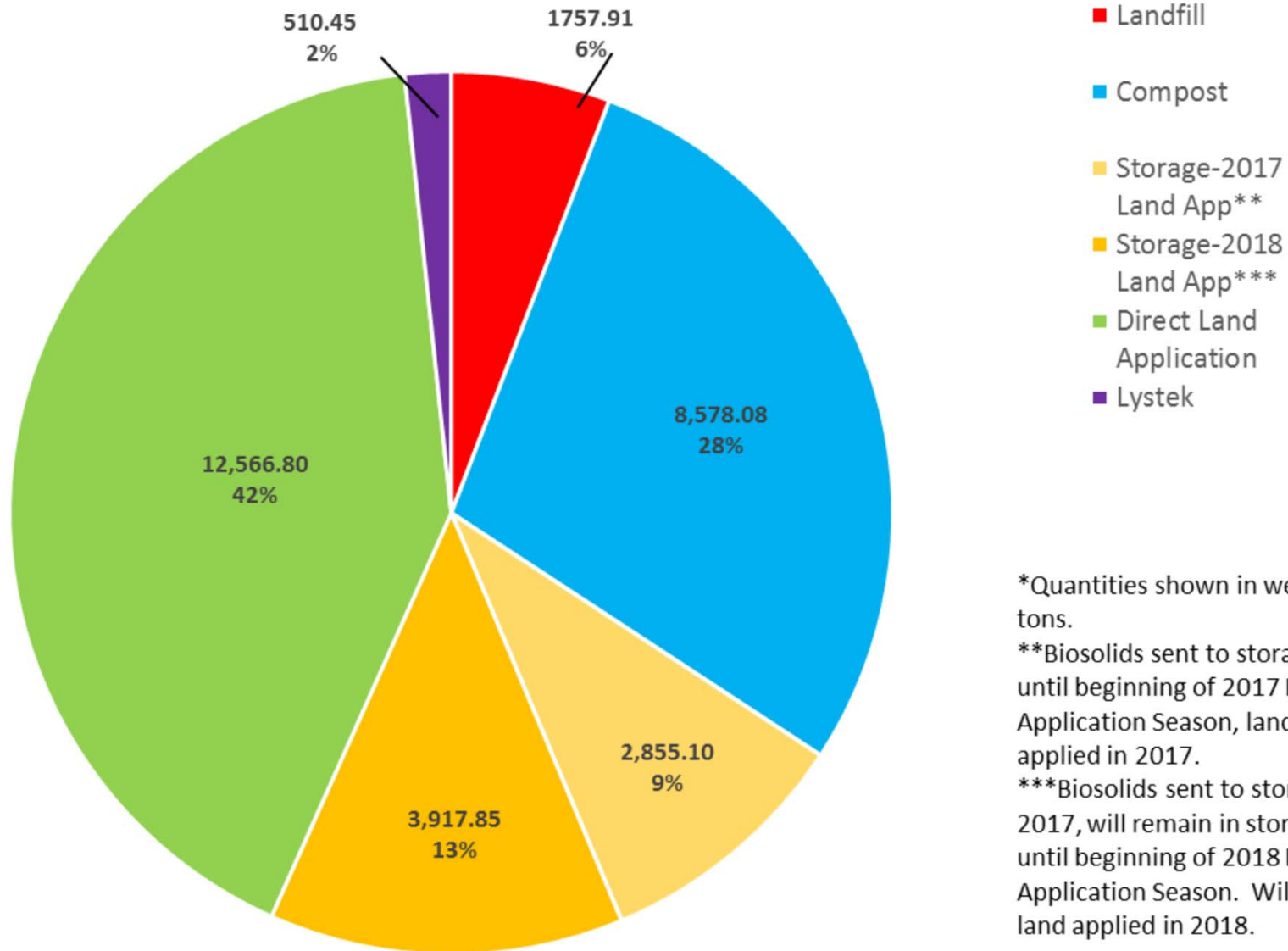


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Biosolids Value Chain



2017 Biosolids Beneficial Use Distribution*



*Quantities shown in wet tons.

**Biosolids sent to storage until beginning of 2017 Land Application Season, land applied in 2017.

***Biosolids sent to storage in 2017, will remain in storage until beginning of 2018 Land Application Season. Will be land applied in 2018.

Current Challenges

- Land Application
 - South County – Application rate changes
 - North County – CTS challenges
- Compost
 - Aging facility with needed capital improvements
- Landfill
 - Regulatory Changes

Biosolids Est. Annual Costs

2017	Yearly Cost	Wet Tons	Cost/wet ton	Notes
Landfill	\$ 81,513	1,482	\$ 55.00	Landfill option will expire by 2025 due to SB 1383. Wet tons (1,482) is average of 2014-2017 disposal
Compost	\$1,920,665	8,578	\$ 223.90	Cost/wet ton with CIP and O&M Costs included over 5yr ave
Lystek	\$ 45,762	510	\$ 89.65	Based on 2017 Lystek agreement for tipping & Hauling costs
Land Application	\$ 827,876	19,644	\$ 42.14	12,556 wet tons from LTP, remainder from storage
Total BMS	\$ 2,875,816	30,214	\$ 95.18	



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5 Year Cost Comparison

Biosolids	Wet Tons/Yr ⁴	Cost/Wet Ton	2018	2019	2020	2021	2022	5 yr Total
Total BMS – current program¹	30,214	\$ 95.18	\$ 2,875,769	\$ 2,988,154	\$ 3,104,931	\$ 3,226,271	\$ 3,352,354	\$ 15,547,478
<i>100% disposal:</i>								
Lystek Estimate ²	30,214	\$ 89.65	\$ 2,708,685	\$ 2,814,541	\$ 2,924,533	\$ 3,038,823	\$ 3,157,581	\$ 14,644,163
Synagro Estimate ^{2,3}	30,214	\$ 46.65	\$ 1,413,683	\$ 1,468,930	\$ 1,526,336	\$ 1,585,985	\$ 1,647,965	\$ 7,642,898
<i>50% disposal:</i>								
Lystek Estimate ²	15,107	\$ 89.65	\$ 1,354,343	\$ 1,407,270	\$ 1,462,266	\$ 1,519,412	\$ 1,578,790	\$ 7,322,081
Synagro Estimate ^{2,3}	15,107	\$ 46.65	\$ 708,942	\$ 736,647	\$ 765,435	\$ 795,348	\$ 826,431	\$ 3,832,803

¹ Wet tons based on 2017 wet tons going to Landfill (1,500), Land Application (19,644), Lystek (500), and processed by compost (8,578).

² Lystek and Synagro costs include annual escalator based on annual CPI currently used by Lystek. CPI=.0398

³ Synagro includes costs for annual testing - currently \$4,200 per year

Future Challenges

Regulations and Climate Change

- SB 1383 Short-Lived Climate Pollutants
 - 50% diversion of organics (including POTW solids) from landfills by 2020 relative to 2014 levels and 75% diversion of organics by 2025
- AB 32 The Global Warming Solutions Act of 2006.
 - Requires reduction of statewide GHG emissions to 1990 levels by 2020.
- North County nutrient concerns for land application

Future Opportunities

- Organic Materials Processing Facility
 - Currently in discussion with Renewable Sonoma



Organic Materials Processing Facility

- July 2018 - SRW RFP for use of City property for facility site
- SCWMA has selected Renewable Sonoma to start discussions



Organic Materials Processing Facility

- Renewable Sonoma considering options
 - Partnership opportunities
 - Possible expansion to include our biosolids, as well as others



Biosolids Additional Opportunities

- Bay Area Biosolids Coalition
 - Developing concepts for Regional Facility
- Lystek and Synagro
 - Potential to explore other disposal/reuse options

Next Steps

- Staff discussions to explore options with Renewable Sonoma
- Depending on outcome, consider RFP to better understand options
- Timeline likely driven by capital improvement projects for the compost facility

Questions?

