

BIOSOLIDS REGIONAL PLANNING

SHORT-TERM NEEDS AND OPPORTUNITIES



ARLINGTON
VIRGINIA

BACKGROUND

- Individual utilities are making plans to maintain and increase operational resiliency for solids handling
 - Landfill restrictions, land application challenges
- Fall 2019, PWCSA, Fairfax and UOSA initiated discussions and later expanded to include Arlington, AlexRenew, DC Water and WSSC
- Arlington and DC Water also had an ongoing dialogue on regionalization, completed in early 2020
- What strategies can utilities employ to be more resilient?
- Goal is to develop additional outlets to address emergencies

BIOSOLIDS COLLABORATION UPDATE

- Approach:
 - Initial discussion and data gathering on individual utility's needs, available capacity, and requirements to accept outside solids (matrix)
 - Focus on boosting resiliency in short-term and emergency situations
 - Participating utilities have sufficient design capacity for solids handling at current flows and loads

Near Term: Share Information

- Hauling contracts
- Solids outlets accepting biosolids

Medium Term: Share Capacity

- Send and receive solids between plants for emergency and short term needs
- as needed and able

Long Term: Regional

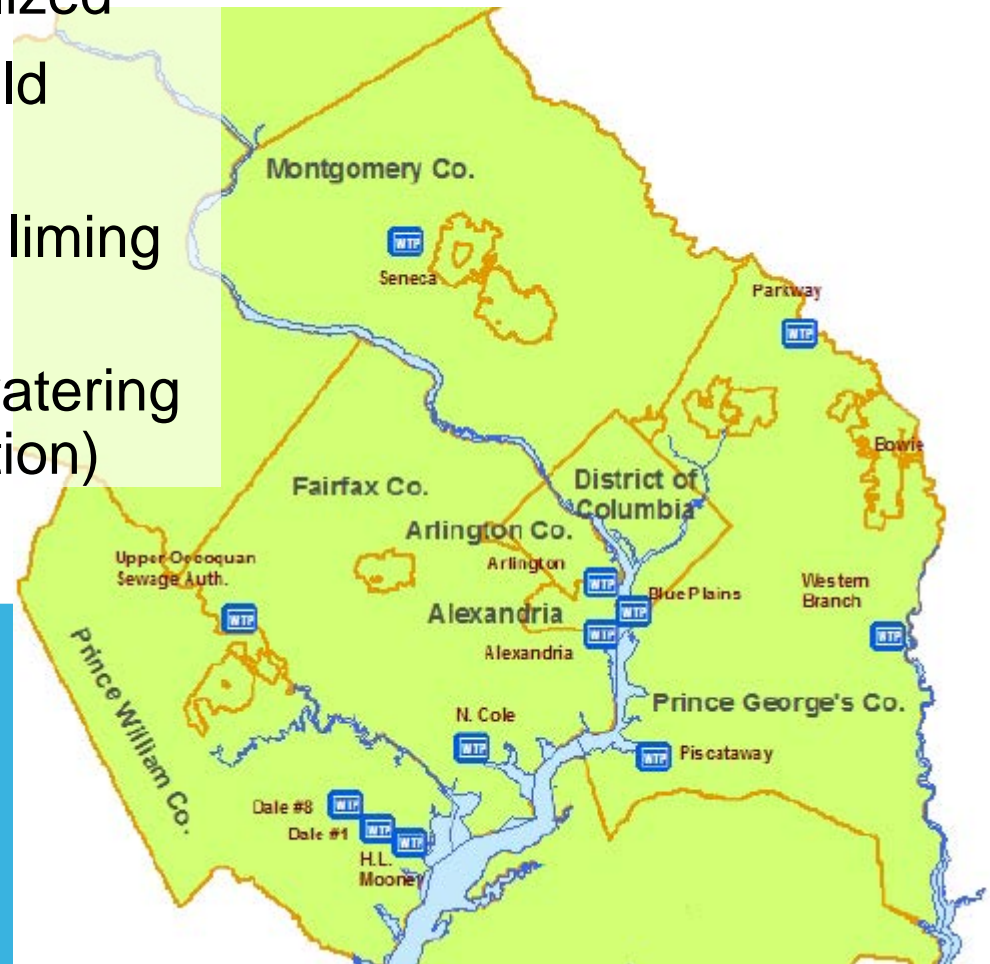
Future planning

WHAT CONSTITUTES A SHORT-TERM NEED?

- Planned or unplanned equipment outages
 - Lack of redundant systems can reduce options
- Unavailability of site (such as construction impacting access to a truck-loading facility)
- Lack of outlets for stabilized or unstabilized material

RESIDUALS HAULING AND PROCESSING

- Delivery of residuals that are:
 - thickened OR dewatered
 - stabilized OR unstabilized
- Processing needed could include
 - Stabilization (such as liming or heat drying)
 - Stabilization plus dewatering (pre- or post stabilization)



DATA GATHERING – MATRIX DEVELOPMENT

- Determining what facilities for solids handling currently exist
- Whether or how outside material could be received
 - Is there a formal receiving station?
 - Or simply someplace where a truck could be offloaded?
 - Thickened and/or dewatered?
- Quantity of available capacity
- Any characteristics that need to be verified before acceptance (such as typical metals content)
- Review of contracts with haulers/land appliers

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2		Biosolids Management Collaboration Inform	
		Question	PWCSA
10		What are permitting and reporting requirements?	The incinerator is heavily regulated. received must be of a quality that will compliance with SSI MACT emissions permit modification to add receiving sludge to VPDES Sludge Management
11		What would be the utility's requirements to set up an agreement to collaborate?	Would like to explore alternatives, in MOU between individual utilities
12		Existing inter-County and inter-agency agreements for emergency response or service?	Other than MWCOG WARN, not sure
13		Existing models - Hopewell permit process, and HRSD memorandum of understanding	PWCSA has obtained a permit to bring cake to Hopewell, however the facility been receiving dewatered cake rece PWCSA may pursue a MOU with HRSD dewatered cake to one or two of thei incinerators.
14		Is there a need to distinguish or handle differently if the material is Digester Sludge/TWAS/Primary Sludge?	To be consistent with our operating e an undigested mixture of WAS/prime would be preferred. Receiving prima digested sludge would require evalu including BTU/lb
15		What range of %TS material (deliver/receive)?	4%-6% (may be more flexible)
		Where will it be (received to/sent from)?	The ability to haul liquid sludge from

WHERE DO WE GO FROM HERE?

- Continue to refine matrix
- Review of completed regionalization and other relevant studies to build upon previous work
- Determine whether a “mutual aid” type of arrangement is acceptable
 - Use NCR-WARN as the base agreement and supplement with a biosolids amendment?
- Determine whether modifications can be made to existing facilities to more readily receive outside material
- Discussions with permitting agencies to ensure they are looped in
- Is a regional facility for biosolids handling feasible and desirable?