

Nutrient Harvesting – Public/ Private Partnership (P3)

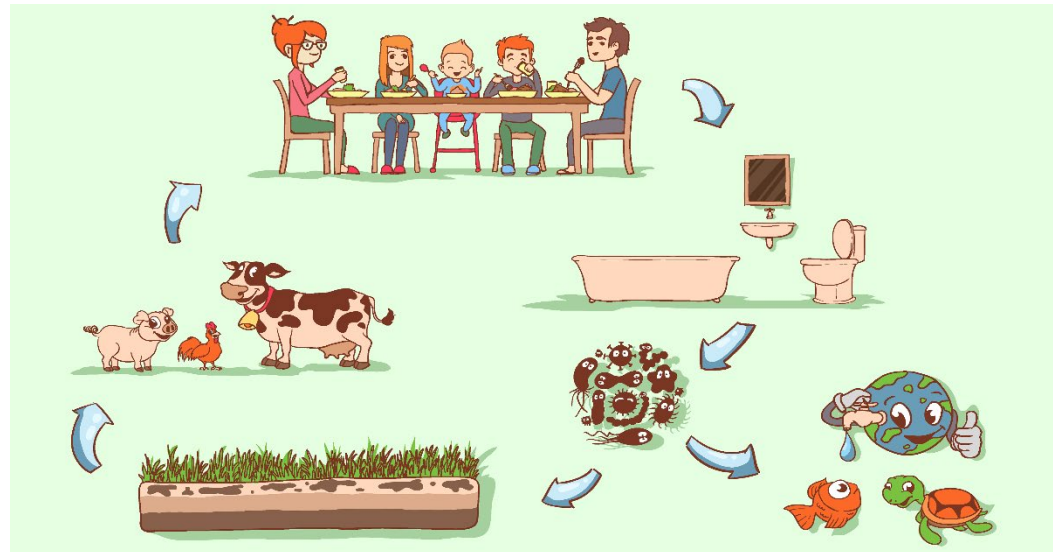


Why P3?

- Method to finance a lower priority capital project
- Non-compliance project
- New technology that is not part of the core business
- Allows City (Charlotte Water) to shift risk to private sector

Sustainability/ Environmental Benefit

- Closes the loop on phosphorus use and reuse (Circular Economy)
 - Displaces phosphorous that would otherwise be mined from the ground
 - Allows targeted use of phosphorous as a fertilizer where specifically needed
 - Supports overall biosolids management philosophy



Technology Locations



High Level Business Case (Most Conservative/ Worst Case)

	Current	To Be	Savings/ Cost
Chemical Cost	\$1,040,000	\$400,000	\$640,000
Lease	\$0	\$900,000	(\$900,000)
Product Revenue	\$0	\$400,000	\$400,000
		TOTAL ANNUAL BENEFIT	\$140,000

This does not include benefits from:

- Reduced sludge disposal costs, reduced energy use
- Gained experience in using P3 procurement
- PR benefits from a high profile circular economy project
- Synergy with biological process

Next Steps/Questions(?)

- Council adopts findings
- Procure, business case, negotiate

