Current Situation

The District of Columbia has to make decisions about how to handle municipal solid waste over the next twenty years.

In order to do so legally and effectively, DPW must comply with the requirements of the DC Sustainability Plan and also be prepared to handle a projected 250,000 increase in population over the next twenty years.

As well, DC has set goals to reduce it's climate footprint and other air, water, land footprints (natural infrastructure).

DC should benefit from the economic value of handling residual assets and have them accrue in DC rather than outside the jurisdiction.

Solution

Therefore DPW is developing an analytic framework that handles substantive data and information that defines the current DC solid waste management system and compares it, using the same data variables, alternative designs for a solid waste management system that accounts for current technologies, regulations, City mandated actions, and environmentally preferable actions.

These design elements are not now fully integrated into the current system because they were not required at that time. DPW will have the ability now to consider these variables in considering options.

DPW is going to map their strategy from the process of solid waste management rather than just from the materials we collect.

Current strategies include singular acts such as limiting Styrofoam. DPW is going to use a more systematic approach to decision making. We are taking an executive management approach to the entire system.

DPW is including these features of natural capital asset management with financial information as part of the due process in evaluating technology choices and understanding their environmental, economic and political outcomes.

Below is snapshot of what that analytic tool DPW will use.

SAMPLE	Scenario: BASELINE	Desideral Asset													
NCAM		Tonnage	Air Assets Used (Tons)		La	nd Assets (Ac	res)		Water A	Water Assets		Sustainability Factors			
FORMAT			Residual Management			Opera	itional	Residual Management	Operational (Gallons)		Residual (Gallons/Tons)	Airshed Tons/Ton	Acres/Ton	Gallons/ Ton	
			Criteria Pollutants	Hazardous Air Pollutants	Greenhouse Gases	Infrastructur e Emplacemen t	Safety/Buffer / Storage	Residuals Emplacemen t (Solid, Hazardous, C&D)	Process/ Supply (Drinking)	Process/ Supply (Industrial	Residuals Emplacement (Industrial and Sanitary Discharge, Runoff, Other)				
uro	Phase I: Load Creation	000.000													
nio	Filler I. Load Creation	500,000													
18															
								1							-
JUST	Phase II: Load Collection														
	(includes truck trips from source to transfer station)														
1	Residential Collection Trips	300,000	150	10	5,000							58.1			
	Residential Recycling Trips		L												L
ADE	Leaf Collection Trips				-										
TD	Other DC Agencies Trips							1							
)P	Citizen Drop Off Trips														
	Commercial Haulars (DC Transfer														
EXAMPLE	Stations)														
	Commercial Recyclers														
OR	Commercial Haulers (Private Transfer Stations)														
ILLUSTRATION															
	Phase III: Load Diversion (includes trucks trips from transfer station, operation of receiving facility; does not include subsequent transport or processes)														
	DC Transfer Station	300,000	5	0.5	300	10 (sort facility)	100 (parking)			20,000 (hosing/ cleaning)		0.001	0.00036	0.066	
	Private Transfer Station														
	Waste-to-Energy (Existing)	100,000	100	5	5,000	10	10		2,000	15,000		19.58	0.0002	0.17	
	Biomass Processing Facility (Existing)	100,000	125	3	5,500	15	15	<u> </u>	2,000	2,000		7.63	0.0003	0.04	
	Energy Development (Local)	X		0	0,000	10	100		2,000	0,000		1.00	0.0022	0.14	<u> </u>
	Recycling Plant (Local)	х													
	Biomass Processing (Local)	X							L	ļ					
	Phase IV: Final Disposition		-					l							-
	(includes truck trips from transfer station, operation of receiving facility)														
	Deside al Associate to Londell	F0.000											0.0007		
	Waste-to-Energy Residuals (Asb)	30,000						6					0.0001		-
	contract of Anticipy Accontinues (1991)					I							r		<u> </u>
						(Above: N	atural Car	ital "Use R	ato" is be	ing comp	ared across sys	tem proc	ess and t	echnology	7 facto
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	Totel							<u> </u>	-						⊢
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