

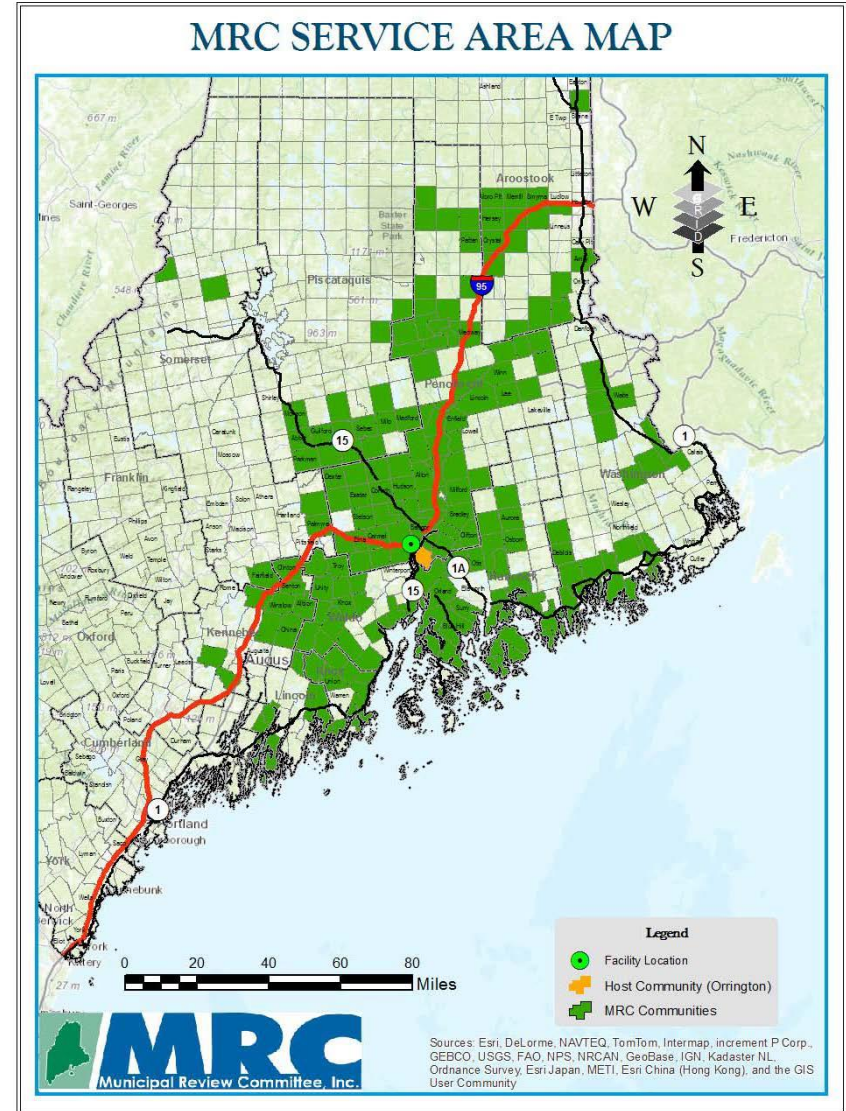
Coastal Resources of Maine, LLC

MSW Recycling Facility

An Innovative Approach to a Mixed Waste Processing Facility

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SWANA Old Dominion Chapter
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By Bob Gardner, PE, Senior Vice President

History of Mixed Waste Recycling Processing Facilities

- Generally, technology has not been issue
- Problems with the business deals
 - Insufficient or no tip fee
 - Unsecured end product markets
 - Financing issues
 - Overstated recovery
 - Overstated revenue
 - Poor quality end-products

Average Tip for US Landfills (2016)

Source: EREF

Region	States	Average Tip Fee	Std Dev	Min.	Max
Pacific	AL, AZ, CA, HI, ID, NV, OR, WA	\$61.20	\$26.43	\$24.00	\$108.00
Northeast	CT, DE, ME, MD, MA, NH, NJ, NY, PA, RI, VT, VA, WV	\$58.20	\$21.74	\$17.00	\$114.00
Southeast	AL, FL, GA, KY, MS, NC, SC, TN	\$44.46	\$25.06	\$19.75	\$119.00
Mountains/ Plains	CO, MT, ND, SD, UT, WY	\$43.38	\$21.47	\$21.00	\$110.00
Midwest	IL, IN, IA, KS, MI, MN, MO, NE, OH, WI	\$39.64	\$16.46	\$14.47	\$85.00
South Central	AR, LA, NM, OK, TX	\$36.34	\$20.63	\$16.00	\$72.00
National Average		\$48.27	\$23.09	\$14.47	\$119.00

MRC Critical Needs

- MRC Approach and Guidelines
 - No municipal funds to be invested
 - “Future Proof” and cutting edge
 - 40-year planning window, 15-year contract term
 - Higher recycling rate and organics recovery
 - Contingency for bypass waste disposal
 - Target capacity, 150,000 tpy, but scalable
- PERC projected significant increase in tip fees in 2018 and beyond due to decreased electrical rates per their PPA.

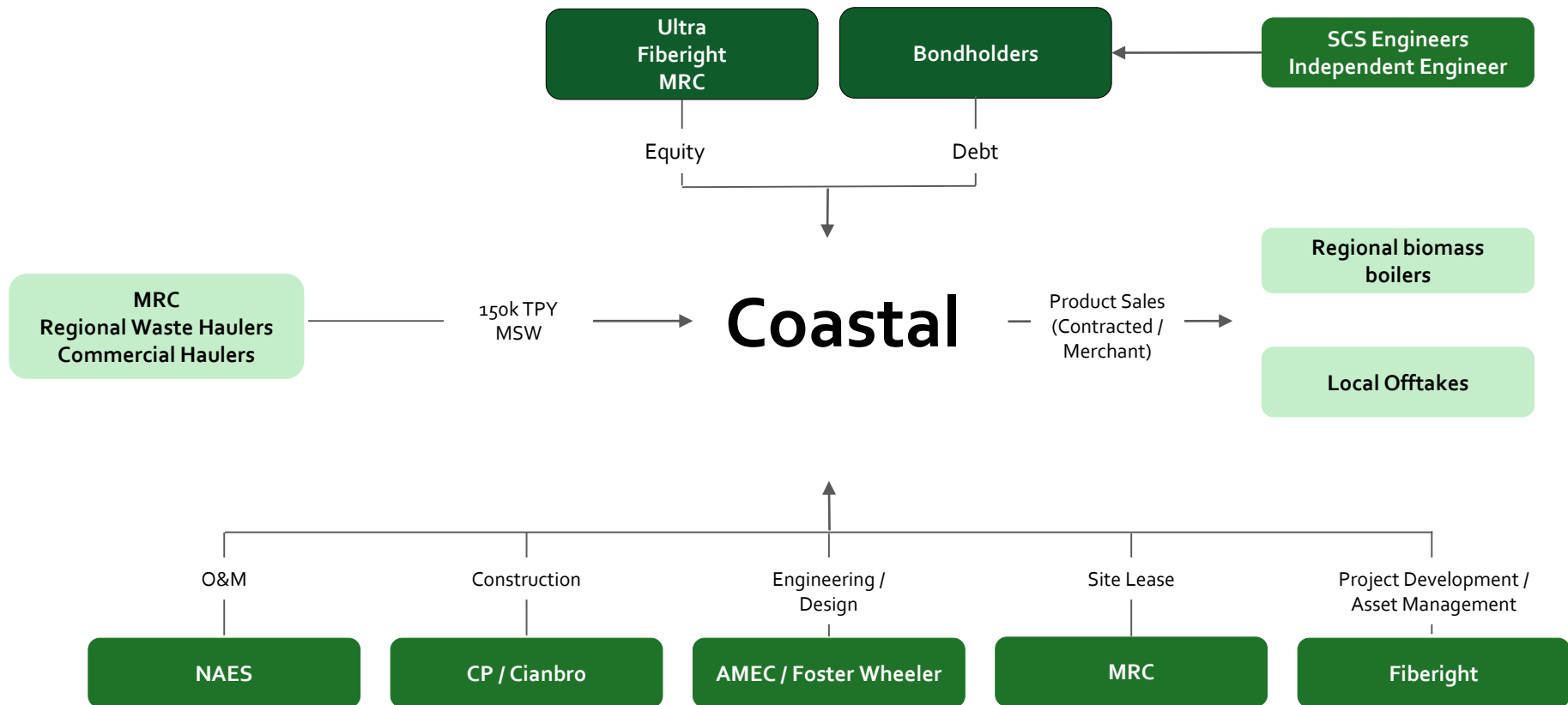
MRC Procurement Process

- MRC issued RFEI in 2013, 15 responses
- MRC selected Fiberight/Coastal Resources of Maine, LLC
- Counter lawsuits filed between MRC and PERC in 2014. Settlement reached, dismissed without prejudice.
- Some project delays occurred as a result due to uncertainty.

Overview of Coastal/Fiberight

- Coastal Resources of Maine, LLC (the “Company” or “Coastal”) is a limited liability company
- Owner/Developer: 100% owned by Fiberight LLC (“Fiberight”) and Ultra Capital RAV I 2016, LLC
- Demonstration facility located in Lawrenceville, VA (“Demonstration Facility”), 10,000 hours of operation

Project Overview - Participants and Structure

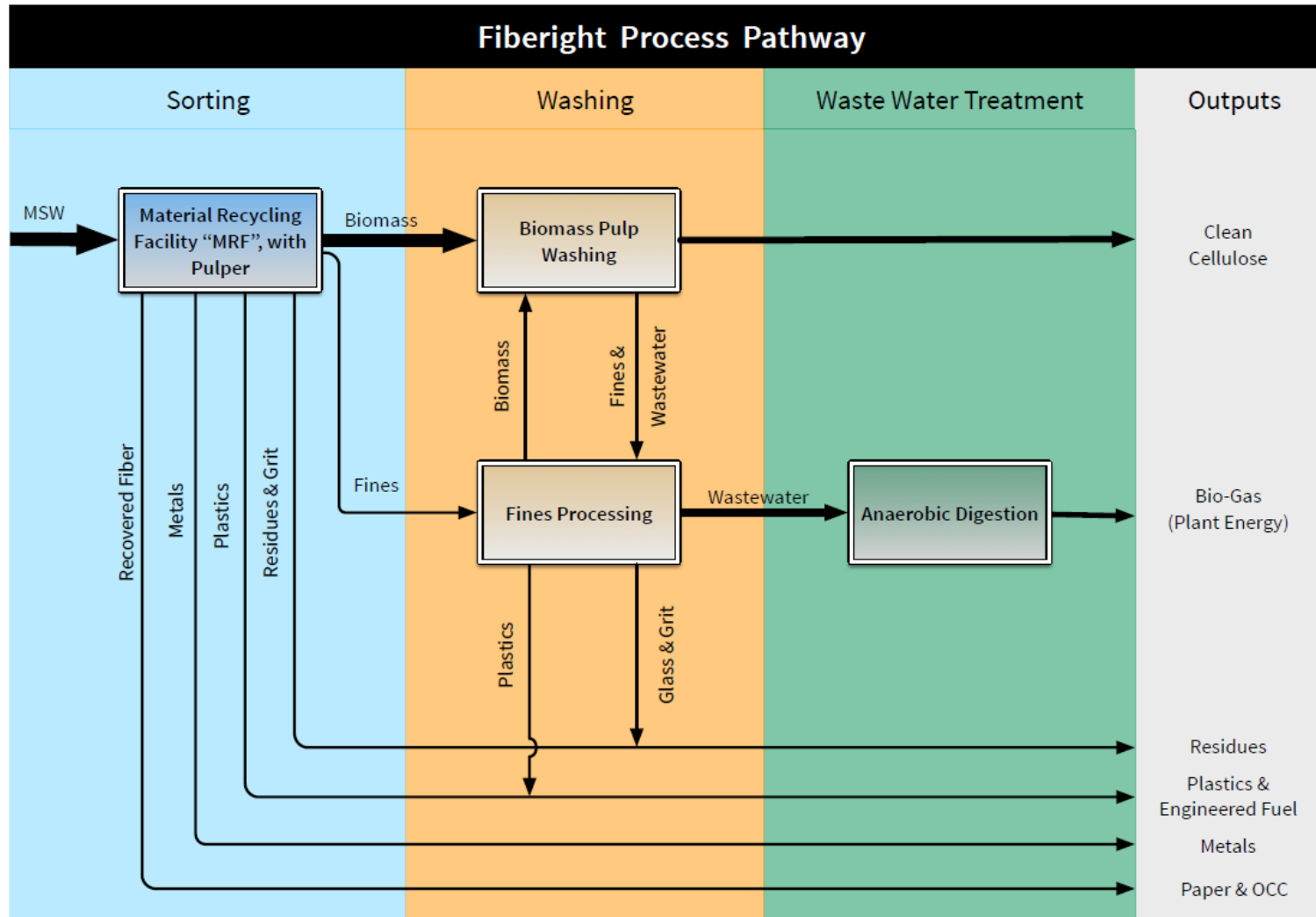


The economics of the Facility depend in major part on the total MSW delivered to the Facility, the operational and capital costs required to run the Facility, and the offtake and disposal of products from the Facility

Project Highlights

- 87 acre property
- 144,000 sf facility
- Project Capex: \$70M
- Tip Fee \$70/ton
- Maximum capacity: 180,000 tpy
- Initial processing: 148,000 tpy
- Recover 80% of incoming waste stream
- 20% residuals to landfill or used as ADC

Simplified Process Overview



Coastal's Formula for Success

- Long-term waste stream supply (MRC communities)
- Contracted tip fee, **\$70/ton**, with escalators
- Solid financing – Equity and Bond Financing
- Secure end-product markets
 - Recyclables
 - Cellulose
 - Engineered Fuel
 - AD gas
 - Residuals (ADC)
- Secure disposal contract for residual and contingency disposal

Summary of SCS's Independent Stress Tests Scenarios

Scenario	Description	Volume of Waste Deliveries (% of Base Case)			Recovered Materials Prices			% Increase
		Contracted	Additional Waste	SSR	Recovered Recyclables	Cellulose	Engineered Fuel ¹	O&M ²
A	Base Case	100%	100%	100%	Current Market	Contracted	Market	-
B	Increased Operating Expenses	100%	100%	100%	Current Market	Contracted	Market	10%
C	Reduced Additional Waste	100%	50%	50%	Current Market	Contracted	Market	-
D	No Additional Waste	100%	--	--	Current Market	Contracted	Market	-
E	Conservative Commodity Case	100%	100%	100%	1 Std. Below Long-Run Average ³	Contracted	50% of Market	-
F	Commodity Low Case	100%	100%	100%	Historical Lows ⁴	Contracted	0% of Market	-
G	Aggregate Worst Case	100%	--	--	Historical Lows ⁴	Contracted	0% of Market	10%

Market O&M Variables Considered

- Tip Fees – secure and constant
- Additional Waste – 0%, 50%, 100%
- Recyclables - \$77.17 - \$123.09/ton
- Cellulose - \$0 to \$24.34/ton
- Engineered fuel - \$0, \$15.68, and \$31.37/ton
- Operating expenses, +10%
- Major maintenance reserve fund \$400k/year



Where can these facilities work?

- Relatively high tip fee market
 - Future bolt ons (e.g. hydrolysis, plastic film upgrading) will broaden addressable market
- Solid end-product market
 - Recyclables
 - Cellulose
 - Engineered fuel
 - ADS
 - Natural Gas (RINs)
- Strong recycling regulatory framework

Status

- Facility begin construction in 2017
 - Site work
 - Utilities
- Bond financing secured in December 2017
- Building erection began in November 2017
- Tough winter – delayed building erection
- On schedule for full operation by the end of the year
- Facility testing begins in 3rd quarter of 2018



