

CSWD: ACT 148 & SWIAC

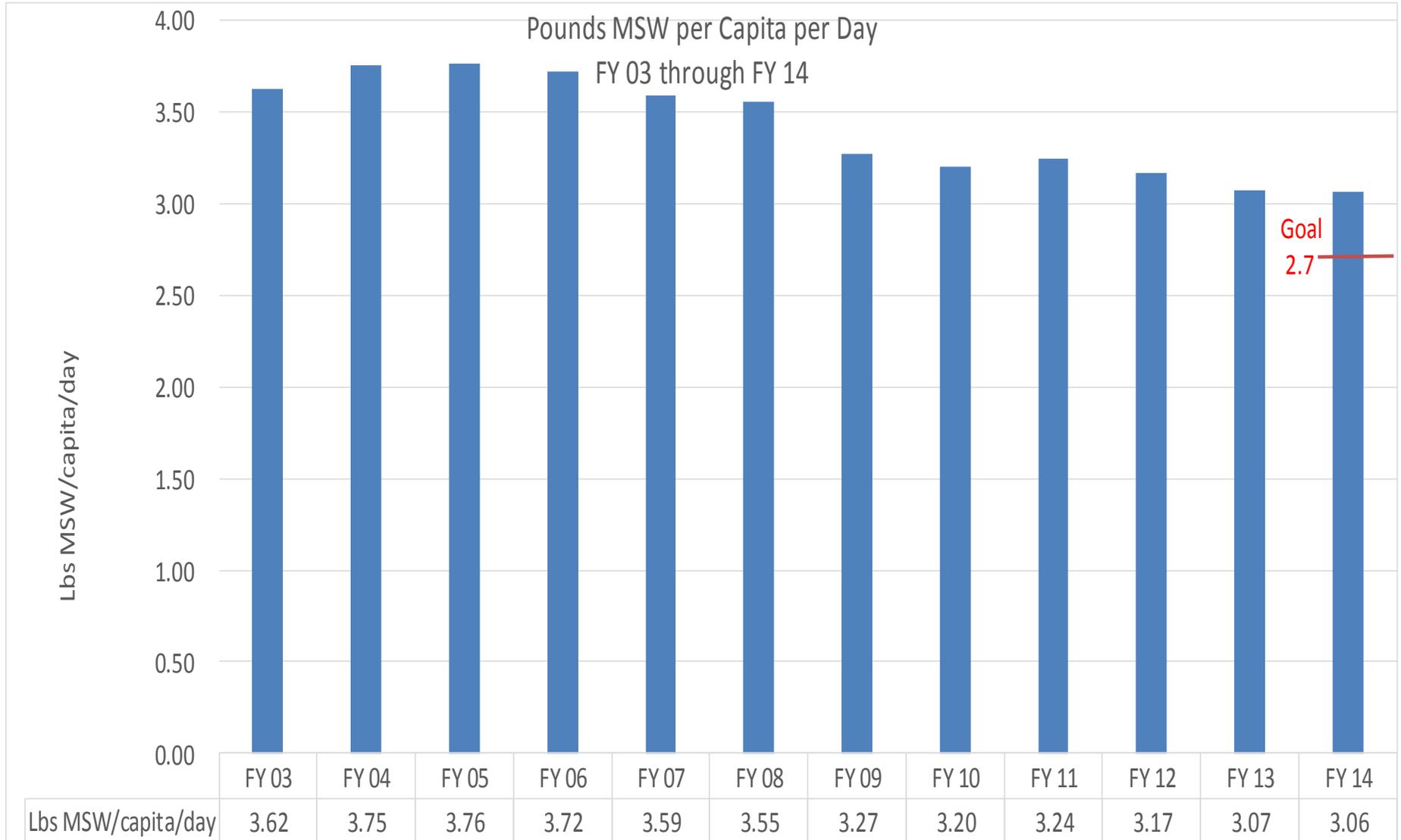
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House Natural Resources & Energy

2/18/15

CSWD Issue

- Current CSWD 2015 = 91,000 tons/year of MSW
160,000 people
3.1 lbs/person/day
- Target CSWD 2020 = 82,000 tons/year of MSW
166,000 people
2.7 lbs/person/day
- Need to reduce MSW by 9,000 tons/year (~10%)
over 5 years



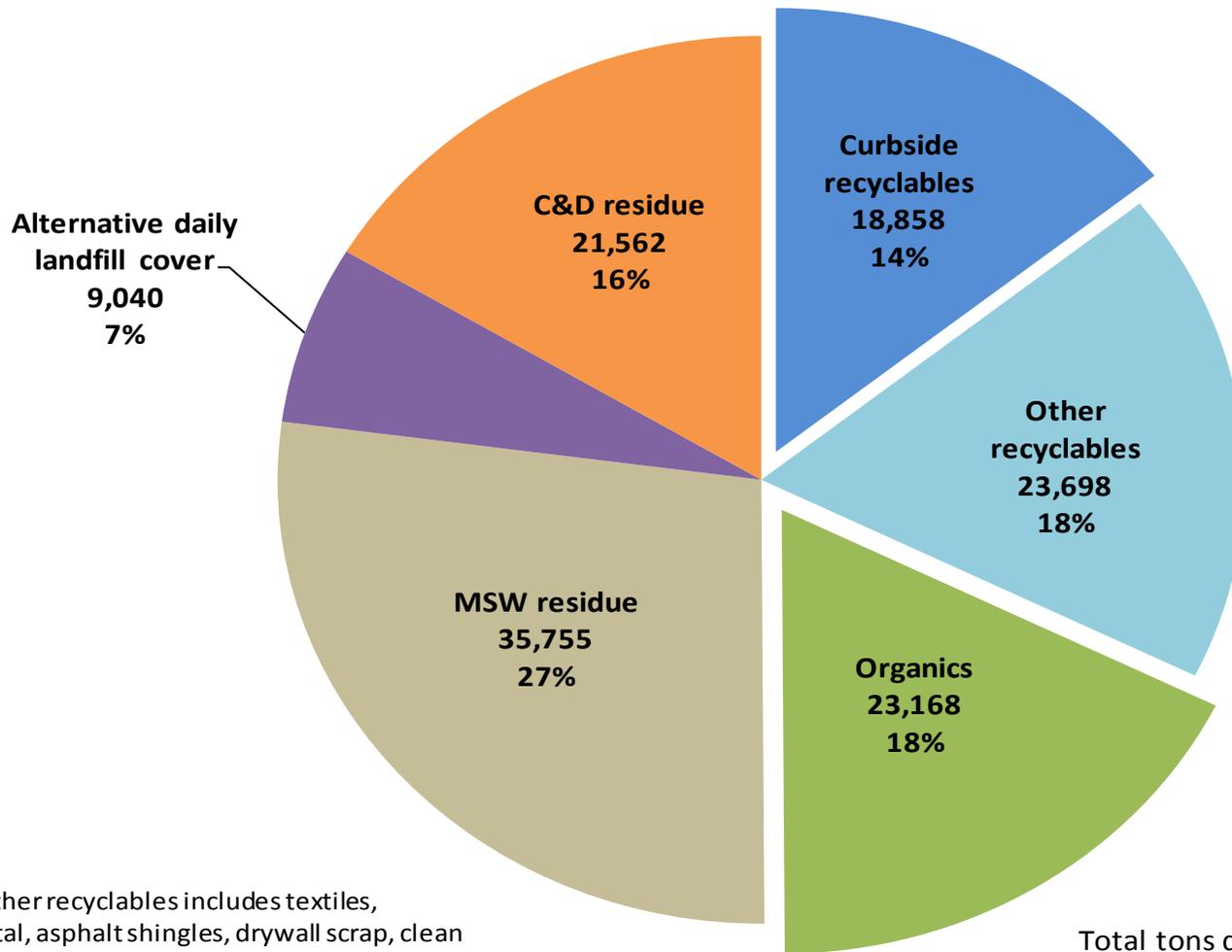
Sources of Reduction

- Where could the 9,000 tons of MSW that needs to be reduced within CSWD come from?
 - The 18,800 tpy of curbside recyclables landfilled today
 - The 23,000 tpy of biodegradable organics landfilled today
 - Less packaging material

COMPONENTS OF CSWD MSW & C&D DISPOSED

Estimated Percents & Tons per Year

Based on 2012 Vermont & 2010 CSWD Waste Composition Studies & FY 2014
CSWD Disposal Data



NOTE: Other recyclables includes textiles, scrap metal, asphalt shingles, drywall scrap, clean wood, plastic bags, electronics, and hardcover books.

Total tons disposed = 133,430

What is it going to take?

- More promotional and education efforts*
 - More carts/bins*
 - More enforcement*
- * - to be funded with CSWD's Fee on trash disposed
-
- State – District – Hauler – Generator Cooperation

Act 148 SWIAC Report

- Reluctantly agree with 25% grant program
- Agree there needs to be some upfront \$ for planning and feasibility studies in “gap” areas
- Agree that grant \$ available for private and public entities after meeting “real world” criteria.
- Desire that grant \$ be available to all qualified recycling projects

Act 148 SWIAC Report (2)

- Funding source preferences:
 - 3.5% Service Fee on trash & recycling services
 - Bag Tax
 - Getting \$ from current Bottle Bill will be controversial and messy but maybe worth exploring – not simply taking the escheats

Act 148 - Observations

- Implementing Act 148 will have both increased operational and capital costs
- Larger Solid Waste Districts and Haulers have a better economy of scale
- The cost per ton will be higher in rural areas but many rural areas don't have the economic resources – tough irony

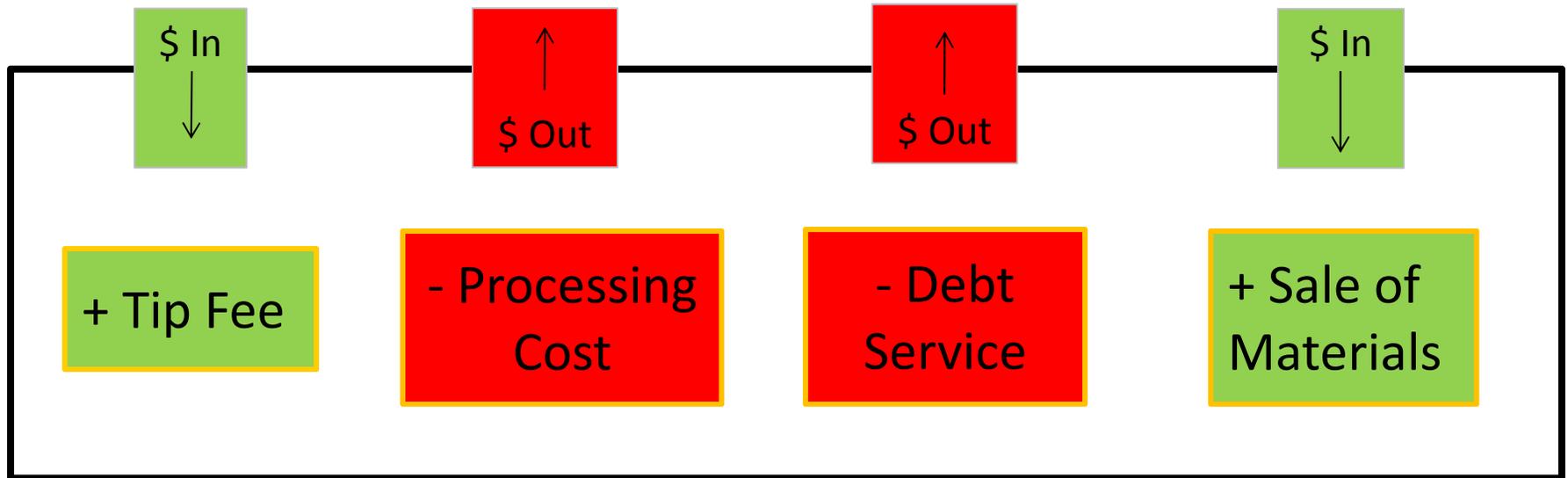
Act 148 – Observations (2)

- There is a certain resentment from the large Districts and Haulers who have already made significant investments on behalf of their residents, businesses and customers to provide additional funding for others
- Sense of not being fair to ask them to pay for others who have not yet taxed or charged their customers at the same level to provide infrastructure and services

Act 148 – Observations (3)

- Suggest to stay the course of Act 148 but be willing to make some adjustments:
 1. No longer require the haulers to imbed the recycling cost into the trash cost
 2. Keep Mandatory recycling and organics diversion
 3. Consider broader exemptions for rural areas where the cost per ton to provide curbside service for mandatory recyclables and organics becomes a certain % over disposal cost
 4. Consider delaying the requirement for Haulers to provide organics collection in 2017 unless there is a receiving /processing facility within 20 miles

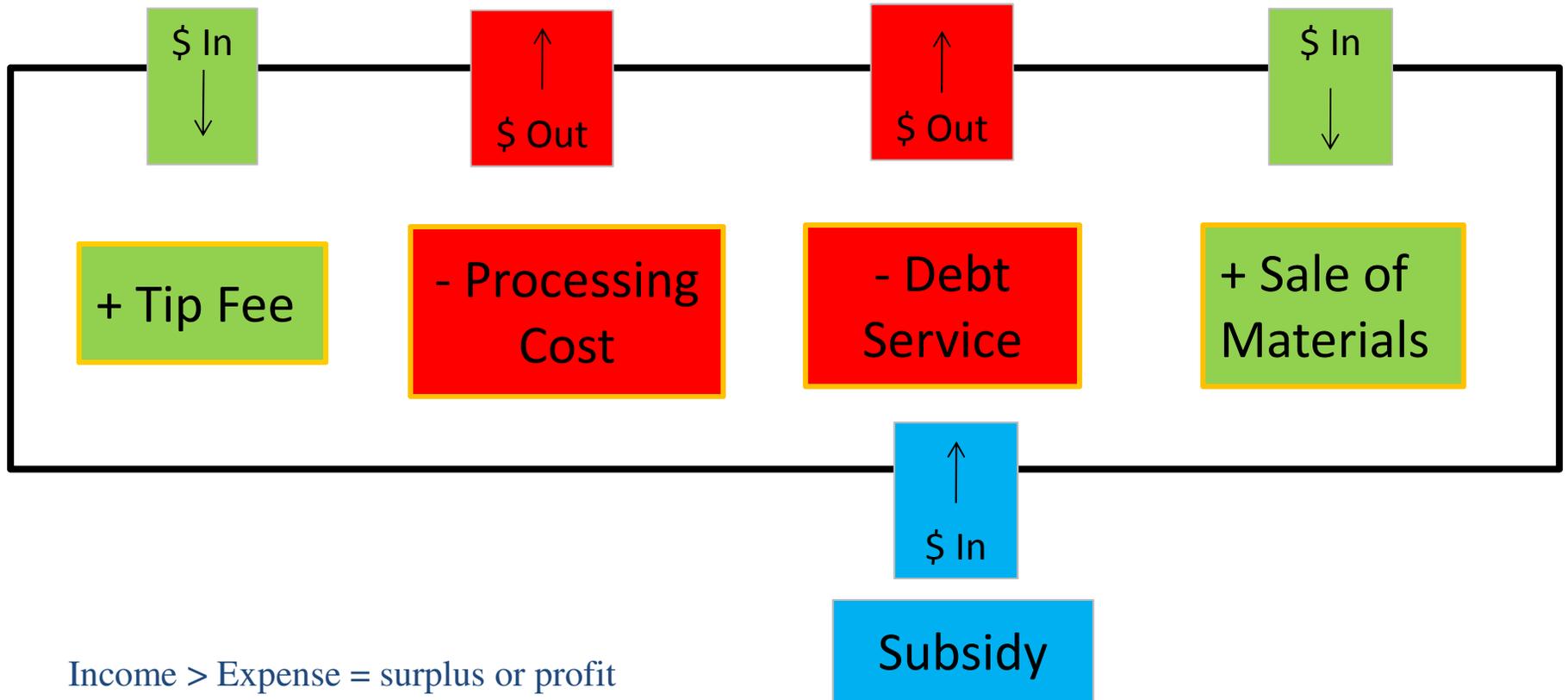
Facility Net Cost =



Income > Expense = surplus or profit

Income < Expense = deficit or loss

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MRF Contract – CSWD Responsibility

- All Capital cost – building, processing and mobile equipment
- Certain operating cost such as oversight, taxes/fees, insurance and glass utilization
- Maintaining a Depreciation/Capital Reserve Fund intended to replace equipment and make building improvements

MRF Contract (2)

- Contractor (Casella) responsibility for all other operational cost such as labor, fuel, materials, maintenance, marketing and facility management
- Revenue from the sale of end products (except glass) are split roughly 50-50 between contractor and CSWD



MRF Owner Costs FY 15

	Cost per Year	Cost Per Ton
CSWD Internal Cost	\$ 295,000	\$ 6.85
Operations Contract	\$ 1,732,470	\$ 40.29
Depreciation/ Capital <u>Reserves</u>	<u>\$ 265,601</u>	<u>\$ 6.18</u>
Total	\$ 2,292,763	\$ 53.32

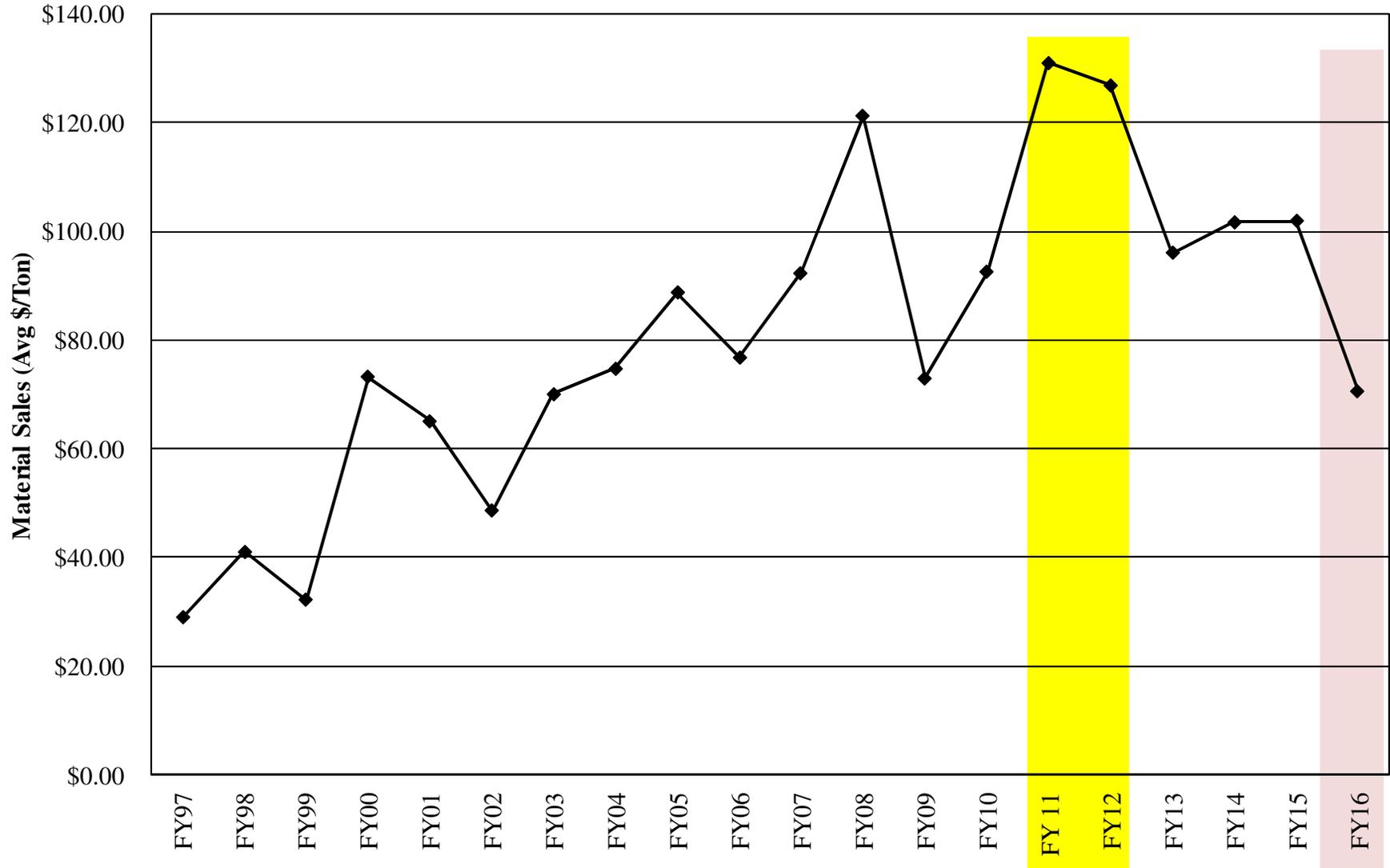
Product Sales \$/Ton	CSWD \$/Ton	Tip Fee \$/Ton
70.00	35.00	\$21.50
75.00	37.50	\$18.57
80.00	40.00	\$15.63
85.00	42.50	\$12.70
90.00	45.00	\$9.77
95.00	47.50	\$6.83
100.00	50.00	\$3.90
105.00	52.50	\$0.97
106.64	53.32	-\$53.32
110.00	55.00	-\$1.97
115.00	57.50	-\$4.90
120.00	60.00	-\$7.83
125.00	62.50	-\$10.76
130.00	65.00	-\$13.69
135.00	67.50	-\$16.62

MRF Tip Fees

- Normally inverse of commodity sales
High Commodity Sales = Low Tip Fees
Low Commodity Sales = High Tip Fees
- Historical CSWD Tip Fees for In-District materials range from charging \$30/ton in 1996 to paying \$10/ton in 2012
- CSWD tries to keep tip fees stable for periods up to a year



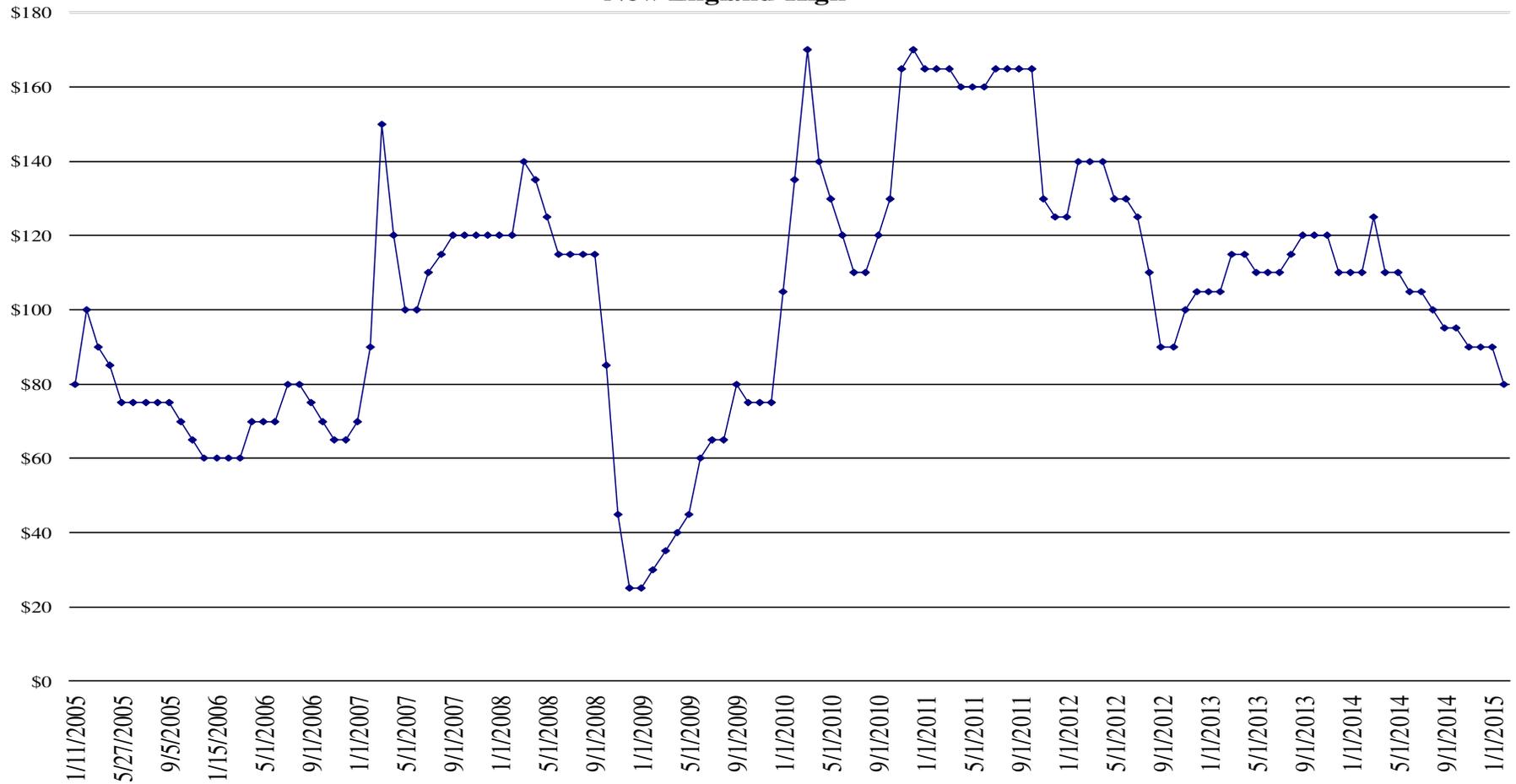
CSWD Materials Recovery Facility Blended Average Price of All Materials





CSWD Materials Recovery Facility - FY 16 Estimate					
Estimated Incoming Tons	44,000			Estimated Outgoing Tons	41,360
	% of Tons	Tons/year	Est \$/Ton	\$/Year	% of \$
FIBERS					
OCC	40.5%	16,751	\$80.00	\$ 1,340,064	45.9%
News	33.5%	13,856	\$40.00	\$ 554,224	19.0%
White Ledger/SOW	0.2%	83	\$155.00	\$ 12,822	0.4%
Mixed paper	1.4%	579	\$45.00	\$ 26,057	0.9%
	75.6%	31,268		\$ 1,933,166	66.2%
		Average \$/Ton	\$ 61.83		
CONTAINERS					
Aluminum - Other	0.0%	0	\$800.00	\$ -	0.0%
Aluminum - UBC	0.4%	165	\$1,500.00	\$ 248,160	8.5%
Glass - PGA	17.1%	7,073	(\$5.00)	\$ (35,363)	-1.2%
PETE	2.5%	1,034	\$250.00	\$ 258,500	8.9%
HDPE Colored	0.8%	331	\$360.00	\$ 119,117	4.1%
HDPE Natural	1.0%	414	\$500.00	\$ 206,800	7.1%
Mixed Plastics	0.8%	331	\$200.00	\$ 66,176	2.3%
Metal - Mixed Cans	1.8%	744	\$165.00	\$ 122,839	4.2%
	24.4%	10,092		\$ 986,229	33.8%
		Average \$/Ton	\$ 97.73		
COMBINED	100.0%	41,360		\$ 2,919,396	100.0%
		Average \$/Ton	\$ 70.59		

**OCC, \$ per Ton
New England High**



Single Stream Recycling in Rural Areas

<u>Item</u>	<u>\$/Ton</u>
MRF Tip Fee	\$11.00
Transfer Station	20.00
Transportation	29.00
<u>Overhead & Profit</u>	<u>7.35</u>
Total	\$67.35

Organics in General

- Higher capital cost per ton than recyclables at MRFs
- Local markets for compost/digestate/electricity versus global markets for recyclables; typically less value per ton
- Anaerobic Digestion will play a significant role for food waste processing

Organics in CSWD

- Invested \$2.3 million into new compost facility in 2011
- Still has capacity for another 3,000 tons/year of food waste
- Anaerobic Digestion will most likely be needed
- All Commercial establishments in compliance with Act 148 timeline