



# Replacing Styrofoam with Washable Lunch Trays: Cost Benefits and Lessons Learned from Elementary Schools in Oak Park, IL

Presentation to Montgomery County School Board
June 2012

#### **Presenter**

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Seven Generations Ahead is a 501(c)3 non-profit organization based in Oak Park whose mission is to promote the development of healthy and ecologically sustainable communities.

"In every deliberation, we must consider the impact on the seventh generation."

-Great Law of the Iroquois



#### **D97 Zero Waste Schools**

### 1 school in 2008-09 Holmes\*

#### 7 schools in 2009-10

Beye\*, Hatch\*, Holmes, Lincoln\*, Longfellow\*, Mann\* & Whittier\*

### 8 schools in 2010-11

Beye\*, Hatch, Holmes\*, Irving\*, Lincoln, Longfellow\*, Mann\* & Whittier



<sup>\* =</sup> grant funding through IL Department of Commerce and Economic Opportunity



### D97 Zero Waste Grant Funding Awarded

DCEO Zero Waste Grant Funding					
	2008-2009	2009-2010	2010-2011		
Beye		\$9,962.00	\$ 9,993.00		
Hatch		\$8,667.00			
Holmes	\$10,000.00		\$ 2,998.00		
Irving			\$ 9,640.00		
Lincoln		\$9,997.00			
Longfellow		\$9,985.00	\$ 3,807.00		
Mann		\$3,068.00	\$ 3,220.00		
Whittier		\$2,910.00			
D97 TOTAL	\$10,000.00	\$44,589.00	\$ 29,658.00		

Other Zero Waste grant funding for 2008-09: \$7,500 and \$2,500

TOTAL GRANT FUNDING \$94,247.00



## Zero Waste Planning and Implementation

- Form a Zero Waste team
- Conduct a waste assessment
- Establish goals and strategies
- Implement and educate
- Communicate and excite
- Measure results





### **Zero Waste Goals**

- > Eliminate waste at its source
- Increase recycling
- Convert food scraps to compost
- > Teach about sustainability
- Start the journey toward Zero Waste





### **Source Reduction**

Activities that prevent the generation of waste material at the source

- replace lunchroom disposables with reusables
- ➤ 2-sided copying policy
- > one note home per family
- > waste free lunches
- ➤ and many more...









### Recycling

"Recyclable" means products or materials that can be collected, separated, and processed to be used as raw materials in the manufacture of new products. A school might already be recycling paper but does it recycle:

- >milk cartons
- **>**ink cartridges
- > steel, aluminum, plastic, glass
- ➤ light bulbs





### **D97 Composting**



Tumbler-Beye







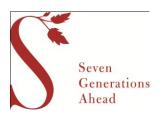
3 Bin System-Hatch



Earth Tub-Holmes



Hauled off site-pilot at Lincoln and Irving



### **Generations** Reusable Lunchroom Purchases

- Reusable trays and utensils
- Tray carts, drying racks, silverware, etc.
- Dishwasher
- Buckets and other supplies for lunchroom sorting into compost, recycling, liquids and landfill)





## Trays Disposable vs. Compostable vs. Reusables

	Disposable	Compostable	Reusable
Initial cost	\$	\$\$	\$\$\$
Long term cost	\$\$\$	\$\$\$	\$
Convenience	high	medium	medium
Sustainable	No	Maybe	Yes



## D97 Lunchroom Sorting Station and Kitchen Equipment













#### **D97 Dishwasher**





**Operating Cycles** 

Wash time (seconds) 2 settings

(70, 160)

Dwell (seconds) 5

Rinse time (seconds) 5

Total Time (seconds) 2 settings

(90, 180)

**Capacities** 

Trays per hour 210

Water Consumption / Requirements
Gallons per hr. (Max. use) 27 gal.
Gallons per cycles 0.9 gal.



## D97 Dishwasher Installation Requirements





**Dimensions / Shipping** 

Width 24 1/4"

Depth 27 1/2"

Height 52"

- Access to water supply
- Access to electricity
- Access to a floor drain (as required by Illinois code)



### D97 Actual Savings 2008-09 and 2009-10

District Savings on Lunchrooms (5 schools) \$19,734.99

+

District Savings on Paper (8 schools) \$6,249.00

TOTAL ACTUAL SAVINGS = \$25,983.99



### D97 Savings Reusable Lunchrooms

2008-2009 1 school switched to a reusable lunchroom

2009-2010 4 schools switched to reusable lunchrooms

2010-11 5 schools continued with reusable lunchrooms

2011-12 5 schools continued with reusable lunchrooms

Savings of approximately \$3,950 per school per year Savings of \$ 19,750 for the District per year



### D97 Savings Reusable Lunchrooms

Actual District savings 2009-10

\$1,087.66

Actual District savings 2010-11

\$18,647.33

Estimated District savings 2011-12

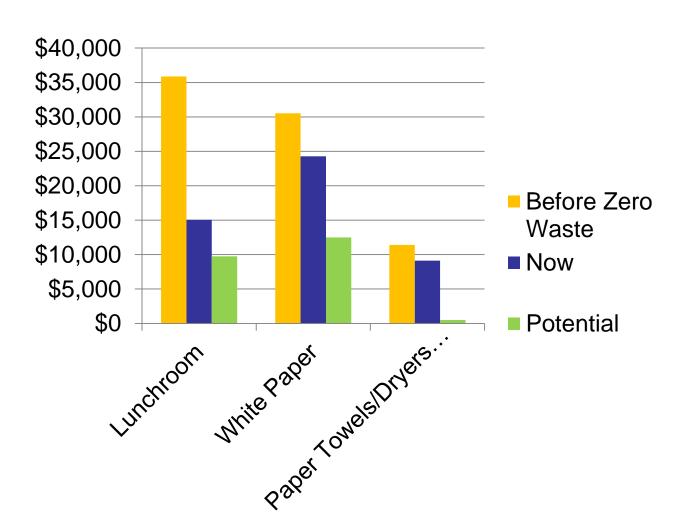
\$19,750.00

\* based on not needing to order trays and sporks

### DISTRICT SAVINGS TO DATE ON 5 LUNCHROOMS \$39,484.00



#### **D97 Costs**





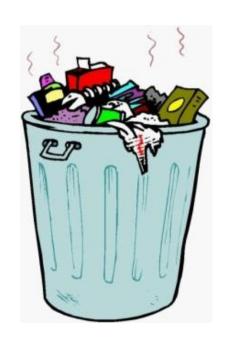
## D97 Zero Waste School Participation

	Reusable Lunchroom and Composting	Hand Dryers	Effective 2-sided Paper Policy
Beye	Yes	4 installed 2009-10 8 installed 2010-11	In process
Hatch	Yes		In process
Holmes	Yes	6 installed 2010-11	In process
Irving	Yes (composting)	16 installed 2010-11	In process
Lincoln	Yes		Yes
Longfellow	Yes	4 installed 2009-10 9 installed 2010-11	In process
Mann		5 installed 2009-10	Yes
Whittier		6 installed 2009-10	Yes
D97 TOTAL	5 schools	6 schools	8 schools implementing policies



### Talking <del>Trash</del> Landfill

Help students and staff change the way they think about trash. Change the image from that of a big smelly black bag you don't want to think about to a challenge in conserving resources and diverting from the landfill.

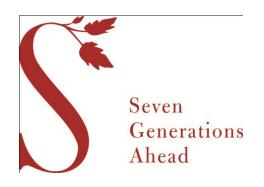














#### **Contact Us**

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