The Skaneateles Lake Watershed Composting Toilet Project

Ten Years of Alternative Toilet Technology in Practice

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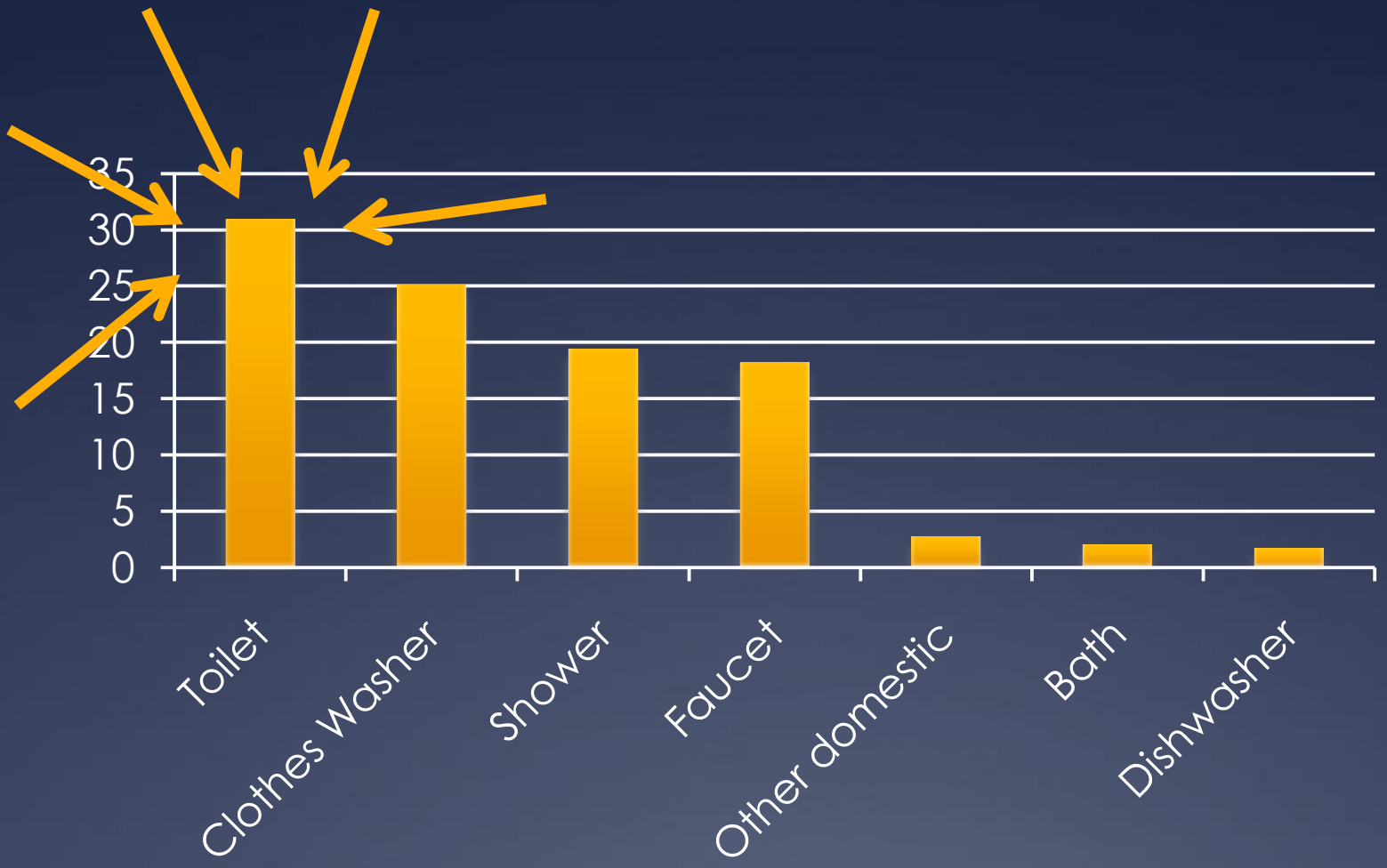
Domestic Water Use



Where are the alternatives?

How effective are they in managing household sewage waste?

What types of challenges do they present to users?


Skaneateles Lake
Lake/watershed ratio = 14/59 square miles
315 feet deep
424 billion gallons of water
12.4 billion/year used as drinking water by the City of Syracuse

Pail Service (1908-1998)

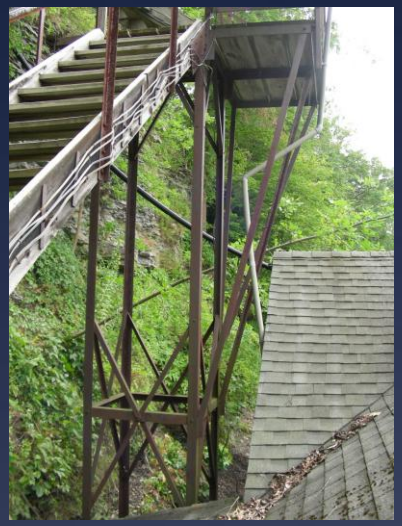
- Free, weekly pick-up of sewage pails
- Long-standing norm

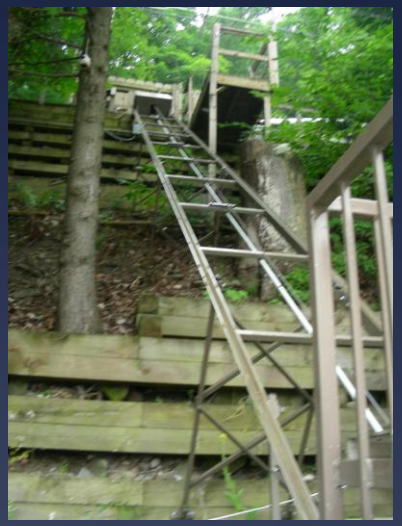
But…

- Technical challenges
- Operational costs
- Hiring policy change

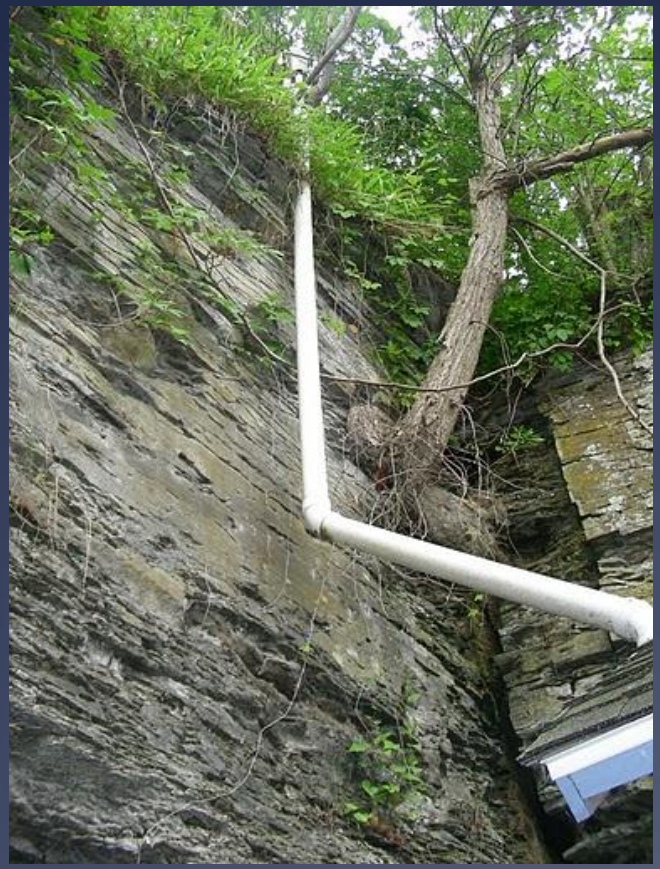
Small Sites

Restricted Access





Steep Slopes, Bedrock



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Technology selection

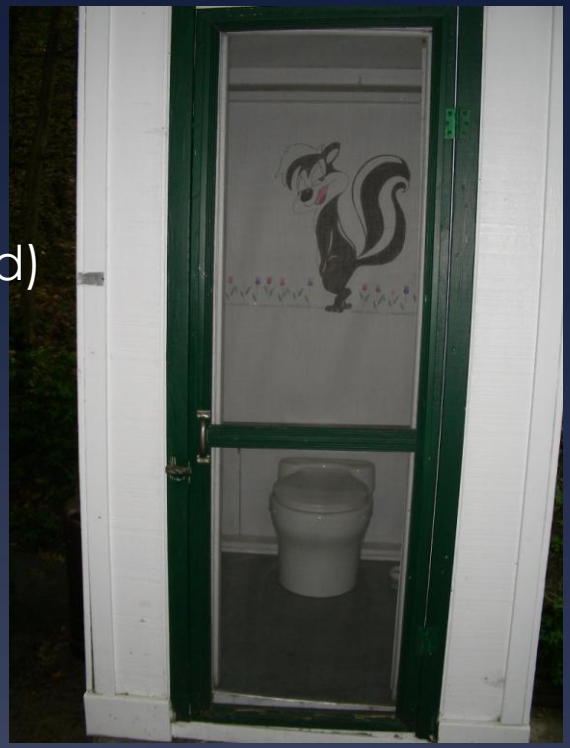
-Pilot study in '99 (5 households, Sun-Mar selected)

Education & outreach

-Community meetings/ letters to residents

Implementation (2 yr. time-line: ~'99-'00)

-74 households (of 114)



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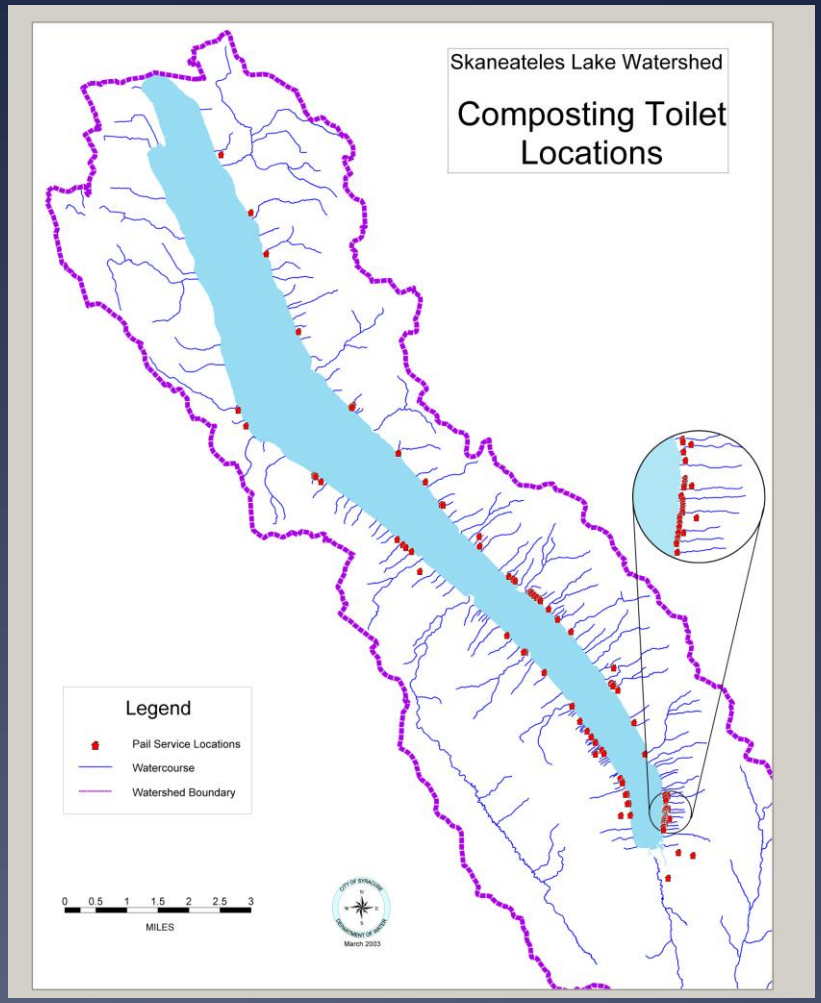
Sun-Mar models
- Compact
- Excel (most popular)
- Excel NE (non-electric)
- Centrex 2000 AF
- Centrex 2000 AF NE

Lake's southern end



To compost…

…or not to compost.

Indoor “plumbing”

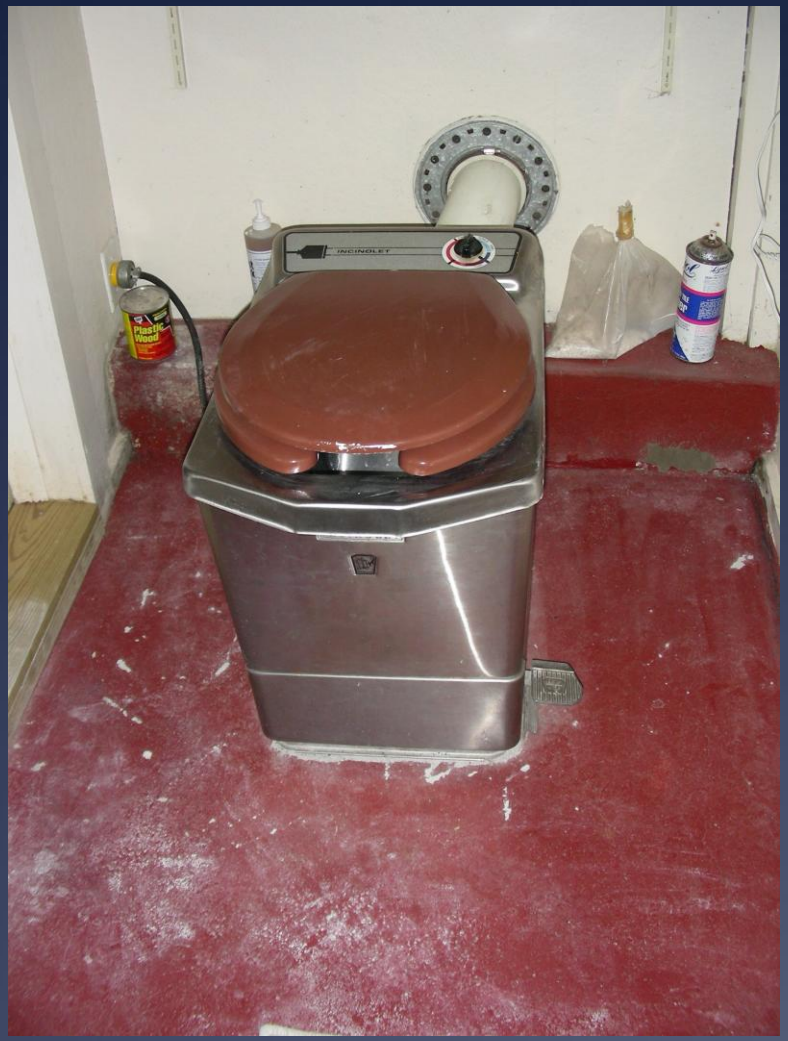
Adaptability

The raw and the cooked.

Raw sewage (pathogenic/nutrient rich)…

…finished compost (inert/nutrient rich).

Antibiotics = anaerobic conditions



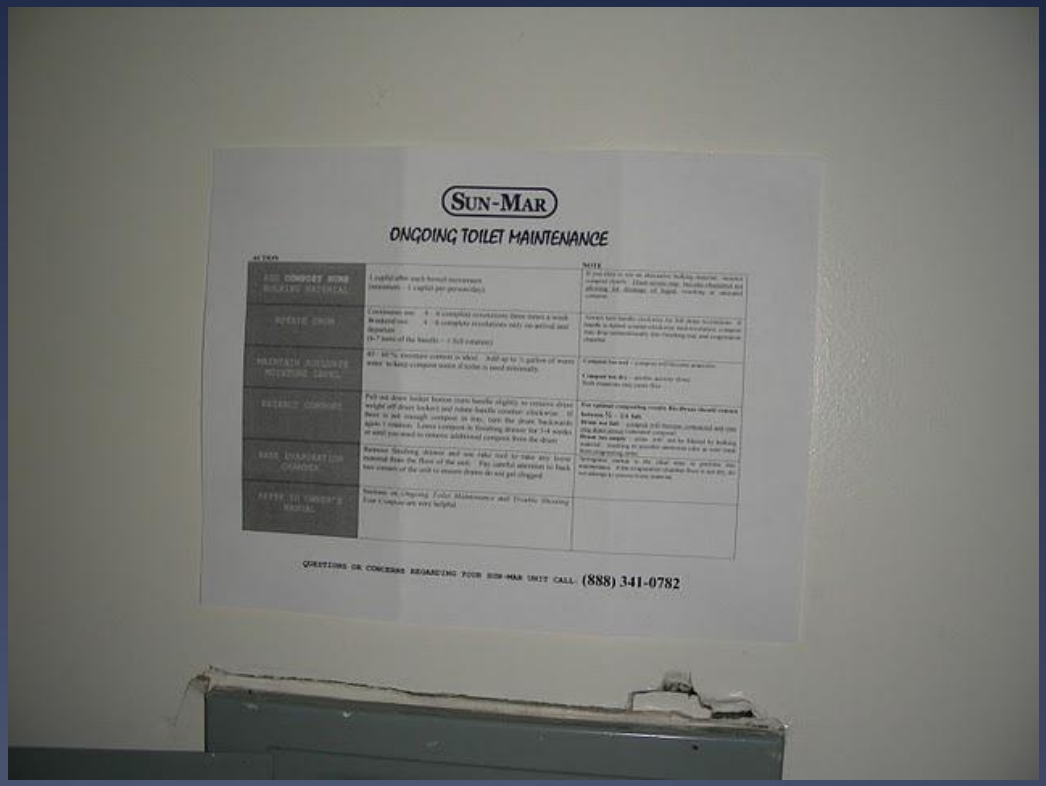
…the *Incinulet*.

"Like getting up on a washing machine"

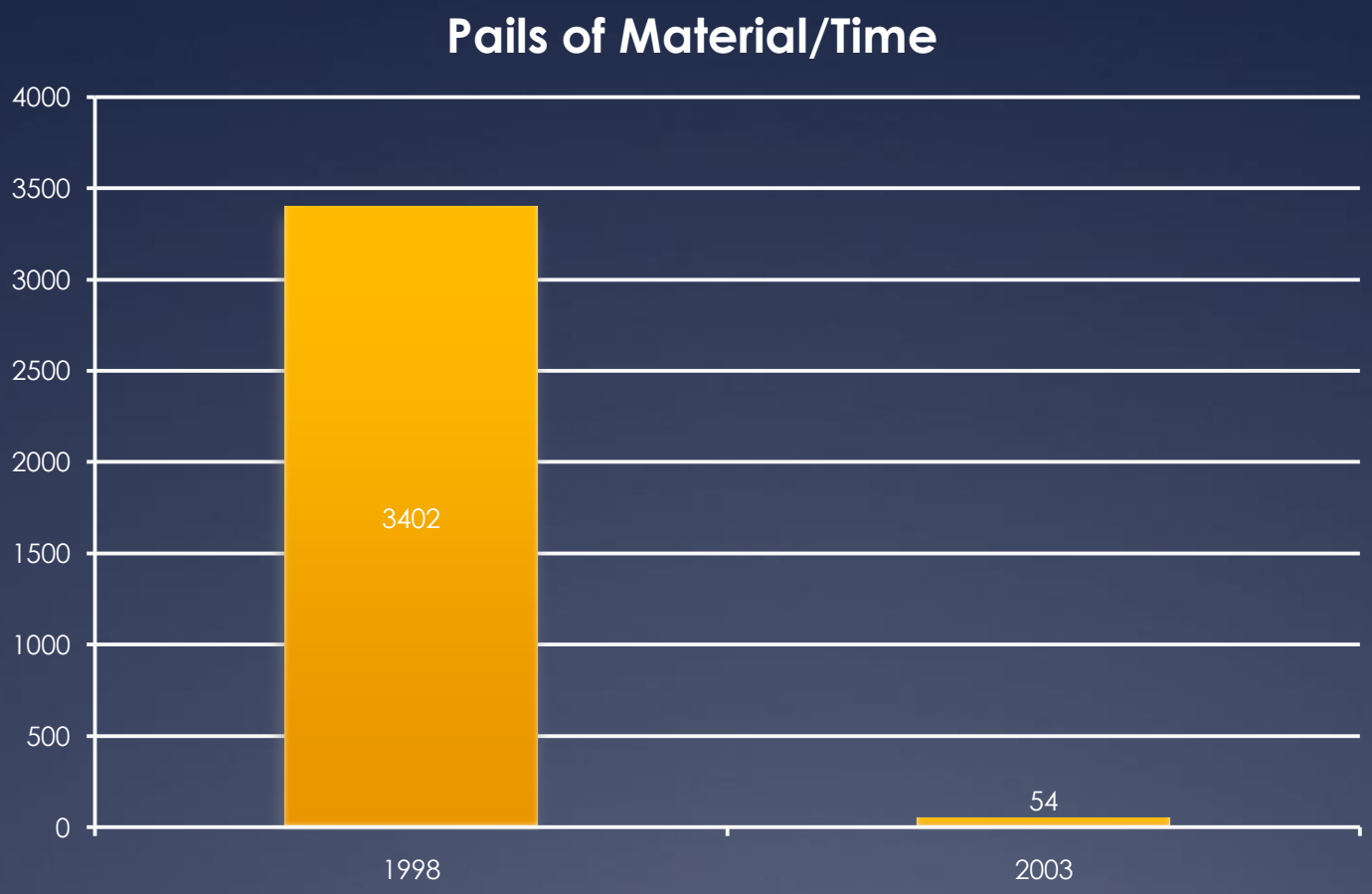
Liquid (im)balance

Excess urine was the #1 challenge for residents using the systems.

Technology in practice…



Success?


Pails of Material/Time
4000
3500
3000
2500
2000
1500
1000
500
0
3402
54
1998
2003

Why? A future with freshwater.

- 20% of the globe's freshwater is in the Great Lakes Basin
- Flushing drinking water down the toilet is an unsustainable use of resources, though mechanically efficient
- Alternatives to water-consuming flush-toilets exist, but information about their use in daily practice is needed to help them emerge from niche markets to wider-scale implementation
- Education, information and ongoing outreach are critical to the application of alternative toilet and septic technologies

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Project Title:

Improved Outreach for On-Site Wastewater Systems:
Understanding User Perceptions

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