



How is SWFAP Using Beyond Waste FTEs and Contract Dollars?

New Beyond Waste Positions: 4 FTEs with phased hiring, \$717,000

- Compost Specialist (filled 7/1/05)
- Green Building Specialist (filled 7/18/05)
- Moderate Risk Waste Specialist (interviews began 1/6/06)
- Environmentally Preferable Purchasing Specialist (position description review nearly final)

Barriers

- New hiring processes; strained human resources support; Mid-Management Cut confusion; letting go of other work (e.g. biosolids/facility technical assistance)

\$150,000 of one-time project funding:

- Paint Product Stewardship Infrastructure – will determine what infrastructure is needed, the next step towards developing a functioning take-back system (\$35,000)
- Green Building Coalition Building – will coordinate green building roles and actions, resulting in rapid spread of green building practices (\$30,000)
- Municipal Solid Waste Finance Analysis, Phase 1 – will identify how local solid waste programs can secure long-term, stable funding that includes waste reduction incentives (\$75,000)
- Green Building Deconstruction Pilot Project – will document how cost-effective semi-mechanized deconstruction can be, providing data that could support more active building materials reuse (\$10,000)

What Progress Has Been Made So Far?

Organics

- Anaerobic digester technology development
- Demo food waste composting at HQ
- Biomass energy inventory

Green Building

- Green building training center
- Straw bale home design
- Green developers

Hazardous Wastes

- Paint product stewardship
- Electronic waste
- PBDE interim plan
- Mercury (HWTR)

Data

- Diversion measure

Grants to local government

- Curbside Food Waste Composting
- Natural Yard Care programs
- Local LEED projects
- Deconstruction materials reuse
- Small business hazardous waste reduction TA
- Mercury switch removal
- Low Quantity HW programs

Barriers

- Staff time – not biting off too much too soon
- Cross-program coordination takes more time – buy-in not attained
- Local governments not always receptive to Beyond Waste
- National product stewardship initiatives take great persistence

Beyond Waste Initiative - Green Building

What is Green Building?

- Energy and water efficiency
- Healthy indoor environment – low toxic materials and products
- Natural ventilation
- Locate and orient building to maximize natural light and minimize heating/cooling needs
- Better storm water management, or rainwater capture and use
- Native, drought-tolerant landscaping
- Deconstructing existing buildings for material salvage and reuse
- Maximize recycling and use of recycled-content materials

Why Build Green?

- Energy savings average 30% (\$600 per 1000 sq ft)
- Emissions reductions (avoids health costs of roughly \$200 per 1000 sq ft)
- Healthier (less toxic) work environment
- Higher productivity (1 - 10%) from natural lighting, ventilation, and temperature control (\$6,000 per 1000 sq ft at 1%)
- Benefits exceed initial costs by a factor of 10
- Demolition debris is 1/3 of the solid waste stream
- OSPI says kids learn better

Green Building Initiative - Why Deconstruct Buildings?

South Puget Sound Community College

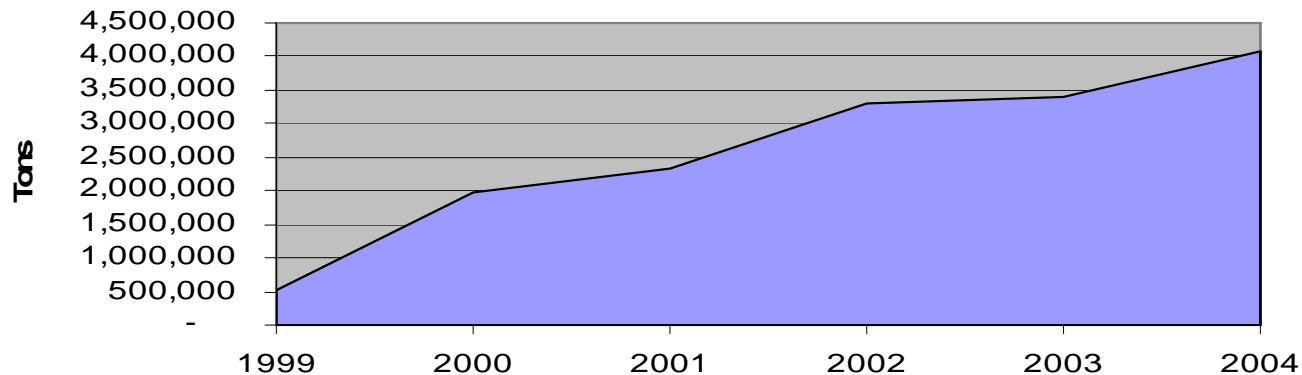
Sold and moved 10,300 sq ft building

- Avoided \$40,000 in demolition and disposal costs
- Buyer saved \$400,000 compared to modular buildings of same size

King County – 3 project sites

- Salvaged materials – 253 tons
- Value of salvaged material- \$218,000
- Avoided disposal costs - \$84,000
- Material recycled – 760 tons

Total Construction and Demolition Diverted Materials

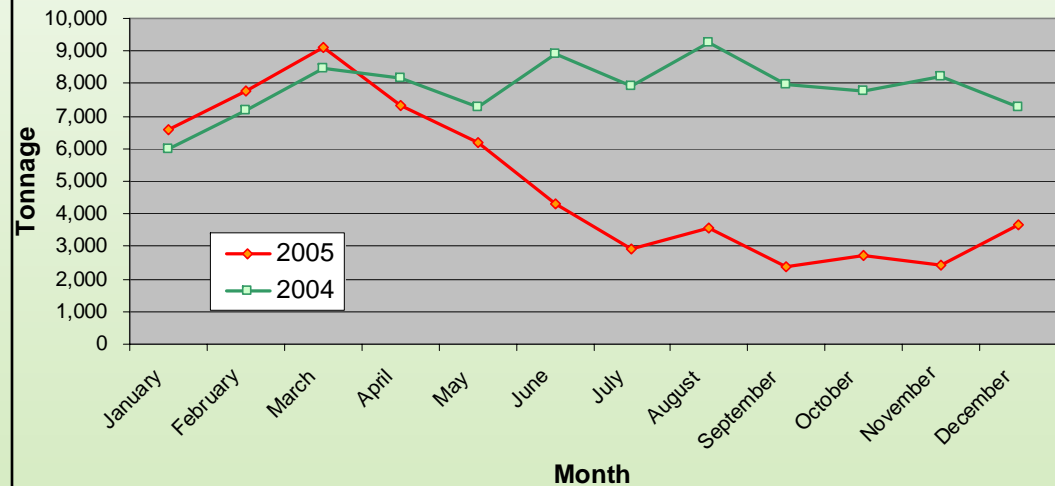


Why is a clean waste stream important for reuse and recycling?

- Demolition debris used as hog fuel
- More stringent air standards made debris unusable

- Sources of possible mercury contamination: thermostats, synthetic gypsum (a coal by-product), pre 1990 paint

Recovery 1: 2004-2005 volumes

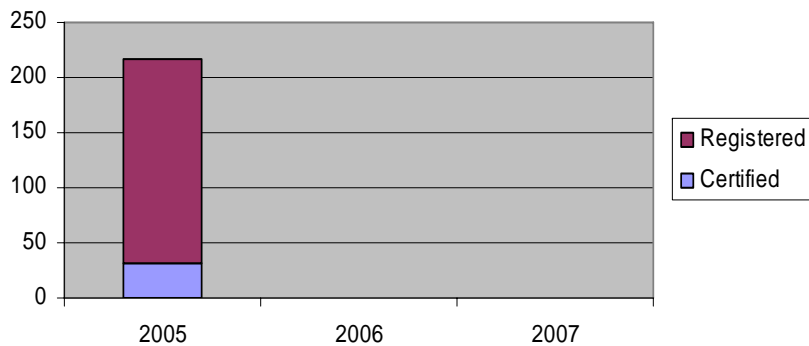


How will we know if the Green Building Initiative is successful?

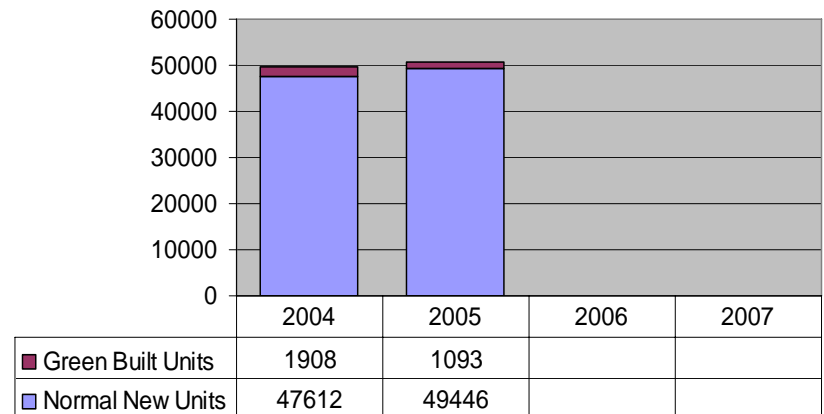
For NEW Buildings:

- Building Green to save energy, reduce toxins, and improve health and productivity
- Initial outcome measures of Green Building construction
- 1300+ accredited LEED professionals

Statewide LEED Certified Projects (Non-Residential)



New Residential Construction Starts

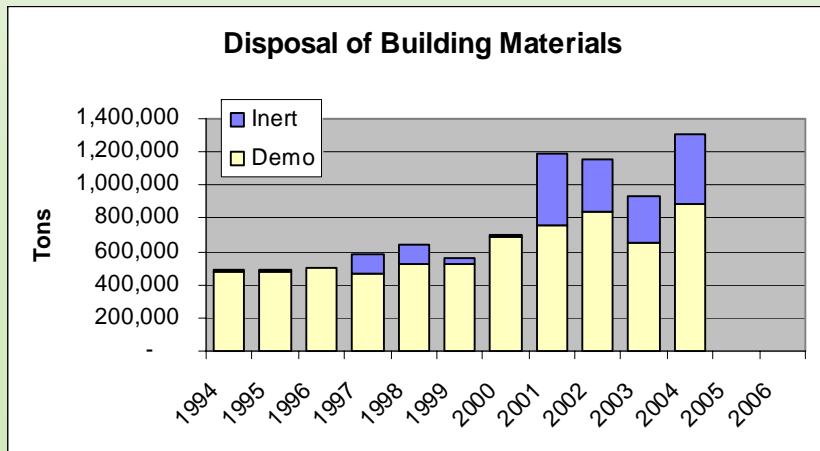
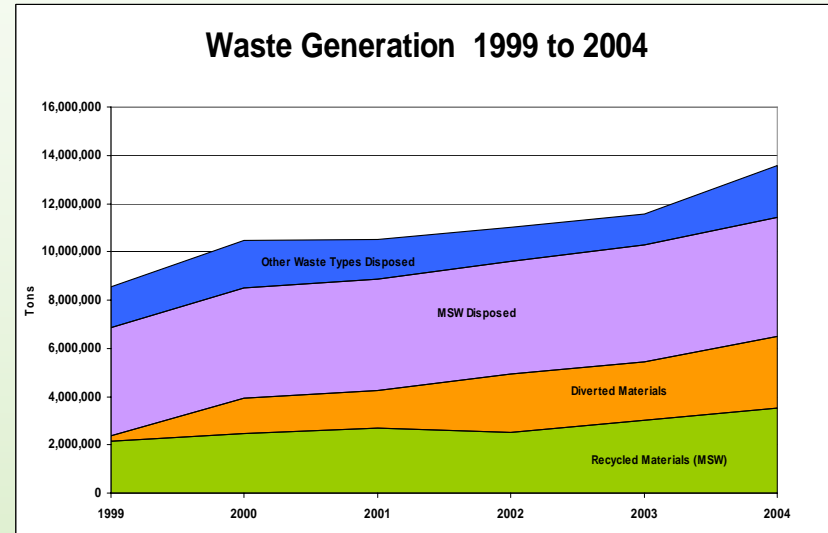


- Intermediate and ultimate measures (energy emissions, e.g.) beyond our scope and measurement ability
- Five year Beyond Waste Goal: 10% of new WA buildings use Green Building practices

How will we know if the Green Building Initiative is successful?

For EXISTING Buildings:

- Statewide waste generation numbers too big to see a short term Green Building impact
- Demolition **disposal** driven by the economy and interest rates
- Deconstruction **reuse** is more meaningful (see slide 4)



- Measuring prevention is always a challenge
- May need to use case-control analysis - compare data from similar counties with strong/weak programs