

The Cost-Benefits of IPM from a Facility Director's Perspective

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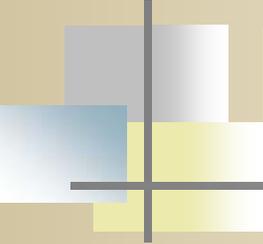
Overview

Salt Lake City School District

- Students
 - 24,000 students
 - 53% are ethnic minority
 - 60% from low income families
 - 33% learning English as a second language
- Facilities
 - 36 schools - 3,800,000 Ft²
 - 44 facilities - 4,110,000 Ft²
- Expenditures FY07-08
 - \$17,899,000 M&O budget
 - Maintenance \$1.51 per Ft²
 - Custodial (including pest management) \$1.51 per Ft²
 - Utilities & other \$1.33 per Ft²
 - Capital improvements \$0.79 per Ft²

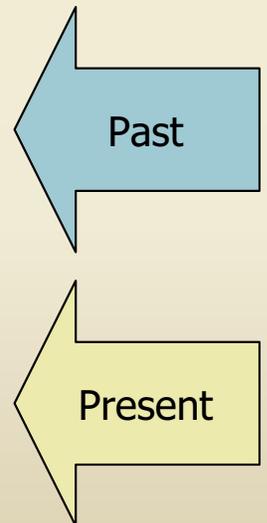
\$5.15 per Ft²

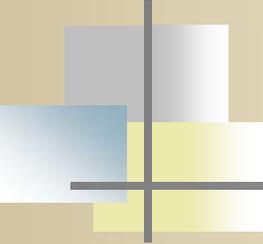




Pest Management Practices

- Do nothing
- Unrestricted pesticide use
- In-house pesticide applicators
- Contracted pesticide applicators
- Combined in-house / contracted
- Integrated Pest Management





Pest Management Factors

- Factors influencing the cost of pest management regardless of practice:
 - Age of the buildings
 - Building maintenance and operation
 - Maintenance and custodial budgets appropriate for the level of care expected
 - Organizational structure that is conducive to success
 - Sanitation is a high priority
 - Culture of environmental responsibility
 - Geographic location



Traditional Pest Management Costs

- Contracted pest management
 - District's practice for the past 30+ years
 - Budget (FY07-08) - \$28,000
 - \$0.007 per Ft²
 - Level of satisfaction – Acceptable



Integrated Pest Management Costs

- Personnel costs
 - Initial training
 - On-going education
 - Monitoring and reporting
 - Tools and resources
 - Professional development
- Material costs
 - Exclusion
 - Pesticides and herbicides



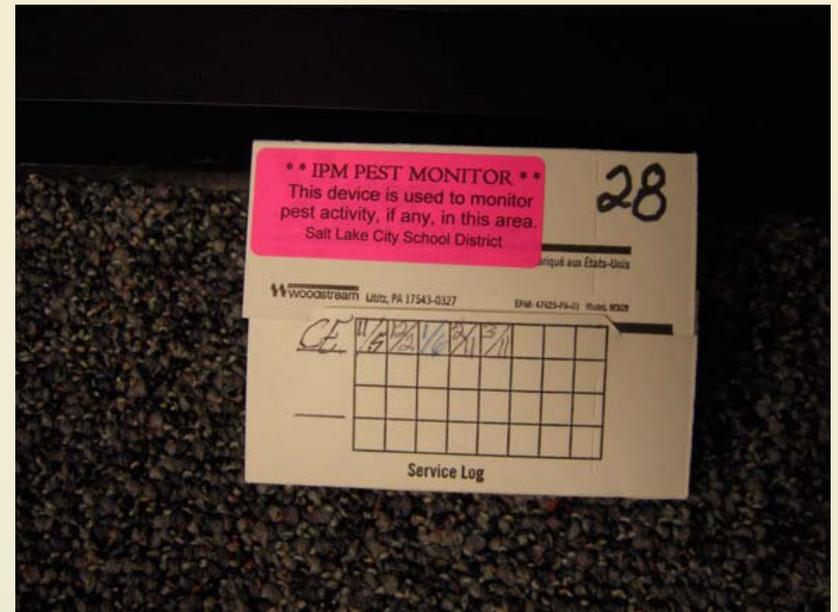
IPM Training and Education

- Initial training may have associated costs if hired consultants are utilized
- On-going education takes time but there are no new dollars spent, just time spent on new tasks
- Training materials cost <\$15/person (40) for binders, tabs and copying, etc.



IPM Monitoring and Reporting

- Monitor traps
 - Approx 3,600/yr @ \$0.50 ea
- Time required to inspect monitor traps and report findings is part of the normal custodial inspections of their buildings



IPM Tools of the Trade

- Flashlight, UV light, eye loupe, collection jars, camera, gloves, caulk, sealant, knee pads, field guides, etc.
- \$100 to \$300 per person (3) initially and \$100/yr there after for supplies



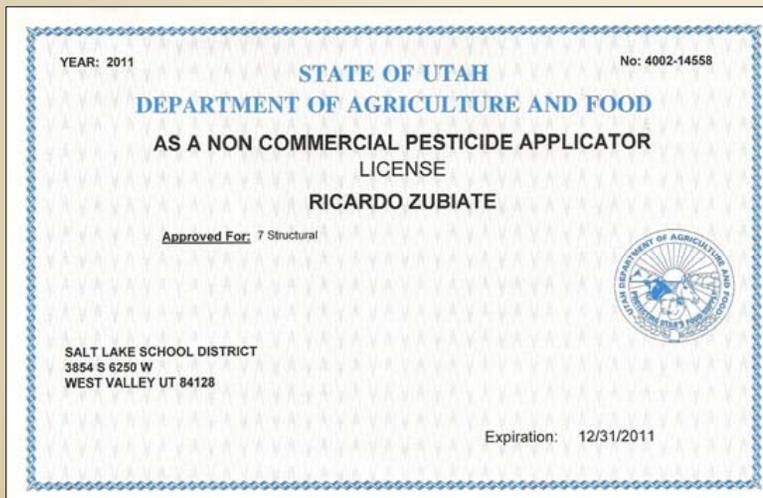
IPM Diagnostic Tools

- Microscope - \$700
- Reference - \$125
Truman's Scientific Guide to Pest Management Operations
- Other texts - \$150



Professional Development

- Custodial Supervisors and key Grounds staff hold Utah Non-Commercial Pesticide Applicator licenses*
- \$20 per license, valid for 3 years - varies with state
- Requires time for studying and exam preparation



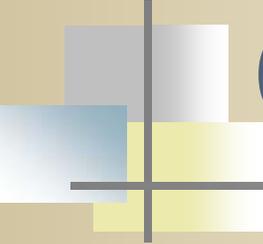
* Not required for school employees in the State of Utah



Exclusion

- Goal is to seal building from pests
- Overall costs will vary greatly depending upon:
 - Building age
 - Level of maintenance
 - Maintenance budget
- Estimated - \$4,000 for door sweeps, screens, caulking, etc. over first 2 years of program

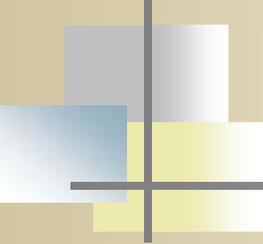




Other IPM Tools

- Pesticides
 - Used ONLY if required to control severe infestations
 - Use approved and listed caution labeled products only
 - Products are used in the least amount possible and only in the target area
 - Products are only applied by licensed applicators
- Herbicides
 - Used ONLY as needed if turf areas have weed infestations that exceed an established threshold
 - Not used as a substitute for weeding in planting beds
 - Use approved and listed caution labeled products only
 - Products are only applied by licensed applicators

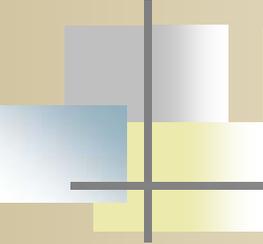




Perspectives on IPM Costs

- Is the cost to repair something in support of a new program really a new cost if it should have been repaired for other reasons?
- Should new activities that replace or enhance existing activities be considered a new cost?
- Is the time required to increase staff awareness, create an atmosphere of cooperation, improve the environment and foster sustainability a cost?

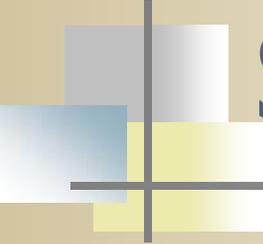




Benefits

- Cost savings – Yes, but will vary greatly with the situation
- Health Benefits - Unable to quantify at a District level but are well documented
- Regulatory Compliance – Unable to quantify but IPM reduces OSHA and State Risk Management worries
- Public Relations – **Priceless!**

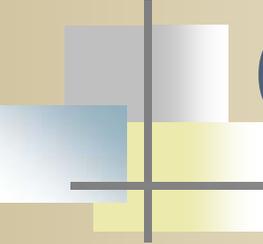




Summary

- **Costs**
 - No new personnel
 - Start up costs
 - \$2,400 - tools, training, etc.
 - \$2,000 - exclusion
 - On-going costs
 - \$1,500-\$1,800/year – monitoring supplies
 - \$1,000-\$2,000/year – exclusion
 - \$0/year – pesticides (not budgeted)
 - \$1,500/person (3)/year – professional development (highly recommended but unable to budget)
- **Benefits**
 - Savings from eliminating contracted pest management - \$28,000/year





Questions?

