



City of Scottsdale, Arizona

APWA EMS Training

April 18, 2008



Scottsdale's EvMS



- 1997 – EPA EMS Municipalities Pilot Project
- 2000 – Charter Member EPA's National Environmental Performance Track (NEPT) – Only municipality in the nation
- 2001 – Scottsdale's EvMS Toolkit used on 5 continents
 - No. Am., Europe, Africa, Asia, So. Am.
- 2002 – EPA Administrator Christine Todd Whitman visits/honors Scottsdale
- 2004 – Recipient EPA's NEPT Environmental Performance Award
- 2005 – Nation's first municipal LEED Gold Green Building Policy
- 2006 – Arizona Environmental Performance Track (AZEPT)
- 2006 – EPA's National Environmental Performance Track (NEPT) (round 2)
- 2007 – Mayor's Energy Efficiency Award, Wash. D.C.
- 2008 – Scottsdale's 10th Annual Green Building Expo attracts over 10,000 attendees



<http://www.scottsdaleaz.gov/ecosystem.asp>

- 13 EvMS System Procedures
- 2 EMP examples
- Process Template for determining significant aspects (aspects, impacts, legal requirements, objectives/targets, EMPs)
- EvMS Conformance Task Force
- Checklist example
- Procedures example



- Implementation Costs

- Initial cost to implement an EMS = \$100,000
- Time? = 1 year
- Resources? = 3 FTEs
- EMS software “IsoSoft” by Intellex

- Annual Maintenance Costs

- Resources? = 2 FTEs in the Environmental Office
- Software maintenance/technical support contract
- Budget? = indistinguishable cost of doing business



● Benefits

- Compliance permit cost efficiencies \$16,000/yr.
- Compliance training cost efficiencies \$8,000/yr.
- Avoided fines/violations – priceless
- Energy efficiencies – >\$500,000 annually
- Pollution metrics – pending (historic 3,569,882 lbs./yr.)
- Recognition



EvMS Environmental Policy

- **Compliance**
- **Conformance**
- **Continual Improvement**
- **Prevention of Pollution**
- **Individual Responsibility**



Environmental Policy

The City of Scottsdale municipal organization is committed to a citywide environmental management system that conforms to the ISO 14001 International Standard. The city organization empowers individual employees to be environmentally responsible and is committed to:

- continual improvement of citywide environmental management practices and performance;
- the prevention of pollution; and
- compliance with applicable legal requirements and other requirements to which the city subscribes.

At planned intervals, the city organization will set and review measurable and practicable environmental objectives and targets consistent with this environmental policy.

To enhance the quality of life for Scottsdale citizens, the city organization will strive to be innovative in planning built environments and preserving the natural environment.

The city's environmental policy will be communicated to its employees, citizens and other stakeholders.



Management Support

"This is what local government ought to be about: benchmark against the highest international standards for environmental performance, institutionalize continuous environmental improvement, and then document, track and report to our citizens meaningful and measurable indicators of performance and progress toward stated environmental goals."

Scottsdale City Manager



EvMS Conformance Task Force roles:

- review EvMS policies and procedures drafted by the Environmental Office;
- implement, support and promote EvMS policies and procedures throughout the organization;
- report operational impacts of conformance and compliance with EvMS policies and procedures;
- audit reports on the City's EvMS conformance and regulatory compliance performance; and
- make recommendations for changes to EvMS conformance and environmental compliance policies and procedures.



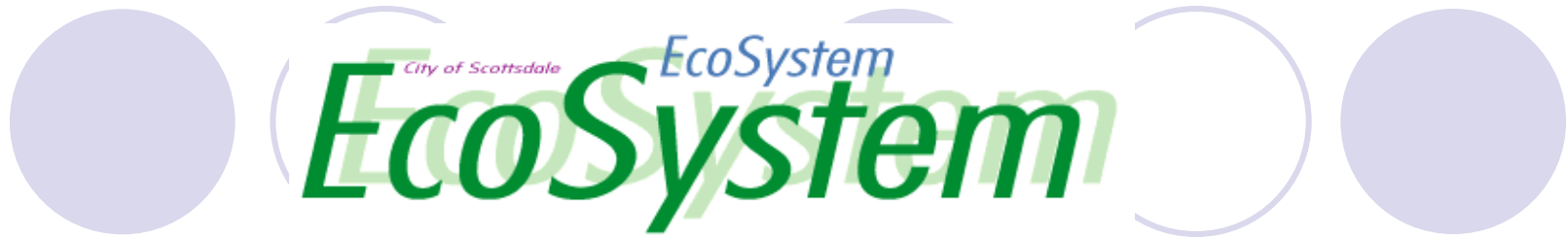
Environmental Performance

- **Energy Savings**
 - Green Lights –\$123,043 saved annually
 - 1.5 m Sq. Ft. retrofit,
 - Traffic and Walk Signal LED -- \$628,000 to date
 - plus maintenance savings of \$300,000
 - HVAC – up to 65% energy savings
 - Vending Misers – 50% less energy
- **Alternative & Clean Fuels**
 - > 500 city fleet vehicles, reduced VOC and particulate emissions
 - Alternative fuels (CNG), hybrids, biodiesel



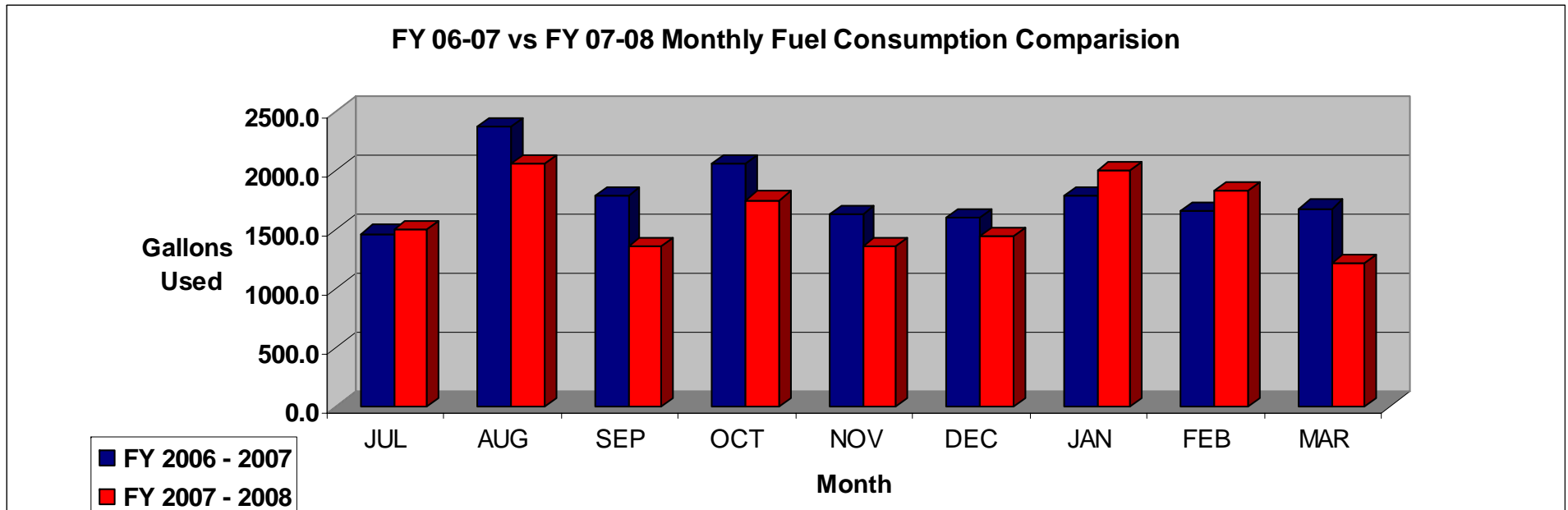
Environmental Performance

- Residential Recycling
 - Recycle or compost 30% of residential solid waste
 - ~ ½ ton per household per year
- Groundwater Recharge
 - > 3 billion gallons effluent annually reused on golf courses and for aquifer recharge
- Open Space and Native Plant Salvage
 - > 14,000 acres preserved, 10,000 acres NAOS & 90% of native plants salvaged during development



Traffic Ops EMP 2008 Fuel Reduction Initiative

Goal = 5% reduction, Current Performance = 9%





Environmental Performance Track Commitments

- Air Emissions – Bio-diesel fleet, PM-10 emission reductions
- Preservation – acres of wildlife habitat preserved
- Energy – Alternative energy at 3 LEED Gold buildings reducing kWh usage
- Water Recharge – in billions of gallons