

The Challenge of Litter

Presented to

H-GAC Environmental Enforcement Roundtable

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by

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Definition – Litter and illegal dumping

Litter is carelessly discarded refuse

- Beverage containers, plastic bags, cigarette butts, snack wrappers, paper, and fast food containers/wrappers, light construction debris etc., etc., etc.
- Can be intentional or unintentional

Illegal Dumping is the disposal of waste in an unpermitted area

- Primarily larger, bulky quantities of non-hazardous materials
- Intentionally dumped

Both are -

- Caused by irresponsible human activities
- A form of blight and environment contamination



Who Contributes to Litter?

• Through intentional and unintentional littering - You, me and everyone else

Who Contributes to Illegal Dumping?

 It is a criminal act by those who knowing dump bulk material to avoid disposal fees or effort to dispose of properly





Who Intentionally Litters?

- Age Younger Adults (< 30) more likely to litter / older (>50) less likely
- Gender Males more likely
- Smokers



- Along roadways, motorists (52%) and pedestrians (23%) are the biggest contributors
- TxDot 2013 Study the incidence of littering skews somewhat toward males, but more heavily toward Millennials, singles, and households with young children.
- ... strong indirect relationships between educational attainment, labor force status, income and litter



Why People Litter

- No Litter Container nearby
- A sense of entitlement
- Someone is employed to collect the litter anyway (*It's not <u>my</u> responsibility!*)
- Bad mood



- Habit
- Litter begets litter Individuals are much more likely to litter into a littered environment
- Belief that material breakdowns quickly in the environment
- No sense of ownership/community to the property

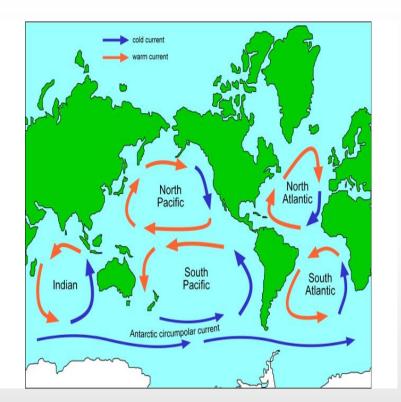


Oceans

- About 80% of marine debris comes from land-based sources
- We all live down stream from someone.
- Floating debris ends up in the five major ocean gyres
 - Plastics breakdown but never really degrade
 - Sea life eat the particles and it continues into the food chain







Stormwater

Where does that litter go?

- Rainfall washes litter into storm drains.
- Storm drains lead to the nearest body of water and dump litter into our creeks and rivers.
- Those creeks and rivers drain into area reservoirs, which happen to be the source of our drinking water supplies











In bayous, creeks, rivers and lakes

• About 18 percent of litter, usually traveling through stormwater systems, ends up in local streams, rivers, and waterways.









Litter Cleanup - A Complex Web of Responsibilities by disparate organizations

- Street/Public Works Department
- Parks Department
- Solid Waste Department
- Storm Water Section
- Businesses
- Water Department
- TxDOT
- Code Enforcement &/or PD
- County Sheriff

- Neighborhood Associations
- Volunteer organizations
- Keep (insert city here)Beautiful
- Work Release
- Contract Labor
- Adopt an area programs
- Management Districts
- Water Districts
- and others



The Cost of Litter

- Cleaning up litter in the US costs hundreds of dollars per ton, about ten times more than the cost of trash disposal, with a cost totaling about \$11 billion per year.
- State of Texas spends **\$46 million** cleaning up litter
- City of Fort Worth FY16 budget **\$3.2 million** to clean up litter & illegal dumping

• What does your city/county/business spend cleaning up litter?



Texans for Clean Water THE COST OF LITTER AND ILLEGAL DUMPING IN TEXAS

To develop case studies from multiple Texas cities regarding the costs and ROI that local governments are occurring to address litter.

- Austin
 Laredo
- Corpus Christi
- El Paso

- Lufkin
- Midland

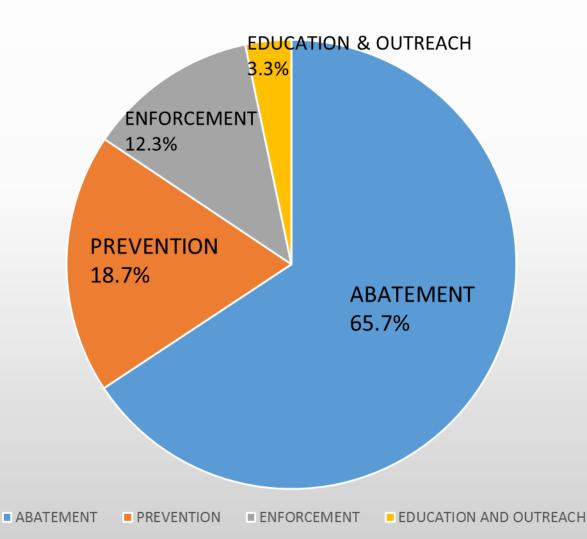
- Fort Worth
- Houston

• San Antonio

Texans For Clean Water THE COST OF LITTER & ILLEGAL DUMPING IN TEXAS



A Study of 9 Cities Across the State of Texas



Best Management Practices – Local Jurisdictions

Determine who is engaged in litter mitigation

- Potential to gain synergies with knowledge of actions of other organizations
- Don't duplicate efforts

Are enforcement actions being taken?

- By whom? PD/Code/Health/County Sherriff?
- Are charges upheld in courts? If not why not?
- Solid Waste Collections
 - Residential customers educated on packing carts &/or setouts?
 - Drivers educated on properly securing their loads?
 - Commercial collections







Best Management Practices – Local Jurisdictions

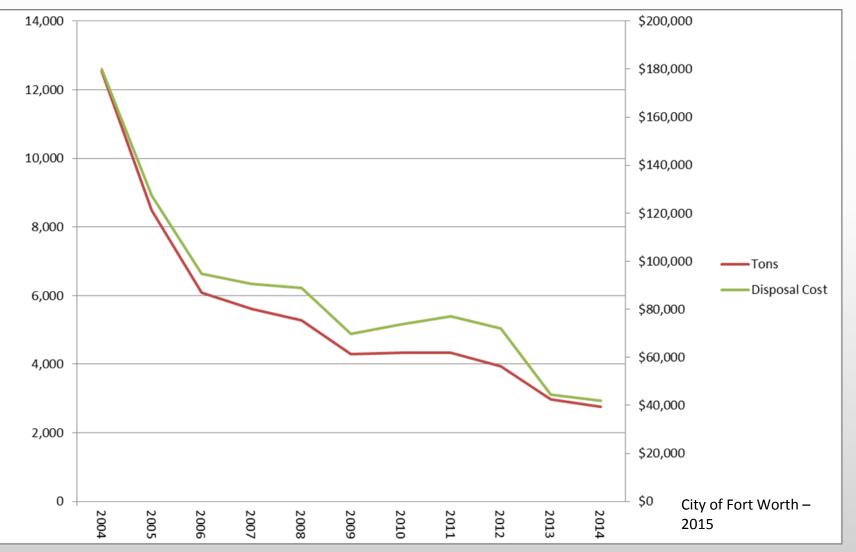
- Is infrastructure sufficient?
 - Adequate number of containers in Pedestrian areas?
 - Adequate collection schedule?
- Stormwater catchment systems/devices
- Is your public information effort working?
- Are you Monitoring, Measuring & Evaluating?
- Carryout bag ordinances
- Styrofoam ordinances







Best Management Practices – Local Jurisdictions – Illegal Dumping





Best Management Practices – State

- Is there strong public awareness?
- Are the Laws and Enforcement adequate and respected?
- Dedicate a portion of COG grants to litter mitigation/law enforcement training/public education improvements
- Extended Producer Responsibility Laws
- Bottle Deposit Law
- Encourage public use TxDOT's Report a Litter app







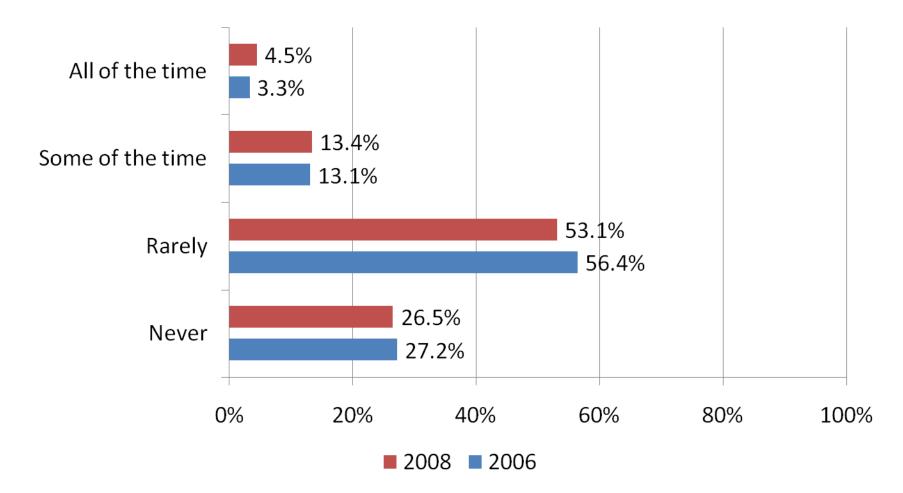


Best Management Practices – KAB's Recommendations to Local Jurisdictions

Cleanup projects remove the litter but do not prevent recurrence. **Root cause is littering behavior.** Need a combination of methods:

- Education Bedrock tool of behavior change.
- Ordinances Change public policy through codes, laws, or ordinances
- Enforcement Consistent and effective enforcement of existing laws. Citizen awareness of these laws help change behavior.
- Tools and Resources
 - Tangible things like litter pick up tools, sanitation collection vehicles, graffiti removal equipment, litter <u>and</u> ash receptacles, and recycling bins.

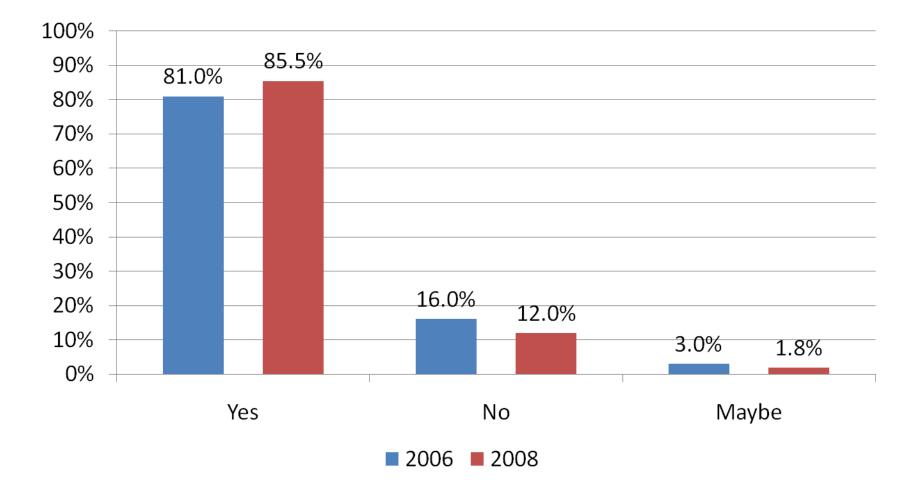
Keep Tennessee Beautiful found people do not view litter laws as being effective since they don't perceive them as being enforced. "How often do you think litter laws are enforced?"



FAN

WATER







Public Education – Best Management Practices

- "Litter Bug" is too cute, need to communicate that littering is a crime
- Need to stress that irresponsible actions both intentional and unintentional - create litter
- Stress that littering is not an acceptable norm
- Emphasize *pride in community* that littering is beneath the acceptable standard
- Set the example (as individuals, as organizations):
 - If you see litter, pick it up!
 - Carry a litter bag in your car
 - Don't let your commercial equipment/infrastructure spread litter



Public Education – Getting Public Engaged

Tarrant Regional Water District (TRWD) Reverse Litter or Ten on Tuesday Campaign









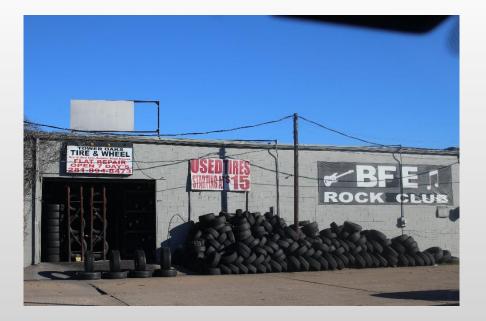
Mission Statement – Texans for Clean Water

TEXANS FOR CLEAN WATER works to eliminate the significant problem of debris in Texas waterways and advocates for strong solutions by engaging with our local and state officials.

SB 570

Senator Rodriguez Senate Business and Commerce Committee

Relating to the regulation of the retention, storage, transportation and disposal of used or scrap tires; providing a civil penalty, creating a criminal offense.







HB 1437

Rep. Hu Has not been assign to committee.

Relating to the use of funding in local initiative projects for litter reduction. Section 382.220(a) and (b), Health and Safety Code are amended to read as follows: Money that is made available to participating counties under Section 382.202g or 382.302 may be appropriated only for programs administered in accordance with Chapter 783, Government Code, to improve air quality <u>or reduce litter.</u>



SB 103 Senator Hall Senate Business and Commerce Committee

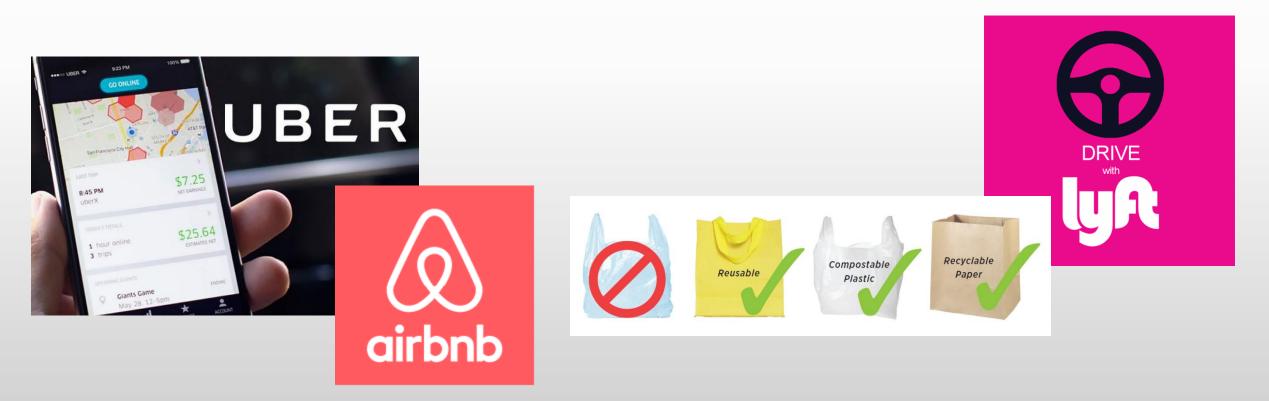
Relating to the provision of bags to customers of a business at the point of sale.



SB 92

Senator Hall Senate Business & Commerce Committee

Relating to prohibition of certain regulations by a county, municipality or other political subdivision.





THE BREAKDOWN ON DEBRIS

Littering and plastic have a negative impact on our local environment and sea life, but what you may not realize is the trash you see today can be harmful for many generations to come. We're dishing the dirt on how long it actually takes for waste to decompose. Enjoy the beach responsibly and join us in our mission to Keep Bolivar Beautiful.



aluminum cans: 80-200 years Styrofoam: 50 years

plastic bags: 10-20 years

plastic beverage bottles and caps: 450 years

cigarette filters: 5-10 years

450 years

plastic items like straws, shovels, cigarette lighters, combs, and toothbrushes: 20-1000 years

isposable diapers

nonofilament fishing line: 600 years

f facebook.com/keepbolivarbeautiful

BOLIVAR PENINSULA'S MAGAZINE

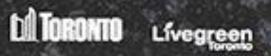
Better Than You Found It

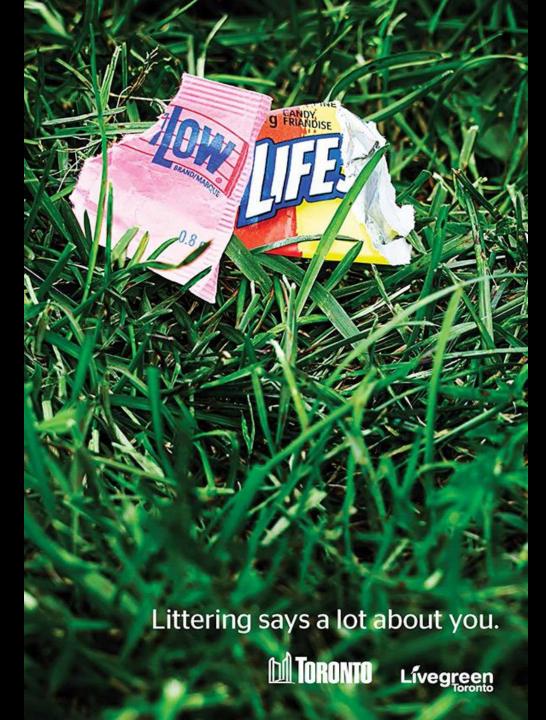
TET

A message from

beaut

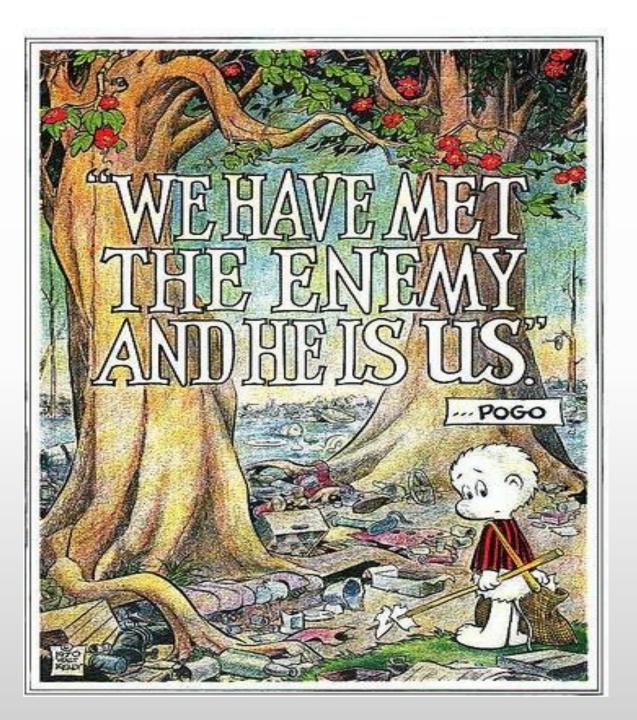
Littering says a lot about you.





Littering says a lot about you.







Thank you

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Rationalizing Reasons for Littering or not

	Axis of acceptability	Axis of excusability	
	ACCEPTABLE	EXCUSABLE	
Axis of Acceptability	If the area is already dirty or run-down	When everyone else is doing it	Axis of Excusability
	If the litter will be cleaned up by others	When drunk	
	If there aren't sufficient bins	When you can't be seen	
	In the country where it's more noticeable	In front of the children	
	In my own back yard		
	If the area is tidy and presentable	In (respectable) public	
From – People Who Litter – ENCAMS Research Report 2007	UNACCEPTABLE	TABOO	



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Public Education-Simple Message that Resonates





Legislation – 85th Legislative Session Interim Charges

Senate Committee on Agriculture, Water and Rural Affairs

Study and make recommendations on the effects of windblown and waterborne litter. The study should include an analysis of the economic effects of litter, and necessary methods to prevent and remediate litter, and an assessment of state and local programs to reduce litter.

House Committee on Environmental Regulation

Review the compliance practices of surface water management entities with state rules regarding the aesthetic condition of waterways and the prevention or removal of human-made floating trash and debris. Provide recommendations on how state and local authorities could coordinate to better achieve these goals.

Study the effectiveness of current state programs to address scrap tire management and disposal methods, including the incidence of scrap tires and rubber debris on roadways and in watercourses. Include analysis of disposal fee collection and management as well as local funding allocations. Provide incentive or enforcement recommendations for ongoing clean-up efforts, abatement of identified tire dumpsites, and means of ensuring accurate record keeping and reporting.

House Committee on Agriculture and Livestock

Study the impacts of windblown trash on agriculture and ranching.

Potential Litter Legislation – 85th Legislative Session

- Increase Enforcement
- Convicted litter litter collection
- Forfeiture of property for littering & dumping
- Scrap tires
- Use SW5000 fund for litter programs
- Small county assistance (\$)
- State funds for litter programs

- Expand funding for public space waste infrastructure
- Dedicated state park fee for waste management to include litter
- Preemption of plastic bag and Styrofoam ordinances
- Strengthen county authority for litter enforcement





Public Education

- KAB Report states 3 Strategies to address litter
 - 1. Beautification (including clean-ups)
 - 2. Waste infrastructure
 - 3. Awareness and Motivation Campaigns i.e. Public Education
- The more members of our community understand a problem the greater the momentum to solve it and the more likely that they will support changes.
- Positive Message The City is a public asset, so are our waterways. Ownership is collective – take pride in community and responsibility for your actions

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