



Town of Queen Creek Green Waste Removal

By: Kyle Corona, Bill Boucher, Timothy Belda, Eric West

Problem Statement

- ▶ Divert green waste from landfills in the Town of Queen Creek, and create a usable end-product.
- ▶ Come up with a feasible program, discuss how this program will be implemented, and address how the people of the town will be involved in this program.
- ▶ We will need to understand the costs, infrastructure, and potential behavioral changes that will be associated with a new green waste program.
- ▶ Implications of this program in terms of residential responsibility, governance, market implications, and municipality must be addressed and clearly defined.

Potential Solutions

- ▶ Biogas
- ▶ Compost Plant
- ▶ Maintain Landfill
- ▶ Rainwater Retention

Approach to Solution

- ▶ Approach based on stakeholder involvement
- ▶ Recognize perspectives and responsibilities of these parties
 - ▶ Resident Responsibility
 - ▶ Government Role
 - ▶ Market Implications
 - ▶ Municipal Aspect

Resident Responsibility

- ▶ Be educated on the subject
 - ▶ What green waste is
 - ▶ How to dispose of it
- ▶ Communicate with government
 - ▶ Understand the program being put in place

Resident Importance

- ▶ Getting residents on board is VITAL
 - ▶ Willing to bear any extra costs
- ▶ Understand affluence of the community
 - ▶ Median income ~\$81,000

Responsibility

- ▶ Residents must separate waste
- ▶ Maintain waste bins
- ▶ Keep on schedule with waste pick up

Governmental Implications of Green Waste

The background features abstract, overlapping geometric shapes in various shades of green, ranging from light lime to dark forest green. These shapes are primarily located on the right side of the slide, creating a modern, layered effect. The text is centered on the left side of the slide.

Education

- ▶ Avoid contamination
- ▶ Show people the benefits of Green Waste
- ▶ Inform why it is important to use a Green Waste bin
- ▶ Beneficial to all aspects of the situation

Various Techniques of Education

- ▶ Preexisting Educational Infrastructure
- ▶ Media Outlets
- ▶ Green Waste Bin

Education: Preexisting Educational Infrastructure

- ▶ Teach the process to children at a young age
- ▶ Children will take pride in helping the planet
- ▶ Children will educate their parents on the matter
- ▶ Field trips to the Green Waste facility would be a memorable experience for any child

Education: Media Outlets

- ▶ Short public service announcements to educate the residents of Queen Creek about the program
- ▶ Television
- ▶ Radio
- ▶ Newspaper
- ▶ Social Media

Green Waste Bin

- ▶ Vital information
- ▶ List of what can and can't be put in the bin
- ▶ Avoid last minute contaminations

Incentives

- ▶ Tax breaks to participants of the Green Waste program
- ▶ Mandating that all residential and commercial facilities compost
- ▶ Providing subsidies to the companies involved in the municipal processes of Green Waste

Disincentives

- ▶ Warnings - Large visual cues on the Green Waste Bin
- ▶ Clear communication of the problem with the residents
- ▶ Fines only if necessary
- ▶ Important to be associated with positive impacts on the community

Market Implications

- ▶ Implications on the businesses who buy the end product?
 - ▶ Contamination
 - ▶ Complexity
 - ▶ Customer Base

Contamination

▶ What is it?

- ▶ Oil, feces, weed killer, herbicides, pesticides, fungicides, fertilizer, etc.

▶ Why is it a problem?

- ▶ A lot of material with no home

▶ Solution?

- ▶ Education, communication, & marketing

Complexity

▶ How is it complex?

- ▶ In a sense, it's a lot like brewing beer

▶ Why is that a problem?

- ▶ Improper timing/accuracy can ruin the process

▶ Solutions?

- ▶ Hire experienced professionals
- ▶ Standardize the procedure

Customer Base

- ▶ Why is it difficult to create?
 - ▶ Recycling green waste has not become a norm
- ▶ Solutions?
 - ▶ Marketing
 - ▶ Preserving quality and reputation
- ▶ Bottom line?
 - ▶ Quality is Key

Municipal Aspect



Problems

- ▶ Population boom 9,000/30,000
- ▶ Educating the public
- ▶ Enforcing laws or regulations relating to waste
- ▶ Diversion rate
- ▶ Financing

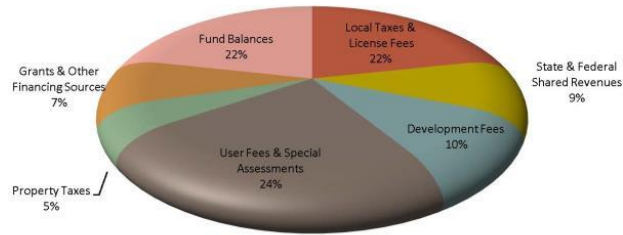
Financial

► Annual Budget Overview of Queen Creek

Where does the money come from?

Town sources as a percent of the total budget

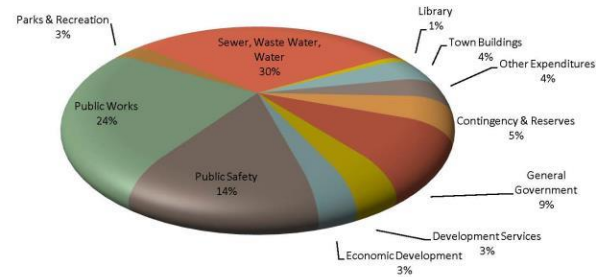
**FY14-15 Revenue Sources \$102.3M
as a Percent of Total Sources**



Where does the money go?

Town expenses as a percent of the total budget

**FY14-15 Adopted Budget \$102.3M
Expenditure Types as a Percent of Total Expenditures**



Sources	FY 2013/14 Adopted Budget	FY 2014/15 Adopted Budget	% increase/ (decrease) year over year
Local Taxes & License Fees	\$ 15,757,717	\$ 22,066,000	40.0%
State Shared Revenues, Government Agency Reimbursements	9,712,500	9,685,000	(0.3%)
Development Fees	6,983,474	10,466,000	49.9%
User Fees & Special Assessments	18,792,191	24,755,000	31.7%
Property Taxes	4,052,882	4,950,960	22.2%
Grants & Other Financing Sources*	49,935,367	3,341,212	(93.3%)
Other (Unallocated revenues & expenditures for budget ceiling purposes & Capital Project Carry forward)	10,000,000	5,000,000	(50.0%)
Fund Balances (includes CIP fund balance)	2,174,045	22,010,197	912.4%
TOTAL	\$ 117,408,176	\$ 102,274,369	(12.9%)

*FY 2013/14 Adopted Budget includes \$47.5M for H2O Acquisition

Expenditures/Uses	FY 2013/14 Adopted Budget	FY 2014/15 Adopted Budget	% increase/ (decrease) year over year
General Government	\$ 8,623,125	\$ 8,481,430	(1.6%)
Development Services	3,351,705	3,526,982	5.2%
Economic Development	2,429,599	2,931,213	20.6%
Fire/Public Safety/EMS	8,549,310	8,707,943	1.9%
Public Works/Transportation/CIP	10,882,665	29,862,025	174.4%
Parks & Recreation ^(a)	2,004,469	2,869,607	43.2%
Sewer, Waste Water, Water*, Solid Waste ^(b)	65,811,725	30,752,111	(53.3%)
Library	1,009,529	1,009,446	(0.0%)
Town Buildings	827,799	4,431,612	435.3%
Special Assessments/Municipal Town Center	3,918,250	3,921,000	0.1%
Contingency & Reserves	10,000,000	5,781,000	(42.2%)
TOTAL	\$ 117,408,176	\$ 102,274,369	(12.9%)

*FY 2013/14 Adopted Budget includes \$47.5M for H2O Acquisition;

^(a)Includes \$0.6M reserves

^(b)Includes \$0.4M contingency/reserves

Process

- ▶ Infrastructure
- ▶ Zoning
- ▶ Pick up times
- ▶ Size and variety of green waste
- ▶ Rules and regulations

End Product

- ▶ Diversion Rate
- ▶ Fertilizers
- ▶ Bio Fuels

Our Solution

- ▶ Compost Plant most viable option
- ▶ Provides most benefits without damaging community
- ▶ Does require a large increase in infrastructure, or transportation to an existing plant

Implementing

- ▶ In order to implement this plan, education is the most important in terms of protecting the waste from contamination, and getting residents on board.

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Questions?