Town of Queen Creek Green Waste Removal

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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

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

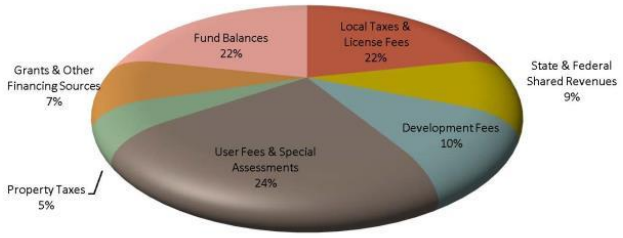
Financial

- 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



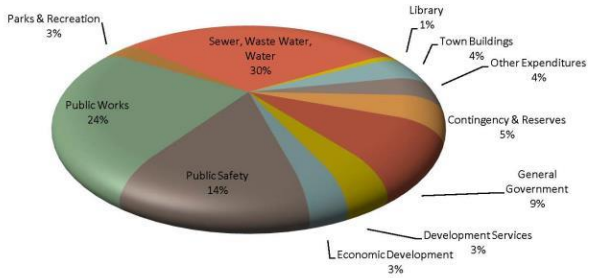
Sources	FY 2013/14 Adopted Budget	FY 2014/15 Adopted Budget	% increase/ (decrease) year over year
Local Taxes & License Fees	$ 15,757,717	$ 22,066,000	40.0%
State Shared Revenues, Government Agency Reimbursements	9,712,500	9,685,000	(0.3%)
Development Fees	6,983,474	10,466,000	49.9%
User Fees & Special 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

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



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?