

Prepared for: City of Tucson, Arizona

Environmental Services Financial Sustainability Plan

April 2010



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April 13, 2010



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Mr. Andrew Quigley
Director of Environmental Services
City of Tucson
4004 S. Park Ave., Bldg 1
Tucson, AZ 85726

Subject: Environmental Services Financial Sustainability Plan

Dear Mr. Quigley:

R. W. Beck is pleased to submit the enclosed report to the City of Tucson detailing the analysis and conclusions resulting from the financial sustainability study conducted for the City's Environmental Services Department. The study equitably allocates costs to the various services provided by Environmental Services to ensure the rate structure is fair and equitable to all customers. Further, the rates proposed in this report are projected to generate the necessary revenue to safeguard the financial sustainability of Environmental Services.

We appreciate the opportunity to provide our professional services to the City of Tucson and would like to express our sincere appreciation to you and your staff for supplying the necessary information to conduct our analysis. Should you or City Council members require additional information or clarification regarding this report, please do not hesitate to contact Mr. Dave Yanke or Mr. Grant Rabon at (512) 450-0991.

Sincerely,

R. W. BECK

A handwritten signature in black ink that reads 'David S. Yanke'.

David S. Yanke
Vice President, Gulf Coast Region

DSY/ms



Environmental Services Financial Sustainability Plan City of Tucson, Arizona

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This report has been prepared for the use of the client for the specific purposes identified in the report. The conclusions, observations and recommendations contained herein attributed to R. W. Beck, Inc. (R. W. Beck) constitute the opinions of R. W. Beck. To the extent that statements, information and opinions provided by the client or others have been used in the preparation of this report, R. W. Beck has relied upon the same to be accurate, and for which no assurances are intended and no representations or warranties are made. R. W. Beck makes no certification and gives no assurances except as explicitly set forth in this report.

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EXECUTIVE SUMMARY

In December 2009, the City of Tucson retained R. W. Beck to conduct a financial sustainability study for the City's Environmental Services Department (ES). The purpose of the study was to determine the cost of all solid waste related services provided by ES and safeguard the financial integrity of the solid waste utility. The following report provides a description of ES services, details the methodology and results from R. W. Beck's cost of service analysis, and provides rate recommendations for ES services.

Revenue Recovery from Current Rates

The current rates for ES services are insufficient to recover the cost of providing these services. This is illustrated by the projected \$7.6 million under-recovery for FY 2011, as shown in Table ES-1. Thus, despite successful efforts to control and reduce costs, ES will require rate adjustments in order to safeguard its financial sustainability.

Table ES-1
Revenue Recovery from Current Rates

	FY 2011
Revenue from Current Rates	\$ 39,896,378
Revenue Requirement	(47,467,501)
Over/(Under) Recovery	\$ (7,571,123)

Proposed Rates

The rates proposed by R. W. Beck are identified in Section 3 of this report. These are based on the cost of service analysis, as discussed in Section 2 of this report. The proposed rates for residential Automated Plastic Container (APC) customers in the first four years of the ten-year forecast are shown in Table ES-2, and are reflective of a transition to rates that vary by the size of container. This provides residents the opportunity to reduce their monthly fee for standard solid waste service if they elect to reduce their capacity to dispose.



**Table ES-2
Residential APC Proposed Rates**

Monthly Cost	Year 1 FY 2010 ¹	Year 2 FY 2011	Year 3 FY 2012	Year 4 FY 2013
48-Gallon APC				
First APC	\$ 14.50	\$ 15.00	\$ 15.25	\$ 15.25
Each Additional	10.00	11.00	11.00	11.00
Low Income	2.50	3.00	3.25	3.25
65-Gallon APC				
First APC	\$ 14.50	\$ 16.00	\$ 16.25	\$ 16.25
Each Additional	10.00	11.00	11.00	11.00
Low Income	2.50	4.00	4.25	4.25
95-Gallon APC				
First APC	\$ 14.50	\$ 16.75	\$ 17.00	\$ 17.00
Each Additional	10.00	11.00	11.00	11.00
Low Income	2.50	4.75	5.00	5.00
300-Gallon APC				
Shared	\$ 14.50	\$ 16.00	\$ 16.25	\$ 16.25
Sole Use	43.50	48.00	48.75	48.75
Low Income	2.50	4.00	4.25	4.25

Notes:

- 1) Year 1 rates are equal to the current rates

ES should monitor revenues from APC customers carefully after adopting the proposed rates to ensure a significant shift to smaller APC sizes does not cause ES to under-recover the cost of providing this service. As mentioned in Section 2.5.1, neither the fixed costs for disposal nor the cost of the collection will decrease due to customers opting for smaller APC sizes. Thus, customers selecting a smaller APC will result in less revenue for ES but, initially, will be essentially the same cost to serve.

Proposed rates for other ES customers and services include:

- Maintaining the current rates at the Los Reales Landfill;
- Modest increases to the ES provided commercial collection services; and
- Development of a new groundwater protection fee assessed to Tucson Water customers.

The proposed groundwater protection fee is discussed in Section 3.2.5. The fee has been developed to recover the operating costs associated with the remediation program that are related to groundwater protection. This mechanism has a meaningful rationale, as the remediation activities have a direct impact on protecting groundwater, the primary source of potable water for Tucson Water.

Section 1

INTRODUCTION

In December 2009, the City of Tucson (City) retained R. W. Beck to conduct a financial sustainability study (Study) for the City's Environmental Services Department (ES). The purpose of the Study was to determine the cost of all solid waste related services provided by ES and safeguard the financial integrity of the solid waste utility.

1.1 Background

ES currently provides solid waste and recycling collection services to approximately 139,134 Automated Plastic Container (APC) customers, approximately 4,895 front load containers, and "pulls" approximately 8,640 roll-off containers each year.¹ Additionally, ES provides drop-off recycling services²; a Household Hazardous Waste (HHW) program; curbside brush and bulky collection; community education programs; operates the City's Los Reales Landfill; is responsible for remediation projects and monitoring at various closed landfills, underground storage tank sites, and Brownfield sites; conducts environmental assessments; and oversees Citywide environmental compliance. This section presents a brief description of the services provided and some of the fees currently charged for these services.

1.2 Current Services and Fees

1.2.1 Automated Plastic Container

The majority of APC accounts are for residential customers and most residents are served via a 95-gallon APC.³ ES sometimes provides service in other container sizes based on collection needs. In some areas, residents share a 300-gallon APC, which is typically located in the alley. The current \$14.50 per month fee⁴ for residential customers applies to all APC accounts for size 95-gallon, or smaller, and most 300-gallon accounts. This fee pays for:

- Once per week refuse (garbage) collection
- Once per week recycling collection
- Twice per year curbside brush and bulky collection

¹ A "pull" is the collection of a roll-off container, which can be either an open top or compacting container.

² Includes 13 Neighborhood Recycling Center drop-off sites

³ Environmental Services, by City Code requirement, provides service to all residential properties with 24 or fewer dwelling units per parcel.

⁴ Effective July 1, 2009



- HHW program
- Neighborhood cleanups
- Remediation/environmental protection
- Community interest collections provided for non-profits or charities
- Low Income Program

Residential customers with extra APC containers (smaller than the 300-gallon APC) are charged an additional \$10.00 per month per container. Residential accounts that are billed for a sole use 300-gallon APC (i.e., not shared and billed separately) are charged \$43.50 per month. Residents that qualify for the Low Income Program are provided a \$12.00 per month credit that reduces their monthly bill to only \$2.50 for solid waste services.

Approximately 4,000 commercial customers are served via APC. These customers are currently charged \$18.60 per month for each APC they utilize that is a size 95-gallon or smaller. Commercial customers are charged \$56.00 per month for each sole use 300-gallon APC.

1.2.2 Commercial Front Load

ES provides front load collection services in an open market and, thus, competes with private haulers. ES offers one to six times per week collection and disposal of refuse via front load containers in sizes ranging from two to eight cubic yards of capacity. The current rates for this service are provided by the rate matrix in Table 1-1 for standard containers.⁵ ES also provides collection of recyclables via front load containers.⁶

Table 1-1
Current Front Load Rate Matrix

Container Size (Cubic Yards)	Collection Frequency (Times per Week)					
	1	2	3	4	5	6
2	\$ 83.00	\$ 138.00	\$ 193.00	\$ 249.00	\$ 304.00	\$ 359.00
3	83.00	138.00	193.00	249.00	304.00	359.00
4	87.00	147.00	207.00	266.00	326.00	386.00
5	96.00	165.00	233.00	302.00	371.00	439.00
6	96.00	165.00	233.00	302.00	371.00	439.00
8	105.00	183.00	260.00	338.00	415.00	493.00

Notes:

- 1) Rates listed are for front load refuse containers without compaction

⁵ There is a separate rate matrix for service of compacting containers.

⁶ Currently, the rates for front load recyclable collection are \$25 per month for once per week collection, \$50 per month for twice per week collection, and \$75 per month for three times per week collection. These rates only apply to customers with ES front load refuse service.

1.2.3 Commercial Roll-Off

ES provides roll-off delivery and pulls for 20, 30 and 40 cubic yard containers in an open market environment. The current delivery charge is \$80.00 and the current rate for a refuse pull is \$160.00 plus \$32.00 per ton for disposal. The current rate for recyclable material is \$110.00 per pull.

1.2.4 Landfill

ES operates the City's Los Reales Landfill. This facility is projected to receive approximately 440,000 tons of refuse in FY 2010. Approximately 56 percent of refuse disposal at this facility is from ES collection services (residential and commercial). Four percent is attributable to other City departments. The remaining 40 percent is delivered to the facility by private commercial haulers and customers that self-haul to the landfill.

As recently as FY 2007, the Los Reales Landfill was receiving approximately 700,000 tons of refuse per year. Although the economy may be partially responsible for the decrease in refuse, the decrease is primarily due to the new Rincon Transfer Station, which Waste Management, Inc. (WMI) opened near the Los Reales Landfill. Prior to this facility, WMI was the largest private contributor of refuse to the Los Reales Landfill – collecting a significant amount of refuse from commercial customers within the City. WMI accounted for approximately 15 percent of the total refuse delivered to the Los Reales Landfill in FY 2007. Since the new transfer station has opened, essentially all of the commercial refuse collected by WMI (and several other private haulers) has been redirected away from the Los Reales Landfill.

In response to this development, the City revised the City Code to allow the ES Director the authority to enter into one-year put-or-pay contracts.⁷ These contracts provide the entity delivering a guaranteed minimum amount of refuse to the Los Reales Landfill a reduced rate per ton. Due to this change in the City Code, the City was able to regain a portion of the business of Saguaro Environmental, historically the second largest private contributor of refuse to the Los Reales Landfill (behind WMI).

The current gate rate for disposal at the Los Reales Landfill is \$32.00 per ton. Residents with refuse weighing less than one ton are charged \$10.00 per load. Residents may dispose of HHW and scrap metal for recycling at the Los Reales Landfill at no charge.⁸ Some materials, such as tires, have special pricing for disposal.

1.2.5 Remediation

ES conducts numerous activities collectively referred to as remediation. These activities can be broadly categorized into two main functions – groundwater protection and soil cleanup. Activities included in support of each function are described below.

⁷ Ordinance Number 10737, adopted December 7, 2009

⁸ There is a \$5.00 Refrigerant Evacuation Fee for appliances designed to use refrigerant

1.2.5.1 Groundwater Protection

Activities in support of groundwater protection include:

- Landfill monitoring, remediation, closure, and post closure
- Engineering development review for property development on or adjacent to landfills
- Underground storage tank assessment and remediation

These activities are described in more detail below.

Landfill monitoring, remediation, closure, and post closure

ES has responsibility for twenty-three landfills, which the City has either operated, hauled refuse to, or owned. Twenty-two of these landfills are within the current City Limits, with one west of the City (in Pima County). ES performs monitoring, remediation, closure, or post closure monitoring at sixteen of these landfills.⁹

These sixteen landfills include fifteen inactive landfills and the active Los Reales Landfill. The fifteen inactive landfills and the older portion of the Los Reales Landfill are unlined with the majority of them located in previous sand and gravel borrow pits. These conditions have contributed to the ability for contaminants to “leak” from the landfills. The landfills are currently adjacent to neighborhoods and businesses. As such, ES must manage environmental issues associated with these landfills on a daily basis. These issues range from exposed waste due to storm water damage, potential underground fires, methane gas excursions off the property, groundwater contamination, odor, nuisance plants such as buffelgrass, and more.

The sixteen landfills comprise 1,549 acres, which ES maintains. Over the course of a year, ES monitors 432 groundwater monitor wells, 72 soil vapor wells, and 588 methane monitoring wells. ES operates four landfill gas extraction systems, and three groundwater remediation systems, cleaning approximately 1.5 million gallons of water per day. One of these systems, ES operates for the Arizona Department of Environmental Quality (ADEQ) per a Settlement Agreement. ES performs inspections of the properties to ensure against damage or odors. Three of the landfills are State Superfund Sites and are heavily regulated by ADEQ, due to groundwater contamination. Three additional landfills have groundwater contamination above regulatory standards, but no remediation systems at this time. At least one of these, the Silverbell Landfill, will require a multimillion dollar remediation system within the next three to five years.

At the City’s one active landfill, the Los Reales Landfill, ES operates a pump and treat system to clean-up groundwater impacted from the older, unlined cells of the landfill. In 2007, ES expanded the piping to capture the entire groundwater plume and upgraded the on-site treatment plant to handle the increased volume estimated at 100

⁹ These sixteen City-owned landfills are: Prudence, Rio Nuevo North, Cottonwood, Congress (Rio Nuevo South), Nearmont, St. Mary’s, Silverbell, Mission, Ryan Airfield, Irvington, Tumamoc, Ryland, A Mountain, Vincent Mullins, Harrison, and Los Reales.

gallons per minute (GPM). Treated water is used on-site for dust control, or reinjected into the aquifer to expedite cleanup.

The remaining seven landfills are not owned by the City, but the City has potential financial liability at these landfills should any hazards be identified in the future.¹⁰

ES has been working with potential developers and City Real Estate to determine if there are viable uses for some of the closed landfills. At this time, ES engineers are working with developers for the potential to site solar power on closed landfills, and gas to energy projects.

Engineering development review for property development on or adjacent to landfills

Due to the City's landfill ordinance, ES maintains a landfill engineer to review and approve development near landfills in order to ensure public safety.

Underground storage tank assessment and remediation

ES is currently responsible for the remediation of two large Leaking Underground Storage Tank (LUST) sites from City Fueling Facilities. These are the Thomas Price Service Center Site and the Downtown former Police/Fire Headquarters Fueling Site. ES is responsible for the engineering, remediation, monitoring, regulatory reporting and compliance on these sites. Additionally, if new contamination is identified or a LUST found, ES would assist in the assessment.

1.2.5.2 Soil Cleanup

Activities in support of soil cleanup include:

- Soil assessment and remediation
- Property transfer environmental assessments per legal standards
- City-wide Brownfield's grant program to return contaminated properties, or perceived contaminated properties to beneficial use
- Regulatory permit monitoring and reporting for air quality and industrial discharge for all City departments
- Coordination of the City-wide environmental team to address spills/leaks, emergency response, improved environmental business practices, and training

These activities are described in more detail below.

Soil assessment and remediation

ES is currently managing four soil contamination properties.¹¹ Combined these represent multimillion dollar financial liabilities for cleanup. These properties are owned by the City and three of the four are needed for current City development

¹⁰ The seven landfills not owned by the City are: 29th Street, Broadway North, Cactus, Columbus #1 & #2, Dagoon, State Pit, and Walnut.

¹¹ The four properties are: Former Ore Mill Site, Former Adkins Site, 6th and 9th, and the Former Flint Oil.

plans. Arizona Soil Remediation Standards are exceeded at all four sites and the properties are fenced to protect against human exposure.

Property transfer environmental assessments per legal standards

ES requires two environmental science staff to oversee the “due diligence” or “Environmental Phase I and II Site Assessments” for the City. These assessments are necessary for property transfers and currently there are a large number of assessments being conducted in support of properties being transferred to the Regional Transportation Authority (RTA). In addition to RTA environmental assessments, there is always a steady volume needed for downtown development work. As development plans and uses of City-owned properties change over time, the environmental assessment is reevaluated to ensure public health and safety is protected.

City-wide Brownfield’s grant program to return contaminated properties, or perceived contaminated properties to beneficial use

ES is nationally recognized for its Brownfields program, bringing in \$2.5 million dollars in grants from the EPA to date. This program supports the City Manager’s agenda of improvements in contaminated areas of the City. ES currently has an EPA Brownfield’s Community-Wide Assessment Grant application submitted for \$400,000 to assess properties that lie within the Empowerment Zone, the Westside Weed and Seed Coalition and the North Tucson Weed and Seed Coalition.

Regulatory permit monitoring and reporting for air quality and industrial discharge for all City departments

ES monitors and performs the regulatory reporting for over 75 City-owned facilities. ES additionally conducts audits of these facilities on an annual basis as part of the City’s Multi-Agency Inspection Team and independently audits each permit condition, sending an annual audit report to the department director who holds the permit.

Coordination of the City-wide environmental team to address spills/leaks, emergency response, improved environmental business practices, and training

With City Manager direction, ES developed and chairs the Citywide Environmental Management Program (EMP). In its eighth year of operation, EMP is an effective group of key City staff trained to prevent, and manage environmental incidents.¹²

1.2.5.3 Financial Implications

The total cost for all of the City’s remediation activities is approximately \$5.3 million annually. Approximately \$2.0 million of this cost is associated with general obligation debt service, which is recovered via property tax assessments. The remaining \$3.3 million represents the operating cost, which is currently the responsibility of ES to recover. Of the \$3.3 million operating cost, \$2.5 million is associated with activities that protect the groundwater and \$0.8 million is associated

¹² EMP activities can be tracked on the web site: <http://cms3.tucsonaz.gov/emp>

with contaminated soil assessment and cleanup, Brownfields, environmental management, and other activities.

When available, ES obtains federal or state grant funding, reimbursement from the State of Arizona, and transfers from other City Departments when the work is in support of their properties or projects. The remaining financial obligation has historically been recovered, along with the cost of refuse disposal, via the rate per ton charged to customers at the Los Reales Landfill and within the ES fees for solid waste services.

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Section 2 COST OF SERVICE

The goal of a cost of service study is to determine the solid waste fees required to adequately recover the costs of providing service and safeguard the financial integrity of the solid waste utility. R. W. Beck has developed several key steps in completing this type of analysis, including:

- Develop a Test Year Revenue Requirement
- Forecast the Revenue Requirement
- Allocate Costs to Service Categories
- Determine Billing Units
- Calculate the Cost of Service

It is important to note that the rates listed in Section 2 of this report reflect the cost of service. These are NOT the rates R. W. Beck is proposing be adopted by the City. Adopted rates should take into consideration other factors, such as external market forces, the desire to encourage or discourage certain behaviors (such as recycling) by customers, and other policy issues. Therefore, the rates recommended for adoption could justifiably differ from the cost of service.

2.1 Test Year Revenue Requirement

The revenue requirement in the Study represents the total revenue that the solid waste utility will need to recover through rates during a fiscal year in order to fund all expenses associated with the provision of solid waste services. The revenue requirement is net of miscellaneous revenue items (referred to as revenue offsets), such as recyclable material sales, Pima County HHW program contributions, ES penalties, and miscellaneous charges.

R. W. Beck worked with City staff to make adjustments, as necessary, to the FY 2010 Adopted Budget in order to reflect the typical operation of the solid waste utility. The resulting “Test Year” (Test Year) budget was then used as the basis to forecast expenses for FY 2010 through FY 2019. The FY 2010 Adopted Budget, adjustments, and the resulting Test Year budget are shown in the Appendix, Schedule 1.

2.2 Revenue Requirement Forecast

R. W. Beck worked with City staff to forecast changes in the Test Year revenue requirement due to various factors, such as inflation, salary increases, new equipment, customer growth, capital projects, etc. Inflation factors utilized in the forecast include:



Section 2

- Salary/Overtime = 0.0 percent in the first two years of the forecast and then 4.0 percent per year thereafter
- Benefits = 4.0 percent per year
- Capital Equipment and Vehicle Maintenance = 3.0 percent per year
- Fuel = 2.0 percent per year
- All Other Expenses = 2.0 percent per year

Table 2-1 shows the projected revenue requirement for selected years in the ten-year forecast. The line-item detail to support these amounts, as well as all of the intermediate years, is provided in the Appendix, Schedule 2.

**Table 2-1
Revenue Requirement Forecast**

(Dollar Amounts in Thousands)	Year 1 FY 2010	Year 2 FY 2011	Year 3 FY 2012	Year 4 FY 2013	Year 7 FY 2016	Year 10 FY 2019
Operating Costs	\$ 41,857	\$ 44,526	\$ 45,374	\$ 46,427	\$ 51,397	\$ 55,613
Capital Projects ¹	1,840	2,256	2,274	2,432	2,530	3,445
Debt and Leases ²	2,585	2,140	1,366	921	746	788
	46,282	48,922	49,013	49,778	54,672	59,846
Revenue Offsets ³	(1,440)	(1,454)	(1,489)	(1,525)	(1,639)	(1,762)
Revenue Requirement	\$ 44,842	\$ 47,468	\$ 47,524	\$ 48,253	\$ 53,033	\$ 58,084
Annualized Change		5.9%	0.1%	1.5%	3.2%	3.1%

Notes:

- 1) Includes contributions to reserve funds for capital projects and closure/post-closure costs related to the Los Reales Landfill
- 2) Existing certificates of participation and capital leases
- 3) Revenue offsets, such as recyclable material sales, Pima County HHW program contributions, ES penalties, and miscellaneous charges

Key assumptions impacting the ten-year forecast include:

- **Pay-As-You-Go (PAYG) vehicles** – ES will reduce its interest expense by funding routine vehicle replacements with funds from operations, in lieu of utilizing capital leases. Vehicle replacements in the revenue requirement forecast represent approximately \$4.4 million per year starting in FY 2011. Correspondingly, remaining obligations on existing capital leases decrease over the first four years of the forecast period and are eliminated by FY 2014. R. W. Beck supports City staff in this policy decision regarding the funding of vehicle replacements on a PAYG basis.
- **Closure/Post-Closure Costs** – The Los Reales Landfill is estimated to require \$35 million (in 2009 US Dollars) for closure and post-closure costs associated with the 423 acre permitted site.¹³ R. W. Beck recommends the utility

¹³ Projected cost based on GASB 18 filing as of June 30, 2009

establish, and begin making an annual contribution to a restricted reserve fund as the site is filled to pay for this future obligation. Assuming a starting balance of \$1 million, the required annual contribution would be approximately \$930,000 starting in FY 2010 and would increase in proportion with tonnage disposed at the landfill until the landfill is closed.

The forecasted balance for each of the recommended reserve funds throughout the ten-year forecast is shown in the Appendix, Schedule 3. It is important to view the reserve fund balances in the context of current and future financial obligations. Dividing the total fund balance into restricted reserve funds allows a utility to assign current assets to specific liabilities.

Reserve funds included in the Study are:

- **Capital and Remediation Project Reserve** – Reflects the funds identified by City staff to be used to pay for various disposal and remediation related capital projects during the ten-year forecast.
- **Los Reales Closure/Post-Closure Reserve** – Savings for costs related to closing and post-closure care of the Los Reales Landfill.
- **O&M Reserve** – Recommended operating reserve to serve as working capital, provide for unexpected revenue shortfalls, and safeguard the financial stability of the solid waste utility.¹⁴

2.3 Cost Allocations to Service Categories

ES provides numerous valuable services to the community. Service categories were developed with the assistance of City staff to represent the primary solid waste services provided by ES. The service categories include:

ES/City

1. Administration

Residential

2. APC Refuse Collection
3. APC Recycling Collection
4. Brush and Bulky Collection
5. HHW Disposal

Commercial Front Load

6. Refuse Collection
7. Recycling Collection
8. Container Maintenance

¹⁴ R. W. Beck generally recommends maintaining 60 to 120 days of operating expenses in an operating reserve.

Commercial Roll-Off

- 9. Refuse Collection
- 10. Recycling Collection
- 11. Container Maintenance

Landfill

- 12. Refuse Disposal

Remediation

- 13. Soil Cleanup
- 14. Groundwater Protection

The annual revenue requirement was allocated to the appropriate service categories based on R. W. Beck's experience with regard to solid waste ratemaking and input from City staff. Table 2-2 lists the projected costs of providing service, by service category, in FY 2010. The costs by service category for the complete ten-year forecast are provided in the Appendix, Schedule 4.

Table 2-2
Revenue Requirement by Service Category

Service Category	Year 1 FY 2010
Administration	\$ 8,616,494
Residential	
APC Refuse Collection	\$ 9,132,693
APC Recycling Collection	6,733,437
Brush and Bulky	1,970,481
HHW	309,944
	\$ 18,146,555
Commercial Front Load	
Refuse Collection	\$ 4,006,451
Recycling Collection	706,019
Container Maintenance	408,213
	\$ 5,120,682
Commercial Roll-Off	
Refuse Collection	\$ 1,333,773
Recycling Collection	144,447
Container Maintenance	166,996
	\$ 1,645,216
Landfill	
Refuse Disposal	\$ 8,629,116
Remediation	
Soil Cleanup	\$ 654,440
Groundwater Protection	2,029,786
	\$ 2,684,226
Revenue Requirement	\$ 44,842,289

2.4 Billing Units

In order to determine the cost of service for each ES service provided, it is necessary to determine the proper number of annual billing units (e.g., number of households, containers, collections, tons). Then, by dividing the revenue requirement for a service by the appropriate billing units, the cost of service is identified. R. W. Beck identified the appropriate billing units for each customer class with the assistance of City staff.

2.4.1 Automated Plastic Container

In most cases, an individual APC container represents the most appropriate billing unit for the purposes of recovering the cost of service. However, in the case of customers sharing a 300-gallon APC, and billed separately, the number of billed customers (not the number of containers) is the appropriate billing unit. The resulting billings units for FY 2010 are shown in Table 2-3. All APC billing units are assumed to increase at 1.5 percent annually throughout the ten-year forecast.

Table 2-3
APC Billing Units

	Year 1 FY 2010
Individual APC ^{1,2}	112,709
Shared APC ³	29,917

Notes:

- 1) Includes 3,492 containers that represent extra (i.e., second or third) containers with the same customer
- 2) Includes 4,861 containers for residents participating in the Low Income Program
- 3) Composed of 11,762 containers being shared by 29,917 customers

2.4.2 Commercial Front Load

The billing units for the commercial front load service are based on the number of containers, the number of collections, and the cubic yards of disposal capacity. The front load billing units for FY 2010 are provided in Table 2-4. These billing units include a small number of “community interest” accounts (16 containers), which are provided service without charge. These accounts represent certain entities (typically non-profits or charities, such as Goodwill Industries, St. Vincent De Paul and others), which benefit the community. The front load billing units are projected to remain unchanged for FY 2011 and FY 2012 and then increase 1.0 percent annually thereafter.

**Table 2-4
Front Load Billing Units**

	Year 1 FY 2010
Refuse	
Number of Containers	4,119
Number of Collections (annual)	393,432
Disposal Capacity (cubic yards per year)	2,387,060
Recycling	
Number of Containers	776
Number of Collections (annual)	52,468

2.4.3 Commercial Roll-Off

Commercial roll-off billing units are typically based on the number of pulls, with the cost of disposal passed-through to the customer based on the actual weight of the refuse disposed. The roll-off billing units for FY 2010 are provided in Table 2-5. Similar to the front load service, these billing units include “community interest” collections provided without charge. ES has recently initiated limits on the number of pulls allowed for these entities without charge. The roll-off billing units are projected to remain unchanged for FY 2011 and FY 2012 and then increase 1.0 percent annually thereafter.

It is notable that the number of pulls has decreased significantly in the last two years due, mainly, to the reduction in construction activity as a result of the economic downturn. As a point of reference, ES made over 16,500 roll-off pulls in FY 2008.

It should also be noted that container delivery fees also generate revenue for the roll-off program. This revenue is treated as a revenue offset in the Study, partially offsetting the cost of the roll-off service.

**Table 2-5
Roll-Off Billing Units**

	Year 1 FY 2010
Refuse	
Number of Collections (annual)	7,692
Recycling	
Number of Collections (annual)	948

2.4.4 Refuse Disposal

Disposal billing units are typically based on the annual tons entering the landfill. The projected annual tons entering the City's Los Reales Landfill in FY 2010, by customer group, are shown in Table 2-6. The tons are projected to increase in accordance with customer growth for each ES customer class provided collection service and at 1.5 percent per year for private and self-haul customers.

**Table 2-6
Landfill Disposal Billing Units**

(Units in Tons)	Year 1 FY 2010
Residential	
APC	137,193
Brush and Bulky	14,149
Community Interest (roll-off)	2,268
	<hr/> 153,610
Commercial	
Front Load	71,671
Roll-Off	18,879
	<hr/> 90,550
Private/Self-Haul	
City Departments	16,938
Self-Haulers	35,539
Private Haulers	142,968
	<hr/> 195,445
Total	<hr/> 439,605 <hr/>

As was discussed in Section 1.2.4, the Los Reales Landfill was receiving approximately 700,000 tons of refuse per year as recently as FY 2007. This significant decrease in annual tonnage disposed has a direct impact on the cost of service, as the majority of costs for the disposal operation are fixed in nature.

2.5 Cost of Service

The costs of providing services, identified in Section 2.3, were distributed across the appropriate customer billing units, discussed in Section 2.4, to calculate the cost of service.

2.5.1 Automated Plastic Container

The total APC revenue requirement for the first four years of the ten-year forecast is shown in Table 2-7. The detail, including the remaining years of the forecast, is provided in the Appendix, Schedule 5. The total APC revenue requirement includes:

- All direct costs identified in Section 2.3 (including Remediation – Soil Cleanup)
- A proportional share of the administration costs (based on the percentage of the total revenue requirement the direct costs represent)
- A proportional share of disposal costs (based on the estimated tonnage associated with APC service as compared with the total tonnage entering the landfill)
- The cost of the “community interest” commercial services

**Table 2-7
APC Revenue Requirement**

Service Category	Year 1 FY 2010	Year 2 FY 2011	Year 3 FY 2012	Year 4 FY 2013
Direct ¹				
APC Refuse Collection	\$ 9,132,693	\$ 9,701,876	\$ 9,449,251	\$ 9,745,867
APC Recycling Collection	6,733,437	7,167,457	6,969,381	7,188,858
Brush and Bulky	1,970,481	2,006,859	1,855,719	2,071,652
HHW	309,944	312,029	414,250	329,576
Remediation – Soil Cleanup	654,440	664,787	675,405	695,013
	<u>\$ 18,800,995</u>	<u>\$ 19,853,007</u>	<u>\$ 19,364,005</u>	<u>\$ 20,030,965</u>
Indirect (Redistributed)				
Administration	\$ 4,471,914	\$ 4,492,364	\$ 4,466,698	\$ 4,678,893
Refuse Disposal	3,732,442	4,119,185	4,252,668	4,065,192
Community Interest	356,396	353,295	379,133	388,307
	<u>\$ 8,560,752</u>	<u>\$ 8,964,844</u>	<u>\$ 9,098,499</u>	<u>\$ 9,132,392</u>
Total Revenue Requirement	<u>\$ 27,361,747</u>	<u>\$ 28,817,851</u>	<u>\$ 28,462,504</u>	<u>\$ 29,163,357</u>

Notes:

- 1) The decrease in revenue requirement between Year 2 and Year 3 is the result of a \$324,451 reduction in the capital leases associated with APC service and the timing of vehicle replacement purchases

The cost of service for APC customers in the first four years of the ten-year forecast is shown in Table 2-8. The cost of service for the remaining years of the forecast is provided in the Appendix, Schedule 5.

Table 2-8
APC Cost of Service

Monthly Cost	Year 1 FY 2010	Year 2 FY 2011	Year 3 FY 2012	Year 4 FY 2013
48-Gallon APC				
First APC	\$ 15.97	\$ 16.52	\$ 16.01	\$ 16.26
Each Additional	7.29	7.67	7.43	7.46
65-Gallon APC				
First APC	\$ 16.36	\$ 16.94	\$ 16.44	\$ 16.66
Each Additional	7.67	8.09	7.86	7.86
95-Gallon APC				
First APC	\$ 17.04	\$ 17.68	\$ 17.19	\$ 17.36
Each Additional	8.35	8.83	8.61	8.57
300-Gallon APC				
Shared ¹	\$ 13.01	\$ 13.47	\$ 13.16	\$ 13.26
Sole Use	21.67	22.72	22.32	22.19

Notes:

- 1) Assumes three households per 300-gallon APC

The cost of service for APC customers depends on the size of container utilized. Although most cost components, such as administration, are uniform across all APC sizes, the disposal cost component varies by APC size. This is due to a larger container's capacity to dispose of more refuse. Residents with "extra" refuse containers only incur the cost of the additional refuse collection and the disposal capacity that the additional APC allows. This is identified as the "Each Additional" cost in Table 2-8. Further, the customers sharing a 300-gallon APC are sharing the cost of the collection among them, thus reducing the cost of providing this collection, per customer.

Impact of APC Size on Cost of Service

It is important to note that the number of containers serviced, by size, has an impact on the overall cost of service (per billing unit). For instance, a shift in customer preference to smaller APC sizes would increase the cost of service for all APC sizes. This is because the fixed costs for disposal would be spread across fewer gallons of total disposal capacity, resulting in a universally higher cost per gallon of disposal capacity. Regardless of whether these customers have decided to reduce their disposal needs via diversion, recycling or simply had excess disposal capacity, their decision to reduce the size of their APC results in a reduction in the total APC disposal capacity.

Therefore, if the City implements differentiated rates for the various sizes of APC, in lieu of the current rates described in Section 1.2.1, a shift in preference to smaller APC sizes will potentially have financial ramifications for the APC customer class as a whole, as the customers that reduce the size of their APC will have previously been

paying for this additional disposal capacity. Thus, this decrease in revenue must be recovered from all other APC customers.

Although price differentials between APC sizes can provide customers with an economic incentive to reduce their waste through recycling or other means, the City should carefully evaluate the financial impact of providing smaller container sizes on the cost of service and the revenue recovered from ratepayers. Conservative assumptions should be utilized to ensure the utility recovers all of its costs. Policy issues related to this include whether or not customers participating in a shared 300-gallon APC should be allowed to opt for a smaller APC in lieu of participating in the shared container.

2.5.2 Commercial Front Load

The total front load revenue requirement for the first four years of the ten-year forecast is shown in Table 2-9. The detail, including the remaining years of the forecast, is provided in the Appendix, Schedule 6. The total front load revenue requirement includes:

- All direct costs identified in Section 2.3
- A proportional share of the administration costs (based on the percentage of the total revenue requirement the direct costs represent)
- A proportional share of disposal costs (based on the estimated tonnage associated with front load service as compared with the total tonnage entering the landfill)

**Table 2-9
Front Load Revenue Requirement**

Service Category	Year 1 FY 2010	Year 2 FY 2011	Year 3 FY 2012	Year 4 FY 2013
Direct ¹				
Refuse Collection	\$ 4,006,451	\$ 4,384,759	\$ 4,374,684	\$ 4,516,118
Recycling Collection	706,019	774,507	771,718	796,751
Container Maintenance	408,213	414,915	421,809	434,795
	\$ 5,120,682	\$ 5,574,181	\$ 5,568,210	\$ 5,747,664
Indirect (Redistributed)				
Administration	\$ 1,217,981	\$ 1,261,333	\$ 1,284,420	\$ 1,342,557
Refuse Disposal	1,741,474	1,893,930	1,926,822	1,833,194
	\$ 2,959,455	\$ 3,155,263	\$ 3,211,242	\$ 3,175,751
Total Revenue Requirement	\$ 8,080,137	\$ 8,729,444	\$ 8,779,452	\$ 8,923,415

Notes:

- 1) The decrease in revenue requirement between Year 2 and Year 3 is the result of a \$118,538 reduction in the capital leases associated with front load service

The commercial front load cost components are developed so that customers only pay for services from which they benefit. All containers share equally in the cost of administration and container maintenance. Collection costs are distributed based on the frequency of collections, without regard to the size of containers. Refuse disposal costs are assigned as a function of the disposal capacity (i.e., collection frequency and container size). The various cost components for the front load cost of service are shown for the first four years of the ten-year forecast in Table 2-10. The cost components for the remaining years of the forecast are provided in the Appendix, Schedule 6. The rate matrix showing the monthly cost for each size of container and frequency of collection for the ten-year forecast is also provided in the Appendix, Schedule 6.

Table 2-10
Front Load Cost of Service Components

	Year 1 FY 2010	Year 2 FY 2011	Year 3 FY 2012	Year 4 FY 2013
Monthly Cost per Container ¹	\$ 27.68	\$ 28.54	\$ 29.05	\$ 29.96
Cost per Collection	\$ 10.57	\$ 11.57	\$ 11.54	\$ 11.80
Cost per Cubic Yard of Disposal Capacity	\$ 0.73	\$ 0.79	\$ 0.81	\$ 0.76

Notes:

- 1) Recovers the cost of container maintenance and administration

2.5.3 Commercial Roll-Off

The total roll-off revenue requirement for the first four years of the ten-year forecast is shown in Table 2-11. The detail, including the remaining years of the forecast, is provided in the Appendix, Schedule 7. The total roll-off revenue requirement includes:

- All direct costs identified in Section 2.3
- A proportional share of the administration costs (based on the percentage of the total revenue requirement the direct costs represent)

**Table 2-11
Roll-Off Revenue Requirement**

Service Category	Year 1 FY 2010	Year 2 FY 2011	Year 3 FY 2012	Year 4 FY 2013
Direct ¹				
Refuse Collection	\$ 1,333,773	\$ 1,320,374	\$ 1,425,378	\$ 1,473,372
Recycling Collection	144,447	145,650	159,816	165,224
Container Maintenance	166,996	169,738	172,558	177,871
	\$ 1,645,216	\$ 1,635,762	\$ 1,757,752	\$ 1,816,466
Indirect (Redistributed)				
Administration	\$ 391,323	\$ 370,142	\$ 405,461	\$ 424,296
Total Revenue Requirement	\$ 2,036,539	\$ 2,005,904	\$ 2,163,213	\$ 2,240,762

Notes:

- 1) The decrease in revenue requirement between Year 1 and Year 2 is the result of a \$35,624 reduction in the capital leases associated with roll-off service

The cost of service for roll-off collections in the first four years of the ten-year forecast is shown in Table 2-12. The cost of service for the remaining years of the forecast is provided in the Appendix, Schedule 7.

The relatively high cost for this service is due, in part, to the significant reduction in the demands placed upon this service (as indicated by the significant decrease in pulls discussed previously). Thus, fixed costs are being spread across fewer pulls, increasing the cost per pull. ES has responded to this situation by reducing costs, where possible, and initiating limits on the number of pulls allowed for “community interest” entities without charge.

**Table 2-12
Roll-Off Cost of Service**

	Year 1 FY 2010	Year 2 FY 2011	Year 3 FY 2012	Year 4 FY 2013
Cost per Pull	\$ 235.71	\$ 232.16	\$ 250.37	\$ 256.78

Disposal costs for refuse pulls are passed through to the customer based on the actual tonnage disposed and the tip fee at the landfill. Therefore, there is no need to recover the cost of disposal in the pull fee.

2.5.4 Refuse Disposal

The total refuse disposal revenue requirement for the first four years of the ten-year forecast is shown in Table 2-13. The detail, including the remaining years of the forecast, is provided in the Appendix, Schedule 8. The total refuse disposal revenue requirement includes:

- Direct costs identified in Section 2.3 (including costs associated with closure and post-closure)
- A proportional share of the administration costs (based on the percentage of the total revenue requirement the direct costs represent)

**Table 2-13
Refuse Disposal Revenue Requirement**

Service Category	Year 1 FY 2010	Year 2 FY 2011	Year 3 FY 2012	Year 4 FY 2013
Direct ¹				
Refuse Disposal	\$ 8,629,116	\$ 9,585,215	\$ 9,832,241	\$ 9,368,594
Indirect (Redistributed)				
Administration	2,052,480	2,168,955	2,268,004	2,188,344
Total Revenue Requirement	\$ 10,681,597	\$ 11,754,170	\$ 12,100,245	\$ 11,556,938

Notes:

- 1) The decrease in revenue requirement between Year 3 and Year 4 is the result of a \$438,297 reduction in the capital leases associated with disposal operations and the timing of vehicle replacement purchases

The cost of service for refuse disposal in the first four years of the ten-year forecast is shown in Table 2-14. The cost of service for the remaining years of the forecast is provided in the Appendix, Schedule 8.

**Table 2-14
Refuse Disposal Cost of Service**

	Year 1 FY 2010	Year 2 FY 2011	Year 3 FY 2012	Year 4 FY 2013
Cost per Ton	\$ 24.30	\$ 26.43	\$ 26.88	\$ 25.32

The APC and front load refuse collection services provided by ES have the cost of disposal (at the rates shown in Table 2-14) included in their revenue requirements.

2.5.5 Remediation – Groundwater Protection

The total remediation revenue requirement related to groundwater protection for the first four years of the ten-year forecast is shown in Table 2-15. It is important to note that the remediation costs associated with soil cleanup have been included within the APC revenue requirement (as shown in Table 2-7). The detail, including the remaining years of the forecast, is provided in the Appendix, Schedule 9. The total remediation – groundwater protection revenue requirement includes:

- Direct costs identified in Section 2.3
- A proportional share of the administration costs (based on the percentage of the total revenue requirement the direct costs represent)

Table 2-15
Groundwater Protection Revenue Requirement

Service Category	Year 1 FY 2010	Year 2 FY 2011	Year 3 FY 2012	Year 4 FY 2013
Direct				
Groundwater Protection	\$ 2,029,786	\$ 2,060,328	\$ 2,093,984	\$ 2,152,161
Indirect (Redistributed)				
Administration	482,795	466,214	483,020	502,708
Total Revenue Requirement	\$ 2,512,581	\$ 2,526,542	\$ 2,577,004	\$ 2,654,869

Historically, the costs for the remediation program have been recovered in conjunction with the cost of refuse disposal and included in ES fees for collection services. This is the approach currently utilized by the City and it has a rational nexus, as the remediation cost represents a legacy of refuse disposed in the past. However, there is a lag in the recovery of this cost as the cost of remediation recovered from current refuse disposal customers is associated with refuse that was disposed in the past (and not necessarily by the current customers).

Importantly, the historical approach to remediation cost recovery fails to equitably distribute the remediation costs to all waste generators in the City. This is primarily due to the new Rincon Transfer Station, which Waste Management, Inc. (WMI) opened near the Los Reales Landfill. Prior to this facility, WMI was the largest private contributor of refuse to the Los Reales Landfill – collecting a significant amount of refuse from commercial customers within the City. WMI accounted for approximately 15 percent of the total refuse delivered to the Los Reales Landfill in FY 2007. Since the new transfer station has opened, essentially all of the commercial refuse collected by WMI (and several other private haulers) has been redirected away from the Los Reales Landfill.

As a result of the significant amount of commercially generated refuse being directed away from the Los Reales Landfill, the costs for the remediation program are no longer being recovered from all the customers generating refuse. In R. W. Beck's view, this is not equitable since, if refuse generation is the mechanism selected for cost recovery, the cost of remediation should be allocated to all waste generators – not just the generators that have their waste collected by ES and/or disposed of at the Los Reales Landfill.

If the City were to continue to utilize the historical approach to remediation cost recovery in conjunction with the cost of disposal at the landfill, then the cost shown in Table 2-16 would need to be added to the cost of refuse disposal (as shown in Table 2-14). **However, this has been provided for informational purposes only.** To ensure the cost of remediation is recovered equitably, ES is in the process of evaluating several alternative approaches to recover the cost of groundwater protection and, as stated previously, the cost of soil cleanup has been included within the APC revenue requirement.

Table 2-16
Remediation Cost of Service (Historical Approach for Informational Purposes)

	Year 1 FY 2010	Year 2 FY 2011	Year 3 FY 2012	Year 4 FY 2013
Cost per Ton ¹				
Groundwater Protection	\$ 5.72	\$ 5.68	\$ 5.73	\$ 5.82
Soil Cleanup	1.84	1.83	1.85	1.88
	\$ 7.56	\$ 7.51	\$ 7.58	\$ 7.70

Notes:

- 1) To be added to the cost of disposal at the Los Reales Landfill if the historical approach to remediation cost recovery were maintained

Section 3 PROPOSED RATES

R. W. Beck proposes the rates for ES services listed in this section of the report be adopted by the City. The proposed rates reflect the cost of service analysis discussed in Section 2 as well as other factors, such as external market forces, the desire to encourage or discourage certain behaviors (such as recycling) by customers, and other policy issues.

3.1 Revenue Recovery from Current Rates

In order to convey the financial importance of the proposed rates, it is instructive to evaluate the revenue projected under the current rates for FY 2011, the next full fiscal year. Table 3-1 shows the forecasted revenue recovery from current rates, which is projected to under-recover the revenue requirement by approximately \$7.6 million. Thus, despite successful efforts to control and reduce costs, ES will require rate adjustments in order to safeguard its financial sustainability.

Table 3-1
Revenue Recovery from Current Rates

	FY 2011
Revenue from Current Rates	\$ 39,896,378
Revenue Requirement	(47,467,501)
Over/(Under) Recovery	\$ (7,571,123)

3.2 Proposed Rates

3.2.1 Automated Plastic Container

The proposed rates for the APC service in the first four years of the ten-year forecast are listed in Table 3-2 and Table 3-3 for residential and commercial customers, respectively. The proposed rates for the remaining years of the forecast are provided in the Appendix, Schedule 10.

The proposed rates continue the existing Low Income Program provided by the City, which reduces qualifying residential customers' solid waste rate by \$12.00 per month. Currently, 4,861 customers participate in the Low Income Program.

Table 3-2
Residential APC Proposed Rates

Monthly Cost	Year 1 FY 2010 ¹	Year 2 FY 2011	Year 3 FY 2012	Year 4 FY 2013
48-Gallon APC				
First APC	\$ 14.50	\$ 15.00	\$ 15.25	\$ 15.25
Each Additional	10.00	11.00	11.00	11.00
Low Income	2.50	3.00	3.25	3.25
65-Gallon APC				
First APC	\$ 14.50	\$ 16.00	\$ 16.25	\$ 16.25
Each Additional	10.00	11.00	11.00	11.00
Low Income	2.50	4.00	4.25	4.25
95-Gallon APC				
First APC	\$ 14.50	\$ 16.75	\$ 17.00	\$ 17.00
Each Additional	10.00	11.00	11.00	11.00
Low Income	2.50	4.75	5.00	5.00
300-Gallon APC				
Shared	\$ 14.50	\$ 16.00	\$ 16.25	\$ 16.25
Sole Use	43.50	48.00	48.75	48.75
Low Income	2.50	4.00	4.25	4.25

Notes:

- 1) Year 1 rates are equal to the current rates

Unlike the current rates described in Section 1.2.1, the proposed rates vary based on the size of the APC starting in FY 2011. This provides residents the opportunity to reduce their monthly fee for standard solid waste service if they elect to reduce their capacity to dispose.

ES should monitor revenues from APC customers carefully after adopting the proposed rates to ensure a significant shift to smaller APC sizes does not cause ES to under-recover the cost of providing this service. As mentioned in Section 2.5.1, neither the fixed costs for disposal nor the cost of the collection will decrease due to customers opting for smaller APC sizes. Thus, customers selecting a smaller APC will result in less revenue for ES but, initially, will be essentially the same cost to serve.

**Table 3-3
Commercial APC Proposed Rates**

Monthly Cost	Year 1 FY 2010 ¹	Year 2 FY 2011	Year 3 FY 2012	Year 4 FY 2013
95-Gallon APC (or smaller)				
Each APC	\$ 18.60	\$ 19.00	\$ 19.25	\$ 19.25
300-Gallon APC				
Sole Use	\$ 56.00	\$ 57.00	\$ 57.75	\$ 57.75

Notes:

- 1) Year 1 rates are equal to the current rates

3.2.2 Commercial Front Load

It is standard industry practice to establish commercial front load rates based on the size of the container and the frequency of collection. ES provides a reduced rate for the collection of recyclable materials via front load containers to reflect the fact that the material can be sold (rather than disposed) and to encourage recycling.

Table 3-4 and Table 3-5 show the FY 2011 proposed rates for refuse and recyclable materials, respectively. The proposed rates for the commercial front load service in each year of the ten-year forecast are provided in the Appendix, Schedule 10.

**Table 3-4
Proposed Front Load Refuse Rate Matrix for FY 2011**

Container Size (Cubic Yards)	Collection Frequency (Times per Week)					
	1	2	3	4	5	6
2	\$ 87.00	\$ 145.00	\$ 203.00	\$ 261.00	\$ 319.00	\$ 377.00
3	87.00	145.00	203.00	261.00	319.00	377.00
4	91.00	154.00	217.00	279.00	342.00	405.00
5	101.00	173.00	245.00	317.00	390.00	461.00
6	101.00	173.00	245.00	317.00	390.00	461.00
8	110.00	192.00	273.00	355.00	436.00	518.00

Notes:

- 1) Rates listed are for front load refuse containers without compaction

It is important to note that ES competes in the open market with private firms to provide commercial solid waste collection services. Thus, the proposed rates are reflective of the market pricing for this service.

Table 3-5
Proposed Front Load Recycling Rate Matrix for FY 2011

Container Size (Cubic Yards)	Collection Frequency (Times per Week)		
	1	2	3
2	\$ 30.00	\$ 60.00	\$ 90.00
3	30.00	60.00	90.00
4	30.00	60.00	90.00
5	30.00	60.00	90.00
6	30.00	60.00	90.00
8	30.00	60.00	90.00

Notes:

- 1) Rates listed only apply to customers with ES front load refuse service

3.2.3 Commercial Roll-Off

Although the cost of service for a roll-off pull in FY 2010 is approximately 47 percent greater than the current rate for a refuse pull, R. W. Beck recognizes that it may not be feasible to dramatically increase the rate for this service. Unlike residential collection services, ES competes in the open market with private firms to provide commercial solid waste collection services. Therefore, the City must consider the market rate for these services in the area in order to maintain competitive rates.

Thus, the proposed roll-off rates listed in Table 3-6 are reflective of market forces, but contemplate annual increases to incrementally transition the service towards cost recovery over time, if possible. Further, ES is not able to charge as much for a roll-off pull for recyclables as for refuse, again, due to market pricing. Private haulers will charge less for a recycling roll-off pull because the recyclable materials can be sold. The proposed rates also have the effect of financially incentivizing recycling, since the rate for a recycling roll-off pull is less than the rate for a refuse roll-off pull.

The proposed rates for the remaining years of the forecast are provided in the Appendix, Schedule 10.

Table 3-6
Roll-Off Proposed Rates

	Year 1 FY 2010 ¹	Year 2 FY 2011	Year 3 FY 2012	Year 4 FY 2013
Cost per Pull				
Refuse	\$ 160.00	\$ 175.00	\$ 180.00	\$ 185.00
Recycling	110.00	125.00	129.00	133.00

Notes:

- 1) Year 1 rates are equal to the current rates

3.2.4 Refuse Disposal

The APC and front load refuse collection services provided by ES have the cost of disposal (at the rates shown in Table 2-14) reflected in their rates. However, there are other customers that contribute to the refuse disposed at the Los Reales Landfill. This includes refuse from ES collected roll-off containers, other City departments (e.g., Streets Department), self-haulers, and private commercial haulers. These customers are largely charged the gate rate for disposal, which is currently \$32.00 per ton. However, some customers have been provided a different rate, in accordance with Ordinance Number 10737, based on a commitment to bring a certain volume of refuse to the landfill. The gate rate at the landfill is subject to competitive market forces given that, as discussed in Section 1.2.4, private haulers have the option of taking refuse to the nearby Rincon Transfer Station or other facilities for disposal. Based on our analysis, R. W. Beck recommends maintaining the current rates at the Los Reales Landfill.

Further, it is not practical to weigh all vehicles (e.g., residential and small commercial customers) entering and leaving the landfill in order to charge a rate per ton to all customers. Therefore, a flat fee may be developed, based on the cost of service, which will facilitate orderly operations at the landfill. The Los Reales Landfill currently has a residential self-haul flat rate of \$10.00 per load for any loads that are covered and weigh less than one ton. R. W. Beck recommends maintaining this pricing structure and revising the rate going forward, as necessary, to ensure these customers are recovering the cost to serve them.

3.2.5 Remediation – Groundwater Protection

To ensure the cost of remediation is recovered equitably, ES is in the process of evaluating several alternative approaches to recover the cost of groundwater protection. R. W. Beck recommends the City pursue the implementation of a groundwater remediation fee for all customers of Tucson Water to recover the operating costs associated with the remediation program that are related to groundwater protection. This mechanism has a meaningful rationale, as the remediation activities have a direct impact on protecting groundwater, the primary source of potable water for Tucson Water. Also, R. W. Beck believes this mechanism will be more equitable than the historical approach to remediation cost recovery because it allows for recovery of costs from additional beneficiaries of the program, such as commercial customers that do not have their waste disposed at the Los Reales Landfill and those Tucson Water customers located in Pima County that do not have their waste disposed at the Los Reales Landfill but benefit from the groundwater protection efforts. Further, the groundwater remediation fee is easy to implement and has no identified disadvantages.

Two possible fee structures to recover this cost from Tucson Water customers are described below.

A fee assessed based on a flat monthly charge per active connection

Based on data provided by City staff, there are approximately 229,750 active potable water connections to Tucson Water. If each of these connections were charged a flat monthly fee for groundwater protection, provided by ES remediation activities, then the fee for FY 2011 would need to be established at \$0.92 per month in order to recover the cost for this service.

A fee assessed based on a monthly charge per active connection that varies by meter size

Based on the current Tucson Water monthly service charge by meter size, as listed in Table 3-7, the groundwater protection fee, by meter size, for FY 2011 would need to be established at the monthly rates shown in Table 3-7 in order to recover the cost for this service. These rates will maintain the existing relationship between the rates for the various meter sizes.

**Table 3-7
Groundwater Protection Monthly Fee for FY 2011**

Meter Size (Inches)	Current Service Charge ¹	Implied Meter Factors ²	Groundwater Protection Monthly Fee ³
5/8	\$ 5.62	1.00	\$ 0.56
1	10.38	1.85	1.03
1 1/2	18.31	3.26	1.83
2	27.83	4.95	2.77
2 1/2	40.53	7.21	4.04
3	53.22	9.47	5.31
4	89.72	15.96	8.95
6	181.13	32.23	18.06
8	272.22	48.44	27.14
10	415.04	73.85	41.38
12	684.82	121.85	68.28

Notes:

- 1 Tucson Water monthly service charges, effective July 6, 2009
- 2 Identifies the amount to be charged by meter size as compared with the 5/8-inch meter size
- 3 Calculated as the rate for a 5/8-inch meter times the Implied Meter Factor (e.g., a 2-inch meter should be charged 4.95 times the rate for a 5/8-inch meter, or 4.95 * \$0.56 = \$2.77)

3.3 Other Fees

ES charges various other fees for providing additional services, including:

- Special Events Collections
- Extra Collections

- Steam Cleaning and Painting of Commercial Containers
- Container Delivery
- Additional Uncontained (Brush and Bulky) Collections
- Hand Loads

ES also charges fees for violations, such as:

- Uncovered Loads
- Unacceptable Materials in Refuse/Recycling Containers
- Improperly Placed Containers
- Dry Runs and Overloaded Containers

These fees were incorporated into the Study as revenue offsets. R. W. Beck recommends maintaining these fees, as they are a means to directly charge customers using these additional services, discourage prohibited activities, and prevent excessive demands on ES services.

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Appendix
Schedules

SOLID WASTE BUDGET

Line No.	Object Code	Description	Adopted ¹ Budget FY 2010	Adjustments	Test Year	Comments
4601 ADMINISTRATION (Includes 4649)						
1	101	Salaries & Wages	\$ 1,181,600		\$ 1,181,600	
2	101A	Longevity	-		-	
3	102	Extra Time	-		-	
4	103	Overtime Wages	3,400		3,400	
5	107	Second Language Pay	2,340		2,340	
6	108	Downtown Allowance & Discounted Transit Passes	1,800		1,800	
7	113	Supplemental Pension Contribution	194,130		194,130	
8	114	FICA (Social Security)	90,360		90,360	
9	115	Workers Compensation Insurance	60,260		60,260	
10	116	Group Plan Insurance	142,620		142,620	
11	117	State Unemployment	-		-	
12	131	Regular Time Np	-		-	
13	171	Sick Leave Paid At Retirement	-		-	
14	190	Miscellaneous Distrib Labor	-		-	
15	196	Interdepartmental Labor	-		-	
16	201	Local Travel	-		-	
17	202	Travel	12,620		12,620	
18	203	Non-Local Travel- Training	-		-	
19	204	Training	5,910		5,910	
20	207	Executive Vehicle Allowance	5,200		5,200	
21	209	Risk Mgmt Training-Other Dept	-		-	
22	219	Miscellaneous Professional Services	100,000		100,000	
23	220	Remediation Fee	-	146	146	I
24	221	Insurance	92,650		92,650	
25	228	Hazardous Waste Insurance	5,780		5,780	
26	232	R&M Machinery & Equipment	10,380		10,380	
27	235	Minor Rehab, Remodel & Alter	540		540	
28	236	Maint Of Office Equipment	-		-	
29	240	Cellular Phone Service	5,660		5,660	
30	241	Electricity	520		520	
31	242	Water	60		60	
32	244	Garbage And Trash Services	30		30	
33	245	Telephone	14,450		14,450	
34	247	Gas	210		210	
35	248	Sewer	30		30	
36	251	Rents Land And Buildings	118,500		118,500	
37	252	Rents Equipment	3,200		3,200	
38	260	Computer Software Maintenance Agreements	28,000		28,000	
39	263	Public Relations	10,000		10,000	
40	265	Community Center	-		-	
41	266	Advertising	2,000		2,000	
42	272	Depreciation	-		-	
43	274	Rental Housing Assistance	3,260		3,260	
44	284	Memberships And Subscriptions	2,600		2,600	
45	286	Misc Outside Services	-		-	
46	293	Vehicle Maintenance	7,190	(3,228)	3,962	D
47	294	Radio And Data Services	520		520	
48	295	Building Maintenance	38,140		38,140	
49	296	Custodial And Miscellaneous Services	19,570		19,570	
50	298	Planned Building Maintenance	3,000		3,000	
51	311	Office Supplies	15,400		15,400	
52	312	Printing,Photography,Reproduction	5,000		5,000	
53	314	Postage	22,050		22,050	
54	317	Computer Software < \$100,000	13,230		13,230	
55	321	Food	-		-	
56	331	Uniforms, Safety And Special Clothing	2,000		2,000	
57	332	Safety & Special Clothing	-		-	
58	341	Book, Periodicals And Records	930		930	
59	345	Furnishings, Equipment And Tools < \$5,000	7,540		7,540	
60	346	Computer Equipment < \$5,000	18,780		18,780	
61	347	Furn,Other Eq,Tools \$500-\$4999	-		-	
62	359	Non Office Supplies	3,600		3,600	
63	394	"Fleet Svc Chg, Cng"	-		-	
64	395	Fleet Services Gas And Diesel	5,300	(130)	5,170	D
65	461	Vehicles	-	-	-	C
66	552	Lease Purchase D/S Principal	-		-	
67	798	Unallocated Budget Capacity (Budget Use Only)	-		-	

City of Tucson Environmental Services
Solid Waste Cost of Service and Rate Design

Schedule 1
Test Year Budget

Line No.	Object Code	Description	Adopted ¹ Budget FY 2010	Adjustments	Test Year	Comments
68	902	Credits For All Other Than 901	-		-	
		TOTAL ADMINISTRATION (Includes 4649)	\$ 2,260,360		\$ 2,257,147	
		4603 TUCSON CLEAN AND BEAUTIFUL				
69	245	Telephone	\$ 2,350		\$ 2,350	
70	268	Contributions To Organizations	53,520		53,520	
71	311	Office Supplies	-		-	
72	312	Printing,Photography,Reproduction	1,070		1,070	
73	314	Postage	2,470		2,470	
74	359	Non Office Supplies	-		-	
		TOTAL TUCSON CLEAN AND BEAUTIFUL	\$ 59,410		\$ 59,410	
		4610 CUSTOMER SUPPORT AND BILLING				
75	101	Salaries & Wages	\$ 592,400		\$ 592,400	
76	102	Extra Time	1,400		1,400	
77	103	Overtime Wages	6,720		6,720	
78	107	Second Language Pay	3,900		3,900	
79	108	Downtown Allowance & Discounted Transit Passes	-		-	
80	113	Supplemental Pension Contribution	97,920		97,920	
81	114	FICA (Social Security)	46,340		46,340	
82	115	Workers Compensation Insurance	30,320		30,320	
83	116	Group Plan Insurance	110,810		110,810	
84	117	State Unemployment	-		-	
85	202	Travel	3,000		3,000	
86	203	Non-Local Travel- Training	-		-	
87	204	Training	1,500		1,500	
88	219	Miscellaneous Professional Services	60,000		60,000	
89	220	Remediation Fee	-		-	
90	221	Insurance	46,450		46,450	
91	228	Hazardous Waste Insurance	2,900		2,900	
92	232	R&M Machinery & Equipment	320		320	
93	235	Minor Rehab, Remodel & Alter	-		-	
94	236	Maint Of Office Equipment	-		-	
95	240	Cellular Phone Service	1,420		1,420	
96	245	Telephone	5,040		5,040	
97	252	Rents Equipment	-		-	
98	263	Public Relations	-		-	
99	284	Memberships And Subscriptions	400		400	
100	293	Vehicle Maintenance	330	(330)	-	D
101	294	Radio And Data Services	400		400	
102	299	Inter-Activity Transf	-		-	
103	311	Office Supplies	3,800		3,800	
104	312	Printing,Photography,Reproduction	11,500		11,500	
105	314	Postage	14,800		14,800	
106	317	Computer Software < \$100,000	85,000		85,000	
107	331	Uniforms, Safety And Special Clothing	600		600	
108	332	Safety & Special Clothing	-		-	
109	341	Book, Periodicals And Records	270		270	
110	345	Furnishings, Equipment And Tools < \$5,000	10,000		10,000	
111	346	Computer Equipment < \$5,000	2,500		2,500	
112	347	Furn,Other Eq,Tools \$500-\$4999	-		-	
113	359	Non Office Supplies	370		370	
114	395	Fleet Services Gas And Diesel	-	-	-	D
115	452	Furnishings,Eq,Tools >=\$5,000	-		-	
116	461	Vehicles	-		-	C
		TOTAL CUSTOMER SUPPORT AND BILLING	\$ 1,140,410		\$ 1,140,080	
		4613 PROGRAM DEVELOPMENT AND PLANNING				
117	101	Salaries & Wages	\$ 242,000		\$ 242,000	
118	102	Extra Time	-		-	
119	103	Overtime Wages	200		200	
120	106	Uniform/Equipment/Housekeeping	-		-	
121	107	Second Language Pay	780		780	
122	108	Downtown Allowance & Discounted Transit Passes	1,200		1,200	
123	113	Supplemental Pension Contribution	41,170		41,170	
124	114	FICA (Social Security)	18,730		18,730	
125	115	Workers Compensation Insurance	12,380		12,380	
126	116	Group Plan Insurance	38,000		38,000	
127	117	State Unemployment	-		-	
128	190	Miscellaneous Distrib Labor	-		-	

City of Tucson Environmental Services
Solid Waste Cost of Service and Rate Design

Schedule 1
Test Year Budget

Line No.	Object Code	Description	Adopted ¹ Budget FY 2010	Adjustments	Test Year	Comments
129	201	Local Travel	-		-	
130	202	Travel	4,570		4,570	
131	203	Non-Local Travel- Training	-		-	
132	204	Training	4,000		4,000	
133	206	Exec Veh Allow/Variable Reimbu	-		-	
134	219	Miscellaneous Professional Services	16,000		16,000	
135	220	Remediation Fee	-	58	58	I
136	221	Insurance	18,970		18,970	
137	228	Hazardous Waste Insurance	1,180		1,180	
138	234	Computer Hardware Maintenance	-		-	
139	236	Maint Of Office Equipment	-		-	
140	240	Cellular Phone Service	2,110		2,110	
141	245	Telephone	-		-	
142	259	Intra-Dept. Micro Comp.	-		-	
143	262	Civic Events	-		-	
144	263	Public Relations	153,000		153,000	
145	266	Advertising	8,950		8,950	
146	268	Contributions To Organizations	-		-	
147	284	Memberships And Subscriptions	200		200	
148	290	Rental Fleet Services	-		-	
149	293	Vehicle Maintenance	2,500	1,335	3,835	D
150	294	Radio And Data Services	20		20	
151	311	Office Supplies	500		500	
152	312	Printing,Photography,Reproduction	20,000		20,000	
153	314	Postage	2,970		2,970	
154	317	Computer Software < \$100,000	-		-	
155	321	Food	-		-	
156	331	Uniforms, Safety And Special Clothing	600		600	
157	332	Safety & Special Clothing	-		-	
158	341	Book, Periodicals And Records	-		-	
159	345	Furnishings, Equipment And Tools < \$5,000	5,430		5,430	
160	346	Computer Equipment < \$5,000	4,970		4,970	
161	347	Furn,Other Eq,Tools \$500-\$4999	-		-	
162	359	Non Office Supplies	8,000		8,000	
163	394	"Fleet Svc Chg, Cng"	-		-	
164	395	Fleet Services Gas And Diesel	2,600	(526)	2,074	D
165	461	Vehicles	-	-	-	C
166	902	Credits For All Other Than 901	-		-	
TOTAL PROGRAM DEVELOPMENT AND PLANNING			\$ 611,030		\$ 611,898	
4633 RESIDENTIAL COLLECTIONS						
167	101	Salaries & Wages	\$ 3,193,140	(43,150)	\$ 3,149,990	A
168	101A	Longevity	-		-	
169	102	Extra Time	91,000		91,000	
170	102A	Shift	-		-	
171	103	Overtime Wages	243,720		243,720	
172	106	Uniform/Equipment/Housekeeping	-		-	
173	107	Second Language Pay	780		780	
174	108	Downtown Allowance & Discounted Transit Passes	-		-	
175	113	Supplemental Pension Contribution	542,540		542,540	
176	114	FICA (Social Security)	270,050		270,050	
177	115	Workers Compensation Insurance	162,730		162,730	
178	116	Group Plan Insurance	735,790		735,790	
179	117	State Unemployment	-		-	
180	171	Sick Leave Paid At Retirement	-		-	
181	175	Meal Allowances	1,200		1,200	
182	190	Miscellaneous Distrib Labor	-		-	
183	201	Local Travel	-		-	
184	202	Travel	3,610		3,610	
185	203	Non-Local Travel- Training	-		-	
186	204	Training	1,330		1,330	
187	218	Test Services	-		-	
188	219	Miscellaneous Professional Services	60,000		60,000	
189	220	Remediation Fee	75,190	(40,705)	34,485	I
190	221	Insurance	250,370		250,370	
191	228	Hazardous Waste Insurance	15,630		15,630	
192	231	R&M Buildings & Grounds	-		-	
193	235	Minor Rehab, Remodel & Alter	-		-	
194	240	Cellular Phone Service	6,000		6,000	
195	241	Electricity	7,000		7,000	

City of Tucson Environmental Services
Solid Waste Cost of Service and Rate Design

Schedule 1
Test Year Budget

Line No.	Object Code	Description	Adopted ¹ Budget FY 2010	Adjustments	Test Year	Comments
196	242	Water	900		900	
197	244	Garbage And Trash Services	1,640		1,640	
198	245	Telephone	3,700		3,700	
199	247	Gas	3,500		3,500	
200	248	Sewer	420		420	
201	252	Rents Equipment	6,000		6,000	
202	263	Public Relations	-		-	
203	266	Advertising	400		400	
204	272	Depreciation	-		-	
205	284	Memberships And Subscriptions	670		670	
206	286	Misc Outside Services	-		-	
207	291	Administrative Services	300,000	(300,000)	-	H
208	293	Vehicle Maintenance	6,400,000	(1,399,553)	5,000,447	D
209	294	Radio And Data Services	27,000		27,000	
210	295	Building Maintenance	20,240		20,240	
211	296	Custodial And Miscellaneous Services	5,910		5,910	
212	311	Office Supplies	8,600		8,600	
213	312	Printing,Photography,Reproduction	5,000		5,000	
214	314	Postage	-		-	
215	321	Food	-		-	
216	324	Chemicals	2,150		2,150	
217	331	Uniforms, Safety And Special Clothing	38,480		38,480	
218	332	Safety & Special Clothing	-		-	
219	336	Oil/Lubricants	-		-	
220	337	Wheels/Tires	-		-	
221	338	Repair Parts	-		-	
222	345	Furnishings, Equipment And Tools < \$5,000	1,300,000		1,300,000	
223	346	Computer Equipment < \$5,000	6,200		6,200	
224	347	Furn,Other Eq,Tools \$500-\$4999	-		-	
225	353	O+M Other Improvements	-		-	
226	359	Non Office Supplies	37,000		37,000	
227	394	"Fleet Svc Chg, Cng"	-		-	
228	395	Fleet Services Gas And Diesel	1,500,000	(276,453)	1,223,547	D
229	452	Furnishings,Eq,Tools >=\$5,000	-		-	
230	461	Vehicles	1,600,000	459,858	2,059,858	C
TOTAL RESIDENTIAL COLLECTIONS			\$ 16,927,890		\$ 15,327,886	
4635 CLEAN COMMUNITY PROGRAM (Brush & Bulky)						
231	101	Salaries & Wages	\$ 638,670		\$ 638,670	
232	101A	Longevity	-		-	
233	102	Extra Time	11,700		11,700	
234	102A	Shift	-		-	
235	103	Overtime Wages	43,970		43,970	
236	106	Uniform/Equipmt/Hskping Allow	-		-	
237	113	Supplemental Pension Contribution	113,290		113,290	
238	114	FICA (Social Security)	53,200		53,200	
239	115	Workers Compensation Insurance	32,690		32,690	
240	116	Group Plan Insurance	162,950		162,950	
241	117	State Unemployment	-		-	
242	171	Sick Leave Paid At Retirement	-		-	
243	175	Meal Allowances	-		-	
244	190	Miscellaneous Distrib Labor	-		-	
245	219	Miscellaneous Professional Services	35,000		35,000	
246	220	Remediation Fee	-	3,725	3,725	I
247	221	Insurance	50,080		50,080	
248	228	Hazardous Waste Insurance	3,130		3,130	
249	231	R&M Buildings & Grounds	2,360		2,360	
250	232	R&M Machinery & Equipment	-		-	
251	240	Cellular Phone Service	420		420	
252	241	Electricity	-		-	
253	242	Water	-		-	
254	244	Garbage And Trash Services	3,200		3,200	
255	247	Gas	-		-	
256	248	Sewer	-		-	
257	263	Public Relations	90,000		90,000	
258	293	Vehicle Maintenance	328,000	68,219	396,219	D
259	294	Radio And Data Services	2,000		2,000	
260	295	Building Maintenance	-		-	
261	296	Custodial And Miscellaneous Services	-		-	
262	299	Inter-Activity Transf	-		-	

City of Tucson Environmental Services
Solid Waste Cost of Service and Rate Design

Schedule 1
Test Year Budget

Line No.	Object Code	Description	Adopted ¹ Budget FY 2010	Adjustments	Test Year	Comments
263	311	Office Supplies	300		300	
264	312	Printing,Photography,Reproduction	-		-	
265	321	Food	-		-	
266	331	Uniforms, Safety And Special Clothing	10,440		10,440	
267	332	Safety & Special Clothing	-		-	
268	336	Oil/Lubricants	-		-	
269	337	Wheels/Tires	-		-	
270	338	Repair Parts	-		-	
271	345	Furnishings, Equipment And Tools < \$5,000	2,130		2,130	
272	346	Computer Equipment < \$5,000	-		-	
273	347	Furn,Other Eq,Tools \$500-\$4999	-		-	
274	359	Non Office Supplies	5,000		5,000	
275	394	"Fleet Svc Chg, Cng"	-		-	
276	395	Fleet Services Gas And Diesel	145,000	(12,828)	132,172	D
277	461	Vehicles	150,000	27,835	177,835	C
TOTAL CLEAN COMMUNITY PROGRAM (Brush & Bulky)			\$ 1,883,530		\$ 1,970,481	
4639 COMMERCIAL COLLECTIONS						
278	101	Salaries & Wages	\$ 1,637,670		\$ 1,637,670	
279	101A	Longevity	-		-	
280	102	Extra Time	49,000		49,000	
281	102A	Shift	-		-	
282	103	Overtime Wages	221,560	(96,560)	125,000	A
283	106	Uniform/Equipmt/Hskping Allow	-		-	
284	107	Second Language Pay	-		-	
285	113	Supplemental Pension Contribution	313,850		313,850	
286	114	FICA (Social Security)	145,900		145,900	
287	115	Workers Compensation Insurance	83,590		83,590	
288	116	Group Plan Insurance	402,680		402,680	
289	117	State Unemployment	-		-	
290	196	Interdepartmental Labor	-		-	
291	202	Travel	1,360		1,360	
292	203	Non-Local Travel- Training	-		-	
293	204	Training	1,370		1,370	
294	219	Miscellaneous Professional Services	10,000		10,000	
295	220	Remediation Fee	-	17,470	17,470	I
296	221	Insurance	128,410		128,410	
297	228	Hazardous Waste Insurance	8,020		8,020	
298	231	R&M Buildings & Grounds	2,400		2,400	
299	235	Minor Rehab, Remodel & Alter	3,120		3,120	
300	240	Cellular Phone Service	5,460		5,460	
301	241	Electricity	4,500		4,500	
302	242	Water	300		300	
303	244	Garbage And Trash Services	-		-	
304	245	Telephone	1,340		1,340	
305	247	Gas	930		930	
306	248	Sewer	160		160	
307	252	Rents Equipment	3,000		3,000	
308	259	Intra-Dept. Micro Comp.	-		-	
309	263	Public Relations	2,500		2,500	
310	266	Advertising	2,150		2,150	
311	272	Depreciation	-		-	
312	284	Memberships And Subscriptions	700		700	
313	290	Rental Fleet Services	-		-	
314	291	Administrative Services	(300,000)	300,000	-	H
315	293	Vehicle Maintenance	1,800,000	(57,318)	1,742,682	D
316	294	Radio And Data Services	8,000		8,000	
317	295	Building Maintenance	23,090		23,090	
318	296	Custodial And Miscellaneous Services	9,420		9,420	
319	311	Office Supplies	1,000		1,000	
320	312	Printing,Photography,Reproduction	1,500		1,500	
321	317	Computer Software < \$100,000	630		630	
322	321	Food	-		-	
323	331	Uniforms, Safety And Special Clothing	15,290		15,290	
324	332	Safety & Special Clothing	-		-	
325	336	Oil/Lubricants	-		-	
326	337	Wheels/Tires	-		-	
327	338	Repair Parts	-		-	
328	341	Book, Periodicals And Records	420		420	
329	345	Furnishings, Equipment And Tools < \$5,000	326,970	(126,970)	200,000	A

City of Tucson Environmental Services
Solid Waste Cost of Service and Rate Design

Schedule 1
Test Year Budget

Line No.	Object Code	Description	Adopted ¹ Budget FY 2010	Adjustments	Test Year	Comments
330	346	Computer Equipment < \$5,000	-		-	
331	347	Furn,Other Eq,Tools \$500-\$4999	-		-	
332	353	O+M Other Improvements	-		-	
333	359	Non Office Supplies	5,000		5,000	
334	394	"Fleet Svc Chg, Cng"	-		-	
335	395	Fleet Services Gas And Diesel	875,000	(255,167)	619,833	D
336	461	Vehicles	230,000	456	230,456	C
337	902	Credits For All Other Than 901	-		-	
TOTAL COMMERCIAL COLLECTIONS			<u>\$ 6,026,290</u>		<u>\$ 5,808,201</u>	
4641 CONTAINER MAINTENANCE						
338	101	Salaries & Wages	\$ 230,300		\$ 230,300	
339	102	Extra Time	2,500		2,500	
340	103	Overtime Wages	3,600		3,600	
341	106	Uniform/Equipmt/Hskping Allow	-		-	
342	113	Supplemental Pension Contribution	37,600		37,600	
343	114	FICA (Social Security)	18,090		18,090	
344	115	Workers Compensation Insurance	11,780		11,780	
345	116	Group Plan Insurance	57,970		57,970	
346	117	State Unemployment	-		-	
347	202	Travel	-		-	
348	203	Non-Local Travel- Training	-		-	
349	204	Training	-		-	
350	219	Miscellaneous Professional Services	80,000		80,000	
351	220	Remediation Fee	-	445	445	I
352	221	Insurance	18,050		18,050	
353	228	Hazardous Waste Insurance	1,130		1,130	
354	231	R&M Buildings & Grounds	2,800		2,800	
355	232	R&M Machinery & Equipment	1,200		1,200	
356	233	R&M Streets	-		-	
357	234	Computer Hardware Maintenance	-		-	
358	235	Minor Rehab, Remodel & Alter	-		-	
359	240	Cellular Phone Service	1,040		1,040	
360	241	Electricity	11,140		11,140	
361	242	Water	1,390		1,390	
362	244	Garbage And Trash Services	560		560	
363	245	Telephone	1,340		1,340	
364	247	Gas	4,840		4,840	
365	248	Sewer	600		600	
366	252	Rents Equipment	650		650	
367	263	Public Relations	-		-	
368	266	Advertising	-		-	
369	293	Vehicle Maintenance	25,000	9,198	34,198	D
370	294	Radio And Data Services	2,500		2,500	
371	295	Building Maintenance	18,810		18,810	
372	296	Custodial And Miscellaneous Services	7,400		7,400	
373	298	Planned Building Maintenance	4,000		4,000	
374	311	Office Supplies	700		700	
375	312	Printing,Photography,Reproduction	170		170	
376	321	Food	-		-	
377	324	Chemicals	-		-	
378	331	Uniforms, Safety And Special Clothing	6,240		6,240	
379	332	Safety & Special Clothing	-		-	
380	336	Oil/Lubricants	-		-	
381	345	Furnishings, Equipment And Tools < \$5,000	1,690		1,690	
382	346	Computer Equipment < \$5,000	-		-	
383	347	Furn,Other Eq,Tools \$500-\$4999	-		-	
384	354	O+M Equipment	-		-	
385	359	Non Office Supplies	115,000		115,000	
386	394	"Fleet Svc Chg, Cng"	-		-	
387	395	Fleet Services Gas And Diesel	17,500	(1,706)	15,794	D
388	396	Fleet Service Chg-Oil & Lube	-		-	
389	461	Vehicles	-		-	C
TOTAL CONTAINER MAINTENANCE			<u>\$ 685,590</u>		<u>\$ 693,527</u>	
4650 ENVIRONMENTAL ENGINEERING AND LANDFILL CLOSURE						
390	101	Salaries & Wages	\$ 278,740		\$ 278,740	
391	102	Extra Time	-		-	
392	103	Overtime Wages	-		-	
393	106	Uniform/Equipmt/Hskping Allow	-		-	

City of Tucson Environmental Services
Solid Waste Cost of Service and Rate Design

Schedule 1
Test Year Budget

Line No.	Object Code	Description	Adopted ¹ Budget FY 2010	Adjustments	Test Year	Comments
394	107	Second Language Pay	-		-	
395	108	Downtown Allowance & Discounted Transit Passes	1,200		1,200	
396	113	Supplemental Pension Contribution	45,550		45,550	
397	114	FICA (Social Security)	21,530		21,530	
398	115	Workers Compensation Insurance	14,270		14,270	
399	116	Group Plan Insurance	35,770		35,770	
400	117	State Unemployment	-		-	
401	171	Sick Leave Paid At Retirement	-		-	
402	196	Interdepartmental Labor	-		-	
403	201	Local Travel	-		-	
404	202	Travel	3,850		3,850	
405	203	Non-Local Travel- Training	-		-	
406	204	Training	3,290		3,290	
407	219	Miscellaneous Professional Services	100,000		100,000	
408	220	Remediation Fee	-	209	209	I
409	221	Insurance	21,860		21,860	
410	228	Hazardous Waste Insurance	1,360		1,360	
411	232	R&M Machinery & Equipment	9,840		9,840	
412	233	R&M Streets	-		-	
413	234	Computer Hardware Maintenance	-		-	
414	240	Cellular Phone Service	2,040		2,040	
415	245	Telephone	-		-	
416	251	Rents Land And Buildings	-		-	
417	252	Rents Equipment	530		530	
418	266	Advertising	100		100	
419	274	Rental Housing Assistance	-		-	
420	283	Licenses And Permits	1,070		1,070	
421	284	Memberships And Subscriptions	1,700		1,700	
422	286	Misc Outside Services	-		-	
423	293	Vehicle Maintenance	13,030	4,268	17,298	D
424	294	Radio And Data Services	420		420	
425	311	Office Supplies	540		540	
426	312	Printing,Photography,Reproduction	1,070		1,070	
427	314	Postage	220		220	
428	317	Computer Software < \$100,000	1,070		1,070	
429	321	Food	-		-	
430	331	Uniforms, Safety And Special Clothing	1,810		1,810	
431	332	Safety & Special Clothing	-		-	
432	336	Oil/Lubricants	-		-	
433	338	Repair Parts	-		-	
434	341	Book, Periodicals And Records	430		430	
435	345	Furnishings, Equipment And Tools < \$5,000	5,630		5,630	
436	346	Computer Equipment < \$5,000	1,000		1,000	
437	347	Furn,Other Eq,Tools \$500-\$4999	-		-	
438	352	Maintenance Supplies For Machinery And Equipment	1,070		1,070	
439	354	O+M Equipment	-		-	
440	359	Non Office Supplies	6,140		6,140	
441	394	"Fleet Svc Chg, Cng"	-		-	
442	395	Fleet Services Gas And Diesel	9,200	(1,788)	7,412	D
443	426	Improvements Other Than Bldg	-		-	
444	461	Vehicles	-	-	-	C
445	901	Credits For Personal Svc(Pyrl)	-		-	
446	902	Credits For All Other Than 901	-		-	
TOTAL ENVIRONMENTAL ENGINEERING AND LANDFILL CLOSURE			\$ 584,330		\$ 587,019	
4651 REGULATION COMPLIANCE DATA MANAGEMENT						
447	101	Salaries & Wages	\$ 202,180		\$ 202,180	
448	102	Extra Time	-		-	
449	103	Overtime Wages	-		-	
450	106	Uniform/Equipmt/Hskping Allow	-		-	
451	108	Downtown Allowance & Discounted Transit Passes	900		900	
452	113	Supplemental Pension Contribution	34,320		34,320	
453	114	FICA (Social Security)	15,580		15,580	
454	115	Workers Compensation Insurance	10,350		10,350	
455	116	Group Plan Insurance	35,080		35,080	
456	117	State Unemployment	-		-	
457	201	Local Travel	-		-	
458	202	Travel	3,050		3,050	
459	203	Non-Local Travel- Training	-		-	
460	204	Training	280		280	

City of Tucson Environmental Services
Solid Waste Cost of Service and Rate Design

Schedule 1
Test Year Budget

Line No.	Object Code	Description	Adopted ¹ Budget FY 2010	Adjustments	Test Year	Comments
461	212	Consultants And Surveys	-		-	
462	219	Miscellaneous Professional Services	150,000		150,000	
463	221	Insurance	15,860		15,860	
464	228	Hazardous Waste Insurance	990		990	
465	240	Cellular Phone Service	1,020		1,020	
466	283	Licenses And Permits	39,300		39,300	
467	284	Memberships And Subscriptions	230		230	
468	286	Misc Outside Services	-		-	
469	293	Vehicle Maintenance	290	(290)	-	D
470	311	Office Supplies	600		600	
471	312	Printing,Photography,Reproduction	350		350	
472	314	Postage	-		-	
473	317	Computer Software < \$100,000	2,200		2,200	
474	321	Food	-		-	
475	331	Uniforms, Safety And Special Clothing	590		590	
476	332	Safety & Special Clothing	-		-	
477	341	Book, Periodicals And Records	-		-	
478	345	Furnishings, Equipment And Tools < \$5,000	3,770		3,770	
479	346	Computer Equipment < \$5,000	2,170		2,170	
480	347	Furn,Other Eq,Tools \$500-\$4999	-		-	
481	354	O-M Equipment	-		-	
482	359	Non Office Supplies	400		400	
483	395	Fleet Services Gas And Diesel	-	-	-	D
484	452	Furnishings,Eq,Tools >=\$5,000	-		-	
485	461	Vehicles	-	-	-	C
486	901	Credits For Personal Svc(Pyrl)	-		-	
487	902	Credits For All Other Than 901	-		-	
TOTAL REGULATION COMPLIANCE DATA MANAGEMENT			\$ 519,510		\$ 519,220	
4652 HYDROGEOLOGY						
488	101	Salaries & Wages	\$ 312,870		\$ 312,870	
489	103	Overtime Wages	-		-	
490	106	Uniform/Equipmt/Hskping Allow	-		-	
491	108	Downtown Allowance & Discounted Transit Passes	1,800		1,800	
492	113	Supplemental Pension Contribution	50,240		50,240	
493	114	FICA (Social Security)	24,180		24,180	
494	115	Workers Compensation Insurance	16,020		16,020	
495	116	Group Plan Insurance	43,400		43,400	
496	117	State Unemployment	-		-	
497	131	Regular Time Np	-		-	
498	196	Interdepartmental Labor	(348,350)		(348,350)	E
499	201	Local Travel	-		-	
500	202	Travel	2,400		2,400	
501	203	Non-Local Travel- Training	-		-	
502	204	Training	2,080		2,080	
503	219	Miscellaneous Professional Services	150,000		150,000	
504	220	Remediation Fee	-	142	142	I
505	221	Insurance	24,530		24,530	
506	228	Hazardous Waste Insurance	1,530		1,530	
507	232	R&M Machinery & Equipment	6,400		6,400	
508	234	Computer Hardware Maintenance	-		-	
509	240	Cellular Phone Service	2,520		2,520	
510	245	Telephone	-		-	
511	252	Rents Equipment	-		-	
512	256	Maintenance C/S Personnel	-		-	
513	263	Public Relations	-		-	
514	266	Advertising	-		-	
515	274	Rental Housing Assistance	6,120		6,120	
516	283	Licenses And Permits	-		-	
517	284	Memberships And Subscriptions	430		430	
518	286	Misc Outside Services	-		-	
519	293	Vehicle Maintenance	6,000	509	6,509	D
520	311	Office Supplies	700		700	
521	312	Printing,Photography,Reproduction	1,070		1,070	
522	314	Postage	320		320	
523	317	Computer Software < \$100,000	12,910		12,910	
524	321	Food	-		-	
525	331	Uniforms, Safety And Special Clothing	2,680		2,680	
526	332	Safety & Special Clothing	-		-	
527	335	Gas And Diesel	-		-	

City of Tucson Environmental Services
Solid Waste Cost of Service and Rate Design

Schedule 1
Test Year Budget

Line No.	Object Code	Description	Adopted ¹ Budget FY 2010	Adjustments	Test Year	Comments
528	341	Book, Periodicals And Records	-		-	
529	345	Furnishings, Equipment And Tools < \$5,000	5,330		5,330	
530	346	Computer Equipment < \$5,000	2,800		2,800	
531	347	Furn,Other Eq,Tools \$500-\$4999	-		-	
532	352	Maintenance Supplies For Machinery And Equipment	11,440		11,440	
533	354	O+M Equipment	-		-	
534	359	Non Office Supplies	8,500		8,500	
535	394	"Fleet Svc Chg, Cng"	-		-	
536	395	Fleet Services Gas And Diesel	6,000	(953)	5,047	D
537	426	Improvements Other Than Bldg	200,000		200,000	
538	461	Vehicles	-	-	-	C
539	901	Credits For Personal Svc(Pyrl)	-		-	
540	902	Credits For All Other Than 901	-		-	
TOTAL HYDROGEOLOGY			\$ 553,920		\$ 553,619	
4653 LOS REALES ENGINEERING AND OPERATIONS						
541	101	Salaries & Wages	\$ 1,563,590		\$ 1,563,590	
542	101A	Longevity	-		-	
543	102	Extra Time	44,000		44,000	
544	103	Overtime Wages	152,660	(102,660)	50,000	A
545	106	Uniform/Equipmt/Hskping Allow	-		-	
546	107	Second Language Pay	4,680		4,680	
547	108	Downtown Allowance & Discounted Transit Passes	-		-	
548	113	Supplemental Pension Contribution	285,960		285,960	
549	114	FICA (Social Security)	135,040		135,040	
550	115	Workers Compensation Insurance	79,740		79,740	
551	116	Group Plan Insurance	295,390		295,390	
552	117	State Unemployment	-		-	
553	190	Miscellaneous Distrib Labor	-		-	
554	196	Interdepartmental Labor	-		-	
555	202	Travel	2,080		2,080	
556	203	Non-Local Travel- Training	-		-	
557	204	Training	4,160		4,160	
558	215	Auditing And Bank Services	10,000		10,000	
559	219	Miscellaneous Professional Services	465,000	(100,000)	365,000	A
560	220	Remediation Fee	-	18,510	18,510	I
561	221	Insurance	122,600		122,600	
562	228	Hazardous Waste Insurance	7,650		7,650	
563	231	R&M Buildings & Grounds	188,000	(88,000)	100,000	A
564	232	R&M Machinery & Equipment	450		450	
565	233	R&M Streets	6,500		6,500	
566	234	Computer Hardware Maintenance	10,000		10,000	
567	235	Minor Rehab, Remodel & Alter	1,040		1,040	
568	236	Maint Of Office Equipment	-		-	
569	240	Cellular Phone Service	6,000		6,000	
570	241	Electricity	36,580		36,580	
571	242	Water	53,790		53,790	
572	244	Garbage And Trash Services	32,000		32,000	
573	245	Telephone	4,030		4,030	
574	251	Rents Land And Buildings	12,000		12,000	
575	252	Rents Equipment	2,000		2,000	
576	261	Community Advertising	-		-	
577	263	Public Relations	1,070		1,070	
578	266	Advertising	-		-	
579	274	Rental Housing Assistance	-		-	
580	282	Collections Services	-		-	
581	283	Licenses And Permits	198,900		198,900	
582	284	Memberships And Subscriptions	2,360		2,360	
583	286	Misc Outside Services	-		-	
584	293	Vehicle Maintenance	1,420,000	(304,021)	1,115,979	D
585	294	Radio And Data Services	10,400		10,400	
586	295	Building Maintenance	34,000		34,000	
587	296	Custodial And Miscellaneous Services	14,930		14,930	
588	298	Planned Building Maintenance	-		-	
589	311	Office Supplies	5,410		5,410	
590	312	Printing,Photography,Reproduction	5,000		5,000	
591	314	Postage	-		-	
592	317	Computer Software < \$100,000	-		-	
593	321	Food	-		-	
594	331	Uniforms, Safety And Special Clothing	17,530		17,530	

City of Tucson Environmental Services
Solid Waste Cost of Service and Rate Design

Schedule 1
Test Year Budget

Line No.	Object Code	Description	Adopted ¹ Budget FY 2010	Adjustments	Test Year	Comments
595	332	Safety & Special Clothing	-	-	-	
596	335	Gas And Diesel	-	-	-	
597	336	Oil/Lubricants	-	-	-	
598	337	Wheels/Tires	-	-	-	
599	338	Repair Parts	-	-	-	
600	341	Book, Periodicals And Records	-	-	-	
601	345	Furnishings, Equipment And Tools < \$5,000	4,000	-	4,000	
602	346	Computer Equipment < \$5,000	4,140	-	4,140	
603	347	Furn,Other Eq,Tools \$500-\$4999	-	-	-	
604	353	O+M Other Improvements	-	-	-	
605	354	O+M Equipment	-	-	-	
606	359	Non Office Supplies	150,000	(75,000)	75,000	A
607	394	"Fleet Svc Chg, Cng"	-	-	-	
608	395	Fleet Services Gas And Diesel	825,000	(168,242)	656,758	D
609	461	Vehicles	45,000	(45,000)	-	C
610	901	Credits For Personal Svc(Pyrl)	-	-	-	
611	902	Credits For All Other Than 901	-	-	-	
TOTAL LOS REALES ENGINEERING AND OPERATIONS			\$ 6,262,680		\$ 5,398,267	
4654 OPERATIONS AND MAINTENANCE (Past Capital Projects)						
612	219	Miscellaneous Professional Services	\$ 900,000		\$ 900,000	
613	221	Insurance	-	-	-	
614	232	R&M Machinery & Equipment	100,000	-	100,000	
615	233	R&M Streets	-	-	-	
616	234	Computer Hardware Maintenance	-	-	-	
617	240	Cellular Phone Service	-	-	-	
618	242	Water	600	-	600	
619	244	Garbage And Trash Services	700	-	700	
620	245	Telephone	3,020	-	3,020	
621	251	Rents Land And Buildings	12,530	-	12,530	
622	252	Rents Equipment	8,200	-	8,200	
623	283	Licenses And Permits	-	-	-	
624	312	Printing,Photography,Reproduction	-	-	-	
625	314	Postage	-	-	-	
626	317	Computer Software < \$100,000	-	-	-	
627	324	Chemicals	-	-	-	
628	345	Furnishings, Equipment And Tools < \$5,000	-	-	-	
629	347	Furn,Other Eq,Tools \$500-\$4999	-	-	-	
630	354	O+M Equipment	-	-	-	
631	359	Non Office Supplies	20,000	-	20,000	
632	452	Furnishings,Eq,Tools >=\$5,000	-	-	-	
TOTAL OPERATIONS AND MAINTENANCE (Past Capital Projects)			\$ 1,045,050		\$ 1,045,050	
4656 CITYWIDE BROWNFIELDS						
633	201	Local Travel	\$ -		\$ -	
634	202	Travel	9,820	-	9,820	
635	203	Non-Local Travel- Training	-	-	-	
636	204	Training	-	-	-	
637	205	Parking & Shuttle Service	-	-	-	
638	219	Miscellaneous Professional Services	114,030	-	114,030	
639	221	Insurance	-	-	-	
640	228	Hazardous Waste Insurance	-	-	-	
641	231	R&M Buildings & Grounds	-	-	-	
642	234	Computer Hardware Maintenance	-	-	-	
643	261	Community Advertising	-	-	-	
644	262	Civic Events	-	-	-	
645	263	Public Relations	4,300	-	4,300	
646	266	Advertising	3,380	-	3,380	
647	274	Rental Housing Assistance	-	-	-	
648	281	Project Management Services	-	-	-	
649	284	Memberships And Subscriptions	250	-	250	
650	293	Vehicle Maintenance	-	-	-	
651	311	Office Supplies	570	-	570	
652	312	Printing,Photography,Reproduction	1,120	-	1,120	
653	314	Postage	620	-	620	
654	321	Food	-	-	-	
655	331	Uniforms, Safety And Special Clothing	-	-	-	
656	359	Non Office Supplies	1,130	-	1,130	
TOTAL CITYWIDE BROWNFIELDS			\$ 135,220		\$ 135,220	

City of Tucson Environmental Services
Solid Waste Cost of Service and Rate Design

Schedule 1
Test Year Budget

Line No.	Object Code	Description	Adopted ¹ Budget FY 2010	Adjustments	Test Year	Comments
4657 HOUSEHOLD HAZARDOUS WASTE PROGRAM						
657	101	Salaries & Wages	\$ 293,210		\$ 293,210	
658	102	Extra Time	5,500		5,500	
659	103	Overtime Wages	1,200		1,200	
660	107	Second Language Pay	1,560		1,560	
661	113	Supplemental Pension Contribution	49,520		49,520	
662	114	FICA (Social Security)	22,580		22,580	
663	115	Workers Compensation Insurance	4,940		4,940	
664	116	Group Plan Insurance	63,880		63,880	
665	117	State Unemployment	200		200	
666	201	Local Travel	-		-	
667	202	Travel	9,300		9,300	
668	203	Non-Local Travel- Training	-		-	
669	204	Training	3,080		3,080	
670	214	Medical	300		300	
671	216	Real Property Fees	250		250	
672	217	Title Reports + Recording Fees	-		-	
673	219	Miscellaneous Professional Services	80,760		80,760	
674	221	Insurance	32,210		32,210	
675	228	Hazardous Waste Insurance	1,640		1,640	
676	232	R&M Machinery & Equipment	500		500	
677	234	Computer Hardware Maintenance	500		500	
678	235	Minor Rehab, Remodel & Alter	2,500		2,500	
679	236	Maint Of Office Equipment	-		-	
680	240	Cellular Phone Service	1,650		1,650	
681	241	Electricity	4,080		4,080	
682	242	Water	820		820	
683	244	Garbage And Trash Services	900		900	
684	245	Telephone	2,750		2,750	
685	252	Rents Equipment	10,110		10,110	
686	263	Public Relations	2,760		2,760	
687	266	Advertising	600		600	
688	284	Memberships And Subscriptions	550		550	
689	286	Misc Outside Services	-		-	
690	293	Vehicle Maintenance	3,700	(3,700)	-	D
691	311	Office Supplies	550		550	
692	312	Printing,Photography,Reproduction	2,500		2,500	
693	317	Computer Software < \$100,000	-		-	
694	321	Food	-		-	
695	331	Uniforms, Safety And Special Clothing	6,000		6,000	
696	332	Safety & Special Clothing	-		-	
697	336	Oil/Lubricants	-		-	
698	338	Repair Parts	-		-	
699	341	Book, Periodicals And Records	150		150	
700	345	Furnishings, Equipment And Tools < \$5,000	8,060		8,060	
701	346	Computer Equipment < \$5,000	2,000		2,000	
702	352	Maintenance Supplies For Machinery And Equipment	1,500		1,500	
703	359	Non Office Supplies	44,600		44,600	
704	394	"Fleet Svc Chg, Cng"	-		-	
705	395	Fleet Services Gas And Diesel	3,400	(3,400)	-	D
706	461	Vehicles	-		-	C
TOTAL HOUSEHOLD HAZARDOUS WASTE PROGRAM			\$ 670,310		\$ 663,210	
4680 ADMINISTRATIVE SERVICE CHARGE						
707	196	Interdepartmental Labor	\$ -		\$ -	
708	219	Miscellaneous Professional Services	766,570		766,570	

City of Tucson Environmental Services
Solid Waste Cost of Service and Rate Design

Schedule 1
Test Year Budget

Line No.	Object Code	Description	Adopted ¹ Budget FY 2010	Adjustments	Test Year	Comments
709	203	Non-Local Travel- Training	-		-	
710	204	Training	-		-	
711	291	Administrative Services	751,450		751,450	G
712	293	Vehicle Maintenance	-		-	
713	297	Indirect Cost Allocation	3,672,490	(261,640)	3,410,850	A
714	299	Inter-Activity Transf	-		-	
TOTAL ADMINISTRATIVE SERVICE CHARGE			\$ 5,190,510		\$ 4,928,870	
4681 GENERAL EXPENSE						
715	190	Miscellaneous Distrib Labor	\$ -		\$ -	
716	263	Public Relations	-		-	
717	273	Bad Debt Expense	158,140		158,140	
718	299	Inter-Activity Transf	-		-	
TOTAL GENERAL EXPENSE			\$ 158,140		\$ 158,140	
MISCELLANEOUS & NON-RECURRING EXPENSES						
719	1	Reserve Contribution - Capital	\$ -	\$ 860,000	\$ 860,000	
720	2	Reserve Contribution - Closure	-	412,061	412,061	
721	3	Reserve Contribution - Post-Closure	-	517,801	517,801	
722	4	Reserve Contribution - Equipment	-		-	
723	5	Reserve Contribution - O&M	-		-	
724	6	Reserve Contribution - Other	-		-	
725	7	PAYG - Capital Projects	-	50,000	50,000	
TOTAL MISCELLANEOUS & NON-RECURRING EXPENSES			\$ -		\$ 1,839,862	
DEBT AND CAPITAL LEASES						
726		Existing Debt Service	\$ 1,048,460	\$ (497,427)	\$ 551,033	F
727		Proposed Debt Service	-		-	
728		Existing Capital Leases	2,034,140	(8)	2,034,132	F
729		Proposed Capital Leases	-		-	
TOTAL DEBT AND CAPITAL LEASES			\$ 3,082,600		\$ 2,585,165	
TOTAL SOLID WASTE EXPENSES			\$ 47,796,780		\$ 46,282,271	
REVENUE OFFSETS						
730		Refuse Penalties - Residential	\$ -	\$ 106,017	\$ 106,017	B
731		Refuse Penalties - Front Load	-	17,402	17,402	B
732		Refuse Penalties - Roll-Off	-	16,797	16,797	B
733		Refuse Penalties - Landfill	-	81,272	81,272	B
734		Sanitation Violations	-	1,743	1,743	B
735		ES Misc Charges	-	121,181	121,181	B
736		Recyclable Material Sales	-	602,704	602,704	A
737		IGA (Pima County HHW)	-	285,000	285,000	A
738		ADEQ (Remediation)	-	90,000	90,000	A
739		HHW Collection	-	68,266	68,266	B
740		Grants For Operations	-		-	
741		General Fund Transfers	-		-	
742		Roll-Off Deliveries	-	49,600	49,600	J
TOTAL REVENUE OFFSETS			\$ -		\$ 1,439,981	
NET REVENUE REQUIREMENT			\$ 47,796,780		\$ 44,842,289	

COMMENT LEGEND

- A Per City staff
- B Based on FY 2009 Actual
- C Test Year defined by "Vehicles" worksheet
- D Test Year based on FY 2009 Actuals with adjustments from City staff, as listed on the "Vehicles" worksheet
- E Test Year contra-expense (paid by the Water Department)
- F Test Year defined by "Debt" and "Leases" worksheets
- G Cost for Pueblo billing system
- H Negate allocation from 4639 to 4633 in Test Year in order to identify the full cost of 4639
- I Remediation Fee reallocated based on Test Year fuel budget
- J Assumes 620 roll-off deliveries at \$80 each

Notes:

¹ Adopted Budget may not tie to published documents due to revisions by City staff for amounts such as grant capacity and debt service

Revenue Requirement Forecast

Line No.	Object Code	Description	Year 1 FY 2010	Year 2 FY 2011	Year 3 FY 2012	Year 4 FY 2013	Year 5 FY 2014	Year 6 FY 2015	Year 7 FY 2016	Year 8 FY 2017	Year 9 FY 2018	Year 10 FY 2019	Inflation Factor
4601 ADMINISTRATION (Includes 4649)													
1	101	Salaries & Wages	\$ 1,181,600	\$ 1,181,600	\$ 1,181,600	\$ 1,228,864	\$ 1,278,019	\$ 1,329,139	\$ 1,382,305	\$ 1,437,597	\$ 1,495,101	\$ 1,554,905	
2	101A	Longevity	-	-	-	-	-	-	-	-	-	-	- Salary
3	102	Extra Time	-	-	-	-	-	-	-	-	-	-	- Salary
4	103	Overtime Wages	3,400	3,400	3,400	3,536	3,677	3,825	3,978	4,137	4,302	4,474	Overtime
5	107	Second Language Pay	2,340	2,340	2,340	2,434	2,531	2,632	2,737	2,847	2,961	3,079	Salary
6	108	Downtown Allowance & Discounted Transit Passes	1,800	1,872	1,947	2,025	2,106	2,190	2,278	2,369	2,463	2,562	Benefits
7	113	Supplemental Pension Contribution	194,130	201,895	209,971	218,370	227,105	236,189	245,636	255,462	265,680	276,308	Benefits
8	114	FICA (Social Security)	90,360	90,360	90,360	93,974	97,733	101,643	105,708	109,937	114,334	118,908	Salary
9	115	Workers Compensation Insurance	60,260	62,670	65,177	67,784	70,496	73,316	76,248	79,298	82,470	85,769	Benefits
10	116	Group Plan Insurance	142,620	148,325	154,258	160,428	166,845	173,519	180,460	187,678	195,185	202,993	Benefits
11	117	State Unemployment	-	-	-	-	-	-	-	-	-	-	- General
12	131	Regular Time Np	-	-	-	-	-	-	-	-	-	-	- General
13	171	Sick Leave Paid At Retirement	-	-	-	-	-	-	-	-	-	-	- General
14	190	Miscellaneous Dtrib Labor	-	-	-	-	-	-	-	-	-	-	- General
15	196	Interdepartmental Labor	-	-	-	-	-	-	-	-	-	-	- General
16	201	Local Travel	-	-	-	-	-	-	-	-	-	-	- General
17	202	Travel	12,620	12,872	13,130	13,392	13,660	13,933	14,212	14,496	14,786	15,082	General
18	203	Non-Local Travel- Training	-	-	-	-	-	-	-	-	-	-	- General
19	204	Training	5,910	6,028	6,149	6,272	6,397	6,525	6,656	6,789	6,925	7,063	General
20	207	Executive Vehicle Allowance	5,200	5,304	5,410	5,518	5,629	5,741	5,856	5,973	6,093	6,214	General
21	209	Risk Mgmt Training-Other Dept	-	-	-	-	-	-	-	-	-	-	- General
22	219	Miscellaneous Professional Services	100,000	102,000	104,040	106,121	108,243	110,408	112,616	114,869	117,166	119,509	Prof. Services
23	220	Remediation Fee	146	149	152	155	158	161	164	167	171	174	General
24	221	Insurance	92,650	94,503	96,393	98,321	100,287	102,293	104,339	106,426	108,554	110,725	General
25	228	Hazardous Waste Insurance	5,780	5,896	6,014	6,134	6,256	6,382	6,509	6,639	6,772	6,908	General
26	232	R&M Machinery & Equipment	10,380	10,588	10,799	11,015	11,236	11,460	11,690	11,923	12,162	12,405	General
27	235	Minor Rehab, Remodel & Alter	540	551	562	573	585	596	608	620	633	645	General
28	236	Maint Of Office Equipment	-	-	-	-	-	-	-	-	-	-	- General
29	240	Cellular Phone Service	5,660	5,773	5,889	6,006	6,127	6,249	6,374	6,502	6,632	6,764	General
30	241	Electricity	520	530	541	552	563	574	586	597	609	621	General
31	242	Water	60	61	62	64	65	66	68	69	70	72	General
32	244	Garbage And Trash Services	30	31	31	32	32	33	34	34	35	36	General
33	245	Telephone	14,450	14,739	15,034	15,334	15,641	15,954	16,273	16,599	16,930	17,269	General
34	247	Gas	210	214	218	223	227	232	236	241	246	251	General
35	248	Sewer	30	31	31	32	32	33	34	34	35	36	General
36	251	Rents Land And Buildings	118,500	120,870	123,287	125,753	128,268	130,834	133,450	136,119	138,842	141,618	General
37	252	Rents Equipment	3,200	3,264	3,329	3,396	3,464	3,533	3,604	3,676	3,749	3,824	General
38	260	Computer Software Maintenance Agreements	28,000	28,560	29,131	29,714	30,308	30,914	31,533	32,163	32,806	33,463	General
39	263	Public Relations	10,000	10,200	10,404	10,612	10,824	11,041	11,262	11,487	11,717	11,951	General
40	265	Community Center	-	-	-	-	-	-	-	-	-	-	- General
41	266	Advertising	2,000	2,040	2,081	2,122	2,165	2,208	2,252	2,297	2,343	2,390	General
42	272	Depreciation	-	-	-	-	-	-	-	-	-	-	- General
43	274	Rental Housing Assistance	3,260	3,325	3,392	3,460	3,529	3,599	3,671	3,745	3,820	3,896	General
44	284	Memberships And Subscriptions	2,600	2,652	2,705	2,759	2,814	2,871	2,928	2,987	3,046	3,107	General
45	286	Misc Outside Services	-	-	-	-	-	-	-	-	-	-	- General
46	293	Vehicle Maintenance	3,962	4,081	4,203	4,329	4,459	4,593	4,731	4,872	5,019	5,169	General
47	294	Radio And Data Services	520	530	541	552	563	574	586	597	609	621	General
48	295	Building Maintenance	38,140	38,903	39,681	40,474	41,284	42,110	42,952	43,811	44,687	45,581	Maintenance
49	296	Custodial And Miscellaneous Services	19,570	19,961	20,361	20,768	21,183	21,607	22,039	22,480	22,929	23,388	General
50	298	Planned Building Maintenance	3,000	3,060	3,121	3,184	3,247	3,312	3,378	3,446	3,515	3,585	Maintenance
51	311	Office Supplies	15,400	15,708	16,022	16,343	16,669	17,003	17,343	17,690	18,044	18,404	Supplies
52	312	Printing,Photography,Reproduction	5,000	5,100	5,202	5,306	5,412	5,520	5,631	5,743	5,858	5,975	Supplies
53	314	Postage	22,050	22,491	22,941	23,400	23,868	24,345	24,832	25,329	25,835	26,352	Supplies
54	317	Computer Software < \$100,000	13,230	13,495	13,764	14,040	14,321	14,607	14,899	15,197	15,501	15,811	Supplies
55	321	Food	-	-	-	-	-	-	-	-	-	-	- Supplies
56	331	Uniforms, Safety And Special Clothing	2,000	2,040	2,081	2,122	2,165	2,208	2,252	2,297	2,343	2,390	Supplies
57	332	Safety & Special Clothing	-	-	-	-	-	-	-	-	-	-	- Supplies
58	341	Book, Periodicals And Records	930	949	968	987	1,007	1,027	1,047	1,068	1,090	1,111	Supplies
59	345	Furnishings, Equipment And Tools < \$5,000	7,540	7,691	7,845	8,002	8,162	8,325	8,491	8,661	8,834	9,011	Supplies
60	346	Computer Equipment < \$5,000	18,780	19,156	19,539	19,929	20,328	20,735	21,149	21,572	22,004	22,444	Supplies
61	347	Furn,Other Eq,Tools \$500-\$4999	-	-	-	-	-	-	-	-	-	-	- Supplies
62	359	Non Office Supplies	3,600	3,672	3,745	3,820	3,897	3,975	4,054	4,135	4,218	4,302	Supplies
63	394	"Fleet Svc Chg, Cng"	-	-	-	-	-	-	-	-	-	-	- Supplies
64	395	Fleet Services Gas And Diesel	5,170	5,273	5,378	5,486	5,596	5,708	5,822	5,938	6,057	6,178	

City of Tucson Environmental Services
Solid Waste Cost of Service and Rate Design

Schedule 2
Revenue Requirement Forecast

Line No.	Object Code	Description	Year 1 FY 2010	Year 2 FY 2011	Year 3 FY 2012	Year 4 FY 2013	Year 5 FY 2014	Year 6 FY 2015	Year 7 FY 2016	Year 8 FY 2017	Year 9 FY 2018	Year 10 FY 2019	Inflation Factor
65	461	Vehicles	-	-	-	-	-	-	-	-	-	-	-
66	552	Lease Purchase D/S Principal	-	-	-	-	-	-	-	-	-	-	General
67	798	Unallocated Budget Capacity (Budget Use Only)	-	-	-	-	-	-	-	-	-	-	General
68	902	Credits For All Other Than 901	-	-	-	-	-	-	-	-	-	-	General
TOTAL ADMINISTRATION (Includes 4649)			\$ 2,257,147	\$ 2,284,752	\$ 2,313,229	\$ 2,393,717	\$ 2,477,182	\$ 2,563,741	\$ 2,653,511	\$ 2,746,615	\$ 2,843,183	\$ 2,943,347	
4603 TUCSON CLEAN AND BEAUTIFUL													
69	245	Telephone	\$ 2,350	\$ 2,397	\$ 2,445	\$ 2,494	\$ 2,544	\$ 2,595	\$ 2,646	\$ 2,699	\$ 2,753	\$ 2,808	General
70	268	Contributions To Organizations	53,520	54,590	55,682	56,796	57,932	59,090	60,272	61,478	62,707	63,961	General
71	311	Office Supplies	-	-	-	-	-	-	-	-	-	-	Supplies
72	312	Printing,Photography,Reproduction	1,070	1,091	1,113	1,135	1,158	1,181	1,205	1,229	1,254	1,279	Supplies
73	314	Postage	2,470	2,519	2,570	2,621	2,674	2,727	2,782	2,837	2,894	2,952	Supplies
74	359	Non Office Supplies	-	-	-	-	-	-	-	-	-	-	Supplies
TOTAL TUCSON CLEAN AND BEAUTIFUL			\$ 59,410	\$ 60,598	\$ 61,810	\$ 63,046	\$ 64,307	\$ 65,593	\$ 66,905	\$ 68,243	\$ 69,608	\$ 71,000	
4610 CUSTOMER SUPPORT AND BILLING													
75	101	Salaries & Wages	\$ 592,400	\$ 592,400	\$ 592,400	\$ 616,096	\$ 640,740	\$ 666,369	\$ 693,024	\$ 720,745	\$ 749,575	\$ 779,558	
76	102	Extra Time	1,400	1,400	1,400	1,456	1,514	1,575	1,638	1,703	1,771	1,842	Salary
77	103	Overtime Wages	6,720	6,720	6,720	6,989	7,268	7,559	7,861	8,176	8,503	8,843	Overtime
78	107	Second Language Pay	3,900	3,900	3,900	4,056	4,218	4,387	4,562	4,745	4,935	5,132	Salary
79	108	Downtown Allowance & Discounted Transit Passes	-	-	-	-	-	-	-	-	-	-	Benefits
80	113	Supplemental Pension Contribution	97,920	101,837	105,910	110,147	114,553	119,135	123,900	128,856	134,010	139,371	Benefits
81	114	FICA (Social Security)	46,340	46,340	46,340	48,194	50,121	52,126	54,211	56,380	58,635	60,980	Salary
82	115	Workers Compensation Insurance	30,320	31,533	32,794	34,106	35,470	36,889	38,364	39,899	41,495	43,155	Benefits
83	116	Group Plan Insurance	110,810	115,242	119,852	124,646	129,632	134,817	140,210	145,818	151,651	157,717	Benefits
84	117	State Unemployment	-	-	-	-	-	-	-	-	-	-	General
85	202	Travel	3,000	3,060	3,121	3,184	3,247	3,312	3,378	3,446	3,515	3,585	General
86	203	Non-Local Travel- Training	-	-	-	-	-	-	-	-	-	-	General
87	204	Training	1,500	1,530	1,561	1,592	1,624	1,656	1,689	1,723	1,757	1,793	General
88	219	Miscellaneous Professional Services	60,000	61,200	62,424	63,672	64,946	66,245	67,570	68,921	70,300	71,706	Prof. Services
89	220	Remediation Fee	-	-	-	-	-	-	-	-	-	-	General
90	221	Insurance	46,450	47,379	48,327	49,293	50,279	51,285	52,310	53,356	54,424	55,512	General
91	228	Hazardous Waste Insurance	2,900	2,958	3,017	3,078	3,139	3,202	3,266	3,331	3,398	3,466	General
92	232	R&M Machinery & Equipment	320	326	333	340	346	353	360	368	375	382	General
93	235	Minor Rehab, Remodel & Alter	-	-	-	-	-	-	-	-	-	-	General
94	236	Maint Of Office Equipment	-	-	-	-	-	-	-	-	-	-	General
95	240	Cellular Phone Service	1,420	1,448	1,477	1,507	1,537	1,568	1,599	1,631	1,664	1,697	General
96	245	Telephone	5,040	5,141	5,244	5,348	5,455	5,565	5,676	5,789	5,905	6,023	General
97	252	Rents Equipment	-	-	-	-	-	-	-	-	-	-	General
98	263	Public Relations	-	-	-	-	-	-	-	-	-	-	General
99	284	Memberships And Subscriptions	400	408	416	424	433	442	450	459	469	478	General
100	293	Vehicle Maintenance	-	-	-	-	-	-	-	-	-	-	General
101	294	Radio And Data Services	400	408	416	424	433	442	450	459	469	478	General
102	299	Inter-Activity Transf	-	-	-	-	-	-	-	-	-	-	General
103	311	Office Supplies	3,800	3,876	3,954	4,033	4,113	4,196	4,279	4,365	4,452	4,541	Supplies
104	312	Printing,Photography,Reproduction	11,500	11,730	11,965	12,204	12,448	12,697	12,951	13,210	13,474	13,744	Supplies
105	314	Postage	14,800	15,096	15,398	15,706	16,020	16,340	16,667	17,001	17,341	17,687	Supplies
106	317	Computer Software < \$100,000	85,000	86,700	88,434	90,203	92,007	93,847	95,724	97,638	99,591	101,583	Supplies
107	331	Uniforms, Safety And Special Clothing	600	612	624	637	649	662	676	689	703	717	Supplies
108	332	Safety & Special Clothing	-	-	-	-	-	-	-	-	-	-	Supplies
109	341	Book, Periodicals And Records	270	275	281	287	292	298	304	310	316	323	Supplies
110	345	Furnishings, Equipment And Tools < \$5,000	10,000	10,200	10,404	10,612	10,824	11,041	11,262	11,487	11,717	11,951	Supplies
111	346	Computer Equipment < \$5,000	2,500	2,550	2,601	2,653	2,706	2,760	2,815	2,872	2,929	2,988	Supplies
112	347	Furn,Other Eq,Tools \$500-\$4999	-	-	-	-	-	-	-	-	-	-	Supplies
113	359	Non Office Supplies	370	377	385	393	400	409	417	425	434	442	Supplies
114	395	Fleet Services Gas And Diesel	-	-	-	-	-	-	-	-	-	-	General
115	452	Furnishings,Eq,Tools >=\$5,000	-	-	-	-	-	-	-	-	-	-	General
116	461	Vehicles	-	-	-	-	-	-	-	-	-	-	General
TOTAL CUSTOMER SUPPORT AND BILLING			\$ 1,140,080	\$ 1,154,647	\$ 1,169,697	\$ 1,211,278	\$ 1,254,417	\$ 1,299,176	\$ 1,345,616	\$ 1,393,804	\$ 1,443,807	\$ 1,495,694	
4613 PROGRAM DEVELOPMENT AND PLANNING													
117	101	Salaries & Wages	\$ 242,000	\$ 242,000	\$ 242,000	\$ 251,680	\$ 261,747	\$ 272,217	\$ 283,106	\$ 294,430	\$ 306,207	\$ 318,455	
118	102	Extra Time	-	-	-	-	-	-	-	-	-	-	Salary
119	103	Overtime Wages	200	200	200	208	216	225	234	243	253	263	Overtime
120	106	Uniform/Equipment/Housekeeping	-	-	-	-	-	-	-	-	-	-	General
121	107	Second Language Pay	780	780	780	811	844	877	912	949	987	1,026	Salary

City of Tucson Environmental Services
Solid Waste Cost of Service and Rate Design

Schedule 2
Revenue Requirement Forecast

Line No.	Object Code	Description	Year 1 FY 2010	Year 2 FY 2011	Year 3 FY 2012	Year 4 FY 2013	Year 5 FY 2014	Year 6 FY 2015	Year 7 FY 2016	Year 8 FY 2017	Year 9 FY 2018	Year 10 FY 2019	Inflation Factor
122	108	Downtown Allowance & Discounted Transit Passes	1,200	1,248	1,298	1,350	1,404	1,460	1,518	1,579	1,642	1,708	Benefits
123	113	Supplemental Pension Contribution	41,170	42,817	44,529	46,311	48,163	50,090	52,093	54,177	56,344	58,598	Benefits
124	114	FICA (Social Security)	18,730	18,730	18,730	19,479	20,258	21,069	21,911	22,788	23,699	24,647	Salary
125	115	Workers Compensation Insurance	12,380	12,875	13,390	13,926	14,483	15,062	15,665	16,291	16,943	17,621	Benefits
126	116	Group Plan Insurance	38,000	39,520	41,101	42,745	44,455	46,233	48,082	50,005	52,006	54,086	Benefits
127	117	State Unemployment	-	-	-	-	-	-	-	-	-	-	General
128	190	Miscellaneous Distrib Labor	-	-	-	-	-	-	-	-	-	-	General
129	201	Local Travel	-	-	-	-	-	-	-	-	-	-	General
130	202	Travel	4,570	4,661	4,755	4,850	4,947	5,046	5,147	5,249	5,354	5,462	General
131	203	Non-Local Travel- Training	-	-	-	-	-	-	-	-	-	-	General
132	204	Training	4,000	4,080	4,162	4,245	4,330	4,416	4,505	4,595	4,687	4,780	General
133	206	Exec Veh Allow/Variable Reimbu	-	-	-	-	-	-	-	-	-	-	General
134	219	Miscellaneous Professional Services	16,000	16,320	16,646	16,979	17,319	17,665	18,019	18,379	18,747	19,121	Prof. Services
135	220	Remediation Fee	58	60	61	62	63	65	66	67	68	70	General
136	221	Insurance	18,970	19,349	19,736	20,131	20,534	20,944	21,363	21,791	22,226	22,671	General
137	228	Hazardous Waste Insurance	1,180	1,204	1,228	1,252	1,277	1,303	1,329	1,355	1,383	1,410	General
138	234	Computer Hardware Maintenance	-	-	-	-	-	-	-	-	-	-	General
139	236	Maint Of Office Equipment	-	-	-	-	-	-	-	-	-	-	General
140	240	Cellular Phone Service	2,110	2,152	2,195	2,239	2,284	2,330	2,376	2,424	2,472	2,522	General
141	245	Telephone	-	-	-	-	-	-	-	-	-	-	General
142	259	Intra-Dept. Micro Comp.	-	-	-	-	-	-	-	-	-	-	General
143	262	Civic Events	-	-	-	-	-	-	-	-	-	-	General
144	263	Public Relations	153,000	156,060	159,181	162,365	165,612	168,924	172,303	175,749	179,264	182,849	General
145	266	Advertising	8,950	9,129	9,312	9,498	9,688	9,882	10,079	10,281	10,486	10,696	General
146	268	Contributions To Organizations	-	-	-	-	-	-	-	-	-	-	General
147	284	Memberships And Subscriptions	200	204	208	212	216	221	225	230	234	239	General
148	290	Rental Fleet Services	-	-	-	-	-	-	-	-	-	-	General
149	293	Vehicle Maintenance	3,835	3,950	4,069	4,191	4,316	4,446	4,579	4,717	4,858	5,004	General
150	294	Radio And Data Services	20	20	21	21	22	22	23	23	23	24	Supplies
151	311	Office Supplies	500	510	520	531	541	552	563	574	586	598	Supplies
152	312	Printing,Photography,Reproduction	20,000	20,400	20,808	21,224	21,649	22,082	22,523	22,974	23,433	23,902	Supplies
153	314	Postage	2,970	3,029	3,090	3,152	3,215	3,279	3,345	3,412	3,480	3,549	Supplies
154	317	Computer Software < \$100,000	-	-	-	-	-	-	-	-	-	-	Supplies
155	321	Food	-	-	-	-	-	-	-	-	-	-	Supplies
156	331	Uniforms, Safety And Special Clothing	600	612	624	637	649	662	676	689	703	717	Supplies
157	332	Safety & Special Clothing	-	-	-	-	-	-	-	-	-	-	Supplies
158	341	Book, Periodicals And Records	-	-	-	-	-	-	-	-	-	-	Supplies
159	345	Furnishings, Equipment And Tools < \$5,000	5,430	5,539	5,649	5,762	5,878	5,995	6,115	6,237	6,362	6,489	Supplies
160	346	Computer Equipment < \$5,000	4,970	5,069	5,171	5,274	5,380	5,487	5,597	5,709	5,823	5,940	Supplies
161	347	Furn,Other Eq,Tools \$500-\$4999	-	-	-	-	-	-	-	-	-	-	Supplies
162	359	Non Office Supplies	8,000	8,160	8,323	8,490	8,659	8,833	9,009	9,189	9,373	9,561	Supplies
163	394	"Fleet Svc Chg, Cng"	-	-	-	-	-	-	-	-	-	-	Supplies
164	395	Fleet Services Gas And Diesel	2,074	2,116	2,158	2,201	2,245	2,290	2,336	2,382	2,430	2,479	General
165	461	Vehicles	-	-	-	-	-	-	-	-	-	-	General
166	902	Credits For All Other Than 901	-	-	-	-	-	-	-	-	-	-	General
TOTAL PROGRAM DEVELOPMENT AND PLANNING			\$ 611,898	\$ 620,795	\$ 629,945	\$ 649,825	\$ 670,394	\$ 691,676	\$ 713,699	\$ 736,489	\$ 760,075	\$ 784,487	
4633 RESIDENTIAL COLLECTIONS													
167	101	Salaries & Wages	\$ 3,149,990	\$ 3,149,990	\$ 3,149,990	\$ 3,275,990	\$ 3,407,029	\$ 3,543,310	\$ 3,685,043	\$ 3,832,444	\$ 3,985,742	\$ 4,145,172	
168	101A	Longevity	-	-	-	-	-	-	-	-	-	-	Salary
169	102	Extra Time	91,000	91,000	91,000	94,640	98,426	102,363	106,457	110,715	115,144	119,750	Salary
170	102A	Shift	-	-	-	-	-	-	-	-	-	-	Salary
171	103	Overtime Wages	243,720	243,720	243,720	253,469	263,608	274,152	285,118	296,523	308,384	320,719	Overtime
172	106	Uniform/Equipment/Housekeeping	-	-	-	-	-	-	-	-	-	-	General
173	107	Second Language Pay	780	780	780	811	844	877	912	949	987	1,026	Salary
174	108	Downtown Allowance & Discounted Transit Passes	-	-	-	-	-	-	-	-	-	-	Benefits
175	113	Supplemental Pension Contribution	542,540	564,242	586,811	610,284	634,695	660,083	686,486	713,946	742,503	772,204	Benefits
176	114	FICA (Social Security)	270,050	270,050	270,050	280,852	292,086	303,770	315,920	328,557	341,699	355,367	Salary
177	115	Workers Compensation Insurance	162,730	169,239	176,009	183,049	190,371	197,986	205,905	214,142	222,707	231,616	Benefits
178	116	Group Plan Insurance	735,790	765,222	795,830	827,664	860,770	895,201	931,009	968,249	1,006,979	1,047,259	Benefits
179	117	State Unemployment	-	-	-	-	-	-	-	-	-	-	General
180	171	Sick Leave Paid At Retirement	-	-	-	-	-	-	-	-	-	-	General
181	175	Meal Allowances	1,200	1,224	1,248	1,273	1,299	1,325	1,351	1,378	1,406	1,434	General
182	190	Miscellaneous Distrib Labor	-	-	-	-	-	-	-	-	-	-	General
183	201	Local Travel	-	-	-	-	-	-	-	-	-	-	General
184	202	Travel	3,610	3,682	3,756	3,831	3,908	3,986	4,065	4,147	4,230	4,314	General

City of Tucson Environmental Services
Solid Waste Cost of Service and Rate Design

Schedule 2
Revenue Requirement Forecast

Line No.	Object Code	Description	Year 1 FY 2010	Year 2 FY 2011	Year 3 FY 2012	Year 4 FY 2013	Year 5 FY 2014	Year 6 FY 2015	Year 7 FY 2016	Year 8 FY 2017	Year 9 FY 2018	Year 10 FY 2019	Inflation Factor
185	203	Non-Local Travel- Training	-	-	-	-	-	-	-	-	-	-	General
186	204	Training	1,330	1,357	1,384	1,411	1,440	1,468	1,498	1,528	1,558	1,589	General
187	218	Test Services	-	-	-	-	-	-	-	-	-	-	General
188	219	Miscellaneous Professional Services	60,000	61,200	62,424	63,672	64,946	66,245	67,570	68,921	70,300	71,706	Prof. Services
189	220	Remediation Fee	34,485	35,174	35,878	36,595	37,327	38,074	38,835	39,612	40,404	41,212	General
190	221	Insurance	250,370	255,377	260,485	265,695	271,009	276,429	281,957	287,596	293,348	299,215	General
191	228	Hazardous Waste Insurance	15,630	15,943	16,261	16,587	16,918	17,257	17,602	17,954	18,313	18,679	General
192	231	R&M Buildings & Grounds	-	-	-	-	-	-	-	-	-	-	General
193	235	Minor Rehab, Remodel & Alter	-	-	-	-	-	-	-	-	-	-	General
194	240	Cellular Phone Service	6,000	6,120	6,242	6,367	6,495	6,624	6,757	6,892	7,030	7,171	General
195	241	Electricity	7,000	7,140	7,283	7,428	7,577	7,729	7,883	8,041	8,202	8,366	General
196	242	Water	900	918	936	955	974	994	1,014	1,034	1,054	1,076	General
197	244	Garbage And Trash Services	1,640	1,673	1,706	1,740	1,775	1,811	1,847	1,884	1,922	1,960	General
198	245	Telephone	3,700	3,774	3,849	3,926	4,005	4,085	4,167	4,250	4,335	4,422	General
199	247	Gas	3,500	3,570	3,641	3,714	3,789	3,864	3,942	4,020	4,101	4,183	General
200	248	Sewer	420	428	437	446	455	464	473	482	492	502	General
201	252	Rents Equipment	6,000	6,120	6,242	6,367	6,495	6,624	6,757	6,892	7,030	7,171	General
202	263	Public Relations	-	-	-	-	-	-	-	-	-	-	General
203	266	Advertising	400	408	416	424	433	442	450	459	469	478	General
204	272	Depreciation	-	-	-	-	-	-	-	-	-	-	General
205	284	Memberships And Subscriptions	670	683	697	711	725	740	755	770	785	801	General
206	286	Misc Outside Services	-	-	-	-	-	-	-	-	-	-	General
207	291	Administrative Services	-	-	-	-	-	-	-	-	-	-	General
208	293	Vehicle Maintenance	5,000,447	5,150,460	5,304,974	5,464,123	5,628,047	5,796,888	5,970,795	6,149,919	6,334,416	6,524,449	General
209	294	Radio And Data Services	27,000	27,540	28,091	28,653	29,226	29,810	30,406	31,015	31,635	32,267	General
210	295	Building Maintenance	20,240	20,645	21,058	21,479	21,908	22,347	22,794	23,249	23,714	24,189	Maintenance
211	296	Custodial And Miscellaneous Services	5,910	6,028	6,149	6,272	6,397	6,525	6,656	6,789	6,925	7,063	General
212	311	Office Supplies	8,600	8,772	8,947	9,126	9,309	9,495	9,685	9,879	10,076	10,278	Supplies
213	312	Printing,Photography,Reproduction	5,000	5,100	5,202	5,306	5,412	5,520	5,631	5,743	5,858	5,975	Supplies
214	314	Postage	-	-	-	-	-	-	-	-	-	-	Supplies
215	321	Food	-	-	-	-	-	-	-	-	-	-	Supplies
216	324	Chemicals	2,150	2,193	2,237	2,282	2,327	2,374	2,421	2,470	2,519	2,569	Supplies
217	331	Uniforms, Safety And Special Clothing	38,480	39,250	40,035	40,835	41,652	42,485	43,335	44,201	45,085	45,987	Supplies
218	332	Safety & Special Clothing	-	-	-	-	-	-	-	-	-	-	Supplies
219	336	Oil/Lubricants	-	-	-	-	-	-	-	-	-	-	Supplies
220	337	Wheels/Tires	-	-	-	-	-	-	-	-	-	-	Supplies
221	338	Repair Parts	-	-	-	-	-	-	-	-	-	-	Supplies
222	345	Furnishings, Equipment And Tools < \$5,000	1,300,000	1,326,000	1,352,520	1,379,570	1,407,162	1,435,305	1,464,011	1,493,291	1,523,157	1,553,620	Supplies
223	346	Computer Equipment < \$5,000	6,200	6,324	6,450	6,579	6,711	6,845	6,982	7,122	7,264	7,410	Supplies
224	347	Furn,Other Eq,Tools \$500-\$4999	-	-	-	-	-	-	-	-	-	-	Supplies
225	353	O+M Other Improvements	-	-	-	-	-	-	-	-	-	-	Supplies
226	359	Non Office Supplies	37,000	37,740	38,495	39,265	40,050	40,851	41,668	42,501	43,351	44,218	Supplies
227	394	"Fleet Svc Chg, Cng"	-	-	-	-	-	-	-	-	-	-	Supplies
228	395	Fleet Services Gas And Diesel	1,223,547	1,248,018	1,272,978	1,298,438	1,324,407	1,350,895	1,377,913	1,405,471	1,433,580	1,462,252	General
229	452	Furnishings,Eq,Tools >=\$5,000	-	-	-	-	-	-	-	-	-	-	General
230	461	Vehicles	2,059,858	3,064,610	2,670,926	2,751,054	2,833,585	2,918,593	3,006,150	3,096,335	3,189,225	3,284,902	General
TOTAL RESIDENTIAL COLLECTIONS			\$ 15,327,886	\$ 16,601,714	\$ 16,485,140	\$ 17,000,885	\$ 17,533,590	\$ 18,083,835	\$ 18,652,221	\$ 19,239,372	\$ 19,845,932	\$ 20,472,570	
4635 CLEAN COMMUNITY PROGRAM (Brush & Bulky)													
231	101	Salaries & Wages	\$ 638,670	\$ 638,670	\$ 638,670	\$ 664,217	\$ 690,785	\$ 718,417	\$ 747,154	\$ 777,040	\$ 808,121	\$ 840,446	
232	101A	Longevity	-	-	-	-	-	-	-	-	-	-	Salary
233	102	Extra Time	11,700	11,700	11,700	12,168	12,655	13,161	13,687	14,235	14,804	15,396	Salary
234	102A	Shift	-	-	-	-	-	-	-	-	-	-	Salary
235	103	Overtime Wages	43,970	43,970	43,970	45,729	47,558	49,460	51,439	53,496	55,636	57,862	Overtime
236	106	Uniform/Equipmt/Hskping Allow	-	-	-	-	-	-	-	-	-	-	General
237	113	Supplemental Pension Contribution	113,290	117,822	122,534	127,436	132,533	137,835	143,348	149,082	155,045	161,247	Benefits
238	114	FICA (Social Security)	53,200	53,200	53,200	55,328	57,541	59,843	62,236	64,726	67,315	70,008	Salary
239	115	Workers Compensation Insurance	32,690	33,998	35,358	36,772	38,243	39,772	41,363	43,018	44,739	46,528	Benefits
240	116	Group Plan Insurance	162,950	169,468	176,247	183,297	190,628	198,254	206,184	214,431	223,008	231,929	Benefits
241	117	State Unemployment	-	-	-	-	-	-	-	-	-	-	General
242	171	Sick Leave Paid At Retirement	-	-	-	-	-	-	-	-	-	-	General
243	175	Meal Allowances	-	-	-	-	-	-	-	-	-	-	General
244	190	Miscellaneous Distrib Labor	-	-	-	-	-	-	-	-	-	-	General
245	219	Miscellaneous Professional Services	35,000	35,700	36,414	37,142	37,885	38,643	39,416	40,204	41,008	41,828	Prof. Services
246	220	Remediation Fee	3,725	3,800	3,876	3,953	4,032	4,113	4,195	4,279	4,365	4,452	General
247	221	Insurance	50,080	51,082	52,103	53,145	54,208	55,292	56,398	57,526	58,677	59,850	General

City of Tucson Environmental Services
Solid Waste Cost of Service and Rate Design

Schedule 2
Revenue Requirement Forecast

Line No.	Object Code	Description	Year 1 FY 2010	Year 2 FY 2011	Year 3 FY 2012	Year 4 FY 2013	Year 5 FY 2014	Year 6 FY 2015	Year 7 FY 2016	Year 8 FY 2017	Year 9 FY 2018	Year 10 FY 2019	Inflation Factor
248	228	Hazardous Waste Insurance	3,130	3,193	3,256	3,322	3,388	3,456	3,525	3,595	3,667	3,741	General
249	231	R&M Buildings & Grounds	2,360	2,407	2,455	2,504	2,555	2,606	2,658	2,711	2,765	2,820	General
250	232	R&M Machinery & Equipment	-	-	-	-	-	-	-	-	-	-	General
251	240	Cellular Phone Service	420	428	437	446	455	464	473	482	492	502	General
252	241	Electricity	-	-	-	-	-	-	-	-	-	-	General
253	242	Water	-	-	-	-	-	-	-	-	-	-	General
254	244	Garbage And Trash Services	3,200	3,264	3,329	3,396	3,464	3,533	3,604	3,676	3,749	3,824	General
255	247	Gas	-	-	-	-	-	-	-	-	-	-	General
256	248	Sewer	-	-	-	-	-	-	-	-	-	-	General
257	263	Public Relations	90,000	91,800	93,636	95,509	97,419	99,367	101,355	103,382	105,449	107,558	General
258	293	Vehicle Maintenance	396,219	408,106	420,349	432,959	445,948	459,327	473,106	487,300	501,919	516,976	General
259	294	Radio And Data Services	2,000	2,040	2,081	2,122	2,165	2,208	2,252	2,297	2,343	2,390	General
260	295	Building Maintenance	-	-	-	-	-	-	-	-	-	-	Maintenance
261	296	Custodial And Miscellaneous Services	-	-	-	-	-	-	-	-	-	-	General
262	299	Inter-Activity Transf	-	-	-	-	-	-	-	-	-	-	General
263	311	Office Supplies	300	306	312	318	325	331	338	345	351	359	Supplies
264	312	Printing,Photography,Reproduction	-	-	-	-	-	-	-	-	-	-	Supplies
265	321	Food	-	-	-	-	-	-	-	-	-	-	Supplies
266	331	Uniforms, Safety And Special Clothing	10,440	10,649	10,862	11,079	11,301	11,527	11,757	11,992	12,232	12,477	Supplies
267	332	Safety & Special Clothing	-	-	-	-	-	-	-	-	-	-	Supplies
268	336	Oil/Lubricants	-	-	-	-	-	-	-	-	-	-	Supplies
269	337	Wheels/Tires	-	-	-	-	-	-	-	-	-	-	Supplies
270	338	Repair Parts	-	-	-	-	-	-	-	-	-	-	Supplies
271	345	Furnishings, Equipment And Tools < \$5,000	2,130	2,173	2,216	2,260	2,306	2,352	2,399	2,447	2,496	2,546	Supplies
272	346	Computer Equipment < \$5,000	-	-	-	-	-	-	-	-	-	-	Supplies
273	347	Furn,Other Eq,Tools \$500-\$4999	-	-	-	-	-	-	-	-	-	-	Supplies
274	359	Non Office Supplies	5,000	5,100	5,202	5,306	5,412	5,520	5,631	5,743	5,858	5,975	Supplies
275	394	"Fleet Svc Chg, Cng"	-	-	-	-	-	-	-	-	-	-	Supplies
276	395	Fleet Services Gas And Diesel	132,172	134,815	137,511	140,262	143,067	145,928	148,847	151,824	154,860	157,957	General
277	461	Vehicles	177,835	183,170	-	152,982	157,571	162,298	167,167	172,182	177,348	182,668	General
TOTAL CLEAN COMMUNITY PROGRAM (Brush & Bulky)			\$ 1,970,481	\$ 2,006,859	\$ 1,855,719	\$ 2,071,652	\$ 2,141,443	\$ 2,213,706	\$ 2,288,531	\$ 2,366,013	\$ 2,446,249	\$ 2,529,340	
4639 COMMERCIAL COLLECTIONS													
278	101	Salaries & Wages	\$ 1,637,670	\$ 1,637,670	\$ 1,637,670	\$ 1,703,177	\$ 1,771,304	\$ 1,842,156	\$ 1,915,842	\$ 1,992,476	\$ 2,072,175	\$ 2,155,062	
279	101A	Longevity	-	-	-	-	-	-	-	-	-	-	Salary
280	102	Extra Time	49,000	49,000	49,000	50,960	52,998	55,118	57,323	59,616	62,001	64,481	Salary
281	102A	Shift	-	-	-	-	-	-	-	-	-	-	Salary
282	103	Overtime Wages	125,000	125,000	125,000	130,000	135,200	140,608	146,232	152,082	158,165	164,491	Overtime
283	106	Uniform/Equipmt/Hskping Allow	-	-	-	-	-	-	-	-	-	-	General
284	107	Second Language Pay	-	-	-	-	-	-	-	-	-	-	Salary
285	113	Supplemental Pension Contribution	313,850	326,404	339,460	353,039	367,160	381,847	397,120	413,005	429,525	446,706	Benefits
286	114	FICA (Social Security)	145,900	145,900	145,900	151,736	157,805	164,118	170,682	177,510	184,610	191,994	Salary
287	115	Workers Compensation Insurance	83,590	86,934	90,411	94,027	97,788	101,700	105,768	109,999	114,399	118,975	Benefits
288	116	Group Plan Insurance	402,680	418,787	435,539	452,960	471,079	489,922	509,519	529,899	551,095	573,139	Benefits
289	117	State Unemployment	-	-	-	-	-	-	-	-	-	-	General
290	196	Interdepartmental Labor	-	-	-	-	-	-	-	-	-	-	General
291	202	Travel	1,360	1,387	1,415	1,443	1,472	1,502	1,532	1,562	1,593	1,625	General
292	203	Non-Local Travel- Training	-	-	-	-	-	-	-	-	-	-	General
293	204	Training	1,370	1,397	1,425	1,454	1,483	1,513	1,543	1,574	1,605	1,637	General
294	219	Miscellaneous Professional Services	10,000	10,200	10,404	10,612	10,824	11,041	11,262	11,487	11,717	11,951	Prof. Services
295	220	Remediation Fee	17,470	17,819	18,175	18,539	18,910	19,288	19,674	20,067	20,468	20,878	General
296	221	Insurance	128,410	130,978	133,598	136,270	138,995	141,775	144,611	147,503	150,453	153,462	General
297	228	Hazardous Waste Insurance	8,020	8,180	8,344	8,511	8,681	8,855	9,032	9,212	9,397	9,585	General
298	231	R&M Buildings & Grounds	2,400	2,448	2,497	2,547	2,598	2,650	2,703	2,757	2,812	2,868	General
299	235	Minor Rehab, Remodel & Alter	3,120	3,182	3,246	3,311	3,377	3,445	3,514	3,584	3,656	3,729	General
300	240	Cellular Phone Service	5,460	5,569	5,681	5,794	5,910	6,028	6,149	6,272	6,397	6,525	General
301	241	Electricity	4,500	4,590	4,682	4,775	4,871	4,968	5,068	5,169	5,272	5,378	General
302	242	Water	300	306	312	318	325	331	338	345	351	359	General
303	244	Garbage And Trash Services	-	-	-	-	-	-	-	-	-	-	General
304	245	Telephone	1,340	1,367	1,394	1,422	1,450	1,479	1,509	1,539	1,570	1,601	General
305	247	Gas	930	949	968	987	1,007	1,027	1,047	1,068	1,090	1,111	General
306	248	Sewer	160	163	166	170	173	177	180	184	187	191	General
307	252	Rents Equipment	3,000	3,060	3,121	3,184	3,247	3,312	3,378	3,446	3,515	3,585	General
308	259	Intra-Dept. Micro Comp.	-	-	-	-	-	-	-	-	-	-	General
309	263	Public Relations	2,500	2,550	2,601	2,653	2,706	2,760	2,815	2,872	2,929	2,988	General
310	266	Advertising	2,150	2,193	2,237	2,282	2,327	2,374	2,421	2,470	2,519	2,569	General

City of Tucson Environmental Services
Solid Waste Cost of Service and Rate Design

Schedule 2
Revenue Requirement Forecast

Line No.	Object Code	Description	Year 1 FY 2010	Year 2 FY 2011	Year 3 FY 2012	Year 4 FY 2013	Year 5 FY 2014	Year 6 FY 2015	Year 7 FY 2016	Year 8 FY 2017	Year 9 FY 2018	Year 10 FY 2019	Inflation Factor
311	272	Depreciation	-	-	-	-	-	-	-	-	-	-	General
312	284	Memberships And Subscriptions	700	714	728	743	758	773	788	804	820	837	General
313	290	Rental Fleet Services	-	-	-	-	-	-	-	-	-	-	General
314	291	Administrative Services	-	-	-	-	-	-	-	-	-	-	General
315	293	Vehicle Maintenance	1,742,682	1,794,963	1,848,812	1,904,276	1,961,404	2,020,246	2,080,854	2,143,279	2,207,578	2,273,805	General
316	294	Radio And Data Services	8,000	8,160	8,323	8,490	8,659	8,833	9,009	9,189	9,373	9,561	General
317	295	Building Maintenance	23,090	23,552	24,023	24,503	24,993	25,493	26,003	26,523	27,054	27,595	Maintenance
318	296	Custodial And Miscellaneous Services	9,420	9,608	9,801	9,997	10,197	10,400	10,608	10,821	11,037	11,258	General
319	311	Office Supplies	1,000	1,020	1,040	1,061	1,082	1,104	1,126	1,149	1,172	1,195	Supplies
320	312	Printing,Photography,Reproduction	1,500	1,530	1,561	1,592	1,624	1,656	1,689	1,723	1,757	1,793	Supplies
321	317	Computer Software < \$100,000	630	643	655	669	682	696	709	724	738	753	Supplies
322	321	Food	-	-	-	-	-	-	-	-	-	-	Supplies
323	331	Uniforms, Safety And Special Clothing	15,290	15,596	15,908	16,226	16,550	16,881	17,219	17,563	17,915	18,273	Supplies
324	332	Safety & Special Clothing	-	-	-	-	-	-	-	-	-	-	Supplies
325	336	Oil/Lubricants	-	-	-	-	-	-	-	-	-	-	Supplies
326	337	Wheels/Tires	-	-	-	-	-	-	-	-	-	-	Supplies
327	338	Repair Parts	-	-	-	-	-	-	-	-	-	-	Supplies
328	341	Book, Periodicals And Records	420	428	437	446	455	464	473	482	492	502	Supplies
329	345	Furnishings, Equipment And Tools < \$5,000	200,000	204,000	208,080	212,242	216,486	220,816	225,232	229,737	234,332	239,019	Supplies
330	346	Computer Equipment < \$5,000	-	-	-	-	-	-	-	-	-	-	Supplies
331	347	Furn,Other Eq,Tools \$500-\$4999	-	-	-	-	-	-	-	-	-	-	Supplies
332	353	O+M Other Improvements	-	-	-	-	-	-	-	-	-	-	Supplies
333	359	Non Office Supplies	5,000	5,100	5,202	5,306	5,412	5,520	5,631	5,743	5,858	5,975	Supplies
334	394	"Fleet Svc Chg, Cng"	-	-	-	-	-	-	-	-	-	-	Supplies
335	395	Fleet Services Gas And Diesel	619,833	632,230	644,875	657,772	670,928	684,346	698,033	711,994	726,234	740,758	General
336	461	Vehicles	230,456	712,108	919,129	946,702	975,103	1,004,357	1,034,487	1,065,522	1,097,488	1,130,412	General
337	902	Credits For All Other Than 901	-	-	-	-	-	-	-	-	-	-	General
TOTAL COMMERCIAL COLLECTIONS			\$ 5,808,201	\$ 6,395,686	\$ 6,711,819	\$ 6,930,194	\$ 7,156,026	\$ 7,389,578	\$ 7,631,125	\$ 7,880,951	\$ 8,139,349	\$ 8,406,626	
4641 CONTAINER MAINTENANCE													
338	101	Salaries & Wages	\$ 230,300	\$ 230,300	\$ 230,300	\$ 239,512	\$ 249,092	\$ 259,056	\$ 269,418	\$ 280,195	\$ 291,403	\$ 303,059	General
339	102	Extra Time	2,500	2,500	2,500	2,600	2,704	2,812	2,925	3,042	3,163	3,290	Salary
340	103	Overtime Wages	3,600	3,600	3,600	3,744	3,894	4,050	4,211	4,380	4,555	4,737	Overtime
341	106	Uniform/Equipmt/Hskping Allow	-	-	-	-	-	-	-	-	-	-	General
342	113	Supplemental Pension Contribution	37,600	39,104	40,668	42,295	43,987	45,746	47,576	49,479	51,458	53,517	Benefits
343	114	FICA (Social Security)	18,090	18,090	18,090	19,566	20,349	21,163	22,009	22,890	23,805	24,755	Salary
344	115	Workers Compensation Insurance	11,780	12,251	12,741	13,251	13,781	14,332	14,905	15,502	16,122	16,767	Benefits
345	116	Group Plan Insurance	57,970	60,289	62,700	65,208	67,817	70,529	73,351	76,285	79,336	82,509	Benefits
346	117	State Unemployment	-	-	-	-	-	-	-	-	-	-	General
347	202	Travel	-	-	-	-	-	-	-	-	-	-	General
348	203	Non-Local Travel- Training	-	-	-	-	-	-	-	-	-	-	General
349	204	Training	-	-	-	-	-	-	-	-	-	-	General
350	219	Miscellaneous Professional Services	80,000	81,600	83,232	84,897	86,595	88,326	90,093	91,895	93,733	95,607	Prof. Services
351	220	Remediation Fee	445	454	463	472	482	491	501	511	522	532	General
352	221	Insurance	18,050	18,411	18,779	19,155	19,538	19,929	20,327	20,734	21,148	21,571	General
353	228	Hazardous Waste Insurance	1,130	1,153	1,176	1,199	1,223	1,248	1,273	1,298	1,324	1,350	General
354	231	R&M Buildings & Grounds	2,800	2,856	2,913	2,971	3,031	3,091	3,153	3,216	3,281	3,346	General
355	232	R&M Machinery & Equipment	1,200	1,224	1,248	1,273	1,299	1,325	1,351	1,378	1,406	1,434	General
356	233	R&M Streets	-	-	-	-	-	-	-	-	-	-	General
357	234	Computer Hardware Maintenance	-	-	-	-	-	-	-	-	-	-	General
358	235	Minor Rehab, Remodel & Alter	-	-	-	-	-	-	-	-	-	-	General
359	240	Cellular Phone Service	1,040	1,061	1,082	1,104	1,126	1,148	1,171	1,195	1,219	1,243	General
360	241	Electricity	11,140	11,363	11,590	11,822	12,058	12,299	12,545	12,796	13,052	13,313	General
361	242	Water	1,390	1,418	1,446	1,475	1,505	1,535	1,565	1,597	1,629	1,661	General
362	244	Garbage And Trash Services	560	571	583	594	606	618	631	643	656	669	General
363	245	Telephone	1,340	1,367	1,394	1,422	1,450	1,479	1,509	1,539	1,570	1,601	General
364	247	Gas	4,840	4,937	5,036	5,136	5,239	5,344	5,451	5,560	5,671	5,784	General
365	248	Sewer	600	612	624	637	649	662	676	689	703	717	General
366	252	Rents Equipment	650	663	676	690	704	718	732	747	762	777	General
367	263	Public Relations	-	-	-	-	-	-	-	-	-	-	General
368	266	Advertising	-	-	-	-	-	-	-	-	-	-	General
369	293	Vehicle Maintenance	34,198	35,224	36,281	37,369	38,491	39,645	40,835	42,060	43,321	44,621	General
370	294	Radio And Data Services	2,500	2,550	2,601	2,653	2,706	2,760	2,815	2,872	2,929	2,988	General
371	295	Building Maintenance	18,810	19,186	19,570	19,961	20,361	20,768	21,183	21,607	22,039	22,480	Maintenance
372	296	Custodial And Miscellaneous Services	7,400	7,548	7,699	7,853	8,010	8,170	8,334	8,500	8,670	8,844	General
373	298	Planned Building Maintenance	4,000	4,080	4,162	4,245	4,330	4,416	4,505	4,595	4,687	4,780	Maintenance

City of Tucson Environmental Services
Solid Waste Cost of Service and Rate Design

Schedule 2
Revenue Requirement Forecast

Line No.	Object Code	Description	Year 1 FY 2010	Year 2 FY 2011	Year 3 FY 2012	Year 4 FY 2013	Year 5 FY 2014	Year 6 FY 2015	Year 7 FY 2016	Year 8 FY 2017	Year 9 FY 2018	Year 10 FY 2019	Inflation Factor
374	311	Office Supplies	700	714	728	743	758	773	788	804	820	837	Supplies
375	312	Printing,Photography,Reproduction	170	173	177	180	184	188	191	195	199	203	Supplies
376	321	Food	-	-	-	-	-	-	-	-	-	-	Supplies
377	324	Chemicals	-	-	-	-	-	-	-	-	-	-	Supplies
378	331	Uniforms, Safety And Special Clothing	6,240	6,365	6,492	6,622	6,754	6,889	7,027	7,168	7,311	7,457	Supplies
379	332	Safety & Special Clothing	-	-	-	-	-	-	-	-	-	-	Supplies
380	336	Oil/Lubricants	-	-	-	-	-	-	-	-	-	-	Supplies
381	345	Furnishings, Equipment And Tools < \$5,000	1,690	1,724	1,758	1,793	1,829	1,866	1,903	1,941	1,980	2,020	Supplies
382	346	Computer Equipment < \$5,000	-	-	-	-	-	-	-	-	-	-	Supplies
383	347	Furn,Other Eq,Tools \$500-\$4999	-	-	-	-	-	-	-	-	-	-	Supplies
384	354	O+M Equipment	-	-	-	-	-	-	-	-	-	-	Supplies
385	359	Non Office Supplies	115,000	117,300	119,646	122,039	124,480	126,969	129,509	132,099	134,741	137,436	Supplies
386	394	"Fleet Svc Chg, Cng"	-	-	-	-	-	-	-	-	-	-	Supplies
387	395	Fleet Services Gas And Diesel	15,794	16,110	16,432	16,761	17,096	17,438	17,786	18,142	18,505	18,875	Supplies
388	396	Fleet Service Chg-Oil & Lube	-	-	-	-	-	-	-	-	-	-	Supplies
389	461	Vehicles	-	-	-	-	-	-	-	-	-	-	Supplies
TOTAL CONTAINER MAINTENANCE			\$ 693,527	\$ 704,797	\$ 716,388	\$ 738,491	\$ 761,343	\$ 784,971	\$ 809,405	\$ 834,672	\$ 860,804	\$ 887,832	
4650 ENVIRONMENTAL ENGINEERING AND LANDFILL CLOSURE													
390	101	Salaries & Wages	\$ 278,740	\$ 278,740	\$ 278,740	\$ 289,890	\$ 301,485	\$ 313,545	\$ 326,086	\$ 339,130	\$ 352,695	\$ 366,803	
391	102	Extra Time	-	-	-	-	-	-	-	-	-	-	Salary
392	103	Overtime Wages	-	-	-	-	-	-	-	-	-	-	Overtime
393	106	Uniform/Equipmt/Hskping Allow	-	-	-	-	-	-	-	-	-	-	General
394	107	Second Language Pay	-	-	-	-	-	-	-	-	-	-	Salary
395	108	Downtown Allowance & Discounted Transit Passes	1,200	1,248	1,298	1,350	1,404	1,460	1,518	1,579	1,642	1,708	Benefits
396	113	Supplemental Pension Contribution	45,550	47,372	49,267	51,238	53,287	55,419	57,635	59,941	62,338	64,832	Benefits
397	114	FICA (Social Security)	21,530	21,530	21,530	22,391	23,287	24,218	25,187	26,195	27,242	28,332	Salary
398	115	Workers Compensation Insurance	14,270	14,841	15,434	16,052	16,694	17,362	18,056	18,778	19,529	20,311	Benefits
399	116	Group Plan Insurance	35,770	37,201	38,689	40,236	41,846	43,520	45,260	47,071	48,954	50,912	Benefits
400	117	State Unemployment	-	-	-	-	-	-	-	-	-	-	General
401	171	Sick Leave Paid At Retirement	-	-	-	-	-	-	-	-	-	-	General
402	196	Interdepartmental Labor	-	-	-	-	-	-	-	-	-	-	General
403	201	Local Travel	-	-	-	-	-	-	-	-	-	-	General
404	202	Travel	3,850	3,927	4,006	4,086	4,167	4,251	4,336	4,422	4,511	4,601	General
405	203	Non-Local Travel- Training	-	-	-	-	-	-	-	-	-	-	General
406	204	Training	3,290	3,356	3,423	3,491	3,561	3,632	3,705	3,779	3,855	3,932	General
407	219	Miscellaneous Professional Services	100,000	102,000	104,040	106,121	108,243	110,408	112,616	114,869	117,166	119,509	Prof. Services
408	220	Remediation Fee	209	213	217	222	226	231	235	240	245	250	General
409	221	Insurance	21,860	22,297	22,743	23,198	23,662	24,135	24,618	25,110	25,612	26,125	General
410	228	Hazardous Waste Insurance	1,360	1,387	1,415	1,443	1,472	1,502	1,532	1,562	1,593	1,625	General
411	232	R&M Machinery & Equipment	9,840	10,037	10,238	10,442	10,651	10,864	11,081	11,303	11,529	11,760	General
412	233	R&M Streets	-	-	-	-	-	-	-	-	-	-	General
413	234	Computer Hardware Maintenance	-	-	-	-	-	-	-	-	-	-	General
414	240	Cellular Phone Service	2,040	2,081	2,122	2,165	2,208	2,252	2,297	2,343	2,390	2,438	General
415	245	Telephone	-	-	-	-	-	-	-	-	-	-	General
416	251	Rents Land And Buildings	-	-	-	-	-	-	-	-	-	-	General
417	252	Rents Equipment	530	541	551	562	574	585	597	609	621	633	General
418	266	Advertising	100	102	104	106	108	110	113	115	117	120	General
419	274	Rental Housing Assistance	-	-	-	-	-	-	-	-	-	-	General
420	283	Licenses And Permits	1,070	1,091	1,113	1,135	1,158	1,181	1,205	1,229	1,254	1,279	General
421	284	Memberships And Subscriptions	1,700	1,734	1,769	1,804	1,840	1,877	1,914	1,953	1,992	2,032	General
422	286	Misc Outside Services	-	-	-	-	-	-	-	-	-	-	General
423	293	Vehicle Maintenance	17,298	17,817	18,352	18,902	19,469	20,053	20,655	21,274	21,913	22,570	General
424	294	Radio And Data Services	420	428	437	446	455	464	473	482	492	502	General
425	311	Office Supplies	540	551	562	573	585	596	608	620	633	645	Supplies
426	312	Printing,Photography,Reproduction	1,070	1,091	1,113	1,135	1,158	1,181	1,205	1,229	1,254	1,279	Supplies
427	314	Postage	220	224	229	233	238	243	248	253	258	263	Supplies
428	317	Computer Software < \$100,000	1,070	1,091	1,113	1,135	1,158	1,181	1,205	1,229	1,254	1,279	Supplies
429	321	Food	-	-	-	-	-	-	-	-	-	-	Supplies
430	331	Uniforms, Safety And Special Clothing	1,810	1,846	1,883	1,921	1,959	1,998	2,038	2,079	2,121	2,163	Supplies
431	332	Safety & Special Clothing	-	-	-	-	-	-	-	-	-	-	Supplies
432	336	Oil/Lubricants	-	-	-	-	-	-	-	-	-	-	Supplies
433	338	Repair Parts	-	-	-	-	-	-	-	-	-	-	Supplies
434	341	Book, Periodicals And Records	430	439	447	456	465	475	484	494	504	514	Supplies
435	345	Furnishings, Equipment And Tools < \$5,000	5,630	5,743	5,857	5,975	6,094	6,216	6,340	6,467	6,596	6,728	Supplies
436	346	Computer Equipment < \$5,000	1,000	1,020	1,040	1,061	1,082	1,104	1,126	1,149	1,172	1,195	Supplies

City of Tucson Environmental Services
Solid Waste Cost of Service and Rate Design

Schedule 2
Revenue Requirement Forecast

Line No.	Object Code	Description	Year 1 FY 2010	Year 2 FY 2011	Year 3 FY 2012	Year 4 FY 2013	Year 5 FY 2014	Year 6 FY 2015	Year 7 FY 2016	Year 8 FY 2017	Year 9 FY 2018	Year 10 FY 2019	Inflation Factor
437	347	Furn,Other Eq,Tools \$500-\$4999	-	-	-	-	-	-	-	-	-	-	Supplies
438	352	Maintenance Supplies For Machinery And Equipment	1,070	1,091	1,113	1,135	1,158	1,181	1,205	1,229	1,254	1,279	Supplies
439	354	O+M Equipment	-	-	-	-	-	-	-	-	-	-	Supplies
440	359	Non Office Supplies	6,140	6,263	6,388	6,516	6,646	6,779	6,915	7,053	7,194	7,338	Supplies
441	394	"Fleet Svc Chg, Cng"	-	-	-	-	-	-	-	-	-	-	Supplies
442	395	Fleet Services Gas And Diesel	7,412	7,560	7,711	7,865	8,023	8,183	8,347	8,514	8,684	8,858	General
443	426	Improvements Other Than Bldg	-	-	-	-	-	-	-	-	-	-	General
444	461	Vehicles	-	-	-	-	-	-	-	-	-	-	General
445	901	Credits For Personal Svc(Pyrl)	-	-	-	-	-	-	-	-	-	-	General
446	902	Credits For All Other Than 901	-	-	-	-	-	-	-	-	-	-	General
TOTAL ENVIRONMENTAL ENGINEERING AND LANDFILL CLOSURE			\$ 587,019	\$ 594,862	\$ 602,946	\$ 623,287	\$ 644,365	\$ 666,207	\$ 688,842	\$ 712,301	\$ 736,613	\$ 761,813	
4651 REGULATION COMPLIANCE DATA MANAGEMENT													
447	101	Salaries & Wages	\$ 202,180	\$ 202,180	\$ 202,180	\$ 210,267	\$ 218,678	\$ 227,425	\$ 236,522	\$ 245,983	\$ 255,822	\$ 266,055	
448	102	Extra Time	-	-	-	-	-	-	-	-	-	-	Salary
449	103	Overtime Wages	-	-	-	-	-	-	-	-	-	-	Overtime
450	106	Uniform/Equipmt/Hskping Allow	-	-	-	-	-	-	-	-	-	-	General
451	108	Downtown Allowance & Discounted Transit Passes	900	936	973	1,012	1,053	1,095	1,139	1,184	1,232	1,281	Benefits
452	113	Supplemental Pension Contribution	34,320	35,693	37,121	38,605	40,150	41,756	43,426	45,163	46,969	48,848	Benefits
453	114	FICA (Social Security)	15,580	15,580	15,580	16,203	16,851	17,525	18,226	18,955	19,714	20,502	Salary
454	115	Workers Compensation Insurance	10,350	10,764	11,195	11,642	12,108	12,592	13,096	13,620	14,165	14,731	Benefits
455	116	Group Plan Insurance	35,080	36,483	37,943	39,460	41,039	42,680	44,387	46,163	48,009	49,930	Benefits
456	117	State Unemployment	-	-	-	-	-	-	-	-	-	-	General
457	201	Local Travel	-	-	-	-	-	-	-	-	-	-	General
458	202	Travel	3,050	3,111	3,173	3,237	3,301	3,367	3,435	3,503	3,574	3,645	General
459	203	Non-Local Travel- Training	-	-	-	-	-	-	-	-	-	-	General
460	204	Training	280	286	291	297	303	309	315	322	328	335	General
461	212	Consultants And Surveys	-	-	-	-	-	-	-	-	-	-	General
462	219	Miscellaneous Professional Services	150,000	153,000	156,060	159,181	162,365	165,612	168,924	172,303	175,749	179,264	Prof. Services
463	221	Insurance	15,860	16,177	16,501	16,831	17,167	17,511	17,861	18,218	18,583	18,954	General
464	228	Hazardous Waste Insurance	990	1,010	1,030	1,051	1,072	1,093	1,115	1,137	1,160	1,183	General
465	240	Cellular Phone Service	1,020	1,040	1,061	1,082	1,104	1,126	1,149	1,172	1,195	1,219	General
466	283	Licenses And Permits	39,300	40,086	40,888	41,705	42,540	43,390	44,258	45,143	46,046	46,967	General
467	284	Memberships And Subscriptions	230	235	239	244	249	254	259	264	269	275	General
468	286	Misc Outside Services	-	-	-	-	-	-	-	-	-	-	General
469	293	Vehicle Maintenance	-	-	-	-	-	-	-	-	-	-	General
470	311	Office Supplies	600	612	624	637	649	662	676	689	703	717	Supplies
471	312	Printing,Photography,Reproduction	350	357	364	371	379	386	394	402	410	418	Supplies
472	314	Postage	-	-	-	-	-	-	-	-	-	-	Supplies
473	317	Computer Software < \$100,000	2,200	2,244	2,289	2,335	2,381	2,429	2,478	2,527	2,578	2,629	Supplies
474	321	Food	-	-	-	-	-	-	-	-	-	-	Supplies
475	331	Uniforms, Safety And Special Clothing	590	602	614	626	639	651	664	678	691	705	Supplies
476	332	Safety & Special Clothing	-	-	-	-	-	-	-	-	-	-	Supplies
477	341	Book, Periodicals And Records	-	-	-	-	-	-	-	-	-	-	Supplies
478	345	Furnishings, Equipment And Tools < \$5,000	3,770	3,845	3,922	4,001	4,081	4,162	4,246	4,331	4,417	4,505	Supplies
479	346	Computer Equipment < \$5,000	2,170	2,213	2,258	2,303	2,349	2,396	2,444	2,493	2,543	2,593	Supplies
480	347	Furn,Other Eq,Tools \$500-\$4999	-	-	-	-	-	-	-	-	-	-	Supplies
481	354	O+M Equipment	-	-	-	-	-	-	-	-	-	-	Supplies
482	359	Non Office Supplies	400	408	416	424	433	442	450	459	469	478	Supplies
483	395	Fleet Services Gas And Diesel	-	-	-	-	-	-	-	-	-	-	General
484	452	Furnishings,Eq,Tools >=\$5,000	-	-	-	-	-	-	-	-	-	-	General
485	461	Vehicles	-	-	-	-	-	-	-	-	-	-	General
486	901	Credits For Personal Svc(Pyrl)	-	-	-	-	-	-	-	-	-	-	General
487	902	Credits For All Other Than 901	-	-	-	-	-	-	-	-	-	-	General
TOTAL REGULATION COMPLIANCE DATA MANAGEMENT			\$ 519,220	\$ 526,862	\$ 534,722	\$ 551,516	\$ 568,890	\$ 586,866	\$ 605,464	\$ 624,710	\$ 644,625	\$ 665,236	
4652 HYDROGEOLOGY													
488	101	Salaries & Wages	\$ 312,870	\$ 312,870	\$ 312,870	\$ 325,385	\$ 338,400	\$ 351,936	\$ 366,014	\$ 380,654	\$ 395,880	\$ 411,716	
489	103	Overtime Wages	-	-	-	-	-	-	-	-	-	-	Overtime
490	106	Uniform/Equipmt/Hskping Allow	-	-	-	-	-	-	-	-	-	-	General
491	108	Downtown Allowance & Discounted Transit Passes	1,800	1,872	1,947	2,025	2,106	2,190	2,278	2,369	2,463	2,562	Benefits
492	113	Supplemental Pension Contribution	50,240	52,250	54,340	56,513	58,774	61,125	63,570	66,112	68,757	71,507	Benefits
493	114	FICA (Social Security)	24,180	24,180	24,180	25,147	26,153	27,199	28,287	29,419	30,595	31,819	Salary
494	115	Workers Compensation Insurance	16,020	16,661	17,327	18,020	18,741	19,491	20,270	21,081	21,924	22,801	Benefits
495	116	Group Plan Insurance	43,400	45,136	46,941	48,819	50,772	52,803	54,915	57,111	59,396	61,772	Benefits
496	117	State Unemployment	-	-	-	-	-	-	-	-	-	-	General

City of Tucson Environmental Services
Solid Waste Cost of Service and Rate Design

Schedule 2
Revenue Requirement Forecast

Line No.	Object Code	Description	Year 1 FY 2010	Year 2 FY 2011	Year 3 FY 2012	Year 4 FY 2013	Year 5 FY 2014	Year 6 FY 2015	Year 7 FY 2016	Year 8 FY 2017	Year 9 FY 2018	Year 10 FY 2019	Inflation Factor
487	131	Regular Time Np	-	-	-	-	-	-	-	-	-	-	General
498	196	Interdepartmental Labor	(348,350)	(355,317)	(362,423)	(369,672)	(377,065)	(384,607)	(392,299)	(400,145)	(408,148)	(416,310)	General
499	201	Local Travel	-	-	-	-	-	-	-	-	-	-	General
500	202	Travel	2,400	2,448	2,497	2,547	2,598	2,650	2,703	2,757	2,812	2,868	General
501	203	Non-Local Travel- Training	-	-	-	-	-	-	-	-	-	-	General
502	204	Training	2,080	2,122	2,164	2,207	2,251	2,296	2,342	2,389	2,437	2,486	General
503	219	Miscellaneous Professional Services	150,000	153,000	156,060	159,181	162,365	165,612	168,924	172,303	175,749	179,264	Prof. Services
504	220	Remediation Fee	142	145	148	151	154	157	160	163	167	170	General
505	221	Insurance	24,530	25,021	25,521	26,031	26,552	27,083	27,625	28,177	28,741	29,316	General
506	228	Hazardous Waste Insurance	1,530	1,561	1,592	1,624	1,656	1,689	1,723	1,757	1,793	1,828	General
507	232	R&M Machinery & Equipment	6,400	6,528	6,659	6,792	6,928	7,066	7,207	7,352	7,499	7,649	General
508	234	Computer Hardware Maintenance	-	-	-	-	-	-	-	-	-	-	General
509	240	Cellular Phone Service	2,520	2,570	2,622	2,674	2,728	2,782	2,838	2,895	2,953	3,012	General
510	245	Telephone	-	-	-	-	-	-	-	-	-	-	General
511	252	Rents Equipment	-	-	-	-	-	-	-	-	-	-	General
512	256	Maintenance C/S Personnel	-	-	-	-	-	-	-	-	-	-	General
513	263	Public Relations	-	-	-	-	-	-	-	-	-	-	General
514	266	Advertising	-	-	-	-	-	-	-	-	-	-	General
515	274	Rental Housing Assistance	6,120	6,242	6,367	6,495	6,624	6,757	6,892	7,030	7,171	7,314	General
516	283	Licenses And Permits	-	-	-	-	-	-	-	-	-	-	General
517	284	Memberships And Subscriptions	430	439	447	456	465	475	484	494	504	514	General
518	286	Misc Outside Services	-	-	-	-	-	-	-	-	-	-	General
519	293	Vehicle Maintenance	6,509	6,705	6,906	7,113	7,326	7,546	7,772	8,006	8,246	8,493	Supplies
520	311	Office Supplies	700	714	728	743	758	773	788	804	820	837	Supplies
521	312	Printing,Photography,Reproduction	1,070	1,091	1,113	1,135	1,158	1,181	1,205	1,229	1,254	1,279	Supplies
522	314	Postage	320	326	333	340	346	353	360	368	375	382	Supplies
523	317	Computer Software < \$100,000	12,910	13,168	13,432	13,700	13,974	14,254	14,539	14,830	15,126	15,429	Supplies
524	321	Food	-	-	-	-	-	-	-	-	-	-	Supplies
525	331	Uniforms, Safety And Special Clothing	2,680	2,734	2,788	2,844	2,901	2,959	3,018	3,078	3,140	3,203	Supplies
526	332	Safety & Special Clothing	-	-	-	-	-	-	-	-	-	-	Supplies
527	335	Gas And Diesel	-	-	-	-	-	-	-	-	-	-	Supplies
528	341	Book, Periodicals And Records	-	-	-	-	-	-	-	-	-	-	Supplies
529	345	Furnishings, Equipment And Tools < \$5,000	5,330	5,437	5,545	5,656	5,769	5,885	6,002	6,122	6,245	6,370	Supplies
530	346	Computer Equipment < \$5,000	2,800	2,856	2,913	2,971	3,031	3,091	3,153	3,216	3,281	3,346	Supplies
531	347	Furn,Other Eq,Tools \$500-\$4999	-	-	-	-	-	-	-	-	-	-	Supplies
532	352	Maintenance Supplies For Machinery And Equipment	11,440	11,669	11,902	12,140	12,383	12,631	12,883	13,141	13,404	13,672	Supplies
533	354	O+M Equipment	-	-	-	-	-	-	-	-	-	-	Supplies
534	359	Non Office Supplies	8,500	8,670	8,843	9,020	9,201	9,385	9,572	9,764	9,959	10,158	Supplies
535	394	"Fleet Svc Chg, Cng"	-	-	-	-	-	-	-	-	-	-	Supplies
536	395	Fleet Services Gas And Diesel	5,047	5,148	5,251	5,356	5,463	5,573	5,684	5,798	5,914	6,032	Supplies
537	426	Improvements Other Than Bldg	200,000	204,000	208,080	212,242	216,486	220,816	225,232	229,737	234,332	239,019	General
538	461	Vehicles	-	-	-	-	-	-	-	-	-	-	General
539	901	Credits For Personal Svc(Pyrl)	-	-	-	-	-	-	-	-	-	-	General
540	902	Credits For All Other Than 901	-	-	-	-	-	-	-	-	-	-	General
TOTAL HYDROGEOLOGY			\$ 553,619	\$ 560,245	\$ 567,094	\$ 587,657	\$ 608,999	\$ 631,152	\$ 654,145	\$ 678,012	\$ 702,788	\$ 728,506	
4653 LOS REALES ENGINEERING AND OPERATIONS													
541	101	Salaries & Wages	\$ 1,563,590	\$ 1,563,590	\$ 1,563,590	\$ 1,626,134	\$ 1,691,179	\$ 1,758,826	\$ 1,829,179	\$ 1,902,346	\$ 1,978,440	\$ 2,057,578	
542	101A	Longevity	-	-	-	-	-	-	-	-	-	-	Salary
543	102	Extra Time	44,000	44,000	44,000	45,760	47,590	49,494	51,474	53,533	55,674	57,901	Salary
544	103	Overtime Wages	50,000	50,000	50,000	52,000	54,080	56,243	58,493	60,833	63,266	65,797	Overtime
545	106	Uniform/Equipmt/Hskping Allow	-	-	-	-	-	-	-	-	-	-	General
546	107	Second Language Pay	4,680	4,680	4,680	4,867	5,062	5,264	5,475	5,694	5,922	6,159	Salary
547	108	Downtown Allowance & Discounted Transit Passes	-	-	-	-	-	-	-	-	-	-	Benefits
548	113	Supplemental Pension Contribution	285,960	297,398	309,294	321,666	334,533	347,914	361,831	376,304	391,356	407,010	Benefits
549	114	FICA (Social Security)	135,040	135,040	135,040	140,442	146,059	151,902	157,978	164,297	170,869	177,703	Salary
550	115	Workers Compensation Insurance	79,740	82,930	86,247	89,697	93,285	97,016	100,897	104,932	109,130	113,495	Benefits
551	116	Group Plan Insurance	295,390	307,206	319,494	332,274	345,565	359,387	373,763	388,713	404,262	420,432	Benefits
552	117	State Unemployment	-	-	-	-	-	-	-	-	-	-	General
553	190	Miscellaneous Dtrib Labor	-	-	-	-	-	-	-	-	-	-	General
554	196	Interdepartmental Labor	-	-	-	-	-	-	-	-	-	-	General
555	202	Travel	2,080	2,122	2,164	2,207	2,251	2,296	2,342	2,389	2,437	2,486	General
556	203	Non-Local Travel- Training	-	-	-	-	-	-	-	-	-	-	General
557	204	Training	4,160	4,243	4,328	4,415	4,503	4,593	4,685	4,779	4,874	4,972	General
558	215	Auditing And Bank Services	10,000	10,200	10,404	10,612	10,824	11,041	11,262	11,487	11,717	11,951	General
559	219	Miscellaneous Professional Services	365,000	372,300	379,746	387,341	395,088	402,989	411,049	419,270	427,656	436,209	Prof. Services

City of Tucson Environmental Services
Solid Waste Cost of Service and Rate Design

Schedule 2
Revenue Requirement Forecast

Line No.	Object Code	Description	Year 1 FY 2010	Year 2 FY 2011	Year 3 FY 2012	Year 4 FY 2013	Year 5 FY 2014	Year 6 FY 2015	Year 7 FY 2016	Year 8 FY 2017	Year 9 FY 2018	Year 10 FY 2019	Inflation Factor
560	220	Remediation Fee	18,510	18,880	19,258	19,643	20,036	20,437	20,845	21,262	21,688	22,121	General
561	221	Insurance	122,600	125,052	127,553	130,104	132,706	135,360	138,068	140,829	143,645	146,518	General
562	228	Hazardous Waste Insurance	7,650	7,803	7,959	8,118	8,281	8,446	8,615	8,787	8,963	9,142	General
563	231	R&M Buildings & Grounds	100,000	102,000	104,040	106,121	108,243	110,408	112,616	114,869	117,166	119,509	General
564	232	R&M Machinery & Equipment	450	459	468	478	487	497	507	517	527	538	General
565	233	R&M Streets	6,500	6,630	6,763	6,898	7,036	7,177	7,320	7,466	7,616	7,768	General
566	234	Computer Hardware Maintenance	10,000	10,200	10,404	10,612	10,824	11,041	11,262	11,487	11,717	11,951	General
567	235	Minor Rehab, Remodel & Alter	1,040	1,061	1,082	1,104	1,126	1,148	1,171	1,195	1,219	1,243	General
568	236	Maint Of Office Equipment	-	-	-	-	-	-	-	-	-	-	General
569	240	Cellular Phone Service	6,000	6,120	6,242	6,367	6,495	6,624	6,757	6,892	7,030	7,171	General
570	241	Electricity	36,580	37,312	38,058	38,819	39,595	40,387	41,195	42,019	42,859	43,716	General
571	242	Water	53,790	54,866	55,963	57,082	58,224	59,389	60,576	61,788	63,024	64,284	General
572	244	Garbage And Trash Services	32,000	32,640	33,293	33,959	34,638	35,331	36,037	36,758	37,493	38,243	General
573	245	Telephone	4,030	4,111	4,193	4,277	4,362	4,449	4,538	4,629	4,722	4,816	General
574	251	Rents Land And Buildings	12,000	12,240	12,485	12,734	12,989	13,249	13,514	13,784	14,060	14,341	General
575	252	Rents Equipment	2,000	2,040	2,081	2,122	2,165	2,208	2,252	2,297	2,343	2,390	General
576	261	Community Advertising	-	-	-	-	-	-	-	-	-	-	General
577	263	Public Relations	1,070	1,091	1,113	1,135	1,158	1,181	1,205	1,229	1,254	1,279	General
578	266	Advertising	-	-	-	-	-	-	-	-	-	-	General
579	274	Rental Housing Assistance	-	-	-	-	-	-	-	-	-	-	General
580	282	Collections Services	-	-	-	-	-	-	-	-	-	-	General
581	283	Licenses And Permits	198,900	202,878	206,936	211,074	215,296	219,602	223,994	228,474	233,043	237,704	General
582	284	Memberships And Subscriptions	2,360	2,407	2,455	2,504	2,555	2,606	2,658	2,711	2,765	2,820	General
583	286	Misc Outside Services	-	-	-	-	-	-	-	-	-	-	General
584	293	Vehicle Maintenance	1,115,979	1,149,458	1,183,942	1,219,460	1,256,044	1,293,725	1,332,537	1,372,513	1,413,688	1,456,099	
585	294	Radio And Data Services	10,400	10,608	10,820	11,037	11,257	11,482	11,712	11,946	12,185	12,429	General
586	295	Building Maintenance	34,000	34,680	35,374	36,081	36,803	37,539	38,290	39,055	39,836	40,633	Maintenance
587	296	Custodial And Miscellaneous Services	14,930	15,229	15,533	15,844	16,161	16,484	16,814	17,150	17,493	17,843	General
588	298	Planned Building Maintenance	-	-	-	-	-	-	-	-	-	-	Maintenance
589	311	Office Supplies	5,410	5,518	5,629	5,741	5,856	5,973	6,093	6,214	6,339	6,465	Supplies
590	312	Printing,Photography,Reproduction	5,000	5,100	5,202	5,306	5,412	5,520	5,631	5,743	5,858	5,975	Supplies
591	314	Postage	-	-	-	-	-	-	-	-	-	-	Supplies
592	317	Computer Software < \$100,000	-	-	-	-	-	-	-	-	-	-	Supplies
593	321	Food	-	-	-	-	-	-	-	-	-	-	Supplies
594	331	Uniforms, Safety And Special Clothing	17,530	17,881	18,238	18,603	18,975	19,355	19,742	20,136	20,539	20,950	Supplies
595	332	Safety & Special Clothing	-	-	-	-	-	-	-	-	-	-	Supplies
596	335	Gas And Diesel	-	-	-	-	-	-	-	-	-	-	Supplies
597	336	Oil/Lubricants	-	-	-	-	-	-	-	-	-	-	Supplies
598	337	Wheels/Tires	-	-	-	-	-	-	-	-	-	-	Supplies
599	338	Repair Parts	-	-	-	-	-	-	-	-	-	-	Supplies
600	341	Book, Periodicals And Records	-	-	-	-	-	-	-	-	-	-	Supplies
601	345	Furnishings, Equipment And Tools < \$5,000	4,000	4,080	4,162	4,245	4,330	4,416	4,505	4,595	4,687	4,780	Supplies
602	346	Computer Equipment < \$5,000	4,140	4,223	4,307	4,393	4,481	4,571	4,662	4,756	4,851	4,948	Supplies
603	347	Furn,Other Eq,Tools \$500-\$4999	-	-	-	-	-	-	-	-	-	-	Supplies
604	353	O+M Other Improvements	-	-	-	-	-	-	-	-	-	-	Supplies
605	354	O+M Equipment	-	-	-	-	-	-	-	-	-	-	Supplies
606	359	Non Office Supplies	75,000	76,500	78,030	79,591	81,182	82,806	84,462	86,151	87,874	89,632	Supplies
607	394	"Fleet Svc Chg, Cng"	-	-	-	-	-	-	-	-	-	-	Supplies
608	395	Fleet Services Gas And Diesel	656,758	669,893	683,291	696,957	710,896	725,114	739,616	754,409	769,497	784,887	
609	461	Vehicles	-	454,701	929,348	482,392	675,305	1,002,143	1,125,993	542,936	-	576,001	
610	901	Credits For Personal Svc(Pyrl)	-	-	-	-	-	-	-	-	-	-	General
611	902	Credits For All Other Than 901	-	-	-	-	-	-	-	-	-	-	General
TOTAL LOS REALES ENGINEERING AND OPERATIONS			\$ 5,398,267	\$ 5,949,368	\$ 6,523,208	\$ 6,250,215	\$ 6,622,937	\$ 7,135,634	\$ 7,451,612	\$ 7,067,175	\$ 6,729,582	\$ 7,517,890	
4654 OPERATIONS AND MAINTENANCE (Past Capital Projects)													
612	219	Miscellaneous Professional Services	\$ 900,000	\$ 918,000	\$ 936,360	\$ 955,087	\$ 974,189	\$ 993,673	\$ 1,013,546	\$ 1,033,817	\$ 1,054,493	\$ 1,075,583	Prof. Services
613	221	Insurance	-	-	-	-	-	-	-	-	-	-	General
614	232	R&M Machinery & Equipment	100,000	102,000	104,040	106,121	108,243	110,408	112,616	114,869	117,166	119,509	General
615	233	R&M Streets	-	-	-	-	-	-	-	-	-	-	General
616	234	Computer Hardware Maintenance	-	-	-	-	-	-	-	-	-	-	General
617	240	Cellular Phone Service	-	-	-	-	-	-	-	-	-	-	General
618	242	Water	600	612	624	637	649	662	676	689	703	717	General
619	244	Garbage And Trash Services	700	714	728	743	758	773	788	804	820	837	General
620	245	Telephone	3,020	3,080	3,142	3,205	3,269	3,334	3,401	3,469	3,538	3,609	General
621	251	Rents Land And Buildings	12,530	12,781	13,036	13,297	13,563	13,834	14,111	14,393	14,681	14,975	General
622	252	Rents Equipment	8,200	8,364	8,531	8,702	8,876	9,053	9,235	9,419	9,608	9,800	General

City of Tucson Environmental Services
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Schedule 2
Revenue Requirement Forecast

Line No.	Object Code	Description	Year 1 FY 2010	Year 2 FY 2011	Year 3 FY 2012	Year 4 FY 2013	Year 5 FY 2014	Year 6 FY 2015	Year 7 FY 2016	Year 8 FY 2017	Year 9 FY 2018	Year 10 FY 2019	Inflation Factor
623	283	Licenses And Permits	-	-	-	-	-	-	-	-	-	-	General
624	312	Printing,Photography,Reproduction	-	-	-	-	-	-	-	-	-	-	Supplies
625	314	Postage	-	-	-	-	-	-	-	-	-	-	Supplies
626	317	Computer Software < \$100,000	-	-	-	-	-	-	-	-	-	-	Supplies
627	324	Chemicals	-	-	-	-	-	-	-	-	-	-	Supplies
628	345	Furnishings, Equipment And Tools < \$5,000	-	-	-	-	-	-	-	-	-	-	Supplies
629	347	Furn,Other Eq,Tools \$500-\$4999	-	-	-	-	-	-	-	-	-	-	Supplies
630	354	O+M Equipment	-	-	-	-	-	-	-	-	-	-	Supplies
631	359	Non Office Supplies	20,000	20,400	20,808	21,224	21,649	22,082	22,523	22,974	23,433	23,902	Supplies
632	452	Furnishings,Eq,Tools >=\$5,000	-	-	-	-	-	-	-	-	-	-	General
TOTAL OPERATIONS AND MAINTENANCE (Past Capital Projects)			\$ 1,045,050	\$ 1,065,951	\$ 1,087,270	\$ 1,109,015	\$ 1,131,196	\$ 1,153,820	\$ 1,176,896	\$ 1,200,434	\$ 1,224,443	\$ 1,248,931	
4656 CITYWIDE BROWNFIELDS													
633	201	Local Travel	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	General
634	202	Travel	9,820	10,016	10,217	10,421	10,629	10,842	11,059	11,280	11,506	11,736	General
635	203	Non-Local Travel- Training	-	-	-	-	-	-	-	-	-	-	General
636	204	Training	-	-	-	-	-	-	-	-	-	-	General
637	205	Parking & Shuttle Service	-	-	-	-	-	-	-	-	-	-	General
638	219	Miscellaneous Professional Services	114,030	116,311	118,637	121,010	123,430	125,898	128,416	130,985	133,604	136,276	Prof. Services
639	221	Insurance	-	-	-	-	-	-	-	-	-	-	General
640	228	Hazardous Waste Insurance	-	-	-	-	-	-	-	-	-	-	General
641	231	R&M Buildings & Grounds	-	-	-	-	-	-	-	-	-	-	General
642	234	Computer Hardware Maintenance	-	-	-	-	-	-	-	-	-	-	General
643	261	Community Advertising	-	-	-	-	-	-	-	-	-	-	General
644	262	Civic Events	-	-	-	-	-	-	-	-	-	-	General
645	263	Public Relations	4,300	4,386	4,474	4,563	4,654	4,748	4,842	4,939	5,038	5,139	General
646	266	Advertising	3,380	3,448	3,517	3,587	3,659	3,732	3,806	3,883	3,960	4,039	General
647	274	Rental Housing Assistance	-	-	-	-	-	-	-	-	-	-	General
648	281	Project Management Services	-	-	-	-	-	-	-	-	-	-	General
649	284	Memberships And Subscriptions	250	255	260	265	271	276	282	287	293	299	General
650	293	Vehicle Maintenance	-	-	-	-	-	-	-	-	-	-	General
651	311	Office Supplies	570	581	593	605	617	629	642	655	668	681	Supplies
652	312	Printing,Photography,Reproduction	1,120	1,142	1,165	1,189	1,212	1,237	1,261	1,287	1,312	1,339	Supplies
653	314	Postage	620	632	645	658	671	685	698	712	726	741	Supplies
654	321	Food	-	-	-	-	-	-	-	-	-	-	Supplies
655	331	Uniforms, Safety And Special Clothing	-	-	-	-	-	-	-	-	-	-	Supplies
656	359	Non Office Supplies	1,130	1,153	1,176	1,199	1,223	1,248	1,273	1,298	1,324	1,350	Supplies
TOTAL CITYWIDE BROWNFIELDS			\$ 135,220	\$ 137,924	\$ 140,683	\$ 143,497	\$ 146,366	\$ 149,294	\$ 152,280	\$ 155,325	\$ 158,432	\$ 161,600	
4657 HOUSEHOLD HAZARDOUS WASTE PROGRAM													
657	101	Salaries & Wages	\$ 293,210	\$ 293,210	\$ 293,210	\$ 304,938	\$ 317,136	\$ 329,821	\$ 343,014	\$ 356,735	\$ 371,004	\$ 385,844	
658	102	Extra Time	5,500	5,500	5,500	5,720	5,949	6,187	6,434	6,692	6,959	7,238	Salary
659	103	Overtime Wages	1,200	1,200	1,200	1,248	1,298	1,350	1,404	1,460	1,518	1,579	Overtime
660	107	Second Language Pay	1,560	1,560	1,560	1,622	1,687	1,755	1,825	1,898	1,974	2,053	Salary
661	113	Supplemental Pension Contribution	49,520	51,501	53,561	55,703	57,931	60,249	62,659	65,165	67,772	70,482	Benefits
662	114	FICA (Social Security)	22,580	22,580	22,580	23,483	24,423	25,399	26,415	27,472	28,571	29,714	Salary
663	115	Workers Compensation Insurance	4,940	5,138	5,343	5,557	5,779	6,010	6,251	6,501	6,761	7,031	Benefits
664	116	Group Plan Insurance	63,880	66,435	69,093	71,856	74,731	77,720	80,829	84,062	87,424	90,921	Benefits
665	117	State Unemployment	200	204	208	212	216	221	225	230	234	239	General
666	201	Local Travel	-	-	-	-	-	-	-	-	-	-	General
667	202	Travel	9,300	9,486	9,676	9,869	10,067	10,268	10,473	10,683	10,896	11,114	General
668	203	Non-Local Travel- Training	-	-	-	-	-	-	-	-	-	-	General
669	204	Training	3,080	3,142	3,204	3,269	3,334	3,401	3,469	3,538	3,609	3,681	General
670	214	Medical	300	306	312	318	325	331	338	345	351	359	General
671	216	Real Property Fees	250	255	260	265	271	276	282	287	293	299	General
672	217	Title Reports + Recording Fees	-	-	-	-	-	-	-	-	-	-	General
673	219	Miscellaneous Professional Services	80,760	82,375	84,023	85,703	87,417	89,166	90,949	92,768	94,623	96,516	Prof. Services
674	221	Insurance	32,210	32,854	33,511	34,182	34,865	35,562	36,274	36,999	37,739	38,494	General
675	228	Hazardous Waste Insurance	1,640	1,673	1,706	1,740	1,775	1,811	1,847	1,884	1,922	1,960	General
676	232	R&M Machinery & Equipment	500	510	520	531	541	552	563	574	586	598	General
677	234	Computer Hardware Maintenance	500	510	520	531	541	552	563	574	586	598	General
678	235	Minor Rehab, Remodel & Alter	2,500	2,550	2,601	2,653	2,706	2,760	2,815	2,872	2,929	2,988	General
679	236	Maint Of Office Equipment	-	-	-	-	-	-	-	-	-	-	General
680	240	Cellular Phone Service	1,650	1,683	1,717	1,751	1,786	1,822	1,858	1,895	1,933	1,972	General
681	241	Electricity	4,080	4,162	4,245	4,330	4,416	4,505	4,595	4,687	4,780	4,876	General
682	242	Water	820	836	853	870	888	905	923	942	961	980	General

City of Tucson Environmental Services
Solid Waste Cost of Service and Rate Design

Schedule 2
Revenue Requirement Forecast

Line No.	Object Code	Description	Year 1 FY 2010	Year 2 FY 2011	Year 3 FY 2012	Year 4 FY 2013	Year 5 FY 2014	Year 6 FY 2015	Year 7 FY 2016	Year 8 FY 2017	Year 9 FY 2018	Year 10 FY 2019	Inflation Factor
683	244	Garbage And Trash Services	900	918	936	955	974	994	1,014	1,034	1,054	1,076	General
684	245	Telephone	2,750	2,805	2,861	2,918	2,977	3,036	3,097	3,159	3,222	3,287	General
685	252	Rents Equipment	10,110	10,312	10,518	10,729	10,943	11,162	11,386	11,613	11,845	12,082	General
686	263	Public Relations	2,760	2,815	2,872	2,929	2,988	3,047	3,108	3,170	3,234	3,298	General
687	266	Advertising	600	612	624	637	649	662	676	689	703	717	General
688	284	Memberships And Subscriptions	550	561	572	584	595	607	619	632	644	657	General
689	286	Misc Outside Services	-	-	-	-	-	-	-	-	-	-	General
690	293	Vehicle Maintenance	-	-	-	-	-	-	-	-	-	-	-
691	311	Office Supplies	550	561	572	584	595	607	619	632	644	657	Supplies
692	312	Printing,Photography,Reproduction	2,500	2,550	2,601	2,653	2,706	2,760	2,815	2,872	2,929	2,988	Supplies
693	317	Computer Software < \$100,000	-	-	-	-	-	-	-	-	-	-	Supplies
694	321	Food	-	-	-	-	-	-	-	-	-	-	Supplies
695	331	Uniforms, Safety And Special Clothing	6,000	6,120	6,242	6,367	6,495	6,624	6,757	6,892	7,030	7,171	Supplies
696	332	Safety & Special Clothing	-	-	-	-	-	-	-	-	-	-	Supplies
697	336	Oil/Lubricants	-	-	-	-	-	-	-	-	-	-	Supplies
698	338	Repair Parts	-	-	-	-	-	-	-	-	-	-	Supplies
699	341	Book, Periodicals And Records	150	153	156	159	162	166	169	172	176	179	Supplies
700	345	Furnishings, Equipment And Tools < \$5,000	8,060	8,221	8,386	8,553	8,724	8,899	9,077	9,258	9,444	9,632	Supplies
701	346	Computer Equipment < \$5,000	2,000	2,040	2,081	2,122	2,165	2,208	2,252	2,297	2,343	2,390	Supplies
702	352	Maintenance Supplies For Machinery And Equipment	1,500	1,530	1,561	1,592	1,624	1,656	1,689	1,723	1,757	1,793	Supplies
703	359	Non Office Supplies	44,600	45,492	46,402	47,330	48,276	49,242	50,227	51,231	52,256	53,301	Supplies
704	394	"Fleet Svc Chg, Cng"	-	-	-	-	-	-	-	-	-	-	Supplies
705	395	Fleet Services Gas And Diesel	-	-	-	-	-	-	-	-	-	-	-
706	461	Vehicles	-	-	-	-	-	-	-	-	-	-	-
TOTAL HOUSEHOLD HAZARDOUS WASTE PROGRAM			\$ 663,210	\$ 672,360	\$ 681,788	\$ 704,464	\$ 727,956	\$ 752,294	\$ 777,510	\$ 803,637	\$ 830,709	\$ 858,763	
4680 ADMINISTRATIVE SERVICE CHARGE													
707	196	Interdepartmental Labor	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	General
708	219	Miscellaneous Professional Services	766,570	781,901	797,539	813,490	829,760	846,355	863,282	880,548	898,159	916,122	Prof. Services
709	203	Non-Local Travel- Training	-	-	-	-	-	-	-	-	-	-	General
710	204	Training	-	-	-	-	-	-	-	-	-	-	General
711	291	Administrative Services	751,450	766,479	781,809	797,445	813,394	829,662	846,255	863,180	880,443	898,052	General
712	293	Vehicle Maintenance	-	-	-	-	-	-	-	-	-	-	General
713	297	Indirect Cost Allocation	3,410,850	3,479,067	3,548,648	3,619,621	3,692,014	3,765,854	3,841,171	3,917,995	3,996,354	4,076,281	General
714	299	Inter-Activity Transf	-	-	-	-	-	-	-	-	-	-	General
TOTAL ADMINISTRATIVE SERVICE CHARGE			\$ 4,928,870	\$ 5,027,447	\$ 5,127,996	\$ 5,230,556	\$ 5,335,167	\$ 5,441,871	\$ 5,550,708	\$ 5,661,722	\$ 5,774,957	\$ 5,890,456	
4681 GENERAL EXPENSE													
715	190	Miscellaneous Distrib Labor	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	General
716	263	Public Relations	-	-	-	-	-	-	-	-	-	-	General
717	273	Bad Debt Expense	158,140	161,303	164,529	167,819	171,176	174,599	178,091	181,653	185,286	188,992	General
718	299	Inter-Activity Transf	-	-	-	-	-	-	-	-	-	-	General
TOTAL GENERAL EXPENSE			\$ 158,140	\$ 161,303	\$ 164,529	\$ 167,819	\$ 171,176	\$ 174,599	\$ 178,091	\$ 181,653	\$ 185,286	\$ 188,992	
MISCELLANEOUS & NON-RECURRING EXPENSES													
719	1	Reserve Contribution - Capital	\$ 860,000	\$ 946,000	\$ 1,040,600	\$ 1,144,660	\$ 1,259,126	\$ 1,385,039	\$ 1,523,542	\$ 1,675,897	\$ 1,843,486	\$ 2,027,835	
720	2	Reserve Contribution - Closure	412,061	416,937	421,886	427,758	433,714	439,755	445,882	452,097	458,400	464,794	
721	3	Reserve Contribution - Post-Closure	517,801	523,928	530,147	537,526	545,010	552,601	560,301	568,110	576,031	584,066	
722	4	Reserve Contribution - Equipment	-	-	-	-	-	-	-	-	-	-	
723	5	Reserve Contribution - O&M	-	-	-	-	-	-	-	-	-	-	
724	6	Reserve Contribution - Other	-	-	-	-	-	-	-	-	-	-	
725	7	PAYG - Capital Projects	50,000	368,000	280,000	320,000	120,000	120,000	-	-	244,000	368,000	
TOTAL MISCELLANEOUS & NON-RECURRING EXPENSES			\$ 1,839,862	\$ 2,254,865	\$ 2,272,633	\$ 2,429,944	\$ 2,357,850	\$ 2,497,394	\$ 2,529,725	\$ 2,696,104	\$ 3,121,918	\$ 3,444,694	
DEBT AND CAPITAL LEASES													
726		Existing Debt Service	\$ 551,033	\$ 601,214	\$ 602,176	\$ 598,926	\$ 606,596	\$ 604,789	\$ 746,004	\$ 753,688	\$ 792,200	\$ 788,000	
727		Proposed Debt Service	-	-	-	-	-	-	-	-	-	-	
728		Existing Capital Leases	2,034,132	1,539,274	764,241	322,005	-	-	-	-	-	-	
729		Proposed Capital Leases	-	-	-	-	-	-	-	-	-	-	
TOTAL DEBT AND CAPITAL LEASES			\$ 2,585,165	\$ 2,140,488	\$ 1,366,417	\$ 920,932	\$ 606,596	\$ 604,789	\$ 746,004	\$ 753,688	\$ 792,200	\$ 788,000	
TOTAL SOLID WASTE EXPENSES			\$ 46,282,271	\$ 48,921,524	\$ 49,013,032	\$ 49,777,991	\$ 50,980,201	\$ 52,886,196	\$ 54,672,291	\$ 55,800,919	\$ 57,310,559	\$ 59,845,778	

City of Tucson Environmental Services
Solid Waste Cost of Service and Rate Design

Schedule 2
Revenue Requirement Forecast

Line No.	Object Code	Description	Year 1 FY 2010	Year 2 FY 2011	Year 3 FY 2012	Year 4 FY 2013	Year 5 FY 2014	Year 6 FY 2015	Year 7 FY 2016	Year 8 FY 2017	Year 9 FY 2018	Year 10 FY 2019	Inflation Factor
REVENUE OFFSETS													
730		Refuse Penalties - Residential	\$ 106,017	\$ 108,137	\$ 110,300	\$ 112,506	\$ 114,756	\$ 117,051	\$ 119,392	\$ 121,780	\$ 124,216	\$ 126,700	General
731		Refuse Penalties - Front Load	17,402	17,750	18,105	18,467	18,837	19,213	19,598	19,990	20,389	20,797	General
732		Refuse Penalties - Roll-Off	16,797	17,133	17,475	17,825	18,181	18,545	18,916	19,294	19,680	20,074	General
733		Refuse Penalties - Landfill	81,272	82,897	84,555	86,246	87,971	89,731	91,525	93,356	95,223	97,127	General
734		Sanitation Violations	1,743	1,778	1,814	1,850	1,887	1,925	1,963	2,002	2,042	2,083	General
735		ES Misc Charges	121,181	123,604	126,076	128,598	131,170	133,793	136,469	139,199	141,983	144,822	General
736		Recyclable Material Sales	602,704	600,000	618,135	636,818	656,066	675,896	696,324	717,371	739,053	761,391	General
737		IGA (Pima County HHW)	285,000	290,700	296,514	302,444	308,493	314,663	320,956	327,375	333,923	340,601	General
738		ADEQ (Remediation)	90,000	91,800	93,636	95,509	97,419	99,367	101,355	103,382	105,449	107,558	General
739		HHW Collection	68,266	69,631	71,024	72,444	73,893	75,371	76,879	78,416	79,985	81,584	General
740		Grants For Operations	-	-	-	-	-	-	-	-	-	-	General
741		General Fund Transfers	-	-	-	-	-	-	-	-	-	-	General
742		Roll-Off Deliveries	49,600	50,592	51,604	52,636	53,689	54,762	55,858	56,975	58,114	59,277	General
TOTAL REVENUE OFFSETS			\$ 1,439,981	\$ 1,454,023	\$ 1,489,238	\$ 1,525,344	\$ 1,562,362	\$ 1,600,317	\$ 1,639,235	\$ 1,679,139	\$ 1,720,057	\$ 1,762,015	
NET REVENUE REQUIREMENT			\$ 44,842,289	\$ 47,467,501	\$ 47,523,794	\$ 48,252,647	\$ 49,417,839	\$ 51,285,878	\$ 53,033,056	\$ 54,121,780	\$ 55,590,502	\$ 58,083,763	

SOLID WASTE RESERVE FUNDS

	Year 1 FY 2010	Year 2 FY 2011	Year 3 FY 2012	Year 4 FY 2013	Year 5 FY 2014	Year 6 FY 2015	Year 7 FY 2016	Year 8 FY 2017	Year 9 FY 2018	Year 10 FY 2019
Capital and Remediation Project Reserve										
Beginning Balance	\$ 3,158,282	2,647,537	2,079,750	3,151,546	4,243,479	5,266,257	5,130,290	4,930,787	980,645	163,841
Additions:										
Operating Contributions	860,000	946,000	1,040,600	1,144,660	1,259,126	1,385,039	1,523,542	1,675,897	1,843,486	2,027,835
Interest ¹	47,374	39,713	31,196	47,273	63,652	78,994	76,954	73,962	14,710	2,458
Reductions:										
Capital Projects	(1,418,120)	(1,553,500)	-	(100,000)	(300,000)	(1,600,000)	(1,800,000)	(5,700,000)	(2,675,000)	(2,150,000)
Ending Balance	\$ 2,647,537	\$ 2,079,750	\$ 3,151,546	\$ 4,243,479	\$ 5,266,257	\$ 5,130,290	\$ 4,930,787	\$ 980,645	\$ 163,841	\$ 44,134
Los Reales Closure/Post-Closure Reserve										
Beginning Balance	\$ 1,000,000	1,944,862	2,814,900	3,809,156	4,031,578	5,070,775	6,139,193	7,237,463	8,266,232	9,124,657
Additions:										
Operating Contributions	929,862	940,865	952,033	965,284	978,724	992,356	1,006,183	1,020,207	1,034,431	1,048,859
Interest ¹	15,000	29,173	42,223	57,137	60,474	76,062	92,088	108,562	123,993	136,870
Reductions:										
Capital Projects	-	(100,000)	-	(800,000)	-	-	-	(100,000)	(300,000)	-
Ending Balance	\$ 1,944,862	\$ 2,814,900	\$ 3,809,156	\$ 4,031,578	\$ 5,070,775	\$ 6,139,193	\$ 7,237,463	\$ 8,266,232	\$ 9,124,657	\$ 10,310,386
O&M Reserve (default)										
Beginning Balance	\$ 5,941,718	6,030,844	5,084,421	5,517,799	6,379,909	7,402,031	8,048,965	8,408,585	9,248,200	10,159,553
Additions:										
Operating Contributions	-	-	-	-	-	-	-	-	-	-
Proposed Rate Over Recovery	-	-	357,111	779,343	926,424	535,903	238,885	713,486	772,631	-
Interest ¹	89,126	90,463	76,266	82,767	95,699	111,030	120,734	126,129	138,723	152,393
Reductions:										
Proposed Rate Under Recovery	-	(1,036,885)	-	-	-	-	-	-	-	(96,807)
Ending Balance	\$ 6,030,844	\$ 5,084,421	\$ 5,517,799	\$ 6,379,909	\$ 7,402,031	\$ 8,048,965	\$ 8,408,585	\$ 9,248,200	\$ 10,159,553	\$ 10,215,139
Days of Operating Reserve ²	53	42	44	50	56	59	60	64	69	67
Total Reserve Funds										
Beginning Balance	\$ 10,100,000	\$ 10,623,242	\$ 9,979,071	\$ 12,478,501	\$ 14,654,965	\$ 17,739,064	\$ 19,318,448	\$ 20,576,835	\$ 18,495,076	\$ 19,448,051
Ending Balance	10,623,242	9,979,071	12,478,501	14,654,965	17,739,064	19,318,448	20,576,835	18,495,076	19,448,051	20,569,659

Notes:

¹ Interest earned based on beginning balance

² Days of operating reserve is based on the ending reserve balance and is calculated excluding capital leases, debt service, and miscellaneous/non-recurring expenses (such as PAYG capital and reserve additions).

Revenue Requirement Forecast by Service Category

	Year 1 FY 2010	Year 2 FY 2011	Year 3 FY 2012	Year 4 FY 2013	Year 5 FY 2014	Year 6 FY 2015	Year 7 FY 2016	Year 8 FY 2017	Year 9 FY 2018	Year 10 FY 2019
ADMINISTRATION	\$ 8,616,494	\$ 8,759,008	\$ 8,907,603	\$ 9,136,797	\$ 9,376,795	\$ 9,623,882	\$ 9,878,293	\$ 10,140,269	\$ 10,410,061	\$ 10,687,927
RESIDENTIAL										
Refuse Collection	\$ 9,132,693	\$ 9,701,876	\$ 9,449,251	\$ 9,745,867	\$ 10,052,263	\$ 10,368,777	\$ 10,695,755	\$ 11,033,558	\$ 11,382,559	\$ 11,743,143
Recycling Collection	6,733,437	7,167,457	6,969,381	7,188,858	7,415,642	7,649,987	7,892,155	8,142,419	8,401,063	8,668,379
Brush & Bulky	1,970,481	2,006,859	1,855,719	2,071,652	2,141,443	2,213,706	2,288,531	2,366,013	2,446,249	2,529,340
HHW	309,944	312,029	414,250	329,576	345,570	362,260	379,675	397,845	416,801	436,577
	\$ 18,146,555	\$ 19,188,220	\$ 18,688,600	\$ 19,335,953	\$ 19,954,919	\$ 20,594,729	\$ 21,256,116	\$ 21,939,835	\$ 22,646,672	\$ 23,377,439
FRONT LOAD										
Refuse Collection	\$ 4,006,451	\$ 4,384,759	\$ 4,374,684	\$ 4,516,118	\$ 4,662,346	\$ 4,813,536	\$ 4,969,863	\$ 5,131,509	\$ 5,298,661	\$ 5,471,514
Recycling Collection	706,019	774,507	771,718	796,751	822,640	849,416	877,110	905,755	935,384	966,033
Container Maintenance	408,213	414,915	421,809	434,795	448,221	462,102	476,454	491,296	506,643	522,515
	\$ 5,120,682	\$ 5,574,181	\$ 5,568,210	\$ 5,747,664	\$ 5,933,207	\$ 6,125,054	\$ 6,323,427	\$ 6,528,559	\$ 6,740,688	\$ 6,960,062
ROLL-OFF										
Refuse Collection	\$ 1,333,773	\$ 1,320,374	\$ 1,425,378	\$ 1,473,372	\$ 1,523,061	\$ 1,574,506	\$ 1,627,772	\$ 1,682,925	\$ 1,740,035	\$ 1,799,174
Recycling Collection	144,447	145,650	159,816	165,224	170,824	176,626	182,634	188,859	195,306	201,985
Container Maintenance	166,996	169,738	172,558	177,871	183,363	189,042	194,913	200,985	207,263	213,756
	\$ 1,645,216	\$ 1,635,762	\$ 1,757,752	\$ 1,816,466	\$ 1,877,248	\$ 1,940,173	\$ 2,005,319	\$ 2,072,768	\$ 2,142,605	\$ 2,214,916
DISPOSAL										
Disposal Operations	\$ 8,629,116	\$ 9,585,215	\$ 9,832,241	\$ 9,368,594	\$ 9,348,264	\$ 9,991,865	\$ 10,474,336	\$ 10,256,683	\$ 10,375,904	\$ 11,475,033
Remediation - Groundwater Protection ¹	2,029,786	2,060,328	2,093,984	2,152,161	2,212,151	2,274,015	2,337,820	2,403,630	2,471,516	2,541,550
Remediation - Soil Cleanup ¹	654,440	664,787	675,405	695,013	715,257	736,159	757,744	780,035	803,057	826,836
	\$ 11,313,342	\$ 12,310,330	\$ 12,601,629	\$ 12,215,767	\$ 12,275,671	\$ 13,002,040	\$ 13,569,900	\$ 13,440,348	\$ 13,650,477	\$ 14,843,419
TOTAL ²	\$ 44,842,289	\$ 47,467,501	\$ 47,523,794	\$ 48,252,647	\$ 49,417,839	\$ 51,285,878	\$ 53,033,056	\$ 54,121,780	\$ 55,590,502	\$ 58,083,763

Notes:

¹ Remediation costs are reflective of the operating costs associated with the remediation program.

There are capital related remediation costs, which are recovered via general obligation debt service payments, that are NOT included in this amount.

² The Revenue Requirement is net of revenue offsets, such as recyclable material sales, Pima County HHW program contributions, ES penalties, and miscellaneous charges.

APC Cost of Service

	Year 1 FY 2010	Year 2 FY 2011	Year 3 FY 2012	Year 4 FY 2013	Year 5 FY 2014	Year 6 FY 2015	Year 7 FY 2016	Year 8 FY 2017	Year 9 FY 2018	Year 10 FY 2019
Direct Revenue Requirement										
Refuse Collection	\$ 9,132,693	\$ 9,701,876	\$ 9,449,251	\$ 9,745,867	\$ 10,052,263	\$ 10,368,777	\$ 10,695,755	\$ 11,033,558	\$ 11,382,559	\$ 11,743,143
Recycling Collection	6,733,437	7,167,457	6,969,381	7,188,858	7,415,642	7,649,987	7,892,155	8,142,419	8,401,063	8,668,379
Brush & Bulky	1,970,481	2,006,859	1,855,719	2,071,652	2,141,443	2,213,706	2,288,531	2,366,013	2,446,249	2,529,340
HHW	309,944	312,029	414,250	329,576	345,570	362,260	379,675	397,845	416,801	436,577
Remediation - Soil Cleanup	654,440	664,787	675,405	695,013	715,257	736,159	757,744	780,035	803,057	826,836
	<u>\$ 18,800,995</u>	<u>\$ 19,853,007</u>	<u>\$ 19,364,005</u>	<u>\$ 20,030,965</u>	<u>\$ 20,670,175</u>	<u>\$ 21,330,889</u>	<u>\$ 22,013,860</u>	<u>\$ 22,719,870</u>	<u>\$ 23,449,729</u>	<u>\$ 24,204,275</u>
Indirect (Redistributed) Revenue Requirement										
Administration	\$ 4,471,914	\$ 4,492,364	\$ 4,466,698	\$ 4,678,893	\$ 4,840,533	\$ 4,927,415	\$ 5,039,058	\$ 5,238,237	\$ 5,403,070	\$ 5,458,149
Disposal	¹ 3,732,442	4,119,185	4,252,668	4,065,192	4,061,793	4,333,933	4,539,321	4,454,749	4,509,802	4,971,828
Roll-Off Pulls (refuse)	² 284,267	279,991	301,948	309,676	317,023	323,570	330,559	338,750	346,655	353,391
Roll-Off Pulls (recycling)	² 48,085	47,362	51,076	52,383	53,626	54,733	55,916	57,301	58,638	59,778
Front Load Community Interest	³ 24,044	25,943	26,109	26,248	26,623	27,317	27,941	28,255	28,735	29,654
	<u>\$ 8,560,752</u>	<u>\$ 8,964,844</u>	<u>\$ 9,098,499</u>	<u>\$ 9,132,392</u>	<u>\$ 9,299,597</u>	<u>\$ 9,666,968</u>	<u>\$ 9,992,795</u>	<u>\$ 10,117,293</u>	<u>\$ 10,346,900</u>	<u>\$ 10,872,800</u>
	<u>\$ 27,361,747</u>	<u>\$ 28,817,851</u>	<u>\$ 28,462,504</u>	<u>\$ 29,163,357</u>	<u>\$ 29,969,772</u>	<u>\$ 30,997,856</u>	<u>\$ 32,006,655</u>	<u>\$ 32,837,163</u>	<u>\$ 33,796,629</u>	<u>\$ 35,077,075</u>

RESIDENTIAL MONTHLY COST PER BILLING UNIT (per month except Disposal, which is per gallon of capacity)

Direct

Refuse Collection	\$ 6.20	\$ 6.49	\$ 6.23	\$ 6.33	\$ 6.43	\$ 6.54	\$ 6.64	\$ 6.75	\$ 6.86	\$ 6.98
Recycling Collection	4.03	4.23	4.05	4.12	4.18	4.25	4.32	4.39	4.47	4.54
Brush & Bulky	1.18	1.18	1.08	1.19	1.21	1.23	1.25	1.28	1.30	1.32
HHW	0.19	0.18	0.24	0.19	0.20	0.20	0.21	0.21	0.22	0.23
Remediation - Soil Cleanup	0.39	0.39	0.39	0.40	0.40	0.41	0.42	0.42	0.43	0.43

Indirect (Redistributed)

Administration	\$ 2.68	\$ 2.65	\$ 2.60	\$ 2.68	\$ 2.73	\$ 2.74	\$ 2.76	\$ 2.83	\$ 2.87	\$ 2.86
Disposal	0.022625	0.024601	0.025023	0.023566	0.023198	0.024387	0.025165	0.024331	0.024268	0.026359
Roll-Off Pulls (refuse)	0.17	0.17	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.19
Roll-Off Pulls (recycling)	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Front Load Community Interest	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02

City of Tucson Environmental Services
Solid Waste Cost of Service and Rate Design

Schedule 5
APC Cost of Service

	Year 1 FY 2010	Year 2 FY 2011	Year 3 FY 2012	Year 4 FY 2013	Year 5 FY 2014	Year 6 FY 2015	Year 7 FY 2016	Year 8 FY 2017	Year 9 FY 2018	Year 10 FY 2019
AUTOMATED PLASTIC CONTAINERS (APC) MONTHLY COST										
48-Gallon (1st Container)										
Direct										
Refuse Collection	\$ 6.20	\$ 6.49	\$ 6.23	\$ 6.33	\$ 6.43	\$ 6.54	\$ 6.64	\$ 6.75	\$ 6.86	\$ 6.98
Recycling Collection	4.03	4.23	4.05	4.12	4.18	4.25	4.32	4.39	4.47	4.54
Brush & Bulky	1.18	1.18	1.08	1.19	1.21	1.23	1.25	1.28	1.30	1.32
HHW	0.19	0.18	0.24	0.19	0.20	0.20	0.21	0.21	0.22	0.23
Remediation - Soil Cleanup	0.39	0.39	0.39	0.40	0.40	0.41	0.42	0.42	0.43	0.43
Indirect (Redistributed)										
Administration	\$ 2.68	\$ 2.65	\$ 2.60	\$ 2.68	\$ 2.73	\$ 2.74	\$ 2.76	\$ 2.83	\$ 2.87	\$ 2.86
Disposal	1.09	1.18	1.20	1.13	1.11	1.17	1.21	1.17	1.16	1.27
Roll-Off Pulls (refuse)	0.17	0.17	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.19
Roll-Off Pulls (recycling)	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Front Load Community Interest	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
	\$ 15.97	\$ 16.52	\$ 16.01	\$ 16.26	\$ 16.49	\$ 16.77	\$ 17.04	\$ 17.28	\$ 17.55	\$ 17.86
Each Additional Refuse Container	\$ 7.29	\$ 7.67	\$ 7.43	\$ 7.46	\$ 7.55	\$ 7.71	\$ 7.85	\$ 7.92	\$ 8.03	\$ 8.24
65-Gallon (1st Container)										
Direct										
Refuse Collection	\$ 6.20	\$ 6.49	\$ 6.23	\$ 6.33	\$ 6.43	\$ 6.54	\$ 6.64	\$ 6.75	\$ 6.86	\$ 6.98
Recycling Collection	4.03	4.23	4.05	4.12	4.18	4.25	4.32	4.39	4.47	4.54
Brush & Bulky	1.18	1.18	1.08	1.19	1.21	1.23	1.25	1.28	1.30	1.32
HHW	0.19	0.18	0.24	0.19	0.20	0.20	0.21	0.21	0.22	0.23
Remediation - Soil Cleanup	0.39	0.39	0.39	0.40	0.40	0.41	0.42	0.42	0.43	0.43
Indirect (Redistributed)										
Administration	\$ 2.68	\$ 2.65	\$ 2.60	\$ 2.68	\$ 2.73	\$ 2.74	\$ 2.76	\$ 2.83	\$ 2.87	\$ 2.86
Disposal	1.47	1.60	1.63	1.53	1.51	1.59	1.64	1.58	1.58	1.71
Roll-Off Pulls (refuse)	0.17	0.17	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.19
Roll-Off Pulls (recycling)	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Front Load Community Interest	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
	\$ 16.36	\$ 16.94	\$ 16.44	\$ 16.66	\$ 16.89	\$ 17.18	\$ 17.47	\$ 17.70	\$ 17.96	\$ 18.31
Each Additional Refuse Container	\$ 7.67	\$ 8.09	\$ 7.86	\$ 7.86	\$ 7.94	\$ 8.12	\$ 8.28	\$ 8.33	\$ 8.44	\$ 8.69
95-Gallon (1st Container)										
Direct										
Refuse Collection	\$ 6.20	\$ 6.49	\$ 6.23	\$ 6.33	\$ 6.43	\$ 6.54	\$ 6.64	\$ 6.75	\$ 6.86	\$ 6.98
Recycling Collection	4.03	4.23	4.05	4.12	4.18	4.25	4.32	4.39	4.47	4.54
Brush & Bulky	1.18	1.18	1.08	1.19	1.21	1.23	1.25	1.28	1.30	1.32
HHW	0.19	0.18	0.24	0.19	0.20	0.20	0.21	0.21	0.22	0.23
Remediation - Soil Cleanup	0.39	0.39	0.39	0.40	0.40	0.41	0.42	0.42	0.43	0.43
Indirect (Redistributed)										
Administration	\$ 2.68	\$ 2.65	\$ 2.60	\$ 2.68	\$ 2.73	\$ 2.74	\$ 2.76	\$ 2.83	\$ 2.87	\$ 2.86
Disposal	2.15	2.34	2.38	2.24	2.20	2.32	2.39	2.31	2.31	2.50
Roll-Off Pulls (refuse)	0.17	0.17	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.19
Roll-Off Pulls (recycling)	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Front Load Community Interest	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
	\$ 17.04	\$ 17.68	\$ 17.19	\$ 17.36	\$ 17.58	\$ 17.91	\$ 18.22	\$ 18.43	\$ 18.69	\$ 19.10
Each Additional Refuse Container	\$ 8.35	\$ 8.83	\$ 8.61	\$ 8.57	\$ 8.64	\$ 8.85	\$ 9.04	\$ 9.06	\$ 9.17	\$ 9.48

City of Tucson Environmental Services
Solid Waste Cost of Service and Rate Design

Schedule 5
APC Cost of Service

	Year 1 FY 2010	Year 2 FY 2011	Year 3 FY 2012	Year 4 FY 2013	Year 5 FY 2014	Year 6 FY 2015	Year 7 FY 2016	Year 8 FY 2017	Year 9 FY 2018	Year 10 FY 2019
300-Gallon Shared										
Direct										
Refuse Collection	\$ 2.07	\$ 2.16	\$ 2.08	\$ 2.11	\$ 2.14	\$ 2.18	\$ 2.21	\$ 2.25	\$ 2.29	\$ 2.33
Recycling Collection	4.03	4.23	4.05	4.12	4.18	4.25	4.32	4.39	4.47	4.54
Brush & Bulky	1.18	1.18	1.08	1.19	1.21	1.23	1.25	1.28	1.30	1.32
HHW	0.19	0.18	0.24	0.19	0.20	0.20	0.21	0.21	0.22	0.23
Remediation - Soil Cleanup	0.39	0.39	0.39	0.40	0.40	0.41	0.42	0.42	0.43	0.43
Indirect (Redistributed)										
Administration	\$ 2.68	\$ 2.65	\$ 2.60	\$ 2.68	\$ 2.73	\$ 2.74	\$ 2.76	\$ 2.83	\$ 2.87	\$ 2.86
Disposal	2.26	2.46	2.50	2.36	2.32	2.44	2.52	2.43	2.43	2.64
Roll-Off Pulls (refuse)	0.17	0.17	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.19
Roll-Off Pulls (recycling)	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Front Load Community Interest	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
	\$ 13.01	\$ 13.47	\$ 13.16	\$ 13.26	\$ 13.41	\$ 13.68	\$ 13.92	\$ 14.05	\$ 14.23	\$ 14.58
300-Gallon Sole Use										
Direct										
Refuse Collection	\$ 6.20	\$ 6.49	\$ 6.23	\$ 6.33	\$ 6.43	\$ 6.54	\$ 6.64	\$ 6.75	\$ 6.86	\$ 6.98
Recycling Collection	4.03	4.23	4.05	4.12	4.18	4.25	4.32	4.39	4.47	4.54
Brush & Bulky	1.18	1.18	1.08	1.19	1.21	1.23	1.25	1.28	1.30	1.32
HHW	0.19	0.18	0.24	0.19	0.20	0.20	0.21	0.21	0.22	0.23
Remediation - Soil Cleanup	0.39	0.39	0.39	0.40	0.40	0.41	0.42	0.42	0.43	0.43
Indirect (Redistributed)										
Administration	\$ 2.68	\$ 2.65	\$ 2.60	\$ 2.68	\$ 2.73	\$ 2.74	\$ 2.76	\$ 2.83	\$ 2.87	\$ 2.86
Disposal	6.79	7.38	7.51	7.07	6.96	7.32	7.55	7.30	7.28	7.91
Roll-Off Pulls (refuse)	0.17	0.17	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.19
Roll-Off Pulls (recycling)	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Front Load Community Interest	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
	\$ 21.67	\$ 22.72	\$ 22.32	\$ 22.19	\$ 22.34	\$ 22.91	\$ 23.38	\$ 23.41	\$ 23.66	\$ 24.50

Notes:

¹ Disposal includes APC refuse, brush & bulky, and community interest disposal

² Community interest roll-off pulls

³ Community interest front load service

Front Load Cost of Service

	Year 1 FY 2010	Year 2 FY 2011	Year 3 FY 2012	Year 4 FY 2013	Year 5 FY 2014	Year 6 FY 2015	Year 7 FY 2016	Year 8 FY 2017	Year 9 FY 2018	Year 10 FY 2019
Direct Revenue Requirement										
Refuse Collection	\$ 4,006,451	\$ 4,384,759	\$ 4,374,684	\$ 4,516,118	\$ 4,662,346	\$ 4,813,536	\$ 4,969,863	\$ 5,131,509	\$ 5,298,661	\$ 5,471,514
Recycling Collection	706,019	774,507	771,718	796,751	822,640	849,416	877,110	905,755	935,384	966,033
Container Maintenance	408,213	414,915	421,809	434,795	448,221	462,102	476,454	491,296	506,643	522,515
	\$ 5,120,682	\$ 5,574,181	\$ 5,568,210	\$ 5,747,664	\$ 5,933,207	\$ 6,125,054	\$ 6,323,427	\$ 6,528,559	\$ 6,740,688	\$ 6,960,062
Indirect (Redistributed) Revenue Requirement										
Administration	\$ 1,217,981	\$ 1,261,333	\$ 1,284,420	\$ 1,342,557	\$ 1,389,436	\$ 1,414,882	\$ 1,447,457	\$ 1,505,209	\$ 1,553,127	\$ 1,569,518
Disposal	1,741,474	1,893,930	1,926,822	1,833,194	1,823,019	1,935,977	2,018,146	1,971,183	1,986,104	2,179,216
	\$ 2,959,455	\$ 3,155,263	\$ 3,211,242	\$ 3,175,751	\$ 3,212,455	\$ 3,350,859	\$ 3,465,603	\$ 3,476,391	\$ 3,539,231	\$ 3,748,734
	\$ 8,080,137	\$ 8,729,444	\$ 8,779,452	\$ 8,923,415	\$ 9,145,662	\$ 9,475,913	\$ 9,789,030	\$ 10,004,950	\$ 10,279,919	\$ 10,708,796

Billing Units and Costs per Unit

CONTAINER BASIS

Refuse										
Number of Containers	4,119	4,119	4,119	4,160	4,202	4,243	4,286	4,328	4,372	4,415
Recycling										
Number of Containers	776	776	776	784	792	799	807	815	824	832
Monthly Fee per Container										
Container Maintenance	\$ 6.95	\$ 7.06	\$ 7.18	\$ 7.33	\$ 7.48	\$ 7.64	\$ 7.80	\$ 7.96	\$ 8.13	\$ 8.30
Administration	20.74	21.47	21.87	22.63	23.19	23.38	23.68	24.39	24.91	24.93
	\$ 27.68	\$ 28.54	\$ 29.05	\$ 29.96	\$ 30.67	\$ 31.02	\$ 31.48	\$ 32.34	\$ 33.04	\$ 33.23

COLLECTION BASIS

Refuse										
Number of Collections (Annual)	393,432	393,432	393,432	397,355	401,317	405,319	409,360	413,443	417,566	421,730
Recycling										
Number of Collections (Annual)	52,468	52,468	52,468	52,992	53,521	54,055	54,594	55,139	55,689	56,245
Fee per Collection	\$ 10.57	\$ 11.57	\$ 11.54	\$ 11.80	\$ 12.06	\$ 12.33	\$ 12.60	\$ 12.88	\$ 13.17	\$ 13.47

COLLECTION BASIS

Refuse										
Cubic Yards of Capacity (Annual)	2,387,060	2,387,060	2,387,060	2,410,855	2,434,887	2,459,160	2,483,676	2,508,437	2,533,445	2,558,704
Fee per Cubic Yard of Capacity	\$ 0.73	\$ 0.79	\$ 0.81	\$ 0.76	\$ 0.75	\$ 0.79	\$ 0.81	\$ 0.79	\$ 0.78	\$ 0.85

City of Tucson Environmental Services
Solid Waste Cost of Service and Rate Design

Schedule 6
Front Load Cost of Service

FRONT LOAD MONTHLY COST

Year 1		REFUSE					
Container Size (Cubic Yards)	Collections per Week						
	1	2	3	4	5	6	
2	\$ 79.80	\$ 131.92	\$ 184.04	\$ 236.16	\$ 288.28	\$ 340.40	
3	82.97	138.25	193.53	248.81	304.09	359.37	
4	86.13	144.57	203.01	261.45	319.90	378.34	
5	89.29	150.89	212.49	274.10	335.70	397.31	
6	92.45	157.21	221.98	286.74	351.51	416.27	
8	98.77	169.86	240.95	312.03	383.12	454.21	

Year 2		REFUSE					
Container Size (Cubic Yards)	Collections per Week						
	1	2	3	4	5	6	
2	\$ 85.55	\$ 142.57	\$ 199.58	\$ 256.60	\$ 313.61	\$ 370.63	
3	88.99	149.44	209.90	270.35	330.80	391.25	
4	92.43	156.32	220.21	284.10	347.99	411.88	
5	95.87	163.20	230.52	297.85	365.18	432.51	
6	99.30	170.07	240.84	311.61	382.37	453.14	
8	106.18	183.82	261.47	339.11	416.76	494.40	

Year 3		REFUSE					
Container Size (Cubic Yards)	Collections per Week						
	1	2	3	4	5	6	
2	\$ 86.06	\$ 143.07	\$ 200.08	\$ 257.08	\$ 314.09	\$ 371.10	
3	89.55	150.06	210.57	271.08	331.58	392.09	
4	93.05	157.06	221.06	285.07	349.07	413.08	
5	96.55	164.05	231.56	299.06	366.56	434.06	
6	100.05	171.05	242.05	313.05	384.05	455.05	
8	107.04	185.04	263.04	341.03	419.03	497.03	

Year 4		REFUSE					
Container Size (Cubic Yards)	Collections per Week						
	1	2	3	4	5	6	
2	\$ 87.67	\$ 145.38	\$ 203.09	\$ 260.81	\$ 318.52	\$ 376.23	
3	90.97	151.97	212.98	273.99	334.99	396.00	
4	94.26	158.56	222.86	287.17	351.47	415.77	
5	97.56	165.15	232.75	300.35	367.94	435.54	
6	100.85	171.74	242.63	313.53	384.42	455.31	
8	107.44	184.92	262.40	339.89	417.37	494.85	

Year 5		REFUSE					
Container Size (Cubic Yards)	Collections per Week						
	1	2	3	4	5	6	
2	\$ 89.42	\$ 148.16	\$ 206.91	\$ 265.65	\$ 324.40	\$ 383.14	
3	92.66	154.65	216.64	278.63	340.62	402.61	
4	95.90	161.14	226.37	291.61	356.84	422.08	
5	99.15	167.63	236.11	304.58	373.06	441.54	
6	102.39	174.12	245.84	317.56	389.29	461.01	
8	108.88	187.09	265.31	343.52	421.73	499.94	

City of Tucson Environmental Services
Solid Waste Cost of Service and Rate Design

Schedule 6
Front Load Cost of Service

Year 6		REFUSE					
Container Size (Cubic Yards)	Collections per Week						
	1	2	3	4	5	6	
2	\$ 91.26	\$ 151.50	\$ 211.74	\$ 271.99	\$ 332.23	\$ 392.47	
3	94.67	158.32	221.98	285.63	349.29	412.94	
4	98.08	165.15	232.21	299.28	366.34	433.41	
5	101.49	171.97	242.45	312.92	383.40	453.88	
6	104.91	178.79	252.68	326.57	400.46	474.35	
8	111.73	192.44	273.15	353.86	434.57	515.28	

Year 7		REFUSE					
Container Size (Cubic Yards)	Collections per Week						
	1	2	3	4	5	6	
2	\$ 93.13	\$ 154.78	\$ 216.44	\$ 278.09	\$ 339.74	\$ 401.40	
3	96.65	161.83	227.00	292.18	357.35	422.52	
4	100.17	168.87	237.56	306.26	374.95	443.65	
5	103.70	175.91	248.13	320.34	392.56	464.78	
6	107.22	182.95	258.69	334.43	410.17	485.90	
8	114.26	197.04	279.82	362.60	445.38	528.16	

Year 8		REFUSE					
Container Size (Cubic Yards)	Collections per Week						
	1	2	3	4	5	6	
2	\$ 94.99	\$ 157.63	\$ 220.27	\$ 282.91	\$ 345.55	\$ 408.19	
3	98.39	164.44	230.48	296.53	362.58	428.63	
4	101.80	171.25	240.70	310.15	379.60	449.06	
5	105.20	178.06	250.92	323.77	396.63	469.49	
6	108.61	184.87	261.13	337.39	413.66	489.92	
8	115.42	198.49	281.56	364.64	447.71	530.78	

Year 9		REFUSE					
Container Size (Cubic Yards)	Collections per Week						
	1	2	3	4	5	6	
2	\$ 96.92	\$ 160.79	\$ 224.67	\$ 288.54	\$ 352.42	\$ 416.30	
3	100.31	167.59	234.86	302.13	369.41	436.68	
4	103.71	174.38	245.05	315.72	386.39	457.06	
5	107.11	181.17	255.24	329.31	403.38	477.44	
6	110.50	187.97	265.43	342.90	420.36	497.83	
8	117.30	201.56	285.82	370.07	454.33	538.59	

Year 10		REFUSE					
Container Size (Cubic Yards)	Collections per Week						
	1	2	3	4	5	6	
2	\$ 98.97	\$ 164.71	\$ 230.46	\$ 296.20	\$ 361.95	\$ 427.69	
3	102.66	172.10	241.53	310.97	380.40	449.84	
4	106.35	179.48	252.60	325.73	398.85	471.98	
5	110.04	186.86	263.67	340.49	417.31	494.12	
6	113.73	194.24	274.75	355.25	435.76	516.27	
8	121.11	209.00	296.89	384.78	472.67	560.55	

City of Tucson Environmental Services
Solid Waste Cost of Service and Rate Design

Schedule 6
Front Load Cost of Service

Year 1		RECYCLING					
Container Size (Cubic Yards)	Collections per Week						
	1	2	3	4	5	6	
2	\$ 73.48	\$ 119.28	\$ 165.07	\$ 210.87	\$ 256.67	\$ 302.46	
3	73.48	119.28	165.07	210.87	256.67	302.46	
4	73.48	119.28	165.07	210.87	256.67	302.46	
5	73.48	119.28	165.07	210.87	256.67	302.46	
6	73.48	119.28	165.07	210.87	256.67	302.46	
8	73.48	119.28	165.07	210.87	256.67	302.46	

Year 2		RECYCLING					
Container Size (Cubic Yards)	Collections per Week						
	1	2	3	4	5	6	
2	\$ 78.68	\$ 128.81	\$ 178.95	\$ 229.09	\$ 279.23	\$ 329.37	
3	78.68	128.81	178.95	229.09	279.23	329.37	
4	78.68	128.81	178.95	229.09	279.23	329.37	
5	78.68	128.81	178.95	229.09	279.23	329.37	
6	78.68	128.81	178.95	229.09	279.23	329.37	
8	78.68	128.81	178.95	229.09	279.23	329.37	

Year 3		RECYCLING					
Container Size (Cubic Yards)	Collections per Week						
	1	2	3	4	5	6	
2	\$ 79.06	\$ 129.07	\$ 179.09	\$ 229.10	\$ 279.12	\$ 329.13	
3	79.06	129.07	179.09	229.10	279.12	329.13	
4	79.06	129.07	179.09	229.10	279.12	329.13	
5	79.06	129.07	179.09	229.10	279.12	329.13	
6	79.06	129.07	179.09	229.10	279.12	329.13	
8	79.06	129.07	179.09	229.10	279.12	329.13	

Year 4		RECYCLING					
Container Size (Cubic Yards)	Collections per Week						
	1	2	3	4	5	6	
2	\$ 81.08	\$ 132.20	\$ 183.32	\$ 234.45	\$ 285.57	\$ 336.69	
3	81.08	132.20	183.32	234.45	285.57	336.69	
4	81.08	132.20	183.32	234.45	285.57	336.69	
5	81.08	132.20	183.32	234.45	285.57	336.69	
6	81.08	132.20	183.32	234.45	285.57	336.69	
8	81.08	132.20	183.32	234.45	285.57	336.69	

Year 5		RECYCLING					
Container Size (Cubic Yards)	Collections per Week						
	1	2	3	4	5	6	
2	\$ 82.93	\$ 135.18	\$ 187.44	\$ 239.70	\$ 291.95	\$ 344.21	
3	82.93	135.18	187.44	239.70	291.95	344.21	
4	82.93	135.18	187.44	239.70	291.95	344.21	
5	82.93	135.18	187.44	239.70	291.95	344.21	
6	82.93	135.18	187.44	239.70	291.95	344.21	
8	82.93	135.18	187.44	239.70	291.95	344.21	

City of Tucson Environmental Services
Solid Waste Cost of Service and Rate Design

Schedule 6
Front Load Cost of Service

Year 6		RECYCLING					
Container Size (Cubic Yards)	Collections per Week						
	1	2	3	4	5	6	
2	\$ 84.44	\$ 137.86	\$ 191.28	\$ 244.69	\$ 298.11	\$ 351.53	
3	84.44	137.86	191.28	244.69	298.11	351.53	
4	84.44	137.86	191.28	244.69	298.11	351.53	
5	84.44	137.86	191.28	244.69	298.11	351.53	
6	84.44	137.86	191.28	244.69	298.11	351.53	
8	84.44	137.86	191.28	244.69	298.11	351.53	

Year 7		RECYCLING					
Container Size (Cubic Yards)	Collections per Week						
	1	2	3	4	5	6	
2	\$ 86.09	\$ 140.70	\$ 195.31	\$ 249.92	\$ 304.53	\$ 359.14	
3	86.09	140.70	195.31	249.92	304.53	359.14	
4	86.09	140.70	195.31	249.92	304.53	359.14	
5	86.09	140.70	195.31	249.92	304.53	359.14	
6	86.09	140.70	195.31	249.92	304.53	359.14	
8	86.09	140.70	195.31	249.92	304.53	359.14	

Year 8		RECYCLING					
Container Size (Cubic Yards)	Collections per Week						
	1	2	3	4	5	6	
2	\$ 88.18	\$ 144.01	\$ 199.84	\$ 255.67	\$ 311.50	\$ 367.33	
3	88.18	144.01	199.84	255.67	311.50	367.33	
4	88.18	144.01	199.84	255.67	311.50	367.33	
5	88.18	144.01	199.84	255.67	311.50	367.33	
6	88.18	144.01	199.84	255.67	311.50	367.33	
8	88.18	144.01	199.84	255.67	311.50	367.33	

Year 9		RECYCLING					
Container Size (Cubic Yards)	Collections per Week						
	1	2	3	4	5	6	
2	\$ 90.12	\$ 147.20	\$ 204.28	\$ 261.37	\$ 318.45	\$ 375.53	
3	90.12	147.20	204.28	261.37	318.45	375.53	
4	90.12	147.20	204.28	261.37	318.45	375.53	
5	90.12	147.20	204.28	261.37	318.45	375.53	
6	90.12	147.20	204.28	261.37	318.45	375.53	
8	90.12	147.20	204.28	261.37	318.45	375.53	

Year 10		RECYCLING					
Container Size (Cubic Yards)	Collections per Week						
	1	2	3	4	5	6	
2	\$ 91.59	\$ 149.95	\$ 208.32	\$ 266.68	\$ 325.04	\$ 383.40	
3	91.59	149.95	208.32	266.68	325.04	383.40	
4	91.59	149.95	208.32	266.68	325.04	383.40	
5	91.59	149.95	208.32	266.68	325.04	383.40	
6	91.59	149.95	208.32	266.68	325.04	383.40	
8	91.59	149.95	208.32	266.68	325.04	383.40	

Roll-Off Cost of Service

	Year 1 FY 2010	Year 2 FY 2011	Year 3 FY 2012	Year 4 FY 2013	Year 5 FY 2014	Year 6 FY 2015	Year 7 FY 2016	Year 8 FY 2017	Year 9 FY 2018	Year 10 FY 2019
Direct Revenue Requirement										
Refuse Collection	\$ 1,333,773	\$ 1,320,374	\$ 1,425,378	\$ 1,473,372	\$ 1,523,061	\$ 1,574,506	\$ 1,627,772	\$ 1,682,925	\$ 1,740,035	\$ 1,799,174
Recycling Collection	144,447	145,650	159,816	165,224	170,824	176,626	182,634	188,859	195,306	201,985
Container Maintenance	166,996	169,738	172,558	177,871	183,363	189,042	194,913	200,985	207,263	213,756
	<u>\$ 1,645,216</u>	<u>\$ 1,635,762</u>	<u>\$ 1,757,752</u>	<u>\$ 1,816,466</u>	<u>\$ 1,877,248</u>	<u>\$ 1,940,173</u>	<u>\$ 2,005,319</u>	<u>\$ 2,072,768</u>	<u>\$ 2,142,605</u>	<u>\$ 2,214,916</u>
Indirect (Redistributed) Revenue Requirement										
Administration	\$ 391,323	\$ 370,142	\$ 405,461	\$ 424,296	\$ 439,613	\$ 448,178	\$ 459,025	\$ 477,892	\$ 493,679	\$ 499,471
	<u>\$ 391,323</u>	<u>\$ 370,142</u>	<u>\$ 405,461</u>	<u>\$ 424,296</u>	<u>\$ 439,613</u>	<u>\$ 448,178</u>	<u>\$ 459,025</u>	<u>\$ 477,892</u>	<u>\$ 493,679</u>	<u>\$ 499,471</u>
	<u>\$ 2,036,539</u>	<u>\$ 2,005,904</u>	<u>\$ 2,163,213</u>	<u>\$ 2,240,762</u>	<u>\$ 2,316,861</u>	<u>\$ 2,388,351</u>	<u>\$ 2,464,345</u>	<u>\$ 2,550,661</u>	<u>\$ 2,636,284</u>	<u>\$ 2,714,387</u>
Billing Units										
Paid Collections										
Refuse Pulls	6,486	6,486	6,486	6,563	6,641	6,719	6,798	6,878	6,959	7,041
Recycling Pulls	744	744	744	753	763	773	782	792	802	812
	<u>7,230</u>	<u>7,230</u>	<u>7,230</u>	<u>7,316</u>	<u>7,404</u>	<u>7,492</u>	<u>7,581</u>	<u>7,671</u>	<u>7,762</u>	<u>7,853</u>
Free Collections ¹										
Refuse Pulls	1,206	1,206	1,206	1,206	1,206	1,206	1,206	1,206	1,206	1,206
Recycling Pulls	204	204	204	204	204	204	204	204	204	204
	<u>1,410</u>									
Total Collections										
Refuse Pulls	7,692	7,692	7,692	7,769	7,847	7,925	8,004	8,084	8,165	8,247
Recycling Pulls	948	948	948	957	967	977	986	996	1,006	1,016
	<u>8,640</u>	<u>8,640</u>	<u>8,640</u>	<u>8,726</u>	<u>8,814</u>	<u>8,902</u>	<u>8,991</u>	<u>9,081</u>	<u>9,172</u>	<u>9,263</u>
COST PER PULL ²	\$ 235.71	\$ 232.16	\$ 250.37	\$ 256.78	\$ 262.87	\$ 268.30	\$ 274.10	\$ 280.89	\$ 287.44	\$ 293.03

Notes:

¹ Community interest collections recovered from APC customers

² Excludes disposal cost as this is a direct pass-through based on the actual weight of the load

Disposal Cost of Service

	Year 1 FY 2010	Year 2 FY 2011	Year 3 FY 2012	Year 4 FY 2013	Year 5 FY 2014	Year 6 FY 2015	Year 7 FY 2016	Year 8 FY 2017	Year 9 FY 2018	Year 10 FY 2019
Direct Revenue Requirement										
Disposal Operations	\$ 8,629,116	\$ 9,585,215	\$ 9,832,241	\$ 9,368,594	\$ 9,348,264	\$ 9,991,865	\$ 10,474,336	\$ 10,256,683	\$ 10,375,904	\$ 11,475,033
	\$ 8,629,116	\$ 9,585,215	\$ 9,832,241	\$ 9,368,594	\$ 9,348,264	\$ 9,991,865	\$ 10,474,336	\$ 10,256,683	\$ 10,375,904	\$ 11,475,033
Indirect (Redistributed) Revenue Requirement										
Administration	\$ 2,052,480	\$ 2,168,955	\$ 2,268,004	\$ 2,188,344	\$ 2,189,172	\$ 2,308,111	\$ 2,397,616	\$ 2,364,756	\$ 2,390,720	\$ 2,587,660
	\$ 2,052,480	\$ 2,168,955	\$ 2,268,004	\$ 2,188,344	\$ 2,189,172	\$ 2,308,111	\$ 2,397,616	\$ 2,364,756	\$ 2,390,720	\$ 2,587,660
	\$ 10,681,597	\$ 11,754,170	\$ 12,100,245	\$ 11,556,938	\$ 11,537,436	\$ 12,299,976	\$ 12,871,953	\$ 12,621,439	\$ 12,766,624	\$ 14,062,694
Billing Units										
<u>RESIDENTIAL</u>										
APC	137,193	139,251	141,340	143,460	145,612	147,796	150,013	152,263	154,547	156,865
Brush & Bulky	14,149	14,361	14,577	14,795	15,017	15,242	15,471	15,703	15,939	16,178
Community Interest	2,268	2,268	2,268	2,268	2,268	2,268	2,268	2,268	2,268	2,268
	153,610	155,880	158,184	160,523	162,897	165,306	167,752	170,234	172,754	175,311
<u>COMMERCIAL</u>										
Front Load	71,671	71,671	71,671	72,388	73,112	73,843	74,581	75,327	76,080	76,841
Roll-Off	18,879	18,879	18,879	19,068	19,258	19,451	19,646	19,842	20,040	20,241
	90,550	90,550	90,550	91,456	92,370	93,294	94,227	95,169	96,121	97,082
<u>PRIVATE/SELF-HAUL</u>										
City Departments	16,938	17,192	17,450	17,712	17,977	18,247	18,521	18,799	19,081	19,367
Self-Haulers	35,539	36,072	36,613	37,162	37,720	38,286	38,860	39,443	40,034	40,635
Private Haulers	142,968	145,113	147,289	149,499	151,741	154,017	156,327	158,672	161,052	163,468
	195,445	198,377	201,352	204,373	207,438	210,550	213,708	216,914	220,167	223,470
<u>TOTAL TONS</u>	439,605	444,807	450,087	456,351	462,705	469,150	475,687	482,317	489,042	495,863
COST PER TON	\$ 24.30	\$ 26.43	\$ 26.88	\$ 25.32	\$ 24.93	\$ 26.22	\$ 27.06	\$ 26.17	\$ 26.11	\$ 28.36

Remediation (Not Included in Revenue Requirement for ES Services)

	Year 1 FY 2010	Year 2 FY 2011	Year 3 FY 2012	Year 4 FY 2013	Year 5 FY 2014	Year 6 FY 2015	Year 7 FY 2016	Year 8 FY 2017	Year 9 FY 2018	Year 10 FY 2019
Direct Revenue Requirement										
Remediation - Groundwater Protection	\$ 2,029,786	\$ 2,060,328	\$ 2,093,984	\$ 2,152,161	\$ 2,212,151	\$ 2,274,015	\$ 2,337,820	\$ 2,403,630	\$ 2,471,516	\$ 2,541,550
	\$ 2,029,786	\$ 2,060,328	\$ 2,093,984	\$ 2,152,161	\$ 2,212,151	\$ 2,274,015	\$ 2,337,820	\$ 2,403,630	\$ 2,471,516	\$ 2,541,550
Indirect (Redistributed) Revenue Requirement										
Administration	\$ 482,795	\$ 466,214	\$ 483,020	\$ 502,708	\$ 518,040	\$ 525,295	\$ 535,136	\$ 554,175	\$ 569,464	\$ 573,128
	\$ 482,795	\$ 466,214	\$ 483,020	\$ 502,708	\$ 518,040	\$ 525,295	\$ 535,136	\$ 554,175	\$ 569,464	\$ 573,128
	\$ 2,512,581	\$ 2,526,542	\$ 2,577,004	\$ 2,654,869	\$ 2,730,191	\$ 2,799,311	\$ 2,872,956	\$ 2,957,805	\$ 3,040,980	\$ 3,114,678

Proposed Rates

	Current Rates	Year 1 FY 2010	Year 2 FY 2011	Year 3 FY 2012	Year 4 FY 2013	Year 5 FY 2014	Year 6 FY 2015	Year 7 FY 2016	Year 8 FY 2017	Year 9 FY 2018	Year 10 FY 2019
AUTOMATED PLASTIC CONTAINERS (APC)											
Fee Per Month											
RESIDENTIAL											
48-Gallon											
1st Container	\$ 14.50	\$ 14.50	\$ 15.00	\$ 15.25	\$ 15.25	\$ 15.50	\$ 15.75	\$ 16.00	\$ 16.25	\$ 16.50	\$ 16.75
2nd/3rd Container	10.00	10.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
Low Income Program	2.50	2.50	3.00	3.25	3.25	3.50	3.75	4.00	4.25	4.50	4.75
65-Gallon											
1st Container	\$ 14.50	\$ 14.50	\$ 16.00	\$ 16.25	\$ 16.25	\$ 16.50	\$ 16.75	\$ 17.00	\$ 17.25	\$ 17.50	\$ 17.75
2nd/3rd Container	10.00	10.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
Low Income Program	2.50	2.50	4.00	4.25	4.25	4.50	4.75	5.00	5.25	5.50	5.75
95-Gallon											
1st Container	\$ 14.50	\$ 14.50	\$ 16.75	\$ 17.00	\$ 17.00	\$ 17.25	\$ 17.50	\$ 17.75	\$ 18.00	\$ 18.25	\$ 18.50
2nd/3rd Container	10.00	10.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
Low Income Program	2.50	2.50	4.75	5.00	5.00	5.25	5.50	5.75	6.00	6.25	6.50
300-Gallon											
Shared Container	\$ 14.50	\$ 14.50	\$ 16.00	\$ 16.25	\$ 16.25	\$ 16.50	\$ 16.75	\$ 17.00	\$ 17.25	\$ 17.50	\$ 17.75
Sole Use	43.50	43.50	48.00	48.75	48.75	49.50	50.25	51.00	51.75	52.50	53.25
Low Income Program	2.50	2.50	4.00	4.25	4.25	4.50	4.75	5.00	5.25	5.50	5.75
COMMERCIAL											
48-Gallon											
1st Container	\$ 18.60	\$ 18.60	\$ 19.00	\$ 19.25	\$ 19.25	\$ 19.50	\$ 19.75	\$ 20.00	\$ 20.25	\$ 20.50	\$ 20.75
2nd/3rd Container	18.60	18.60	19.00	19.25	19.25	19.50	19.75	20.00	20.25	20.50	20.75
65-Gallon											
1st Container	\$ 18.60	\$ 18.60	\$ 19.00	\$ 19.25	\$ 19.25	\$ 19.50	\$ 19.75	\$ 20.00	\$ 20.25	\$ 20.50	\$ 20.75
2nd/3rd Container	18.60	18.60	19.00	19.25	19.25	19.50	19.75	20.00	20.25	20.50	20.75
95-Gallon											
1st Container	\$ 18.60	\$ 18.60	\$ 19.00	\$ 19.25	\$ 19.25	\$ 19.50	\$ 19.75	\$ 20.00	\$ 20.25	\$ 20.50	\$ 20.75
2nd/3rd Container	18.60	18.60	19.00	19.25	19.25	19.50	19.75	20.00	20.25	20.50	20.75
300-Gallon											
Shared Container	N/A	\$ 18.60	\$ 19.00	\$ 19.25	\$ 19.25	\$ 19.50	\$ 19.75	\$ 20.00	\$ 20.25	\$ 20.50	\$ 20.75
Sole Use	56.00	56.00	57.00	57.75	57.75	58.50	59.25	60.00	60.75	61.50	62.25

City of Tucson Environmental Services
 Solid Waste Cost of Service and Rate Design

Schedule 10
 Proposed Rates

	Current Rates	Year 1 FY 2010	Year 2 FY 2011	Year 3 FY 2012	Year 4 FY 2013	Year 5 FY 2014	Year 6 FY 2015	Year 7 FY 2016	Year 8 FY 2017	Year 9 FY 2018	Year 10 FY 2019
ROLL-OFF											
Fee Per Pull											
Refuse	\$ 160.00	\$ 160.00	\$ 175.00	\$ 180.00	\$ 185.00	\$ 191.00	\$ 197.00	\$ 203.00	\$ 209.00	\$ 215.00	\$ 221.00
Recycling	110.00	110.00	125.00	129.00	133.00	137.00	141.00	145.00	149.00	153.00	158.00

City of Tucson Environmental Services
Solid Waste Cost of Service and Rate Design

Schedule 10
Proposed Rates

Front Load Proposed Rates (Fee per Month)

Year 1 - Current Rates		REFUSE					
Container Size (Cubic Yards)	Collections per Week						
	1	2	3	4	5	6	
2	\$ 83.00	\$ 138.00	\$ 193.00	\$ 249.00	\$ 304.00	\$ 359.00	
3	83.00	138.00	193.00	249.00	304.00	359.00	
4	87.00	147.00	207.00	266.00	326.00	386.00	
5	96.00	165.00	233.00	302.00	371.00	439.00	
6	96.00	165.00	233.00	302.00	371.00	439.00	
8	105.00	183.00	260.00	338.00	415.00	493.00	

Year 2		REFUSE					
Container Size (Cubic Yards)	Collections per Week						
	1	2	3	4	5	6	
2	\$ 87.00	\$ 145.00	\$ 203.00	\$ 261.00	\$ 319.00	\$ 377.00	
3	87.00	145.00	203.00	261.00	319.00	377.00	
4	91.00	154.00	217.00	279.00	342.00	405.00	
5	101.00	173.00	245.00	317.00	390.00	461.00	
6	101.00	173.00	245.00	317.00	390.00	461.00	
8	110.00	192.00	273.00	355.00	436.00	518.00	

Year 3		REFUSE					
Container Size (Cubic Yards)	Collections per Week						
	1	2	3	4	5	6	
2	\$ 91.00	\$ 152.00	\$ 213.00	\$ 274.00	\$ 335.00	\$ 396.00	
3	91.00	152.00	213.00	274.00	335.00	396.00	
4	96.00	162.00	228.00	293.00	359.00	425.00	
5	106.00	182.00	257.00	333.00	410.00	484.00	
6	106.00	182.00	257.00	333.00	410.00	484.00	
8	116.00	202.00	287.00	373.00	458.00	544.00	

Year 4		REFUSE					
Container Size (Cubic Yards)	Collections per Week						
	1	2	3	4	5	6	
2	\$ 95.00	\$ 158.00	\$ 222.00	\$ 285.00	\$ 348.00	\$ 412.00	
3	95.00	158.00	222.00	285.00	348.00	412.00	
4	100.00	168.00	237.00	305.00	373.00	442.00	
5	110.00	189.00	267.00	346.00	426.00	503.00	
6	110.00	189.00	267.00	346.00	426.00	503.00	
8	121.00	210.00	298.00	388.00	476.00	566.00	

Year 5		REFUSE					
Container Size (Cubic Yards)	Collections per Week						
	1	2	3	4	5	6	
2	\$ 96.00	\$ 160.00	\$ 224.00	\$ 288.00	\$ 351.00	\$ 416.00	
3	96.00	160.00	224.00	288.00	351.00	416.00	
4	101.00	170.00	239.00	308.00	377.00	446.00	
5	111.00	191.00	270.00	349.00	430.00	508.00	
6	111.00	191.00	270.00	349.00	430.00	508.00	
8	122.00	212.00	301.00	392.00	481.00	572.00	

Note: The refuse rates listed are for regular (i.e., non-compactor) containers

City of Tucson Environmental Services
Solid Waste Cost of Service and Rate Design

Schedule 10
Proposed Rates

Front Load Proposed Rates (Fee per Month)

Year 6		REFUSE					
Container Size (Cubic Yards)	Collections per Week						
	1	2	3	4	5	6	
2	\$ 98.00	\$ 163.00	\$ 228.00	\$ 294.00	\$ 358.00	\$ 424.00	
3	98.00	163.00	228.00	294.00	358.00	424.00	
4	103.00	173.00	244.00	314.00	385.00	455.00	
5	113.00	195.00	275.00	356.00	439.00	518.00	
6	113.00	195.00	275.00	356.00	439.00	518.00	
8	124.00	216.00	307.00	400.00	491.00	583.00	

Year 7		REFUSE					
Container Size (Cubic Yards)	Collections per Week						
	1	2	3	4	5	6	
2	\$ 100.00	\$ 166.00	\$ 233.00	\$ 300.00	\$ 365.00	\$ 432.00	
3	100.00	166.00	233.00	300.00	365.00	432.00	
4	105.00	176.00	249.00	320.00	393.00	464.00	
5	115.00	199.00	281.00	363.00	448.00	528.00	
6	115.00	199.00	281.00	363.00	448.00	528.00	
8	126.00	220.00	313.00	408.00	501.00	595.00	

Year 8		REFUSE					
Container Size (Cubic Yards)	Collections per Week						
	1	2	3	4	5	6	
2	\$ 102.00	\$ 169.00	\$ 238.00	\$ 306.00	\$ 372.00	\$ 441.00	
3	102.00	169.00	238.00	306.00	372.00	441.00	
4	107.00	180.00	254.00	326.00	401.00	473.00	
5	117.00	203.00	287.00	370.00	457.00	539.00	
6	117.00	203.00	287.00	370.00	457.00	539.00	
8	129.00	224.00	319.00	416.00	511.00	607.00	

Year 9		REFUSE					
Container Size (Cubic Yards)	Collections per Week						
	1	2	3	4	5	6	
2	\$ 104.00	\$ 172.00	\$ 243.00	\$ 312.00	\$ 379.00	\$ 450.00	
3	104.00	172.00	243.00	312.00	379.00	450.00	
4	109.00	184.00	259.00	333.00	409.00	482.00	
5	119.00	207.00	293.00	377.00	466.00	550.00	
6	119.00	207.00	293.00	377.00	466.00	550.00	
8	132.00	228.00	325.00	424.00	521.00	619.00	

Year 10		REFUSE					
Container Size (Cubic Yards)	Collections per Week						
	1	2	3	4	5	6	
2	\$ 106.00	\$ 175.00	\$ 248.00	\$ 318.00	\$ 387.00	\$ 459.00	
3	106.00	175.00	248.00	318.00	387.00	459.00	
4	111.00	188.00	264.00	340.00	417.00	492.00	
5	121.00	211.00	299.00	385.00	475.00	561.00	
6	121.00	211.00	299.00	385.00	475.00	561.00	
8	135.00	233.00	332.00	432.00	531.00	631.00	

Note: The refuse rates listed are for regular (i.e., non-compactor) containers

Front Load Proposed Rates (Fee per Month)

Year 1 - Current Rates			RECYCLING			
Container Size (Cubic Yards)	Collections per Week					
	1	2	3	4	5	6
2	\$ 25.00	\$ 50.00	\$ 75.00			
3	25.00	50.00	75.00			
4	25.00	50.00	75.00			
5	25.00	50.00	75.00			
6	25.00	50.00	75.00			
8	25.00	50.00	75.00			

Year 2			RECYCLING			
Container Size (Cubic Yards)	Collections per Week					
	1	2	3	4	5	6
2	\$ 30.00	\$ 60.00	\$ 90.00			
3	30.00	60.00	90.00			
4	30.00	60.00	90.00			
5	30.00	60.00	90.00			
6	30.00	60.00	90.00			
8	30.00	60.00	90.00			

Year 3			RECYCLING			
Container Size (Cubic Yards)	Collections per Week					
	1	2	3	4	5	6
2	\$ 30.00	\$ 60.00	\$ 90.00			
3	30.00	60.00	90.00			
4	30.00	60.00	90.00			
5	30.00	60.00	90.00			
6	30.00	60.00	90.00			
8	30.00	60.00	90.00			

Year 4			RECYCLING			
Container Size (Cubic Yards)	Collections per Week					
	1	2	3	4	5	6
2	\$ 35.00	\$ 70.00	\$ 105.00			
3	35.00	70.00	105.00			
4	35.00	70.00	105.00			
5	35.00	70.00	105.00			
6	35.00	70.00	105.00			
8	35.00	70.00	105.00			

Year 5			RECYCLING			
Container Size (Cubic Yards)	Collections per Week					
	1	2	3	4	5	6
2	\$ 35.00	\$ 70.00	\$ 105.00			
3	35.00	70.00	105.00			
4	35.00	70.00	105.00			
5	35.00	70.00	105.00			
6	35.00	70.00	105.00			
8	35.00	70.00	105.00			

Front Load Proposed Rates (Fee per Month)

Year 6		RECYCLING					
Container Size (Cubic Yards)	Collections per Week						
	1	2	3	4	5	6	
2	\$ 40.00	\$ 80.00	\$ 120.00				
3	40.00	80.00	120.00				
4	40.00	80.00	120.00				
5	40.00	80.00	120.00				
6	40.00	80.00	120.00				
8	40.00	80.00	120.00				

Year 7		RECYCLING					
Container Size (Cubic Yards)	Collections per Week						
	1	2	3	4	5	6	
2	\$ 40.00	\$ 80.00	\$ 120.00				
3	40.00	80.00	120.00				
4	40.00	80.00	120.00				
5	40.00	80.00	120.00				
6	40.00	80.00	120.00				
8	40.00	80.00	120.00				

Year 8		RECYCLING					
Container Size (Cubic Yards)	Collections per Week						
	1	2	3	4	5	6	
2	\$ 45.00	\$ 90.00	\$ 135.00				
3	45.00	90.00	135.00				
4	45.00	90.00	135.00				
5	45.00	90.00	135.00				
6	45.00	90.00	135.00				
8	45.00	90.00	135.00				

Year 9		RECYCLING					
Container Size (Cubic Yards)	Collections per Week						
	1	2	3	4	5	6	
2	\$ 45.00	\$ 90.00	\$ 135.00				
3	45.00	90.00	135.00				
4	45.00	90.00	135.00				
5	45.00	90.00	135.00				
6	45.00	90.00	135.00				
8	45.00	90.00	135.00				

Year 10		RECYCLING					
Container Size (Cubic Yards)	Collections per Week						
	1	2	3	4	5	6	
2	\$ 50.00	\$ 100.00	\$ 150.00				
3	50.00	100.00	150.00				
4	50.00	100.00	150.00				
5	50.00	100.00	150.00				
6	50.00	100.00	150.00				
8	50.00	100.00	150.00				