

## **CURBSIDE RECYCLING PLAN RESPONSE**

### **Kessler Consulting report to Pinellas County assisting with the development of residential curbside recycling**

Page 1      The consultant's scope of work is to develop a plan to implement residential curbside recycling in the unincorporated county and any municipalities within the County willing to participate. We were initially informed the study was to evaluate the pros and cons of the scope of work and then decide on developing an implementation plan. Please comment.

In accordance with the County's strategic plan, a presentation was made to the Board of County Commissioners (BCC) in March 2007 regarding curbside collection in the unincorporated county and funding other municipal programs. At that time the BCC directed Solid Waste Operations to develop more specific costs and details as well as an implementation program to be brought back to the BCC for approval. At the January TMC meeting we notified the TMC of this presentation and at the March 2007 TMC meeting we reviewed this presentation with the TMC and posted it on the TMC web site.

Page 1      **1.2 – Solid Waste Collection in the unincorporated County is by subscription..... Five companies currently provide subscription waste collection service and most offer curbside recycling, usually for an additional fee. Because the County is not directly involved in providing or contracting for waste collection, limited information is available.**

1.2 – In lieu of relying on the footnoted surveys by Research Data Services, Inc., was consideration given to requiring the private waste service entities to provide curbside recycling data? This question is based on the potential of receiving actual data on cost, volumes, weight and categories thereof, for private waste recyclers, in as much as the consultants report and recommendations are significantly reliant on the survey results, with their associated margin of error.

The County does not have the authority to require private haulers to provide such information which is considered confidential by the companies. In the past, Solid Waste Operations has requested such information with little success. However, the information available in the county as well as from other communities is sufficient to support the conclusions based upon this information.

Page 2      Because the County is not directly involved in providing solid waste collection, what provisions are made for the customers to pay for curbside collection if money from the solid waste fund is not available? What provisions will be made to assure solid waste funds will be available for municipal curbside recycling programs in future years?

The plan is to pay for the curbside collection as part of the of the resource recovery system enterprise fund. The costs of the program will be budgeted as part of the annual budget of Solid Waste Operations.

**“Approximately 29 percent of unincorporated county residents subscribe for curbside recycling, and an additional 37 percent would like to have curbside recycling but do not currently have access to it.”**

Where does the 37 percent figure come from? Were the respondents told there is a cost attributed to the service for which they were interested, and if so what was the amount(s)?

**“This is a strong indication that when recycling is available, the majority of county residents will participate.”**

This statement appears to be based on the assumption that the county has funds already set aside for this function, and does not take into account how many residents would choose to pay for this service.

The 37 percent figure has been revised to 40 percent in the final report. It is the percentage of respondents who would like curbside recycling but lived in an area, or subscribe for collection with a hauler, where service was not available. A survey just recently completed indicates that 80% percent of the residents in the unincorporated county would like curbside recycling and were willing to pay for the service with a median of \$5.00 per month.

Page 4

**The report states curbside recycling is more convenient and demonstrates greater recovery of recyclables per household over drop-off recycling.**

But the report fails to include yard waste which as one of the largest segments of the residential waste stream. More importantly, comparing a City-wide Curbside Recycling Tonnage to City Drop-Off Collection sites fails to take into consideration the significant volume of recyclables dropped off at private sites and not for profit entities.

As has been stated previously, the purpose of this program is to focus on curbside recycling which is generally defined as fiber and containers. Yard waste recycling is a separate program. Yard waste is collected separately from these materials. The City of St. Petersburg has a very good yard waste program but this type of program is not included in the present proposal. In 2006, about 85,000 tons of yard waste recycled including the City and County programs as well as other privately operated programs. Solid Waste Operations plans to investigate increasing its yard waste recycling program in the future.

With respect to private/charitable entities, very little data is available on the amounts of material recycled by these entities. Drop-off sites for fiber and containers at private sites are not always available to the public and do not typically maintain tonnage data. They are located in areas with and without curbside recycling. Solid Waste Operations, through the TMC, provides an incentive to charities to recycle by providing one free ton of disposal for every three tons they recycle/reuse. Most materials recycled by these organizations consist of materials that are not collected in curbside programs (e.g. clothing, furniture, household goods).

Page 5

**Table 1.3 – Recyclables Recovered Through Curbside and Drop-off Programs, 2007.**

Only two curbside communities were listed as also having drop-off locations. However there are 7 additional curbside communities that have drop-off locations

that were not listed (according to the 2008 Pinellas County Recycling Directory). Was the tonnage generated from these drop-offs combined in the curbside tonnage for these communities? These communities are: Clearwater, Kenneth City, Largo, Pinellas Park, Safety Harbor, South Pasadena, and Tarpon Springs.

The curbside tonnages for communities that have both curbside recycling and drop-off sites do not include the drop-off tonnages. It was assumed that recyclables received at drop-offs in these communities comes primarily from commercial or multi-family residential sources. Because curbside recycling is on a subscription basis in Dunedin and Indian Rocks Beach collects only newspaper curbside, drop-off tonnages for these two cities are included in the “Drop-off Collection” column since we assumed that single-family residents would also be using these drop-offs. As noted in footnote (c) of the table, the per-household recovery rates for drop-off collection are overestimated since some of the materials are delivered by multi-family residents and businesses. In addition, only those municipalities that provided data to SWO are included in the table.

**“The service fee for curbside recycling ranges from \$1.50 to \$2.79 per household per month.”**

Do these fees reflect the total cost of the program? In those communities that provide their own service, does it include truck and other capital purchases, administration, overhead (payment in lieu of taxes, administration fee, and return on investment)?

In those municipalities that provide their own collection, these are the fees charged to residents. Although a full cost accounting was not performed, these fees generally include administration, overhead and equipment replacement costs. Furthermore, these numbers compare very well with costs for curbside recycling bid by the private sector which certainly includes all these costs as well as profit.

**The table indicates that the average curbside recycling tons collected for all municipalities per household is 0.16 per year.**

What portion of the residential waste stream does this represent? What portion of the total waste stream does this represent?

The approximately 16,000 tons shown in Table 1.3 (about 38% of households) represents about 1.4% of the total waste received at the solid waste facility (1.1-1.2 million tons) and about 2.8% of the residential waste (approximately 50%). A curbside recycling program serving the entire county would result in about 45,000 – 58,000 tons of waste recycled. This would be about 7% to 10% of the residential waste received. Our recent waste composition analysis shows that over 30% of the residential waste stream consists of common curbside recycled materials.

**“The amount of recyclables recovered per household through curbside recycling programs is more than five times greater than the amount of similar materials collected through drop-off recycling programs (does not include yard waste).”**

The volume and the significance of yard waste recycling should not be unaccounted for. The total amount of recyclables recovered countywide in

curbside programs in 2007 was 16,070 tons. St. Petersburg recycled 38,965 tons of yard waste in the same period, nearly two hundred and fifty percent more. Furthermore, as previously stated, it is inappropriate to compare a City-wide curbside to City-wide Drop-Off programs without due consideration of drop-off material to non-City sites. Can the Table include Number of Participating Customers as a percent of total customers?

As discussed above, yard waste is not included in curbside recycling. Regarding participation rates, few jurisdictions track this data because of the expense. For this reason, the average quantity of recyclables recovered per household per year was used as an indicator of participation. A higher per-household recovery rate is a clear indication of higher participation.

Page 7

**“To analyze the option for curbside recycling and potential costs to County, KCI evaluated curbside recycling contracts, fees, and setout rates in other Florida jurisdictions.”**

The report does not indicate setout rates. Setout rates are an indication of true community participation. Which communities were evaluated and what was their setout rate (average containers placed out for collection per week).

As noted above, few jurisdictions track customer participation rates. Of the jurisdictions surveyed, only two were able to provide setout rates. (The setout rate is the percentage of customers that place recyclables curbside on a given collection day. Since some customers do not place recyclables curbside every week, the participation rate is usually quite a bit higher.) Palm Beach County estimates its setout rate to be 65-70 percent and, based on a 2003 waste generation study, Seminole County’s setout rate was 50 percent. As mentioned above, using the quantity of recyclables recovered per household is a better indicator of participation since it takes into account not only the number of customers participating, but also the extent to which they participate (i.e., quantity of materials placed curbside).

Page 8

**Table 2.1** – Does the “Number of Customers” represent program participants?

**Table 2.2** – Same Question as stated above for Table 2.1.

The number of customers represents all single family households with curbside recycling available, whether they are participating or not. It should be pointed out that the number of tons recycled per household are based upon all households, therefore the tons per household already factors in a participation rate. If participation rates are increased, the tons per household recycled will increase.

Was there any attempt to confirm that Curbside Recycling fees were not subsidized by other contract revenue?

See response to previous question regarding this topic.

Page 9

**“If the County chooses to implement a full-service collection contract in the future, rates in the range of \$15 to \$20 per household per month (for collection and disposal) might be expected”**

What data supports this expected rate range?

This range is supported by a review of bid prices for collection contracts in other jurisdictions around Florida and for collection contracts in Pinellas County including the contract rate in Lealman.

Page 9 **Table 2.3** – Can the Table be expanded to include percent of Customer participation?

See response to previous question regarding this topic.

Page 10 **“Based on KCI’s knowledge of the surveyed jurisdictions, those with effective and ongoing education programs for recycling have higher recovery rates.....”**

Is a County’s educational program deemed effective because it has higher recovery rates? Do not the five governments listed at the bottom of Table 2.3 employ similar public educational strategies as Sarasota County? Is there any data that associates recyclables per household versus demographics, i.e. average income.

In reviewing public education and outreach programs, it is clear that Sarasota County, Palm Beach County and Pinellas County have much more extensive programs than the other counties. This includes evaluating the amount, frequency and content of the various outreach methods.

Pinellas County Unincorporated is being compared to Sarasota County, City of Sarasota, and Palm Beach County because they have high recovery rates and have similar education programs. However, recovery rates are influenced by many other factors;

Population Education

Population Income

Population Density

Economic Incentives

Mandatory vs. voluntary

Weight of local Newspaper

Enforcement

Population social structure

Marketing and education expense per resident

Population Urban vs. Rural

Sarasota County is given as an example of a community that has a high recycling recovery rate and implies that it is a result of their effective and ongoing education programs. *A critical point to consider is that Sarasota County has mandatory recycling.*

Can the consultant include any comparative benefits of public education program impacts on Recycling Drop-Off programs?

Demographic and socio-economic factors do have an impact on recycling rates; however, an analysis of this was beyond the scope of this project. Mandating recycling in and of itself does not result in high recovery rates. For example, both Sarasota and Seminole counties have mandatory recycling, yet Seminole County's recovery rate is only 60 percent of Sarasota County's rate. Further, Sarasota and Palm Beach counties have some of the more comprehensive recycling outreach and education programs. That is not to say that it is the only factor affecting recycling participation, but it is one factor over which local government has control.

Given the fact that the average recovery rate in Pinellas County municipalities that have curbside recycling is close to that of Palm Beach County and that two municipalities with curbside recycling (Clearwater and St. Pete Beach) appear to have exceeded the recovery rate achieved in Sarasota County, it is reasonable to expect that recovery rates experienced in a countywide Pinellas County recycling program would be comparable to these counties.

Of the 11 most populated Florida counties (which includes all counties with more than 500,000 residents), Pinellas County is the only one without a comprehensive curbside recycling program; and of the 37 most populated Florida cities (which includes all cities with populations more than 61,000 residents), only St. Petersburg does not have curbside recycling. Since nearly all large cities and counties in Florida have curbside recycling, data regarding the benefits of education on drop-off programs in comparable jurisdictions is not readily available. While outreach and education will help increase participation in drop-off recycling programs, it is widely accepted in the industry that higher recovery rates are achieved through curbside recycling than with drop-off programs.

Page 10

**“Put simply, gone are the days when public recycling programs must pay to process their recyclables, or just be happy to “get rid” of them at no cost”.**

As stated by KCI the value of recyclable materials is at a historically high level. The historical review of recycling markets shows highs and lows with no indications of stability. To take a single snapshot of the market may cause errors in predictions (fuel price can come down, overseas markets can be reduced, and housing construction can take a down turn).

The value of materials recovered in curbside recycling programs is variable, therefore it is necessary to conservatively estimate revenues, as has been done in the County's plan, and not fully rely on revenues to support the program. However, it is important to note that recycling markets, although volatile, have been, on average, steadily rising over the past 15 years.

Page 15

**“Recycling bins”**

Specifying the type bin and having the contractor responsible for purchase and delivery may be a cleaner method. It would more clearly assign responsibility to the contractor, eliminating finger pointing in determining why a container is not being delivered. This is particularly true since this proposed program will allow multiple Pinellas communities to participate.

Was the recommendation for the County to purchase “Recycling Bins”, and the associated cost for same, included as a part of the estimated program cost? County purchases the bins what funding source will be utilized? How would communities that currently have curbside recycling be reimbursed for their containers?

A contractor buying the bins would have to recover the cost of the bins over the life of the contract increasing his costs and his risk. It appears that it is overall less costly for the county to make the initial purchase of the bins and make the contractor responsible for bins afterwards. However, a final decision regarding this issue will be made during the RFP process. Cities with their own programs would continue to use their existing bins. The cost of the bins is a legitimate cost that would be included in determining the cost of the program for reimbursement.

Page 16

**“Pinellas County intends to finance the curbside recycling program with revenue from the resource recovery system. Municipalities that choose not to participate in the County’s curbside recycling contract and prefer to continue their existing curbside recycling programs would be reimbursed by the County for their existing programs.”**

What will happen to communities that choose to continue with their drop-off programs, choosing not to implement a curbside program? The County has been funding all communities on a pro-rata population basis for their recycling efforts. As all communities pay tipping fees into the resource recovery system (the proposed funding source for this curbside proposal), what consideration will be given to the source of monies that communities contributed over the years to allow for the excessive fund balance to be used for the subject project? Are there any legal implications needing to be addressed as it relates to this question?

The reimbursement grants for other recycling programs would be continued. The proposed program has been reviewed by the County Attorneys’ office. The reimbursement must be based upon refunding the net costs of the program. Reimbursement of curbside collection costs represents a use of the funds to benefit the cities that choose to participate and has a county-wide benefit.

**“Pinellas County intends to finance the curbside recycling program with revenue from the resource recovery system.”**

What assurances will be made to the communities that participate in the curbside program that funds will not be discontinued in the future? What is the projected cash flow versus expenses on the drawdown and transfers into the fund balance as it relates to depletion of same and the potential in future years to raise tipping fees for sustaining the proposed recycling program.

Funding for the program will be included in Solid Waste Operations’ budget on an annual basis. Projected cash flows for the next fifteen years show that this program will likely require only a portion of the potential funds available.

Page 17

**“If the county implements a program that includes the recyclable materials mentioned in Section 3.1, recovery rates in the range of 0.17 to 0.22 tons per household per year should be achievable.**

Did KCI take into consideration in estimating recovery rates for Pinellas County that in 2008 the St. Petersburg Times, the local newspaper, has reduced its size and volume of its newspaper by 30%, which will cause a corresponding reduction.

This factor has already been noticed and was considered in the County's program.

Page 18

**Expanding a Recycling Program is one of the easiest, fastest, and least expensive steps that communities can take to decrease their contributions to green house gas emissions.**

Is this comment solely in the context of curbside recycling? Furthermore, a significant number of not for profit entities rely to some degree on revenues generated by recycling curbside materials. It is very important to consider the impacts to these organizations prior to any furtherance of this plan.

The calculation of estimated GHG reduction and other environmental benefits was based upon recovery rates that might be anticipated in a curbside recycling program. Regarding not for profits, please see previous comment on this issue.

Page 19

**“To evaluate the direct impact of a comprehensive curbside recycling in Pinellas County on energy savings and GHG reductions, KCI utilized the Environmental Benefits Calculator developed by the Northeast Recycling Coalition (NERC).”**

The Environmental Benefits Calculator does not use generation of electricity by waste-to-energy facilities in its calculations. Since Pinellas County operates an advanced and efficient WTE, the energy savings calculated appear to be overstated and out of context.

The WTE facility is currently operating at capacity and was assumed to continue to operate at capacity. Increasing waste reduction and recycling will directly impact the excess tonnage that is diverted to landfill. Therefore, the role of the WTE facility in energy savings is included in the model estimates.

Page 20

**“With regard to the impact of curbside recycling on landfill usage, SWO staff estimated that establishing curbside recycling in those areas not already provided this service would reduce landfill requirements by about 6 to 7 percent annually at the current rate of usage.”**

Did the SWO estimate include steel cans and aluminum that go to the Refuse-to-Energy Plant and are recycled? Did this estimate include recyclable materials that are already recycled by drop-off programs? The FDEP reports the State waste composition for curbside recyclables at 10.8% of the total waste system based on 100% recovery, and estimates only 4% based on participation in the program. Why was 6 to 7 percent used? What do the figures show as actual percent as reported to the County? What percent (6 to 7, or 10%) was used in the calculation of extending the landfill life? Can you provide us the consultants calculations in the extension of the landfill life by 6 to 8 years, and what if any impact on tonnage to existing drop-off sites would result from a County-wide Curbside Program.

The savings in landfill life is based upon the fact that the WTE facility is at capacity. Additional material recycled or recovered reduces landfill requirements as it frees up capacity in the facility. It is a fallacy to assume that all the material

potentially recoverable in a curbside recycling program would be incinerated and generate electricity. Existing recycling was considered in the landfill reduction estimates. The estimate was based upon an additional 30,000 tons per year of recycled material out of about 150,000 – 200,000 tons of waste currently landfilled annually. It was adjusted for typical landfill densities of the materials as well as considering ash disposal.

Page 21

**“In summary, establishing a curbside recycling program is economically viable for Pinellas County and will meet public demand.”**

One must question the meaning of “economic viability”. Economic viability is generally accepted to mean that an endeavor is able to support itself entirely on its own (without subsidies)

Curbside collection is a convenient method of collecting recyclables, however the high cost of collection versus the small percent of the waste stream reduced makes it difficult to be called economical.

See response to General Comments below.

**“According to a 2007 citizen survey, the majority of unincorporated county residents that do not currently have access to curbside recycling desire this service.”**

At what monthly cost did they desire this service? This question is considered relevant in light of the fact the program has a relatively high expense for benefit received, and an on-going expenditure of fund balance is still a cost to customers. This proposal is not free.

See response to previous question regarding this topic.

## **GENERAL COMMENTS**

- Curbside recycling is a convenient method of recycling but it has yet to be demonstrated as the more cost effective and environmentally sensitive means of decreasing the waste stream and increasing recovery of recyclables.

While there are other methods to reduce waste that may be more effective, they have advantages and disadvantages and may be difficult to implement. Recycling is beneficial and curbside recycling is certainly more convenient and results in a significant increase in recyclables as compared to drop-off centers.

- Recycling is good; however, it should be approached from a perspective of sound economics, good science, and voluntary cooperation. Too often, it’s promoted as an end in itself without regard to whether it’s worth the time and expense.

It is difficult to put a price on conserving resources and protecting the environment. It cannot be a purely economic decision or based upon convenience alone.

- St. Petersburg strongly believes in the environmental benefits of recycling. However, the goal of a cost-effective, environmentally sound method of reducing the waste stream, extending the landfill life, and recycling greater quantities may be better achieved with focus on the larger components of the waste stream, such as yard waste and construction demolition and debris.

Since the City and County share the same primary objectives, is the County willing to consider the cost and environmental impacts of addressing these components of the waste stream (yard waste, and C&D), and then compare the results to curbside recycling?

The County is looking at improving these programs in addition to implementing curbside recycling. One does not preclude the other. As previously noted, the materials targeted in this program represent over 30 percent of residential waste being disposed at the County's solid waste facility. This is the largest portion of the residential waste stream that could be targeted with a single, well established recovery method.

- Based on lack of uniformity in Cities desire for curbside recycling, their varying results in achieving objectives, and how recycling goals may be alternatively achieved (other than curbside), will the County consider providing fund balance monies to Cities based on achieving recycling goals that may or may not involve curbside recycling?

At this time, the County's proposed program is with respect to curbside recycling. Other programs may be considered in the future.

- Will the County allow communities input on utilizing fund surplus being considered for curbside recycling as a basis for reducing fees, or, issuance of annual rebates? This request is made in light of the economic conditions being faced by our constituents and the need to give equal or greater consideration on lessening the fees paid to government operations versus using their monies from fund surplus to spend on an expanded government service, such as curbside recycling.

The County is evaluating the best way to manage the funds available in the Solid Waste System. We anticipate that there will be sufficient funds for a number of purposes.

- Will the County consider establishing basic goals, i.e. waste stream reduction, extending landfill life, increasing recyclable volumes, and then identify alternatives to best achieve those goals in the most cost-effective and environmentally sensitive way possible?

The County is evaluating alternative approaches to achieve a basic goal of "zero waste to the landfill". Curbside recycling is one of the approaches. We continue to evaluate other programs as we move towards our goal.