Executive Summary

The Emerald Coast Utilities Authority (ECUA) provides a leading waste collection system for our county. Our team is significantly involved with our customers and the environmental health of our community. Our sanitation programs at ECUA assist in making a positive difference throughout Escambia County.

To protect the public health from the effects of improper disposal, we service customers with automated curbside collection. We have seen an explosion of growth since our environmental protection programs have launched. Waste tonnage is steadily decreasing, which reduces the amount of waste we deliver to the landfill.

ECUA pledges itself to environmentally responsible decision-making and minimizing the consumption of natural resources, waste and adverse environmental impacts.
Emerald Coast Utilities Authority  
Pensacola, Florida  
SWANA 2012 Public Education Award Nomination  
Page 2

Statement of Intent

The Emerald Coast Utilities Authority (ECUA) began providing sanitation collection services to the greater Escambia County area in April, 1993. From modest beginnings after acquiring the system from the Escambia County Commission to the organization we are today, has taken much planning, hard work, and dedication on the part of all our employees. We have grown to add a topnotch recycling program, which even includes monthly collection of Household Hazardous Waste at the customer's doorstep.

Our team is significantly involved with our customers and the environmental health of our community. Our sanitation programs at ECUA assist in making a positive difference throughout Escambia County. We are proud of the role we play in the health and welfare of our community and are pleased to apply for SWANA's 2012 Collection Systems Excellence Award.
Design of Collection Facility / Management System

The Emerald Coast Utilities Authority (ECUA) was originally created under the name Escambia County Utilities Authority in 1981 by an Act of the Florida Legislature to own, manage, finance, promote, improve and expand the water and wastewater systems of Escambia County and the City of Pensacola. The ECUA began offering sanitation services in Escambia County in 1992 when it acquired the sanitation collection system owned and operated by the Escambia County Commission.

In Escambia County, Florida, residential sanitation collection services are provided by three municipal agencies: The City of Pensacola, which serves approximately 55,000 residents (16,000 households) within its city limits; the Town of Century, which is located in the northern sector of the County and is home to 8,100 residents; and the Emerald Coast Utilities Authority, who serves the balance of the County’s 74,077 households.

Since 1993, the Emerald Coast Utilities Authority’s Sanitation Department has touched the lives of our community’s 74,000-plus households providing efficient residential sanitation collection services. Residential sanitation service includes once-per-week pickup of household solid waste, recyclables and yard trash. All three services are provided on the same day. The Department of Sanitation provides collection of waste and recyclables through a curbside automated collection system. Automated collection was implemented to provide the best quality sanitation service to our customers, while improving working conditions and safety for our staff.
The ECUA provides the following services to its residential customers:

- Fully automated solid waste collection
- Fully automated single-stream curbside recycling collection
- One bulky waste pick-up per calendar month
- One recycling bulk pick-up per calendar month (for recycling participants)
- One complimentary Household Hazardous Waste (HHW) pick-up per month (the first Saturday of the month following the called-in request)

To maximize productivity and eliminate manual routing, the ECUA is equipped with a computerized routing system. Computerized routing provides the Sanitation Department with a state-of-the-art system that allows the ECUA to collect more solid waste materials and recyclables, using less equipment and fewer employees. This software allows routes to be adjusted quickly to account for a growing area and the increasing number of curbside recycling customers.

Our team delivers an unparalleled combination of strategy, creativity and technology to produce solutions that deliver results for our customers. As our community continues to grow, so does the ECUA residential sanitation collection system.
Environmental Controls & Regulatory Compliance

All of ECUA’s solid waste, recycling and yard trash programs target our key goal of providing cost effective service while protecting the environment. The curbside collection programs benefit our environment, our customers and our organization in several ways:

- Our programs include our customers and the community in our process, building a team to protect the environment.
- Our services are provided to protect the public from the effects of improper disposal.
- The popularity of our single-stream recycling system continues to grow and opens an educational highway to promote and inform our community about recycling.
- Adopting the habit of recycling decreases the amount of waste transferred to our landfill. In turn, this decreases the demand for natural resources.
- Recycling helps promote sustainable community development.
- Lowers waste management costs.
- The ECUA partnered with a private firm, West Florida Recycling, Inc., to process curbside recyclables collected by the ECUA, while meeting all Florida Department of Environmental Protection (FDEP) regulations.

Reducing greenhouse gas is a primary concern for the ECUA.

With that goal in mind, the ECUA purchased a Peterbilt / Eaton-designed Hydraulic Launch Assist (HLA) vehicle in order to test the benefits of this new technology. This technology utilizes the stop-and-go nature of refuse collection trucks to store hydraulic pressure, which is then used to propel the vehicle at speeds below 25
MPH, and reducing the use of the diesel engine. ECUA uses this vehicle known as the Eco-Machine, not only to test this technology in a real-world setting, but to deliver our message to the community: A Greener Today, A Cleaner Tomorrow.

The many benefits of operating a Hybrid Garbage Truck include:

- Reduced operational cost.
- Reduced amount of greenhouse gas emissions from the truck.
- Increased fuel efficiency.
- Extended brake life; we have saved approximately $6,000 annually on brake replacement and maintenance.
- Reduced noise levels.

The Hybrid Garbage Truck with the Eaton HLA system has performed well. The ECO-Machine, is currently averaging 2.39 miles per gallon (MPG), compared to the 1.83 MPG average for the same model-year vehicles without the hybrid system. This 30% increase in fuel economy is in line with projections by the manufacturer for this system, which has proven to be very reliable.

Figure 1 ECUA's ECO-Machine
**Compressed Natural Gas Conversion**

To further protect the environment and reduce operating costs, the ECUA recently finalized a 10-year compressed natural gas (CNG) agreement with Energy Services of Pensacola (ESP), our local provider of compressed natural gas. The concept was approved in the fall of 2011 by the Pensacola City Council and the ECUA Board so the ECUA could begin converting vehicle fleets to compressed natural gas.

ESP will construct a compressed natural gas fueling station on ECUA property adjacent to our Sanitation Complex and provide the CNG to ECUA at a fee based on the New York commodity rate. ESP will operate and maintain the station, which will be open to the public and third-party fleets. There will be 90 slow-fill stations for ECUA sanitation vehicles only, and two fast-fuel dispensers that will be accessible to the public.

Switching to CNG vehicles will help resolve issues with our downtime on diesel emissions, release up to 90% less air pollution than diesel-fueled vehicles, resulting in less greenhouse gas emissions. The vehicles generate less noise than diesel vehicles, cause less disruption in neighborhoods, and are more comfortable for our drivers.

The ECUA board in November, 2011, approved the purchase of 50 CNG-fueled refuse collection trucks, which will be on the roads in July 2012.
Program Planning

Fully Automated Municipal Solid Waste (MSW) Collection Program
ECUA provides MSW collection to approximately 74,000 residential and 1,100 commercial customers once-per-week, utilizing our fully automated collection equipment. Our Sanitation Department utilizes a fleet of 30 fully automated 28-yard side-loading collection vehicles to provide this service. ECUA provides the customer with a choice of 35-, 65- or 90-gallon MSW container. The monthly charge for sanitation service to our residential customers is $18.66 for three pick-ups per week: one pick-up of household refuse; one pick-up of recyclables (not mandatory); and one weekly pick-up of yard trash. Discounted rates are available for Senior Citizens and low income families. Customers can request additional cans and/or extra pick-ups for a small fee.

Fully Automated Single-Stream Recycling Program
Recycling is not a requirement at ECUA; our program allows customers to voluntarily participate in the curbside recycling program. Currently, approximately 60% or 45,000 of ECUA sanitation customers are participating in the curbside recycling program. This number continues to grow with approximately 50 new customers beginning recycling service each week. There is no additional fee to participate in the recycling program as it is included in the regular monthly collection rate. Our recycling program is a fully automated single-stream recycling system. Sanitation currently utilizes a fleet of 15 fully automated 28-yard side-loading collection vehicles to provide this service. Customers are given the choice of 35-, 65- or 90-gallon recycling containers. This system allows our customers to place all recyclable items in one single-stream container. The ECUA formed a partnership with a private firm, West Florida Recycling, Inc., to provide processing of all recyclables collected by the ECUA.
Yard Waste Program

The Yard Waste Program was implemented to provide residents with a convenient means to dispose of yard waste, without placing yard waste material in the automated collection container. This program keeps yard waste out of Class I landfills and allows its use for other beneficial applications. Each customer receives once weekly collection of yard waste as part of the monthly rate. The ECUA utilizes a fleet of 15 rear-load collection trucks to provide this service.

Bulk Waste Program

The Bulk Waste Program was implemented to provide residents with a convenient means to dispose of items such as: furniture; couches, mattresses, bicycles, grills, appliances and other items that are too large to place in the automated collection containers. Each customer is allowed one bulk waste collection each month as part of the monthly rate. Customers can request an estimate for additional pick-ups or removal of items that are not covered in the program, such as building materials. The ECUA utilizes a fleet of six knuckle-boom collection trucks to provide this service.

Bulk Recycling Program

The Bulk Recycling Program was implemented by the ECUA Sanitation Department in June 2010. During the first year of this program, the Sanitation Department received 5,825 requests for bulk recycling pick-up. These requests generated a tremendous amount of materials to be recycled, that if not for this program, would have ended up in the landfill or been disposed of inappropriately. The materials recycled include 42.78 tons of tires, 33.1 tons of appliances and scrap metal, 49.5 tons of household electronics, 39 tons of cardboard, 2 tons of batteries and 90 propane tanks.
This program is included in the monthly rate and has proven to be very popular with customers as there was previously no convenient means for a resident to dispose of many of these items. Our crews have received numerous compliments from customers regarding the availability and simplicity of the program.

**Household Hazardous Waste (HHW) Program**

The ECUA initiated the curbside HHW Program in June 2010, to provide a safe, convenient and cost-effective system to discard of many household chemicals. Additionally, it has provided an opportunity to educate our community on the hazards associated with HHW.

Again, this service is included in the monthly rate at no additional charge, and we are proud to be the first local government in the State of Florida to provide a HHW residential collection program. The ECUA HHW program provides once-per-month doorstep service for residential customers. Our HazMat crews are trained and certified to ensure safe pick-up of HHW material.

This program has proven to be very popular with customers as there was previously no convenient means for a resident to dispose of many of these items. Because the ECUA not only provides Sanitation collection, but is also the drinking water provider for most of Escambia County, our goal was not only to reduce the amount of HHW going to the local landfill, but to provide a safe disposal method for HHW, and prevent illegal disposal that could contaminate the aquifer and our drinking water supply.
Performance, Economics and Cost Effectiveness

ECUA’s Sanitation Department serves 74,077 households in Escambia County, Florida. The operation requires 85 sanitation equipment operators and sanitation collection supervisors.

- There are 23 sanitation collection vehicles used Tuesday to Friday for refuse collection with 1 operator per vehicle.
- There are 10 recycle vehicles used Tuesday to Friday for collection of recyclables with 1 operator per vehicle.
- There are 10 yard waste collection vehicles used Tuesday to Friday for yard waste collection with 2 operators per vehicle.

Our collection system is highly efficient, requiring only one driver for all of our collection services with the exception of yard waste collection. The automated collection system allows our employees to increase the quality of waste collection while reducing lifting related injuries. All sanitation team members are cross-trained and can operate any sanitation vehicle.

As we continue to move forward and set goals for the future, we are very proud of those we have already accomplished:

- Automated collection allows the Sanitation Department to deliver a clean, efficient, and more convenient service for residents.
- Customers are very satisfied with the customer service quality that is provided to them.
- Residents have the option of 3 different sizes of containers: 35-gallon, 65-gallon or 90-gallon garbage can or recycle can, selecting the size container that will suit their needs best.
- Customers are provided with a single-stream recycling system and a wheeled and lidded can for curbside collection.
Waste, recyclables, and yard waste are collected on the same day of the week so our customers only have to remember one pick up day.

The ECUA Sanitation Department operates within budget. Based recent studies conducted of surrounding jurisdictions in the past few years, the ECUA’s Sanitation rates are very competitive and generally lower than our neighboring counties’.

The ECUA is dedicated to quality service. Our Customer Service Department ensures that our customers are provided with the best customer service experience. Each representative follows our mission statement on a day-to-day basis. Teamwork dedicated to quality service is our goal. Training sessions are provided frequently to customer service representatives to ensure the level of service is up to par.

Armed with an outstanding public information staff, a targeted public education effort has been developed through radio and print ads, outdoor advertising, truck signage, media communications and events, and informational packages for all customers. Our website provides customers with detailed information for all the services and programs that are available to them.
Utilization of Equipment / Systems and Technologies

In addition to the HLA vehicle and computerized routing software mentioned earlier, the ECUA is always looking for ways in which new technology can improve our service to our customers. Some of the other technologies we have employed include:

All sanitation equipment operators (SEO) at ECUA are trained to operate each type of sanitation vehicle used in daily operations. Our operators are required to have a Class “B” Commercial Driver’s License and full knowledge of equipment safety. All drivers are trained to safely handle hazardous materials.

To be able to offer all of our sanitation services effectively, we now have six mechanic service trucks and a full garage capable of completing any needed sanitation vehicle repair in-house. The garage facility was expanded in 2006 to allow for completion of any needed repairs within the Sanitation Fleet. The Sanitation Fleet Maintenance Facility includes 18 repair bays and a paint booth to provide all needed maintenance of the fleet. We have lift equipment that is capable of elevating a fully loaded sanitation vehicle, if needed. The garage includes a full inventory of parts, with a computerized work order system and bar code inventory tracking.

To better serve our community, ECUA installed GPS tracking systems in all service vehicles used for sanitation collection. Our tracking system monitors the driver’s speed and displays the vehicle’s location as it travels the assigned route. As part of the ECUA GPS system, we are currently testing a system that allows the tire pressure of collection vehicles to be monitored in real time. This add-on system is being evaluated to help reduce the cost of replacing damaged tires on Sanitation vehicles.

ECUA Sanitation developed a wireless work order system that allows drivers to receive and complete work orders in real time. The system also allows drivers to enter data into our customer service database in real time. For example, if a driver cannot service a container at a
specific address, he can enter information pertinent to that situation in the customer service database directly from the cab of his collection truck. This allows our customer service staff to respond more accurately to customer questions.

Finally, ECUA Sanitation utilizes a fully computerized payroll system that allows employees to punch in and out using a fingerprint reader. The system allows employees to monitor their payroll information in real time and make leave requests on the system. The system provides supervisors with an electronic calendar to coordinate leave requests made by employees.

Worker Health & Safety

The Emerald Coast Utilities Authority Sanitation Department is committed to promoting health, wellness, and disease prevention within the workplace and the community, and to providing a safe, clean and healthy environment of our employees. We have implemented an indoor smoke-free workplace policy that encompasses all our buildings, facilities, and vehicles. As of October 1, 2008, this policy was expanded to include adoption of a tobacco-free hiring practice.

To ensure our employees have the knowledge and skills to perform their jobs safely and effectively, the Sanitation Department has established a Safety Advisory Team (SAT). This team provides a forum for all ECUA employees to address concerns pertaining to safety, security, or loss control matters affecting the ECUA employees, contractors, and the general public.

Upon hiring, all sanitation equipment operators participate in orientation sessions. These sessions include the basics of the job description and what is expected of their role at ECUA.
Following the initial orientation session is our Department Training Program designed to educate our employees on the following health/safety essentials:

- Provided at no cost to the employee, ECUA requires a health exam prior to official hire.
- Safe driving education is provided to employees so they are aware of what is expected when operating an ECUA vehicle. The information provided benefits the driver and others in the area.
- All operators are expected to obey state and local traffic laws. Seat belts are strictly enforced.
- Operation 101: how to safely operate ECUA vehicles and equipment (our sanitation equipment operators are trained to operate all vehicles on site).
- All operators are required to wear the following Personal Protective Equipment at all times:
  - Neon orange traffic safety vests
  - Work Gloves
  - Hard Hat
  - Rain Suit (depending on weather conditions)
- Information on proper waste collection and disposal.
- Instructions on how to protect yourself from blood-borne pathogens.
- Awareness of any harmful chemicals that employees may encounter- HAZMAT training.
- Instructions on how to properly inspect the ECUA vehicle before use and how to determine if the vehicle is in need of maintenance.

Safety Awareness Training is provided by an instructor on a monthly basis. All safety and health information provided at our training sessions are reviewed and stay up-to-date to provide our employees with the most current safety measures.
In 2006, ECUA Sanitation implemented a Safety Incentive Program. This program is available to all sanitation equipment operators (SEO) and provides a quarterly award of $300 for every SEO who does not have an at-fault accident or injury during that period. The payment is made annually in the first payroll in December. Therefore, if an SEO has no accidents or injuries during the year, they will receive the full incentive payment of $1,200. This program has resulted in a 50% reduction in at-fault accidents and injuries at ECUA when compared to pre-2006 data.

Public Acceptance, Appearance and Aesthetics

The home of our Sanitation Department is located in one of our beautiful neighborhoods in Pensacola, FL. Not only do we provide outstanding service to our customers, we have the privilege of also being a neighbor. ECUA takes pride in beautifying our facility and our surrounding neighborhood.

After our operators complete their daily route pick-ups, they detail their vehicle at our onsite wash center. The appearance of our sanitation vehicles can be a deciding factor on how our community views the ECUA. With that said, the maintenance of our vehicles plays a very important role in our service.

ECUA is committed to improving the quality of life and making a positive difference in Escambia County. Our employees contribute their time, resources and talents to several charitable efforts and thus strengthen our relationship with the community, from the American Cancer Society to the United Way. Our goal is to leave our foot prints, and a little bit of our hearts, throughout the community.
We want to share the work we love with our entire community by taking that extra step to better our environment. Our Sanitation Department participates in the ‘Clean Sweeps’ Program to help keep our community clean. We team up with the Escambia County Community and Environment Bureau and the Escambia County Sheriff’s Department to target community redevelopment areas. Our employees volunteer to participate in the program to help protect our shared environment. Working together has allowed ECUA to provide local neighborhoods with pick-up of debris to help the Pensacola area stay clean and green. In October 2011, we were proud to receive an award from the Escambia County Sheriff’s Department for our contributions to the Clean Sweeps effort.

ECUA’s coordinators visit local organizations that would like to learn more about how they can participate in helping strengthen our community. Face-to-face interaction allows us to build and maintain relationships with our community and provide educational information.
Combined with our public education meetings we also created other ways to get information out to our community:

- **ECUA website:** current news and page content provides visitors with important information on events or ceremonies that have occurred or are planned.

- **Customer Pipeline newsletter:** provides customers with all the excitement that is going on at ECUA.

- **Press Releases:** provide customers with a brief overview of an upcoming event or changes that may come into place.

- **Radio Station Interviews:** provide customers with information from an ECUA employee.
In the fall of 2010, the ECUA conducted an art contest designed to promote environmental awareness. All entries were judged on creativity, originality and quality. One of our local photographers submitted the winning design titled, “A Greener Today, A Cleaner Tomorrow.” As the winner, her design now appears on the “ECO-Machine” Sanitation truck, which was photographed below at the June 2011 Fiesta Parade in downtown Pensacola. The artwork has been installed on the vehicle to promote the fact that it is a hybrid vehicle and showcases ECUA’s commitment to protecting the environment.

Every day at ECUA, we try to build one more relationship, educate one more person, and continue to plan for the future.