

 $\star$ 

FALL/WINTER 2018

## **OIL & GAS, PETROCHEM BOOM SPELLS BUSINESS FOR GCA**



INSIDE: BAYPORT TOURS, TRASH BASH, SCRIPT AWARDS, NACWA, WEAT and GFOA AWARDS.



#### **GCA CHAIRMAN'S LETTER**

Many people view GCA as a state-created environmental organization in that our mission is protecting the waters of the State of Texas. That's certainly true, and we do that extremely well, but we're also an important part of the amazing Texas economic engine that is rooted in the petroleum industry. While we do provide excellent municipal wastewater treatment services, the bulk or our operations are dedicated to providing regional wastewater treatment solutions to the booming petrochemical industry concentrated along the Gulf Coast near Houston.

We help create and sustain jobs and generate economic growth — and not just in Texas. The oil and gas and petrochemical industries we support in turn produce energy and vital products that serve our entire nation, as well as people around the world.

It is an awesome responsibility that all of us at GCA take very seriously.

Franklin D.R. Jones, Jr.



#### **GCA CEO/GENERAL MANAGER'S LETTER**

This issue of *Clarifier* is dedicated to the customers we serve in the oil and gas and petrochemical industries. We are so very proud to have the opportunity of working with people in a sector that has done so much for our state, our nation and our world. From the gasoline that fuels our cars and trucks to the plastics, soaps, detergents, fertilizers, paints, solvents, pesticides, fabrics, construction materials and other products they make that contribute so much to our daily lives, this industry—perhaps more than any other—is as essential as it gets.

GCA's regional approach helps provide professional, state-of-the-art, cost-effective wastewater management services to scores of petrochemical companies along the Houston Ship Channel and Houston-Galveston Gulf Coast. We also operate an industrial landfill and wastewater receiving stations that service this sector. Our relationships with the oil and gas industry are many and deep, and we maintain excellent communication with these customers to ensure we are able to serve future, as well as present needs.



To our oil and gas and petrochemical customers, we say, thank you for all you do and for placing your trust in GCA.

Low Traweek

Lori Traweek



## OIL & GAS, PETROCHEM BOOM SPELLS GROWTH FOR GCA

The U.S. oil and gas, refining and petrochemical industries are booming, optimism is high, and the Texas economy will be a major beneficiary—creating challenges and opportunities for GCA.

Not too long ago, the ocean of oil and gas that helped float the United States to victory in World War II and stimulated unrivaled economic growth appeared to be ebbing. Our position as a world producer was eroding as the cost of operations rose to increasingly non-competitive levels. Once-productive reservoirs were drying up, petrochemical capacity was declining as feedstock prices rose and facilities neared the end of their life cycle. Commodity price volatility and layoffs were driving skilled workers out of the industry, aging employees were retiring in droves and new blood was becoming increasingly scarce as young Americans became wary of an education and career in a "dying" industry. In addition, export requirements were unfavorable for exporting oil and natural gas. Then, Mitchell Energy, a small Houston independent exploration and production company, achieved a scientific breakthrough by combining two proven technologies fracking and lateral drilling—to unlock and connect smaller "tight rock" formations of oil and gas via a single wellbore. Previously uneconomic reservoirs suddenly became viable and the Shale Revolution was born.

By 2018, the United States had surpassed Russia and Saudi Arabia to again become the world's largest crude oil producer. Oil and gas prices have come off their highs, reducing the cost of feedstocks and leading to a dramatic U.S. petrochemical industry revival. More than \$185 billion has been invested in new chemical plants since 2010, according to the American Chemistry Council, and the industry presently accounts for about half of all investment in U.S. manufacturing and a whopping \$500 billion a year in exports. A number of U.S. companies are now looking to convert relatively new LNG (liquefied natural gas) import facilities into export terminals for Asian markets. Others, primarily in Texas, are building new infrastructure such as pipelines to facilitate exports to Mexico. All that is great news for Texas: We're the top state crude oil producer; the top state in natural gas production; and number three globally in refinery capacity. And all that translates into challenges and opportunities for GCA.

At the top of the challenges list is staying ahead of the curve when it comes to regional industrial wastewater treatment for the petrochemical industry-our primary focus since inception. Our Bayport, Washburn Tunnel and 40-Acre facilities all serve the Houston-area petrochemical and refining industries, as do our Campbell Bayou industrial nonhazardous solid waste landfill and our Central Laboratory. It is therefore imperative that we stay in close touch with our customers to understand their present and future needs and adapt and grow our own capacity accordingly. It's also imperative that we keep abreast of new technologies to ensure that we maintain our state-of-the-art operational edge. As a result, our facilities are constantly undergoing new construction, refurbishment and life-cycle analysis. Equally important is our commitment to continuing education-staying abreast of and, if possible, ahead of emerging technologies.

A number of U.S. companies are now looking to convert relatively new LNG (liquefied natural gas) import facilities into export terminals for Asian markets. Others, primarily in Texas, are building new infrastructure such as pipelines to facilitate exports to Mexico.

4

All this growth in the energy sector, along with the broadening of our scope of responsibilities to include other state water projects, presents opportunities for GCA, as well. The Permian Basin drilling and fracking boom has had a huge impact on water resources in West Texas. Oil industry experts estimate that handling and treating the large volumes of produced water there could add as much as \$6 a barrel to the cost of production, which would affect both producers and consumers, so it is a major issue from an economic standpoint as well as from an environmental perspective. In an effort to provide water availability solutions to the oil and gas industry that reduce impact on sources that could be utilized for drinking water, our Odessa Facility currently sells two million gallons per day to an oil company for use in fracking. GCA is also working with the State of Texas, the federal government, the petroleum industry and others to study the issue, toward the goal of developing viable oilfield wastewater treatment, handling and re-use solutions.

# BARPORT BACING

### **ENERGY WATER INITIATIVE REPRESENTATIVES VISIT GCA'S BAYPORT FACILITY**

In mid-May, 16 members of the Energy Water Initiative representing 12 companies toured the Authority's Bayport Facility as a follow-up to last year's GCA presentation to the group on the potential benefits of regionalization for the effective management of industrial wastes, including longterm management of wastewater from oil and gas operations. GCA Technical Director Leonard Levine directed the tour.

The Energy Water Initiative is a collaborative effort among participating members of the U.S. oil and natural gas industry to study, describe, and improve lifecycle water use and management in upstream unconventional oil and natural gas exploration and production operations. The purpose of the visit was to give the group a first-hand example of how GCA provides reliable, compliant and cost-effective water handling services to industry and to showcase the unique technologies employed by GCA to protect the waters of Texas.

During the tour the Bayport facility staff, Facility Manager Kim Ontiveros, Operations Supervisor Jeff Nuss and Safety Coordinator Ben Reese, provided various insights into GCA operations and readily answered the many questions posed by the tour group. In follow-up correspondence the visitors expressed that the tour was quite worthwhile and generated further thinking as to how GCA's unique capabilities may be called upon to help solve industrial wastewater management issues.



#### **BAYPORT FACILITY HOSTS SCIENCE TEACHER TOUR**

GCA's Bayport Facility hosted 40 science teachers for a tour in mid-July as part of the Texas Chemical Council (TCC) and Association of Chemical Industry of Texas (ACIT) Teachers and Industry Workshop. The facility has provided the tour to this group for the past several years.

Organizing this year's event were Facility Manager Kimberly Ontiveros (presenter); Bayport Operations Supervisor Jeff Nuss and Safety Coordinator Ben Reese (tour leaders); Compliance Coordinator Carl T. Hennagir (presenter); and GCA Project Manager Jonte Greer and GCA Process Engineer Joanne MacDougall (tour guides).

TCC and ACIT host the annual workshop, which provides Texas science teachers from grades 5-12 with educational information about the chemical manufacturing industry and its impact on the environment and surrounding communities. GCA facility tours are an important arm of the Authority's community outreach program.

2018 Bayport Facility visits included representatives from the Energy Water Initiative group and the GCA Finance Committee, both in May, new GCA Board members in August, the LaPorte Citizen's Advisory Council in October, the University of Houston Clear Lake Senior-Level Pollution Control Technology class in November.

Facility public-outreach efforts during the year included a GCA Overview presentation to BAYCAP (Bay Area Community Advisory Panel) in January, participation in Kaneka North America LLC's Green Day events in October, and participation in the LaPorte Local Emergency Planning Committee meeting in November.



#### CITIZEN'S ADVISORY COUNCIL VISITS GCA BAYPORT FACILITY

Members of the Citizen's Advisory Council (CAC) to LaPorte Industry toured GCA'S Bayport Facility and Central Laboratory in early October as part of an outreach effort to better understand the Authority and what it does to protect the waters of the State of Texas through regional wastewater management. GCA participates in similar citizen advisory groups throughout its service area.

In the background of this photograph are three of Bayport's four receiving tanks where wastewater from more than 60 industrial facilities and the cities of LaPorte and Shoreacres begins its journey through a multi-step treatment process before being discharged into the Bayport Channel. Sitting on the edge of the clarifier are two jars showing the wastewater before and after treatment.

#### **BAYPORT CONSTRUCTION HELPS GCA KEEP PACE WITH PETROCHEMICAL CUSTOMER NEEDS**

This year and next are busy construction periods for our Bayport Facility (GCA's largest) which serves two municipalities and more than 70 industrial customers—mainly petrochemical companies in the midst of an industry boom.

The two major projects are an Organic Treatment Capacity Upgrade (scheduled to wrap up in 4Q19 with the start-up of a fifth 1st Step Treatment Tank) and BIOSAN Pipeline Upgrades (scheduled to begin construction in 1Q19 with completion anticipated in 2020). The latter is designed to ensure the continued reliability of the section that goes under Bay Area Blvd as well as upgrading carbon steel sections of the line to fiberglass.

The Bayport team also is working on design for upgrades to our Discharge-to-Bay Pumps (construction commencing 2Q19), various electrical infrastructure improvements, and additional safety- and compliance-driven smaller projects.

# TRASH BASH

#### A 2018 MAYOR'S Proud Partners Award Recipient

Keep Houston Beautiful has selected the GCA-supported annual Rivers, Lakes, Bays N' Bayous Trash Bash<sup>®</sup> as a winner in the 2018 Mayor's Proud Partner Awards.

The program honors businesses, individuals, youth and community groups whose exceptional projects and programs enhance the beauty and environment of Houston and surrounding areas.

Trash Bash is a project of the Texas Conservation Fund, where GCA CEO Lori Traweek serves as President and GCA Executive Assistant Lynda Norton is Treasurer. GCA backs the annual cleanup effort with funding, volunteers and coordination of two of the fourteen sites.

"The City of Houston is blessed to have so many dedicated volunteers, businesses and organizations who are so willing to devote time and resources to neighborhood cleanups and park beautification to keep Houston beautiful," said Mayor Sylvester Turner.



GCA's Phyllis Frank, Lori Traweek, Lynda Norton and Diane Maloy proudly accepted the award.





#### TRASH BASH WINS 2018 TEXAS ENVIRONMENTAL EXCELLENCE AWARD

The annual River, Lakes, Bays 'N Bayous Trash Bash<sup>®</sup> is a winner in the 2018 Texas Environmental Excellence Awards (TEEA) recognition program organized by the Texas Commission on Environmental Quality (TCEQ). GCA has sponsored the annual event since its inception 25 years ago, providing Platinum-level funding and directing and fielding cleanup teams at two sites.

GCA CEO Lori Traweek has led the coordination for Trash Bash on behalf of GCA for the last 24 years and also serves as president of the Texas Conservation Fund (TCF), which organizes the event. Lynda Norton, Executive Assistant for GCA, also serves as treasurer of TCF, and two GCA facility managers have overseen cleanup efforts at two Trash Bash sites for many years.

Each year, Trash Bash volunteers remove tons of trash, tires and other debris from shorelines along many of the waterways in the Houston area. GCA employees and their families play an important role in the annual effort. Front row L to R: Lynda Norton, GCA and TCF; Governor Abbott; Lori Traweek, GCA and TCF. Back row L to R: then-TCEQ Commissioner Toby Baker, then-TCEQ Chairman Bryan Shaw; and then-TCEQ Commissioner Jon Niermann.

"Trash Bash fits our mission protecting the waters of the State of Texas—like a glove and we are pleased and proud to support the cleanup with leadership, funding and volunteers," says GCA CEO Lori Traweek.

The TEEA presentations were made at TCEQ's annual Trade Fair and Conference in May.

## SCRIPTAWARDS GO TO EMPLOYEES EXEMPLIFYING GCA VALUES

GCA's SCRIPT awards, which are presented to employees who best exemplify the Authority's Core Values—Stewardship, Communication, Reliability, Integrity, Planning and Teamwork—were awarded to deserving GCA personnel in the 2<sup>nd</sup> and 3<sup>rd</sup> quarters of 2018. Nominations for the quarterly awards come from those best able to identify employees who go above and beyond the call of duty in their personal and professional lives: peers and supervisors. We're proud to announce the latest recipients in the following photos.



Lab Manager Doris Haydon presented award to Administrative Assistant Donna Shotwell.



CTO Gordon Pederson and Municipal Superintendent Jerald Landis presented Operator Jeff Wood with the award.



Chemist Amanda Pitt received the award from Lab Manager Doris Haydon.



40-Acre Facility Manager Diane Maloy presented the award to David Espinoza.



CTO Gordon Pederson gave award to Blackhawk Facility Manager Brianna Morales.



Procurement Officer Drew Hutto received award from CFO Beth Free.



Bayport's Susan Calhoun accepted award from COO Scott Harris.



Labbie Lori Warren was presented the award by Lab Manager Doris Haydon.



Bayport's Eddie Carillo accepted award from Operations Supervisor Jeff Nuss.



GCA Engineer Joanne MacDougall was presented the award by Technical Director Leonard Levine.

## 40-Acre staff celebrating their Platinum? Award. 40-ACRE FACILITY PLATINUM PEAK PERFORMANCE AWARD

## **GCA FACILITIES RECOGNIZED FOR PEAK PERFORMANCE**

The National Association of Clean Water Agencies (NACWA) has cited GCA's 40-Acre Facility for seven years of 100 percent compliance with its coveted Platinum Peak Performance Award. The award was presented at the organization's Utility Leadership Conference & 48th Annual Meeting held in Boston last July. In all, NACWA recognized all five GCA wastewater treatment facilities for the second year in a row for consistently outstanding work with a combination of Platinum, Gold and Silver Peak Performance Awards:

- 40-Acre received the Platinum 7 Peak Performance award for seven years of complete and consistent National Pollutant Discharge Elimination System permit compliance.
- Washburn Tunnel, Bayport and Blackhawk won Gold Peak Performance Awards for their complete and consistent permit compliance in 2017.

 Odessa South received a Silver Peak Performance Award for its permit compliance in 2017.

All of us at GCA are extremely proud of our people and facilities for these outstanding accomplishments, as recognized by our peers.

This year, NACWA presented 458 Peak Performance Awards to 173 Member Agencies. The state of Texas had 66 facilities from 12 Agencies achieve Peak Performance status for 2017. This outstanding accomplishment signifies NACWA members' commitment to environmental protection and represents the diligence and hard work of each agency's employees.

## GCA ATTENDS EPA PUBLIC MEETING ON OIL & GAS WASTEWATER MANAGEMENT

GCA Technical Director Leonard Levine recently attended a public Environmental Protection Agency (EPA) working meeting on wastewater management of oil and gas operations that may lead to a white paper early next year to help determine whether new regulations are needed to promote conservation.

Led by Levine, GCA is working with EPA and petroleum industry groups in the Permian Basin toward the goal of changing existing regulations to provide more options for treating water produced in oil and gas operations, such as through Publicly Owned Treatment Works (POTWs) like the Authority. Current regulations do not permit such treatment. Best practices today call for injecting produced water back into underground formations, but in the interests of conservation, states and industry groups have been looking for ways to purify and re-use it.

The fracking/lateral drilling boom that is again making the United States the world's largest petroleum producer is another factor driving the need for a fresh look at oilfield wastewater treatment, reuse and disposal regulations. These operations use (and produce) large volumes of water as fluids are pumped underground to crack and hold open "tight" rock formations in order to free up the oil and gas trapped inside. With as many as four barrels of water produced for each barrel of oil, traditional reinjection disposal methods are becoming both expensive and problematic.

According to a recent article in The Houston Chronicle, "Spending on water management in the Permian Basin is likely to nearly double to more than \$22 billion in just five years... The reason is twofold. The rig count is rising, and many of the 'workhorse' disposal formations used for decades are starting to fill up... That means explorers have to move water further to find a home for it."

The meeting, held at EPA headquarters in Washington, D.C., included federal and state government officials, state and national oil and gas industry trade organizations, water treatment and conservation bodies such as GCA, and public interest groups.

 $\star$ 

"Dealing with wastewater from oil and gas extraction and turning it into useable water is not an easy matter, but it's a critical issue we need to work through," EPA Deputy Assistant Administrator for Water Lee D. Forsgren said.

Jesse Pritts, an engineer in EPA's water office and the study's leader, noted that currently, "We have no regulations for reuse of water in the oil field or its disposal in Class II underwater injection control wells."

Pritts said EPA is conducting the study in light of emerging new wastewater management approaches and possible uses for treated production water in areas where fresh surface water is scarce, such as the Permian Basin.

> EPA undertook the study because new wastewater management approaches are emerging, and possible uses for treated production waste are emerging, suggesting they could be used in parts of the US where fresh surface water is scarce, Pritts said.

> > "Some states support additional discharge options to add water to the hydrological cycle and reduce demand for freshwater," Pritts said.

American Exploration & Production Council President Bruce Thompson said, "We want regulation that reflects the importance of conserving water resources, rather than incentivizing their disposal. We believe that resource protection need not come at the expense of conservation—particularly given that water availability concerns are no longer confined to the 'arid West.'"

Levine said GCA would continue to work with EPA and the oil and gas industry on the study. "We look forward to lending our expertise and leveraging our relationships to benefit not only Texas but other states as well," he said. "What will really reduce the timeline is if [EPA] actually comes up with discharge standards and provides incentives to develop these technologies. Never underestimate the ability of the oil and gas industry to develop technology quickly."

#### WASHBURN TUNNEL SELECTED BY WEAT AS INDUSTRIAL WASTEWATER TREATMENT PLANT OF THE YEAR



GCA's Washburn Tunnel Facility has been recognized by the Water Environment Association of Texas (WEAT) with the Industrial Wastewater Treatment Plant of the Year Award for 2018. The award was presented at the annual Water Environmental Association of Texas meeting in San Antonio.

Washburn Tunnel was cited for consistent outstanding performance of daily activities beyond the normal call of duty. Present on behalf of GCA to accept the award were Facility Manager Phyllis Frank, Chief Operating Officer Scott Harris, Board of Directors Chairman Frank Jones and Board Member Mark Schultz. The Board thanked the facility management and staff for their hard work and dedication.



#### GCA FACILITIES PARTICIPATE IN Pasadena "Can-do" food drive

Thanksgiving is a time to reflect on our blessings and to share them with others. That's what the City of Pasadena's "Can-Do" Food Drive is all about—helping the less fortunate by supporting the area's food pantries a week before Turkey Day.

GCA's Bayport, Central Laboratory and Washburn Tunnel facilities all participated in the 2018 event, collecting canned

and non-perishable food donations from employees and delivering the items to the collection site at Pasadena Veteran's Memorial Stadium on Thursday, November 15. The food was distributed to needy families and individuals by area churches and charitable organizations just in time to celebrate Thanksgiving.

## **RICHARDSON HIGH SCHOOL** TAKES TOP ENVIROTHON HONORS

Left to right: Tony Strohmeyer (Teacher), Shion Kabesele, Hayley Smith, Caroline Cummings, Olivia Brown, Annalis Mach, Hilary Paine (Teacher)

A five-member team of students from Richardson High School in North Texas won the 2018 Texas Envirothon competition in April and went on to compete for the national awards in Pocatello, Idaho, in July. GCA is a Bronze Sponsor of the annual Texas environmental/natural resources educational event.

The Academy of Science and Technology of The Woodlands took second place honors and Clear Lake High School came in third in the competition.

"Envirothon is a way for students to get hands-on experience in environmental science," said Wendy Reistle, program coordinator of the Texas Envirothon. "Preparation for the competition, as well as the competition itself, brings together natural resource professionals and students who may be interested in those careers."

The three-day competition brought together 16 teams representing 10 high schools from across Texas. Financial support for the event was provided by Texas conservation districts and natural-resource-related agencies and businesses. GCA is a long-term sponsor.

 $\star$ 

"GCA is proud to help support events such as Texas Envirothon, which further environmental/ natural resource education and protection in our state," says GCA CEO Lori Traweek. "It is an important part of our mission."

Envirothon is an academic, extra-curricular environmental and natural resource education program and competition designed for high school students. Teams composed of five students answer questions focusing on five areas of study: aquatics, forestry, soils, wildlife, and a current environmental issue. In addition to the field experience, students also participate in an oral component focusing on a real-world environmental problem.

## **GCA 2017 ANNUAL REPORT** RECOGNIZED FOR EXCELLENCE BY GFOA

The Government Finance Officer's Association (GFOA) has announced that GCA's 2017 comprehensive annual financial report qualifies for the organization's Excellence in Financial Reporting Certificate of Achievement. The certificate is GFOA's highest form of recognition in government accounting and financial reporting.

"Its attainment represents a significant accomplishment by government and its management," said GFOA Technical Services Center Director Michele Mark Levine in a November 2018 letter to GCA Board Chairman Franklin Jones. GFOA is headquartered in Chicago.

"Congratulations to GCA's Finance Department's staff for your excellent work," said Jones. "There is no higher form of recognition than that which comes from one's peers."



Amanda Wilbert, GCA's Director of Accounting, received GFOA award from GCA Board member Mark Schultz, Board chairman Frank Jones, Vice Chairman Rita Standridge, Board members Bob Fry and Kevin Scott, and Board Secretary Chris Peden.

## **GALVESTON BAY FOUNDATION** HONORS GCA CEO LORI TRAWEEK

The Galveston Bay Foundation (GBF) selected GCA CEO Lori Traweek as the 2018 Community Honoree in its annual Guardians of the Bay Awards Celebration luncheon held Nov. 9 at the Marriott Marquis in Houston.

The Galveston Bay Foundation (GBF) is a 501(c)(3) non-profit organization established in 1987 under the laws of the State of Texas. Its mission is to preserve and enhance Galveston Bay as a healthy and productive place for generations to come. Traweek is first vice chair of the organization. In addition to her contributions to clean water via the Authority and GBF, she is an active participant in numerous ecological and conservation organizations and events. Traweek joins Aramco Services Company and the Clear Lake City Water Authority as this year's Business and Government honorees, respectively.

"I am truly honored and humbled by this recognition," Traweek said. "I share this award with the many volunteers who dedicate their professional careers and personal time to preserving our magnificent bay for future generations."



CEO Lori Traweek with husband Don

#### **GCA WELCOMES NEW BOARD MEMBER BOB FRY**

The Harris County Mayors Council appointed Robert A. (Bob) Fry to GCA's Board of Directors in May 2018, filling the vacancy left by former Board Member Dr. Irvin Osborne-Lee.

Fry retired in 2011 from the maritime industry after selling the company he founded in 1989. He was elected as Mayor Pro Tem (2007-2011) and Mayor (2011-2015) of West University Place serving two terms each. While in office he served as President of the Harris County Mayors and Councils Association, as a member of the board of the Houston Galveston Area Council representing Home Rule Cities and served as a voting member representing Small Cities on its Transportation Policy Council.

A graduate of Milby High School in Houston and the University of Texas at Austin, he currently serves as Chairman of the Texas A&M Galveston Board of Visitors and is the Founding Chairman and current member of the San Jacinto College Maritime Advisory Committee. In addition, he currently serves as Chairman of the Houston Maritime Museum and is a board member of the River Oaks Chamber Orchestra.



#### **BOARD OF DIRECTORS**



Franklin D.R. Jones, Jr. Chairman of the Board, Harris County



Rita E. Standridge Vice Chair, Chambers County



W. Chris Peden Secretary, Galveston County



Nancy C. Blackwell Treasurer, Harris County



J.M. "Mark" Schultz Member, Chambers County



Ron Crowder Member, Galveston County



Lamont E. Meaux Member, Chambers County



Kevin Scott Member, Galveston County

#### LEADERSHIP TEAM



Lori Traweek General Manager and CEO



Scott Harris Chief Operating Officer



Gordon Pederson Chief Technical Officer



Elizabeth Free Chief Financial Officer

#### **CORE VALUES**

- **S** STEWARDSHIP
- **C** COMMUNICATION
- **R** RELIABILITY
- INTEGRITY
- **P** PLANNING
- T TEAMWORK



Protecting the waters of the State of Texas through environmentally sound and economically feasible regional waste management practices

> Gulf Coast Authority 910 Bay Area Blvd. • Houston, Texas 77058 Phone: 281.488.4115 www.gcatx.org