



Children's Hospitals and Climate Resilience Webinar

July 8, 2025

Champions for Children's Health

Stronger Together

CHA is the only pediatric-focused hospital association, bringing together more than 200 children's hospitals and health systems to advance child health and the delivery of care.



Children's Hospitals Are Stronger Together



Advocate

Advance, partner, and advocate for changes that enable children's hospitals to best serve patients and families in their hospitals and communities.



Improve

Accelerate progress to improve health and health care outcomes for patients and families – and ensure organizational performance.



Learn

Connect with peers to understand and solve the biggest challenges facing children's hospitals by learning and sharing together.

Children's Health, Children's Hospitals, and Environment

Children are disproportionately impacted

- Childhood asthma incidence increases by 4-11% due to air pollution
- 1-2 million children displaced due to flooding
- Disproportionate impacts for low-income and minority children

The healthcare sector contributes to greenhouse gas (GHG) emissions

- Contributes 8.5% of all U.S. GHG emissions
- U.S. health care sector makes up 25% of global health sector emissions

Sustainability Content



ARTICLE —

One Way to Increase Environmental Sustainability Across an Organization

April 10, 2024

A diverse committee of residents and staff advances advocacy, research, and education on the effects of climate change on children's health.

</news/childrens-hospitals-today/2024/04/one-way-to-increase-environmental-sustainability-across-an-organization>



ARTICLE —

Sustainable Shuttle Drives Better Outcomes for Environment, Children

Feb. 03, 2022

Children's hospital's service uses driverless, electric-powered vehicle to solve transportation problems sustainably.

</news/childrens-hospitals-today/2022/02/sustainable-shuttle-drives-better-outcomes-for-environment-children>



EVENT | ON DEMAND —

Children's Health and Climate: A Children's Hospital Perspective

Aug. 15, 2024

Join Children's Hospital Association for "Children's Health and Climate," a two-part webinar series exploring the ways climate change impacts children's hospitals and pediatric...

</education/events/childrens-health-and-climate-a-childrens-hospital-perspective>

EVENT —

Building an Effective Environmental Sustainability Program

May 14, 2025 | On Demand

[VIEW ON DEMAND](#)

[SHARE THIS EVENT](#)

Today's Presenters



Salem Nseir

Director of
Facilities Engineering,
Texas Children's



Daniel Mahoney, MD

Director, Texas Children's
Hospital Medical Humanities
Program, Co-Chair, Texas
Children's Hospital
Sustainability Committee



Julie Katz

Executive Director, Community
Health and Corporate
Responsibility, Nicklaus
Children's



Where Your Child Matters Most™

Nicklaus Children's

Our Mission is to inspire hope and promote lifelong health by providing the best care to every child.

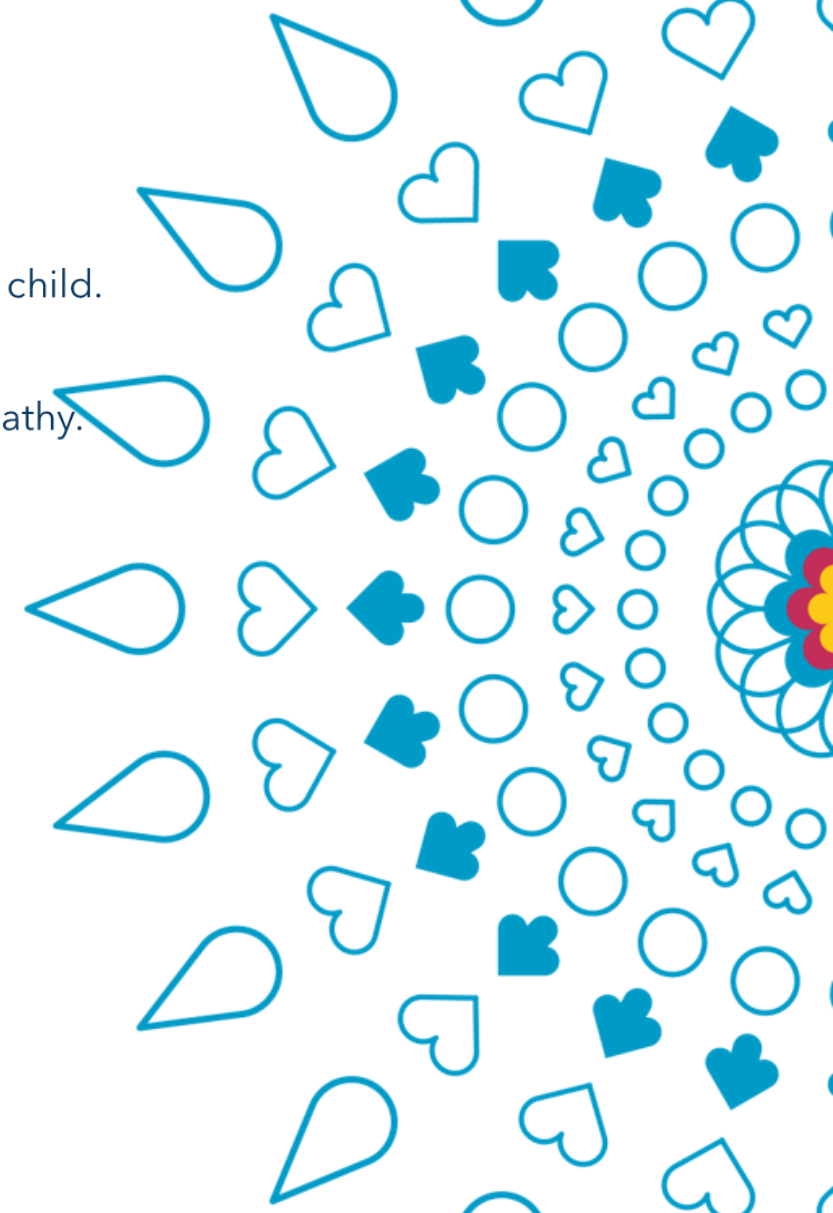
Our Vision is to **CREATE** a healthy future for every child.

Our Values are **C**ollaboration, **R**esponsibility, **E**mpowerment, **A**dvocacy, **T**ransformation & **E**mpathy.



Who We Are

- South Florida's only freestanding hospital dedicated to pediatrics, with 325 pediatric and neonatal beds.
- Part of the Nicklaus Children's Health System network, which includes 3 dozen urgent cares, outpatient centers, specialty offices and primary care centers.
- Home to one of the most visited pediatric emergency departments in the nation with close to 100,000 visits last year.



THE OFFICE OF COMMUNITY HEALTH

Convening internal and external collaborations to advance children's health and serving as an incubator for new community health programs and initiatives. This multi-disciplinary office addresses social drivers of health, community health services, the community health needs assessment and implementation plans, and community benefit work.

Nicklaus Children's Hospital Environmental Sustainability Efforts

Key Collaborations

Practice Greenhealth

- Peer learning as part of a national consortium for sustainable health care.
- Selection as new site for their Place Based Initiatives, joining the Bay Area, Boston, and Detroit.

Project SPRUCE

- Consortium led out of Seattle Children's Hospital
- Reducing carbon emissions through changes in how we use anesthesia gases.

Food Rescue US

- Surplus food from the cafeteria, cafes, and lounges are rescued and distributed to community organizations such as food pantries, shelters, and childcare centers.



Sustainable
Building Design
& Construction

Healthy Campus
Environment &
Practices

Energy
Management

Waste
Management &
Recycling

Nourishment &
Food Waste

Sustainability
Education

CLIMATE RESILIENCY PLAN

Texas Children's Hospital
Sustainability (Green) Team

Daniel P. Mahoney, MD
Salem Nseir

SUSTAINABILITY (GREEN) TEAM



Houston and Climate-Related Disasters

Year	Incident(s)
2017	Hurricane Harvey
2018	Heavy rains, flooding
2019	Tropical storm, flooding
2020	Hurricane Laura Tropical Storms Beta & Cristobal Onalaska Tornado
2021	Hurricane Ida Flooding Tropical Storm Nicholas Winter Storm Uri
2022	Tornadoes Flooding Extreme Heat
2023	Tornadoes Extreme Heat
2024	Derecho event (tornadoes) Hurricane Beryl Flooding Extreme Heat
2025	Winter storm



Introduction to Climate Resiliency Planning



Sustainability Plan: Focuses on long-term environmental, social, and economic sustainability, addressing a wide range of sustainability issues. Goals include reducing negative impacts, promoting economic development, and social equity.

Climate Resilience Plan: Concentrates on preparing for and adapting to climate change impacts, such as extreme weather events and sea-level rise. Goals center on building resilience to climate-related shocks and stresses, often with shorter to medium-term strategies.

SUSTAINABILITY (GREEN) TEAM

Gathering Information

Risk Assessment (ORG RESILIENCE)

- Extreme Weather Events
- General Framework

Vulnerability Analysis (ORG RESILIENCE)

- Sensitivity Assessment
- Interdependency Analysis

Infrastructure Resilience (Engineering)

- Asset Inventory and Prioritization
- Mitigation and Adaptation Strategies

Emergency Preparedness (ORG RESILIENCE)

- Emergency Response Team
- Emergency Training and Drills

Energy & Resource Management (Engineering)

- Proactive maintenance program
- Reducing carbon footprint

Supply Chain and Logistics (Supply Chain)

- Supply Chain Mapping
- Resilient Sourcing

Health and Safety (H&S)

- Risk Assessment and Hazard Identification
- Incident Reporting and Investigation

Monitoring and Evaluation (Engineering)

- Select Key Performance Indicators (KPIs)
- Feedback and Stakeholder Engagement

Gathering Information

Using a questionnaire, we asked departments (via Green Team representative) to think primarily about the climate related risks and what they had done to mitigate them, or were planning to do.

Table-Top Exercises and Hazard Vulnerability Assessments

General framework to guide risk assessment process:

Risk Identification

Risk Analysis

Vulnerability Assessment

Risk Evaluation

Risk Mitigation and Adaptation

Monitoring and Review

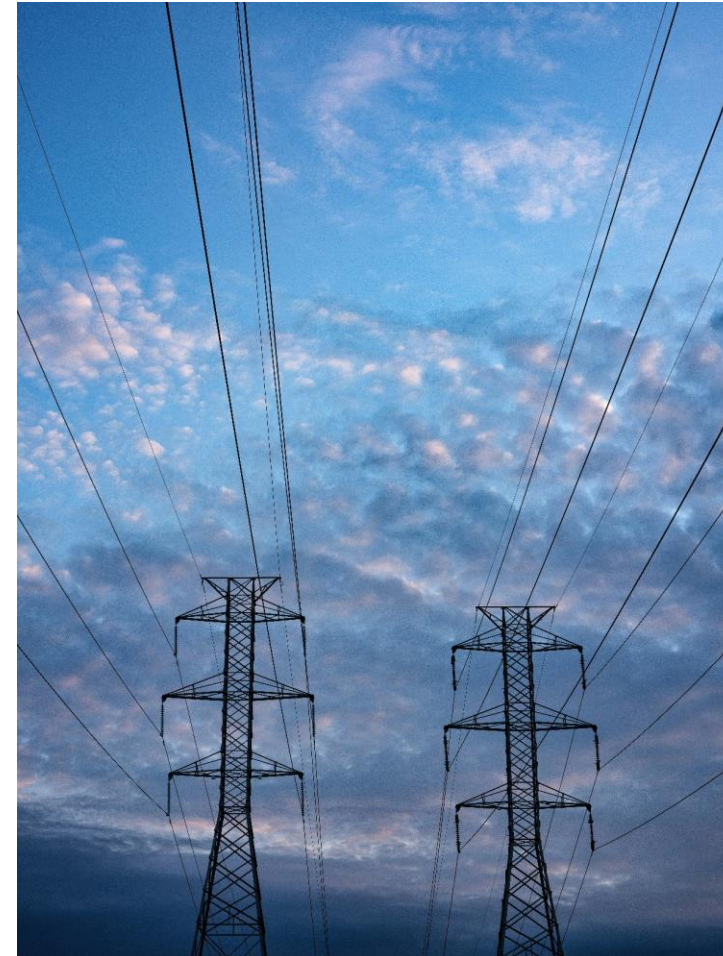
Hazard Vulnerability Assessments

Hazard Vulnerability Assessment (Natural/Climate Disasters)

Type	Likelihood	Impact	Vulnerability types
Tornado	Low/Med/High	Low/Med/High	Asset/System/Process
Hurricane/Trop. Storm	Low/Med/High	Low/Med/High	Asset/System/Process
Flood	Low/Med/High	Low/Med/High	Asset/System/Process
Wildfire	Low/Med/High	Low/Med/High	Asset/System/Process
Extreme Freeze	Low/Med/High	Low/Med/High	Asset/System/Process
Strong wind	Low/Med/High	Low/Med/High	Asset/System/Process

Specific Risk Assessments

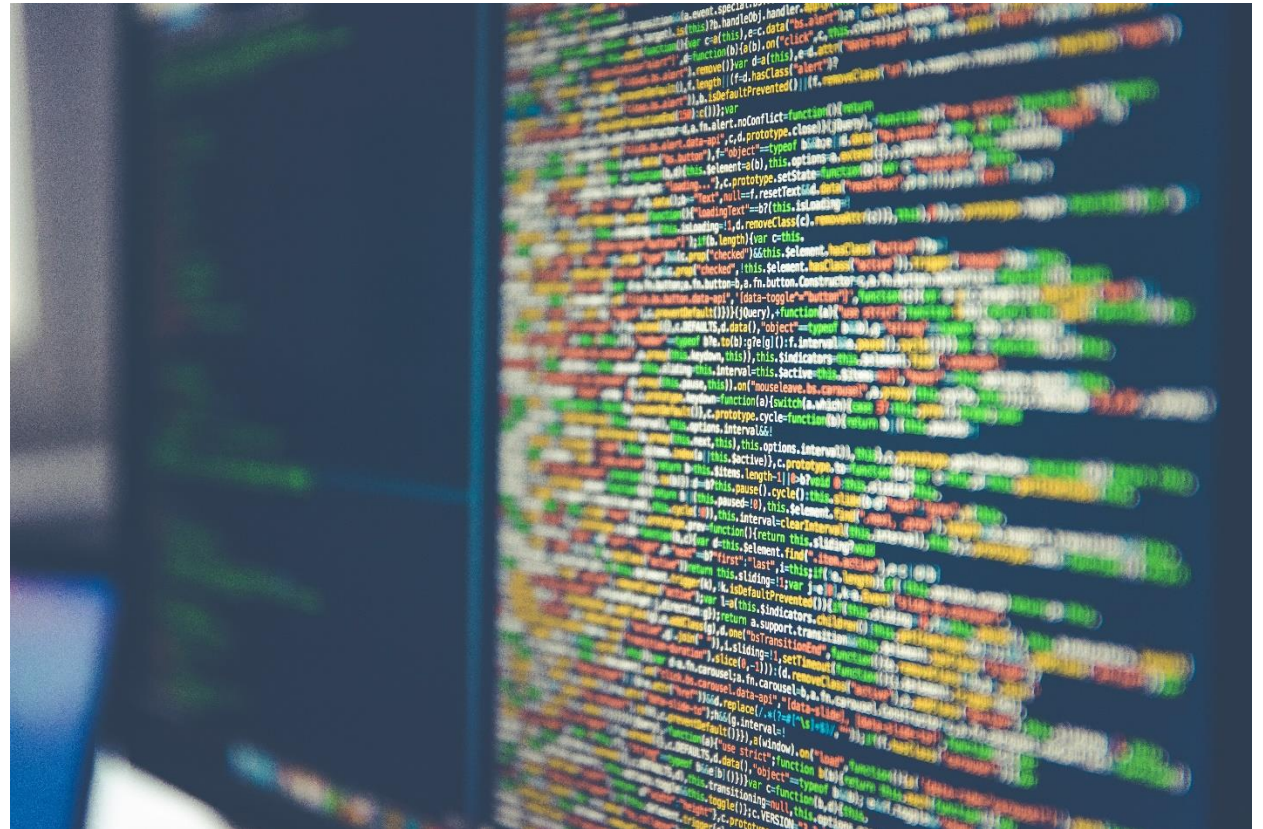
Risk Assessment (Essential Utilities)	
Electricity	Primary System Primary Backup Alternate Backup(s)
Potable Water	
Equipment/Sanitation Water	
Fuel – Operations	
Fuel - Transportation	
Medical Gases	
HVAC	



Organizing Responses

Once the responses were all received we prioritized the responses as chapters in the plan – outlined below

- Risk Assessment
- Vulnerability Analysis
- Community Health Resilience
- Public Health Infrastructure
- Infrastructure Resilience
- Energy and Resource Management
- Supply Chain and Logistics
- Health and Safety
- Monitoring and Evaluation



Draft And Plan Review

First Draft presented to Green Team for review

Feedback and edits took approximately 3 months

Completed Draft submitted to Administration for review

Climate Resiliency Plan published on our website

<https://www.texaschildrens.org/about-us/sustainability>

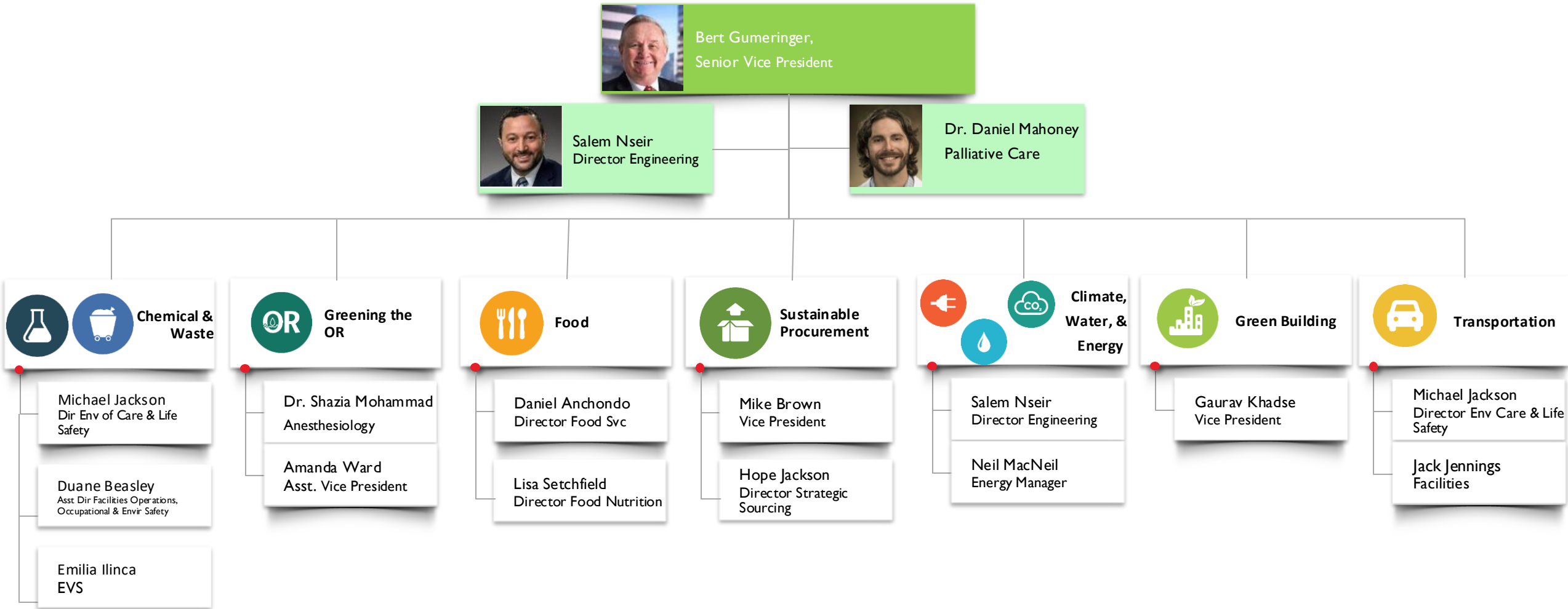
Hope for the best, plan for the rest



Texas Children's®

COMMENTS/QUESTIONS?

SUSTAINABILITY TEAM AKA THE GREEN TEAM



SUSTAINABILITY (GREEN) TEAM