Building a Green Texas Program with our Youth

June 16, 2022
About SPEER:

SPEER’s mission is to accelerate the adoption of advanced building systems and energy efficient products and services in the South-central US.

Our Work
• Policy
• Building Codes
• High Performance Buildings
• Local Government

Our Members
• Advocacy Orgs
• Cities
• ESCOs
• Manufacturers
• Trade Associations
• Utilities
What is the City Efficiency Leadership Council (CELC)?
A collaborative network of Texas cities, school districts, and other government entities engaged in partnership and resource exchange in an effort to expand the adoption of energy management best practices in the public sector.

How can CELC support energy management in my city?
Regional Roundtable Luncheons, Webinars, City Best Practices Case Studies, City Efficiency Toolkit, Local Government Energy Reporting Assistance, Portfolio Baselining and Benchmarking, Technical Support

How can my city get involved?
Contact SPEER to set up a brief intake interview OR Attend a regional roundtable luncheon

Who can join CELC?
Open to staff of any public jurisdiction including city and county governments, public school districts, and other publically funded entities.
Speaker: Elizabeth Stephens, Program Manager
EcoRise
EcoRise & Building a Green Texas

Increasing Representation in the Fields of Sustainability and Green Building

June 2022 - CLEC
Your Presenters Today

Brittany Jayroe
EcoRise
Director of Youth Programs

Elizabeth Stephens
EcoRise
Building a Green Texas
Program Manager
EcoRise – Education For A Resilient Future

EcoRise mobilizes a new generation of leaders to design healthy, just, and thriving communities for all. We work at the intersection of sustainability education, climate resilience, and environmental justice by elevating youth voices and advancing student-led solutions to real-world challenges. As a 501(c)(3) non-profit organization, we offer a range of curricula and programs for students, teachers, school districts, and partners, that are designed to advance environmental literacy, support sustainable schools, and promote equitable access to green career pathways.
CURRICULA & PROGRAMS

Our train-the-teacher model and online platform provide K–12 curricula, professional development, and community resources to educators around the world. EcoRise programs develop the next generation of creative problem solvers by offering teachers and students the tools, community, and inspiration needed to design, cultivate, and embrace sustainable solutions to environmental and social issues in their communities.
Building a Green Texas

Timeline
• 2018 – Launch: Professional Development, mentors
• 2019 – Growth: 12 states, 53 teachers
• 2020-2023 – Building a Green Texas programs

Professional Development
• Building a Green Texas programs

Curriculum
• Green Building Lessons for a Sustainable Future
• Sustainable Intelligence
• LEED certification preparation and support

Instruction, Assessment & Internships
• Project-based and self-paced options
• Showcases
• Student Innovation Fund (classroom grants)
• LEED Green Associate certification opportunity
Goals of a LEED project:

1. **Climate Change**
   - Reverse human contributions.

2. **Human Health**
   - Promote human well-being.

3. **Water Resources**
   - Protect and restore.

4. **Biodiversity**
   - Protect and strengthen ecosystems.

5. **Material Resources**
   - Promote sustainable, regenerative resource cycles.

6. **Greener Economy**
   - Build a greener economy; support the local economy.

7. **Community**
   - Enhance social fairness, justice, and quality of life for all.
Building a Green Texas - program goals

01 Increase knowledge, skills, and confidence related to green building concepts

02 Provide active-learning experiences and career exposure

03 Consider scientific uncertainty, cultural knowledge, and diverse community values

04 Address the need for a more diverse workforce
Building a Green Texas - DEI

Percent of Americans in Architecture, Construction, or Energy

- African American
- Latinx
- Asian
- Female
- Male

Building a Green Texas, CLEC, June 16, 2022
Building a Green Texas - Program Plan

Year 1: 2020-2021 School Year
- 5 schools in Central Texas (CTX)
- 5-8 Teachers
- 100-160 Students
- 4 school-year internship field experiences
- 10 paid summer internships
- 1 Student Innovation Showcase

Year 2: 2021-2022 School Year
- 9 schools: 7 CTX, 2 Gulf Coast
- 9-12 Teachers
- 180-240 Students
- 4 school-year internship field experiences
- 15 paid summer internships
- 2 Student Innovation Showcase

Year 3: 2022-2023 School Year
- 10-15 schools: 10 CTX, 5 Gulf Coast
- 15-20 Teachers
- 300-400 Students
- 4 school-year internship field experiences
- 20 paid summer internships
- 2 Student Innovation Showcases

Building a Green Texas, CLEC, June 16, 2022
“A Research-Practice Partnership to Advance Anti-Racist Green Building, Education, and Practice,”

by Assistant Professor Miriam Solis, Abby Randall, Deputy Director, EcoRise; and Will Davies, Ph.D. candidate, UT Austin and Policy and Data Analyst at Breakthrough Central Texas
## Building a Green Texas Program - SY2021-22

- **Educator workshops and student field experiences:**

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Spring Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 30: Module 1: Systems Thinking</td>
<td>Tuesdays, 6:00-7:30pm starting January 25th</td>
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<tr>
<td>- Brittany Jayroe &amp; Elizabeth Stephens</td>
<td>- USGBC, LEED Green Associate Prep-Take-Teach</td>
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<tr>
<td>- Asomgyee Pamoja &amp; Elizabeth Stephens</td>
<td>- Asomgyee Pamoja, Zakhia Grant, &amp; Elizabeth Stephens</td>
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<tr>
<td>December 9: Student Field Experience to the Meadows</td>
<td>Late March: Virtual Field Experience for Gulf</td>
</tr>
<tr>
<td>Center, San Marcos</td>
<td>Coast &amp; Central Texas students, Microplastics with</td>
</tr>
<tr>
<td>- Brittany Jayroe &amp; Sharon Huerta</td>
<td>Citizen Science!</td>
</tr>
<tr>
<td></td>
<td>- University of Texas Marine Science Institute</td>
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Building a Green Texas, CLEC, June 16, 2022
Recruiting **Building a Green Texas Teachers**

- CTE Directors in Austin ISD & Del Valle ISD share opportunity, focus on relevant courses

- CTE & Science teachers at Title 1 high school campuses

- Teachers were offered $500 stipends, professional learning, access to curriculum resources, and opportunity to prepare for and attempt the LEED Green Associate Certification exam
“I found the Greenscaping lesson was the most useful for my aquatic science classes. I have been teaching the classes about native plants, invasive species, [and] storm water runoff, the problems with lawns and rain gardens all semester. This tied the semester up nicely.” –Navarro HS Science Teacher
The picture can't be displayed.
IS IT A NURDLE?

YES

These are nurdles, or pre-production plastic pellets, used by manufacturers to create new plastic products. Please count these for the hunt.

1. Small in size
2. Rigid plastic
3. Small or disk shaped
4. Clean or opaque
5. Various colours

NO

These look similar but are not nurdles! Please don’t count them for the hunt.

1. Variable in size
2. Deep ridges
3. Not plastic

BIODEADS
- Other black or grey
- Can be green, blue, or beige
- Wrinkled, ridge, or bumpy

SECONDARY MICROPLASTICS
- Angular fragments
- Irregular shapes

AIRSOFT PELLETS
- Spherical
- Brightly coloured

EXPANDED POLYSTYRENE
- Spherical
- Brightly coloured

BIODEADS
- Circular
- Irritated shape

CRINOID FOSSILS
- Variable in size
- Deep ridges
- Not plastic

NURDLE IDENTIFICATION CHART

RECORD THE NUMBER OF NURDLES YOU COUNT ON THE OTHERSIDE OF THIS SHEET

WWW.NURDLEHUNT.ORG.UK
Green Careers Academy – Internship
CENTRAL TEXAS – SUMMER, 2022

EcoRise seeks innovative high school students to join our Summer 2022 Green Careers Academy (GCA) Internship cohort. GCA interns will participate in an immersive, paid summer internship experience designed to provide exposure to a wide variety of green careers, sharpen 21st Century workplace skills, and foster connections with a network of green professionals representing a variety of sustainability focus areas like community resilience, green building, conservation, and more.

PROGRAM OVERVIEW

The Green Careers Academy Internship is a paid, 7-week, professional learning experience that offers meaningful, practical work in career fields related to sustainability.

- Stage 1 (3 weeks). As a cohort, interns will receive professional development in early career and 21st Century skill building.
- Stage 2 (4 weeks) Each intern will be placed with a mentor in a local organization or company for an 80-hour internship. Interns will work on projects designed by their mentor related to a relevant sustainability topic. The summer will culminate in showcase presentations celebrating key learnings and project progress with the whole GCA internship community.

INTERNSHIP GOALS

1) Increase interns’ knowledge of green careers and address the need for a more diverse green workforce.
2) Develop early career and 21st Century skills.
3) Provide interns with active learning experiences with scientists, civic leaders, and green professionals as they engage in and/or design local or regional projects.
4) Increase interns’ ability to consider cultural knowledge and diverse community values when working in the environmental sector.
5) Increase interns’ knowledge, skills, and confidence to reason about the ways humans and nature interact through climate science, green building, and environmental justice.

COMPENSATION & EXPECTATIONS

Interns will receive a stipend of $2,200, paid in two installments of $1,100. Stipends will be issued upon successful completion of assigned activities, participation in scheduled workshops and weekly check-ins, and end-of-summer GCA showcase presentation.

ELIGIBILITY REQUIREMENTS

1) Enrolled in a public high school located in Central Texas
2) A rising junior or rising senior
3) Demonstrated interest in sustainability-related career pathways
4) Available to attend daily GCA professional development sessions (June 13th–June 24th) and work ~20 hours per week at an internship placement (June 27th–July 29th)
Q&A

Join our EcoRise newsletter to learn more.

Consider becoming a green careers mentor and/or hosting an EcoRise intern!
Thank you!

brittany@ecorise.org
elizabeth@ecorise.org
Resources

Contact Information:
Shaun Auckland,
Local Government Program Manager,
SPEER
sauckland@eepartnership.org

For More Information:
• SPEER YouTube Channel
• CELC Upcoming Events
  www.eepartnership.org
SPEER
The South-central Partnership for Energy Efficiency as a Resource

CELC City Efficiency Leadership Council