



# ESI: Steward presenters



**Paola Adame**

Communications Associate

Sustainability Champions  
Lead

**Connor Jarvis**

EHS Associate

Waste Reduction Lead  
Wildlife Team Member

**Hailey Jones**

Continuous Improvement  
Specialist

Wildlife Team Member –  
Beekeeper

**Caroline Macklin**

EHS Associate

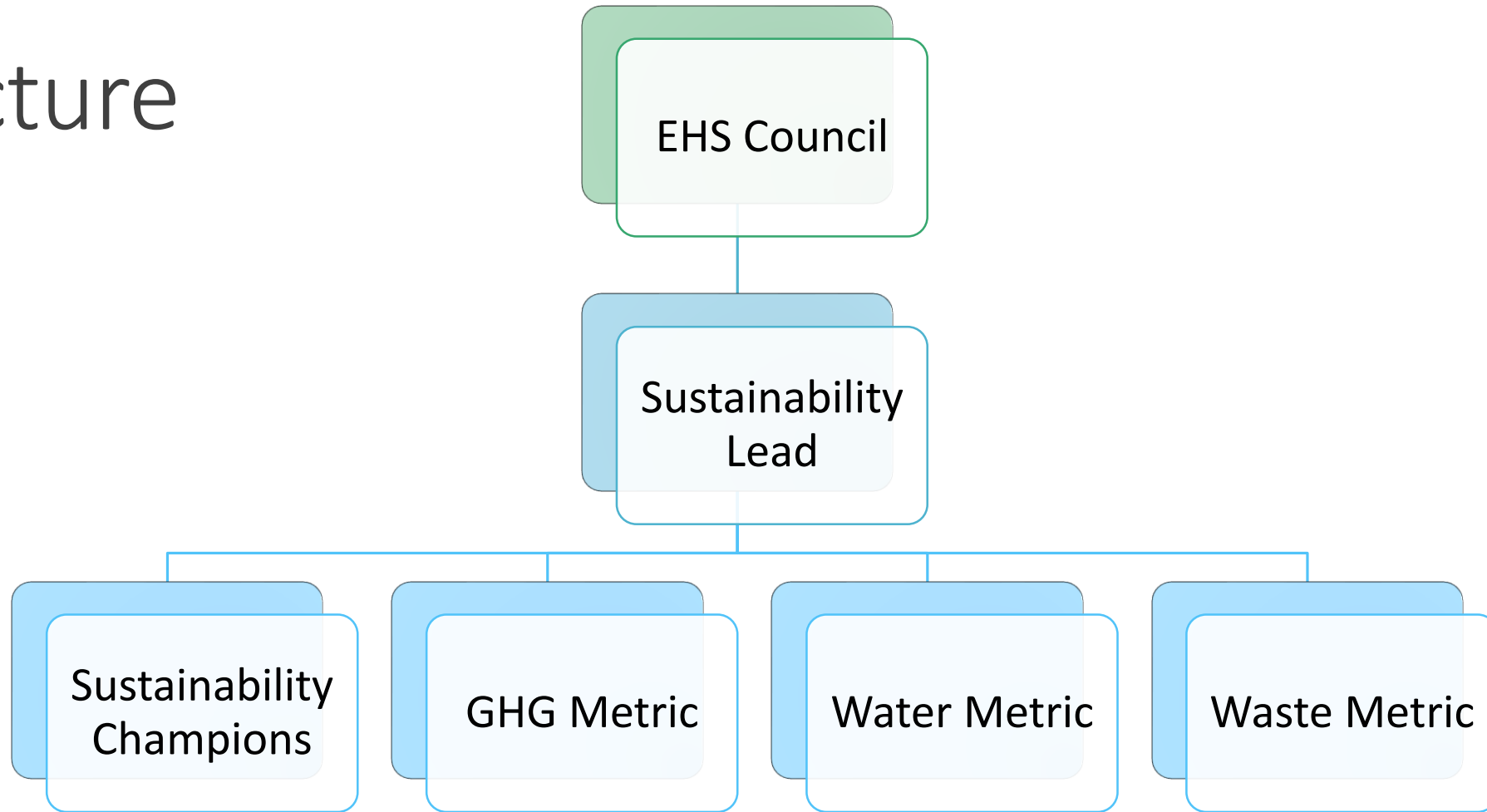
Sustainability Site Lead

**Chuck Powell**

EHS Manager

CHMM  
REM

# Structure

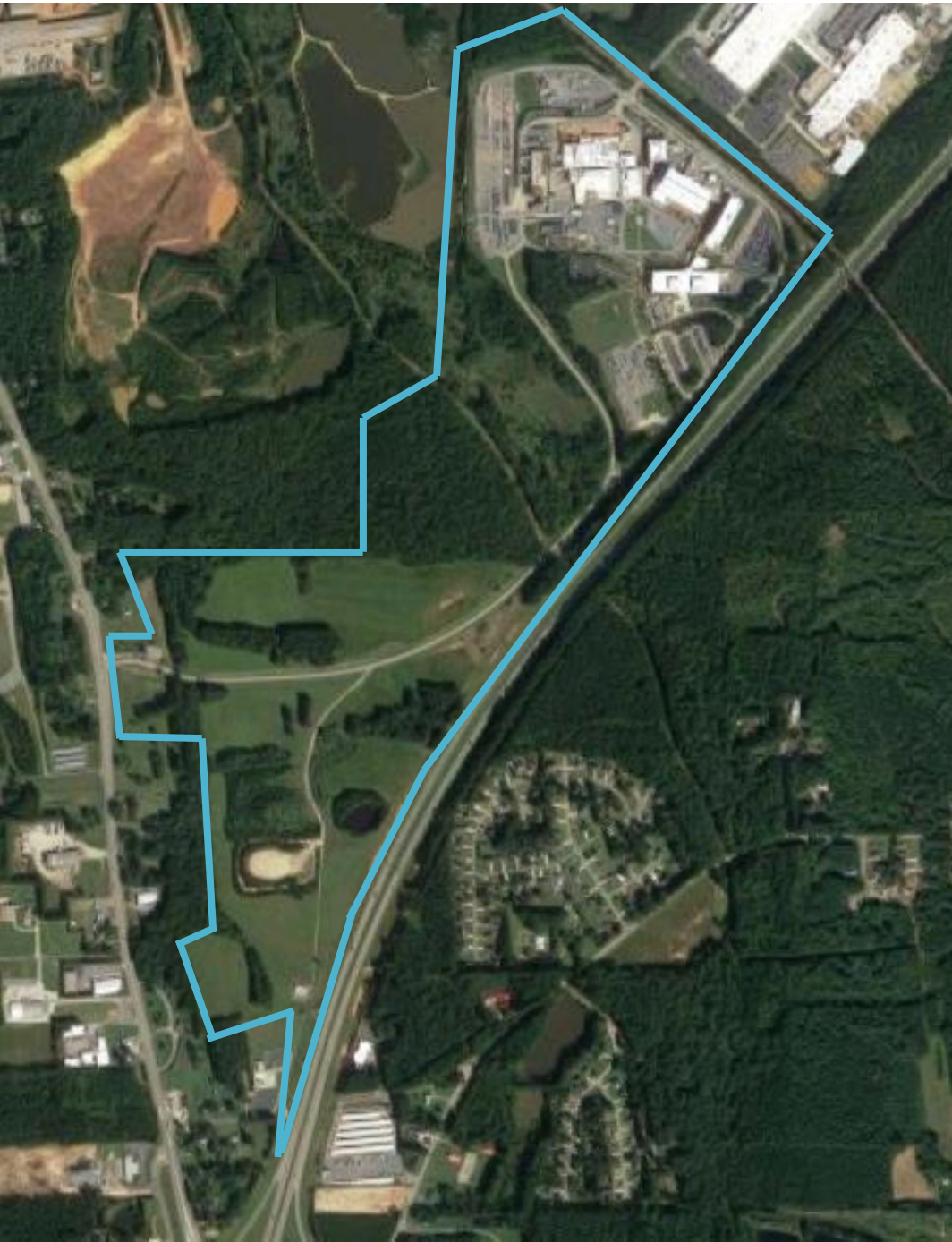


**Culture**

**+**

**Technical Project Implementation**

Sanford, North Carolina  
Geographical Location – Central NC  
Land Area ~ 240 acres



# What do we do?

---

## Vaccine Manufacturing

- Commercial Drug Substances & Intermediates
- Clinical Trial Materials & Commercial Launch
- Cell Banks



## Gene Therapy Manufacturing


- Manufacture of cutting-edge gene therapy products from seed vial to finished dose

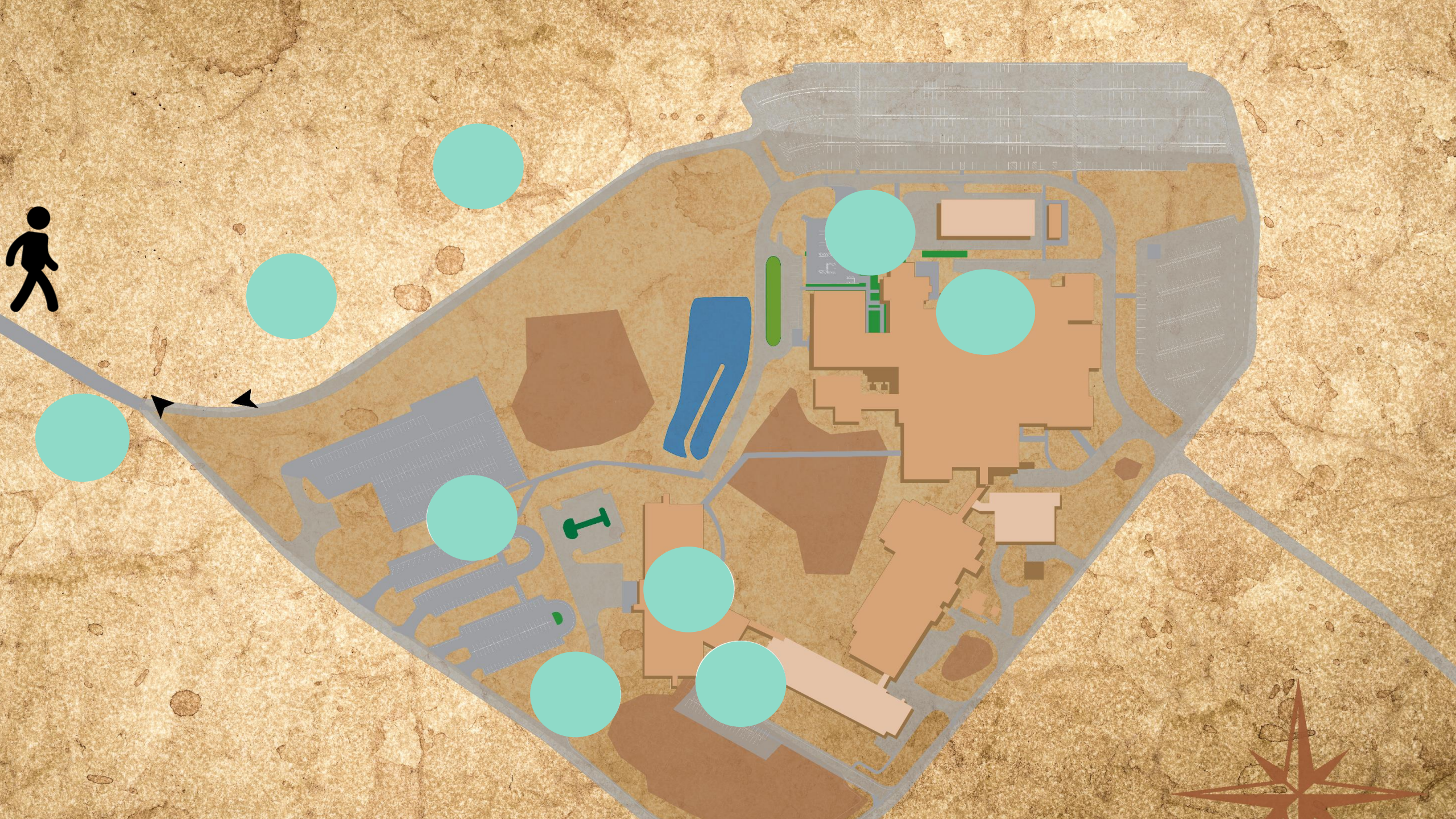


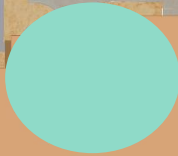
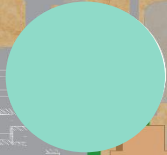
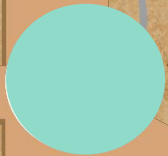
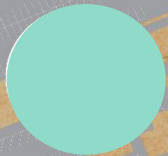
# Sanford's Green Journey



 = Sustainability Project

 Please use the chat function to send any questions to our panelists during the session

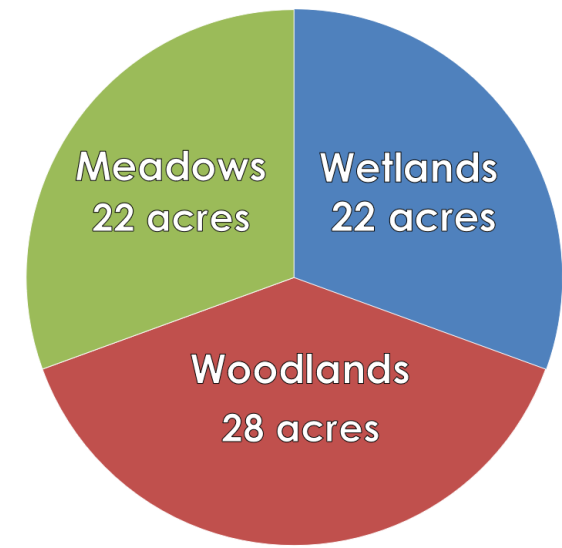






# Wildlife & Industry Together (W.A.I.T)

- 72 acres of land dedicated to preservation
- Increases biodiversity as it is critical to the expansion of molecular diversity
- Continual learning opportunity for colleagues







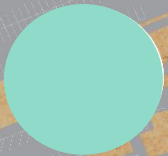
# Hiking Trails

- Cleared and maintained by the Wildlife Committee
- Promotes Joy, physical and mental health through exercise and nature
- Connect colleagues with the importance of our environmental compliance obligations



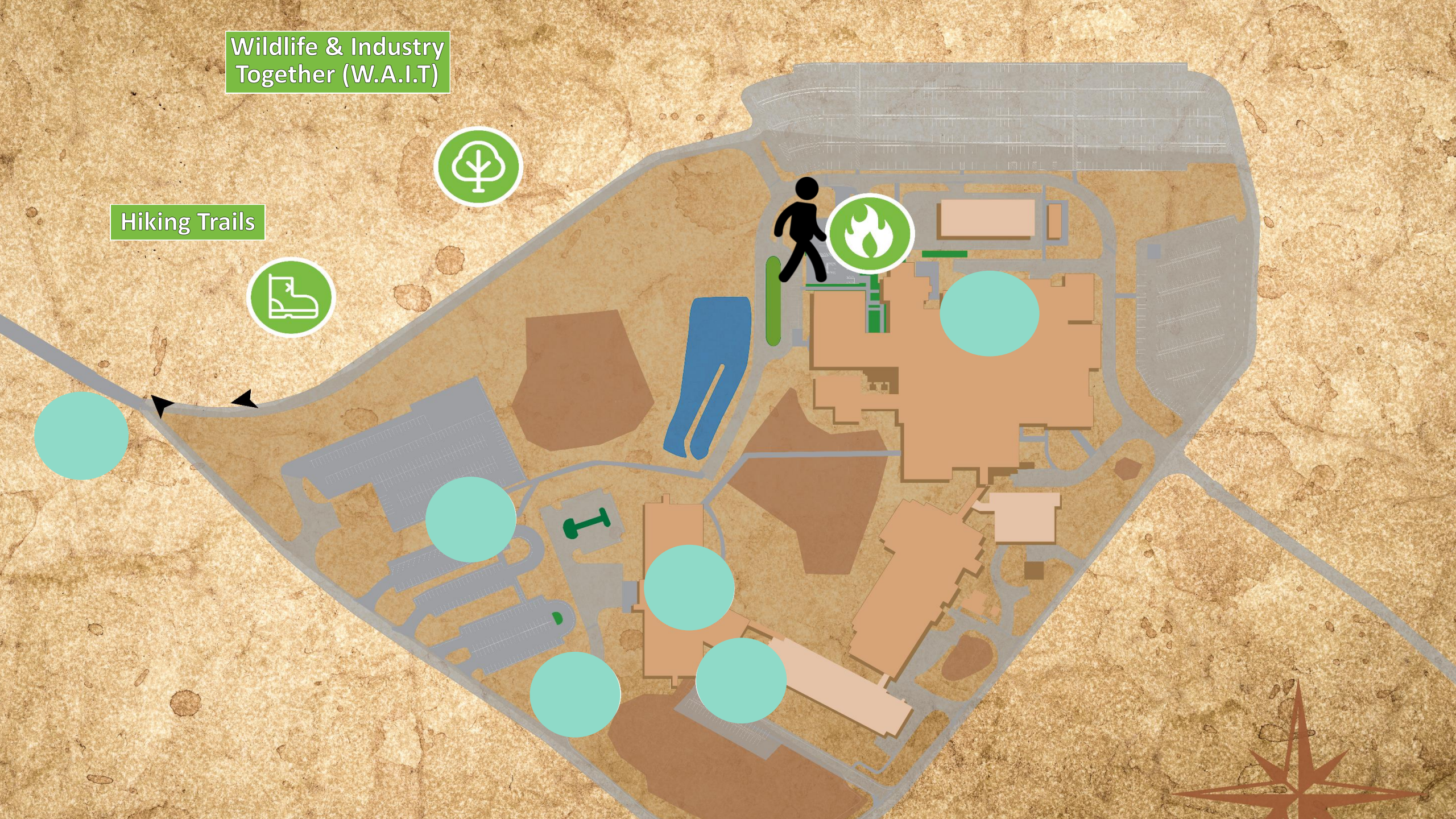
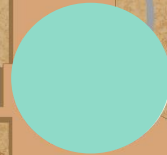
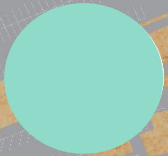
Wildlife & Industry  
Together (W.A.I.T)

Hiking Trails



Wildlife & Industry  
Together (W.A.I.T)

Hiking Trails





# Biomass Boiler

- Uses woodchips from local logging operations as fuel
- Supplies up to 70% of the site's plant steam demand
- Carbon neutral fuel source that generates renewable energy credits (RECs)





---

Which activity on site uses the most energy?

- a. Steam & Hot Water Generation
- b. WFI Generation
- c. HVAC Heating & Cooling
- d. Lighting

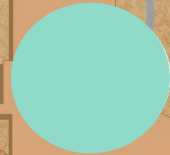
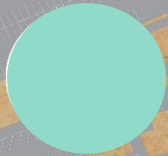


Wildlife & Industry  
Together (W.A.I.T)

Hiking Trails



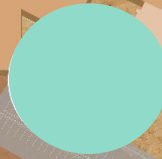
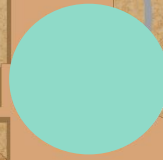
Biomass Boiler



Wildlife & Industry  
Together (W.A.I.T)

Hiking Trails

Biomass Boiler





## Single-Use Gasification



- **First-in-industry approach to treatment of single use waste**
- **Heats plastics to high temperatures creating a fuel rich syngas**
- **Began in GTx Manufacturing and is being phased in across the site**



Wildlife & Industry  
Together (W.A.I.T)

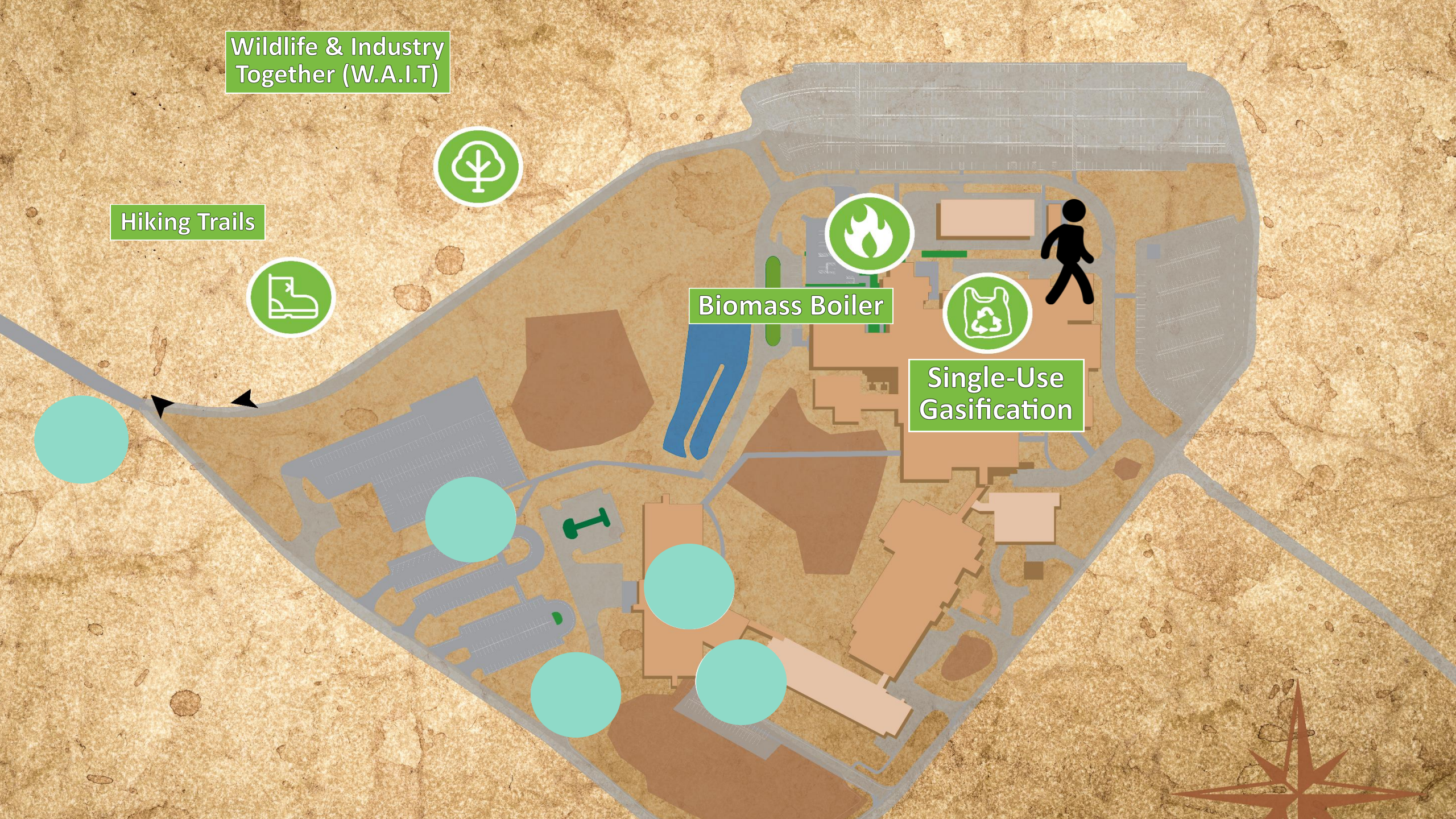
Hiking Trails



Biomass Boiler



Single-Use  
Gasification

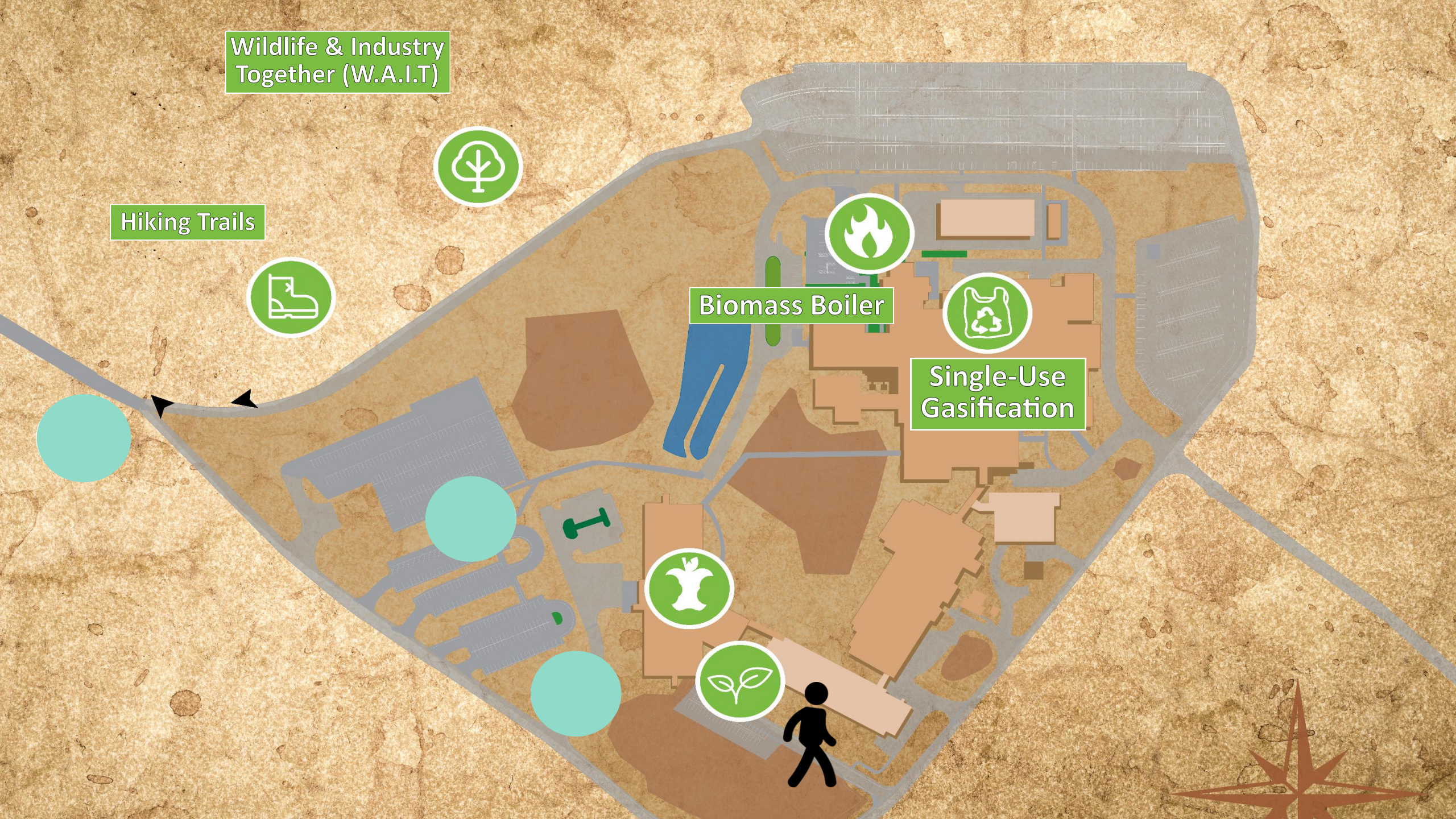


Wildlife & Industry  
Together (W.A.I.T)

Hiking Trails

Biomass Boiler

Single-Use  
Gasification





# Composting

- Alternative treatment method for food scraps
- Creates a valuable soil amendment used in local farming
- Reduces methane emissions associated with landfills





---

On average, in the United States, 52% of all waste goes to the landfill. In 2019 Sanford only sent what percent of its waste to landfill?

a. 7%

b. 15%



c. 25%

d. 32%



# Herb Garden

- Self-sustaining source of flavors for the café
- Supports our site's diverse ecosystem as food for pollinators
- Utilizes compost from our own facility completing a full circle



Wildlife & Industry  
Together (W.A.I.T)

Hiking Trails



Biomass Boiler



Single-Use  
Gasification

Composting



Herb Garden



Wildlife & Industry  
Together (W.A.I.T)

Hiking Trails



Biomass Boiler



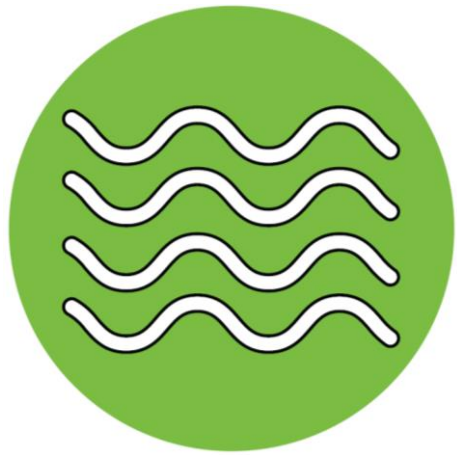
Single-Use  
Gasification

Composting



Herb Garden





## Cooling Tower- Moss Treatment

- Provides cool water for AC, chilled water, and other utility systems
- Utilizes a natural biological treatment vs chemical treatment
- Greatly improves water quality translating to water savings





Wildlife & Industry  
Together (W.A.I.T)

Hiking Trails



Biomass Boiler



Single-Use  
Gasification

Composting



Herb Garden



Cooling Tower-  
Moss Treatment



Wildlife & Industry  
Together (W.A.I.T)

Hiking Trails



Cooling Tower-  
Moss Treatment



Composting



Herb Garden



Biomass Boiler



Single-Use  
Gasification





# Van Pool

- Up to 14 colleagues can ride together
- Reduces GHG emissions
- Provides valuable time back to colleagues and reduces car maintenance



Wildlife & Industry  
Together (W.A.I.T)

Hiking Trails



Biomass Boiler



Single-Use  
Gasification



Van Pool



Composting



Cooling Tower-  
Moss Treatment



Herb Garden



Wildlife & Industry  
Together (W.A.I.T)

Hiking Trails

Biomass Boiler

Single-Use  
Gasification

Van Pool

Composting

Herb Garden

Cooling Tower-  
Moss Treatment





# Beehives

- Increase biodiversity of the site's ecosystems
- Support a pollinator species that has been in rapid decline
- Increased colleague engagement in maintaining hives



?

---

About how many bees are in a colony?

- a. 500
- b. 1,000
- c. 10,000
- d. 50,000



Wildlife & Industry  
Together (W.A.I.T)

Hiking Trails



Beehives



Van Pool



Composting



Cooling Tower-  
Moss Treatment



Herb Garden



Biomass Boiler



Single-Use  
Gasification





# Recognition & Awards

---

2019 Environmental Steward



2019 Safety & Sustainability Star Winner



*Sanford Sustainability Structuring for Success*



# Our Steward Culture

---

We treat sustainability as an extension of our *Actively Caring* culture

Our sustainability program has been successful because of the inclusive culture we have created

Every site is capable!

# Discussion & Questions

---

# Contact Information

---

Caroline Macklin – EHS Associate

Email: [Caroline.Macklin@Pfizer.com](mailto:Caroline.Macklin@Pfizer.com)

Connor Jarvis – EHS Associate

Email: [Connor.Jarvis@Pfizer.com](mailto:Connor.Jarvis@Pfizer.com)

Chuck Powell – EHS Manager

Email: [Charles.Powell@Pfizer.com](mailto:Charles.Powell@Pfizer.com)

Paola Adame – Communications Associate

Email: [Paola.Adame@Pfizer.com](mailto:Paola.Adame@Pfizer.com)

Hailey Jones – CI Specialist

Email: [Hailey.Jones@Pfizer.com](mailto:Hailey.Jones@Pfizer.com)