



2024 YOUTH CLIMATE SUMMIT

Agenda and Climate Action Plan

Museum of Life and Science
Durham, NC
February 18-19, 2024



Sponsored By:

Cornell Douglas Foundation
NC Science Museums Grant Program
Wegmans
Jennifer and Sandy Williams



Agenda

This powerful, educational experience will help high school students become leaders of change working towards a more sustainable future in their schools, communities, and beyond. The Summit, aligned with North Carolina State Science Standards, will feature workshops facilitated by local community leaders, organizers, and scientists.

This youth-led event is hosted by a dedicated group of teens who meet after school throughout the fall with guidance from our Museum team to curate an event that is impactful and relevant for an audience of their peers.

Follow NC Youth Climate Summit’s Instagram!



Sunday, February 18, 2024

Climate Summit Kick-off

- 10:00 - 10:45am** Check In and Registration on Southside Campus by Group Check In
- 10:00am - 12:00pm/1:00 - 3:00pm** Hands on Climate Science activities in The Lab
- 10:30am - 12:00pm/ 1:30 - 2:00pm** Concurrent Service Opportunities

Engage in climate action with hands-on opportunities around the Museum’s campus. *Sign up for morning or afternoon session in advance.*

11:00 - 11:30am/ 1:00 - 1:30pm Wolf Conservation Talk at Red Wolf Habitat in Explore the Wild

10:00am - 5:00pm Explore the Museum of Life and Science, including the new Climate & Sustainability exhibit

Monday, February 19, 2024

Youth Climate Summit

8:30 - 9:00am Check In and Registration

Coffee, juice, and breakfast pastries will be available as you arrive. Teams will check in, get their nametags, and sign up for which workshops they would like to attend.

9:00 - 10:00am Morning Plenary Session in the Mercury Meeting Room

- Welcome Address** by Musuem of Life and Science President & CEO Carrie Heinonen
- Special Address** by Mayor of Durham, Leonardo Williams
- Climate Change 101** by Youth Climate Summit Teen Advisory Board

10:00 - 10:40am & 10:50 - 11:30am Morning Workshops (*Choose 2 to attend*)

- Game on for Climate Action! Creating your Path to a Zero Emissions Future*
- Planning for Climate Action: Rewriting Systems of Power and Inequality*
- Radical Repair Workshop*
- YOUth Have Power: Lobbying for Change*
- MENTOR Session: How to Start an Environmental Club (10:50am - 11:30am ONLY)*

11:30am - 12:45pm Lunch, Eco-Fair, and Poster Session at Cafe Plaza

Enjoy a pasta and salad buffet while you explore the Eco Fair and Poster Session. Engage with climate researchers, educators, and activists and learn about how you can get invloved!

12:45 - 1:35pm Concurrent Workshop Block 3 and Mentor Workshop (*Choose 1 to attend*)

- Climate Advocacy: Capture the Power of Your Ideas*
- Building a Greenway: Environmental Justice Case Study*
- Food Forest for People and Pollinators*
- Queer Ecologies for Community*
- MENTOR Session: Supporting Student Activism*

1:45 - 2:30pm Afternoon Plenary Session in the Mercury Meeting Room

- Special Address** by Secretary Reid Wilson of the North Carolina Department of Natural and Cultural Resources
- Keynote Address** by Dr. Kathryn Stevenson from the College of Natural Resources at North Carolina State University

2:30 - 3:10pm Climate Action Planning

Teens will meet with their team and their adult mentors to create a Climate Action Plan they can take back to their schools and communities.

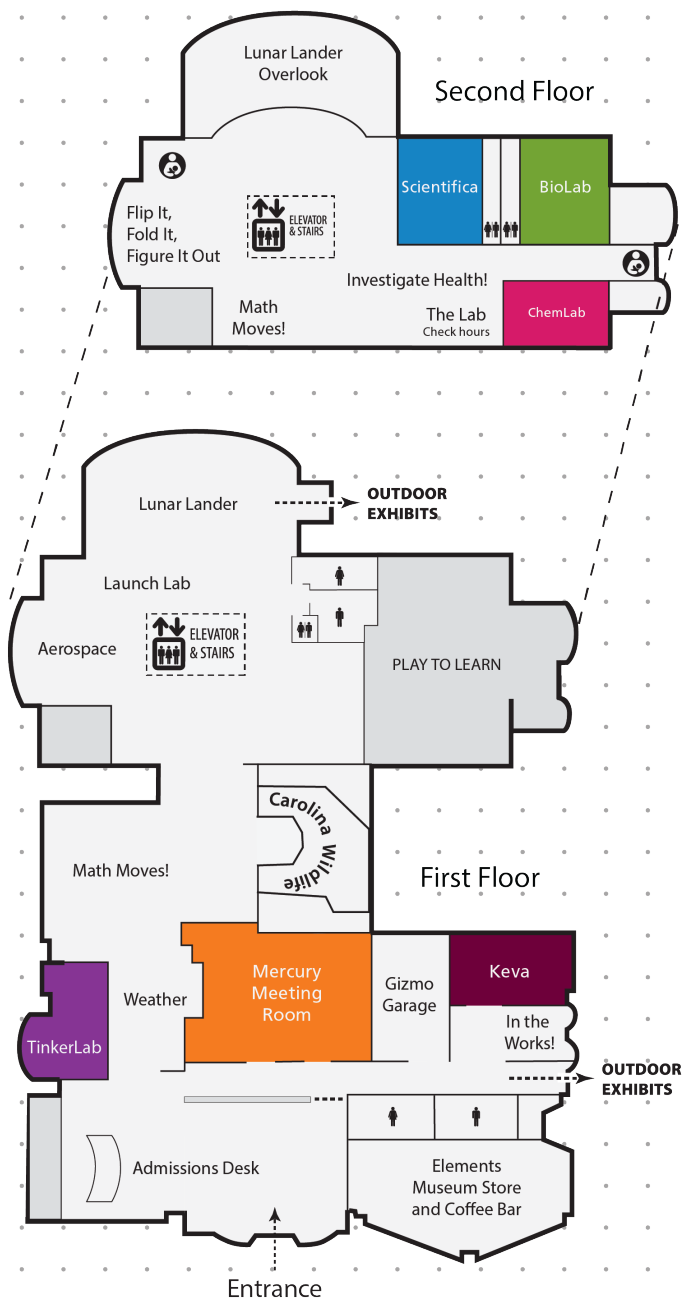
3:20 - 4:00pm Climate Action Planning Share Out and Closing Address

4:00 - 4:30pm Social and Snacks

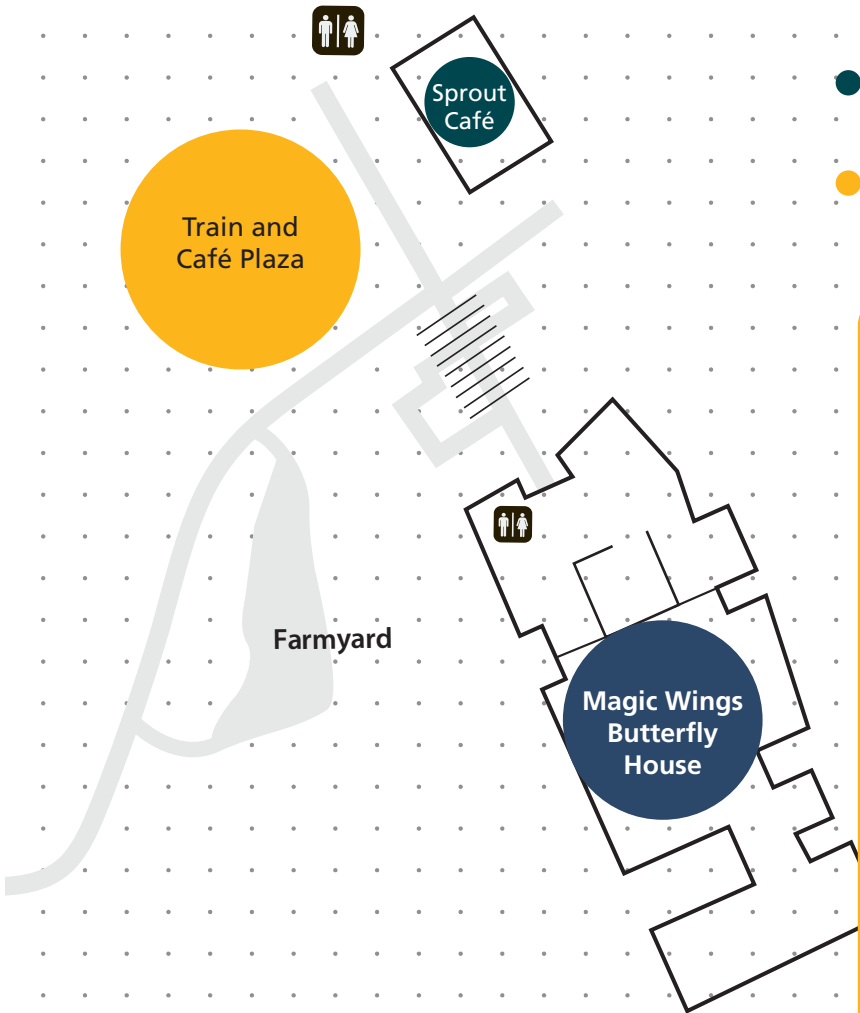
Continue to connect with each other, workshop leaders, and Eco Fair exhibitors. There will be snacks available in the lobby and the Main Museum building will be open to explore.

Museum Map - Main Building

- **BioLab - 2nd Floor**
 - Planning for Climate Justice
 - Climate Advocacy: Capture the Power of Your Ideas
- **ChemLab - 2nd Floor**
 - YOUTH Have Power: Lobbying for Change
 - *Mentor Workshop:* Supporting Student Activism
- **Scientifica - 2nd Floor**
 - Game on for Climate Action! Creating your Path to a Zero Emissions Future
 - Building a Greenway: Environmental Justice Case Study
- **TinkerLab - 1st Floor**
 - Radical Repair Workshop
- **Keva Gallery - 1st Floor**
 - *Mentor Workshop:* How to start an Environmental Club
- **Mercury Meeting Room - 1st Floor**
 - Morning Plenary Session
 - Climate Change 101
 - Afternoon Plenary Session
 - Closing Address



Museum Map - Cafe and Train Plaza



- **Butterfly House**
 - Food Forests for People and Pollinators
 - Queer Ecologies for Community
- **Sprout Café**
 - Lunch: Salad and Pasta Bar
- **Train and Café Plaza**
 - Eco Fair and Poster Session

Eco Fair Exhibitors

- Citizens Climate Lobby
- City of Durham, Arts, Culture, and Sustainable Communities
- City of Durham Dept. Solid Waste Management
- Clean Water Education Partnership
- Climate Action NC
- Conservation Corps North Carolina
- Duke Gardens
- Duke University Superfund Research Center
- Durham County Sustainability
- Ellerbe Creek Watershed Association
- Environmental Protection Agency
- Keep Durham Beautiful
- NC Biodiversity Project and New Hope Audubon
- NC Wildlife Federation
- Observe Nature, Contribute to Research
- PBS NC Education
- Seven Directions of Service
- YCS Teen Advisory Board

For more info, check out Page 20.

Session Information and Presenters

Welcome Address
9:00am - 9:30am
Mercury Meeting Room



Carrie Heinonen
Museum of Life and Science

Carrie Heinonen is President and Chief Executive Officer of the Museum of Life and Science. She joined the Museum in April 2021, two months before the Museum’s 75th Anniversary. Prior to the Museum of Life and Science, Carrie served as Director and CEO of the Museum of Northern Arizona. She earned her Master’s Degree in Public and Private Management from Yale School of Management and a Bachelor’s Degree in Art History from Dartmouth College.



Leonardo Williams
City of Durham Mayor

Mayor Leonardo Williams is a former teacher and school administrator. He was elected to Durham City Council in December 2021 and sworn in as Mayor December 2023. Mayor Williams is a proud graduate of North Carolina Central University, earning a Bachelor’s in Music Education and a Master’s in Educational Leadership.

Morning Plenary Session: Climate Change 101
9:30am - 10:00am
Mercury Meeting Room



Youth Climate Summit Teen Advisory Board
Museum of Life and Science

You’re eager to help spread the word about climate change, but are you sure you have the science straight? Here’s a quick reminder of some of the basic “hot topics” that you’ll need to “know cold” and be able to present in clear and creative ways so you’re properly empowered in your climate outreach. This session is planned and hosted by the Youth Climate Summit Teen Advisory Board

Game on for Climate Action! Creating your Path to a Zero Emissions Future
10:00am - 10:40am and
10:50am - 11:30am
Location: Scientifica



Teresa Townsend (She/Her)
Planning Communities

Join us on an exciting journey towards climate action where we’ll use a unique board game to explore climate strategies. Participants will discover the critical role of these strategies in reducing greenhouse gas emissions, promoting climate equity, fostering regeneration, and building resilience. Attendees will navigate real-world challenges and opportunities in areas such as energy, transportation, land use, and agriculture, gaining valuable insights into the interconnectedness of climate solutions. By blending education with interactive gameplay, we aim to empower young leaders with the knowledge and skills needed to make a meaningful impact on our planet’s future. Let’s turn ideas into action!

Planning for Climate Justice: Rewriting Systems of Power and Inequality
10:00am - 10:40am and
10:50am - 11:30am
Location: BioLab



Dr. Danielle Spurlock
University of North Carolina, Chapel Hill

The session will introduce and illustrate how different types of power influence the systems of inequality that place marginalized communities at higher risk for negative effects of climate change. I will describe best practices to create equitable plans that are shaped with community residents and support implementation.

Radical Repair Workshop
10:00am - 10:40am and
10:50am - 11:30am
Location: TinkerLab



Julia Gartrell
Radical Repair Workshop

The Radical Repair Workshop is a traveling public art project dedicated to the idea that repair techniques can be used in non-traditional ways to preserve memory and reuse materials. Created by artist Julia Gartrell, the RRW approaches repair from the angle of a sculptural practice. The project is housed in a vintage camper and includes a gallery, teaching space, and studio space. In this workshop RRW will present a brief slide show and teach a skills-focused hands-on clothing repair project.

YOUth Have Power: Lobbying for Change
10:00am - 10:40am and
10:50am - 11:30am
Location: ChemLab

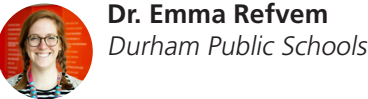


Citizen’s Climate Lobby Triangle Youth Team

Have you ever desired the refreshing sensation of Mint Chocolate Chip Ice Cream on your tongue, but the vile whiff of Birthday Cake Ice Cream stood in the way? Probably not; however, you have likely been in the position of wanting to create change without knowing how. Our lobbying workshop will give you the tools to make a difference, specifically in the realm of climate advocacy.

In this workshop we will simulate a mock lobby meeting for climate legislation via the approachable topic of ice cream flavors. Though ice cream melting is inevitable, we have the power to mitigate glacial melting. Join us as we work together to make youth voices heard. This workshop will give you the skills to interact with your elected officials and influence them on pressing issues.

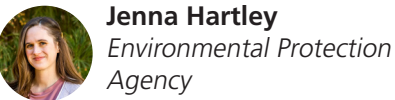
Mentor Workshop: How to Start an Environmental Club
10:50am - 11:30am
Location: Keva



Climate Advocacy: Capture the Power of Your Ideas
12:45pm -1:35pm
Location: BioLab



Building a Greenway: Environmental Justice Case Study
12:45pm -1:35pm
Location: Scientifica



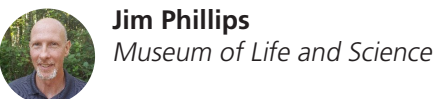
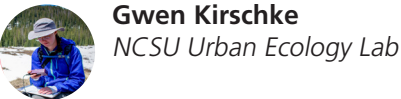
Connect with other adult mentors and club leaders to share best practices for starting and maintaining a climate club. Whether you work in a school or a different type of organization this will be an opportunity to share skills and connect.

All adult mentors are encouraged to participate.

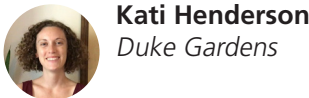
When we're passionate about something, it can be hard to distill our ideas into advocacy that influences others. That's even harder when the issue is contentious, like climate change. This session introduces the traits of effective, persuasive content and a proven planning strategy to develop it. We learn to articulate your opinion, hone your voice, identify relevant details and produce high-impact work that informs ideas and inspires action. This is the foundation for all kinds of advocacy, including writing opinion pieces, presenting at public hearings or creating audio/video assets. Each participant gets a digital playbook with examples of successful advocacy and the writing strategy. This session has been presented at the National High School Journalism Convention and The North American Association of Environmental Educators Annual Conference.

Learn how the national Environmental Justice (EJ) movement began over 40 years ago in Warren County, NC. Participate in an interactive role-play using maps from EPA's EnviroAtlas tool to select a preferred new greenway location in a hypothetical city. Parks and greenways provide many ecosystem services, such as health and environmental benefits, but not all people have equal access to them. You'll be assigned different stakeholder roles and challenged with meeting the needs of your stakeholder group while also considering EJ using maps that provide race and income data for the city. Each group will present their recommended greenway location at a mock town hall meeting. This role-play-based workshop will help to develop connections between the environment, human health, greenways, and using maps in decision-making.

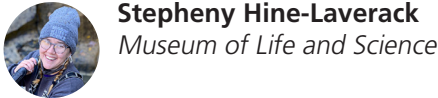
Food Forest for People and Pollinators
12:45pm -1:35pm
Location: LepLab, Butterfly House



Queer Ecologies for Community
12:45pm -1:35pm
Location: TinkerLab



Mentor Workshop Supporting Student Activism
12:45pm -1:35pm
Location: ChemLab



Food forests are gardens that contain a diverse array of edible plants. They can be beneficial to both humans and pollinators as a food source. In this workshop, you will learn about the importance and diversity of native pollinators, as well as best practices on how to build a food forest in your community from the NCSU Urban Ecology Lab and the Museum of Life and Science.

We'll start with a grounding activity to connect with yourself and a plant. Then you'll get a foundation in queer ecology, from the conceptual to real-world examples. We'll consider how queer ecology meshes with what else you've learned about biology & ecology. We'll finish with an activity bridging ideas from queer ecology with your school setting. The ideas you develop in this activity will provide a foundation for developing your climate action plan with community interconnectedness at its heart.

This workshop will give adult mentors tools and resources for supporting youth in developing and implementing a Climate Action Plan.

All adult mentors are expected to participate.

Afternoon Plenary Session
1:45pm - 2:30pm
Mercury Meeting Room



Secretary D. Reid Wilson
*NC Department of Natural
and Cultural Resources*

D. Reid Wilson is the Secretary of the North Carolina Department of Natural and Cultural Resources. He brings a wealth of experience in land conservation, environmental protection, and government and nonprofit leadership to the department.

Secretary Wilson has set five major priorities across the department: expanding educational content for school-age children; protecting public health; boosting local economic development; strengthening our commitment to diversity, inclusion, equity, and accessibility; and addressing climate change and community resiliency.



Kathryn Stevenson
*North Carolina State
University*

Dr. Kathryn Stevenson is an Associate Professor in the College of Natural Resources at NC State University. Her research focuses on youth and nature and looking for ways to support youth in shaping a future they are excited about. Addressing climate change is at the forefront of that goal, as is finding ways to support youth in having a voice in how we go about it.



2024 YOUTH CLIMATE SUMMIT

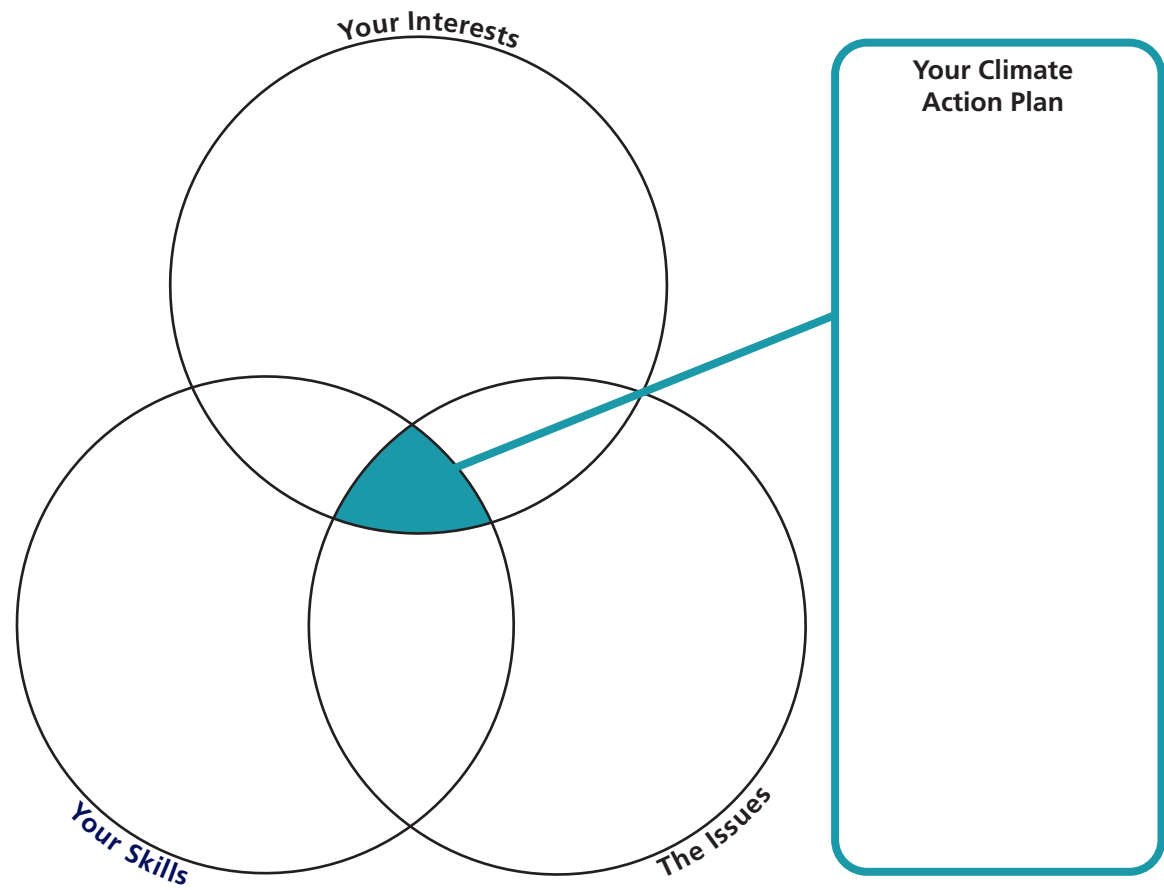


Climate Action Plan

Name: _____

Step 1: Brainstorm

Think about everything you’ve learned at the Youth Climate Summit today. Brainstorm ways you can engage your community to have a positive impact on the climate and environment. Draw pictures! Write words! Free associate! This is the moment of creativity before narrowing down to specific measures that you can enact. Then think about how you can connect your skills and interests to the issues at hand to complete the venn diagram.



Examples

Project Drawdown
Solutions Library



Grades of Green
LAUNCH Toolkit



Climate Action Venn Diagrams
Ayana Elizabeth Johnson



Step 2: Project Synthesis

Come together with your team to combine your ideas, interests and skills to create a team climate action plan. Write a 1-2 sentence summary of the project.

Our Team Climate Action Plan:

Direct Service Idea	Indirect Service Idea	Advocacy idea	Research Idea
Build birdhouses in collaboration with the local nature center or preserve to attract a bird whose home is threatened.	Organize a collection drive to ask neighbors to donate garden supplies for a community garden.	Hold a community information night or create a video to inform neighbors of reducing invasive species.	Take water samples and participate in a species count. Share data about the health of the site to inspire community action.

Step 3: Project Goals

Set at least 3 goals for this project that are **S**pecific, **M**easurable, **A**chievable, **R**ealistic, and **T**ime-bound (SMART Goals). As you craft these goals, think about how you can incorporate **J**ustice, **E**quity, **D**iversity, and **I**nclusion (JEDI) at every stage of your project. These are our JEDI - SMART Goals:

Goal 1:

Goal 2:

Goal 3:

Step 4: Who’s involved?

Who will make this project happen? Depending on our goals, others may need to participate. Check off these people in the following list.

- ☐ Students
- ☐ Faculty
- ☐ Administration
- ☐ Board of Education
- ☐ Experts/Consultants
- ☐ Others: _____
- ☐ Food Services
- ☐ Facilities
- ☐ Community Members
- ☐ Community Leaders
- ☐ Sustainability Coordinator
- ☐ Partners

Step 5: Project Resources

- What resources do we need to accomplish our goals? (supplies, money, time...etc.)
- What will the cost of these items be?
- Where will the resources come from?
- You may not have the specific costs, but you can and should list all the necessary materials you can think of!

The What	The Cost	Where From

Step 6: Tracking Success

How will we track our success? (Who will monitor our progress? What methods can we use?)

We know we are successful when:

We will measure this success by:

Who is keeping track?:

Step 7: Project Outreach

- How can we spread the word about our project?
- Who specifically should we keep informed about our progress?
- What are 3 goals for communicating about our project?

Goal/ Deliverable	Responsible Party	Deliverable Due Date

Who did we meet at the Youth Climate Summit that could help complete our climate action plan?

1. Name:

Email Address:
2. Name:

Email Address:
3. Name:

Email Address:

Step 8: Next Steps

Now that we have our plan, use the chart below to map out the team's next step of climate action! Remember, this is a living document! You should refer back to it often and update it when necessary.

Who	Next Step	Deadline
Person 1		
Person 2		
Person 3		
Person 4		
Person 5		
Person 6		
Mentor		

Climate Action Notes

Use this section to take notes from the Climate Action Planning session.

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Youth Climate Summit

Teen Advisory Board



Mina Richards
North Carolina School of
Science and Math
"Listen to the Lorax, please."



Elizabeth Boltz
Jordan High School
*"Youth should play a role in
reducing the damage to our
planet."*



Nic Cazin
Wakefield High School
*"I want to protect biodiversity
on the globe."*



Raily Greca
Homeschool
*"I want to create community in
the climate change fight."*



Arsh Jha
Panther Creek High School
*"My goal is to bring positive
environmental change to NC."*



Michaela Lamb
J.D. Clement Early College
*"It is 93 degrees, in
September!"*



Kavya Lamichhane
Enloe High School
*"Let's help other youth make an
impact on their community."*



Ashley Wohlford
North Carolina School of Science
and Math
*"Life is beautiful, it's on us to
save it."*



Elliot Bocanegra
J.D. Clement Early College
*"I want to broaden my
knowledge of climate issues."*



Hazel Freel
Durham School of the Arts
*"It's important to take action
and realize climate change."*



Cat Sanchez Totoza
City of Medicine Academy
"I want to see snow."



Justin James
Durham School of the Arts
"I wanted to make a change."

Eco Fair Exhibitors

Citizens Climate Lobby Triangle Youth Team - Learn how to advocate for passage of an "Electrify Everything" Resolution by your school district's Board of Education.

City of Durham, Arts, Culture and Sustainable Communities - Learn about the City's Climate Action Plan, Youth Leadership on the City's Environmental Affairs Board, Internship Opportunities, and volunteer opportunities.

City of Durham Dept. Solid Waste Management - Share your feedback on the development of this emergent city initiative.

Clean Water Education Partnership/ StormwaterSMART/ AmeriCorps - Check out our enviroscape, NC River Basins Map, Spin-the-Wheel macroinvertebrates game, and learn about about CWEP, StormwaterSMART, and AmeriCorps.

Climate Action NC - Fighting to build a world with clean air, clean water, lands, and a safe climate that are protected by an equitable democracy.

Conservation Corps North Carolina - Learn about summer conservation focused job opportunities for high school students in the triangle area.

Duke Gardens - Learn about Duke Gardens educational/engagement programs, high school & college opportunities.

Duke University Superfund Research Center Community Engagement Core - Engage in educational activities on contaminant exposure in soils and wild-caught fish and how to reduce exposure.

Durham County Sustainability - Spin the prize wheel and get prizes as you learn about the work Durham County is doing to create an environment rich in living resources, clean air, water, and soil – providing for human and environmental well-being.

Ellerbe Creek Watershed Association - A nonprofit working to restore a healthy, living creek that connects people and nature in Durham.

Environmental Protection Agency - Learn about the EPA and engage in hands-on activities related to climate change.

Keep Durham Beautiful - We build environmentally just, resilient, and beautiful outdoor spaces in cooperation with Durham communities. Learn about upcoming events and programs.

NC Biodiversity Project and New Hope Audubon - Working to promote public awareness of the importance of our state's native species and unique ecosystems and support conservation statewide.

NC Wildlife Federation - Learn about NCWF's Butterfly Highway program, and how to turn your yard into a wildlife-friendly space. Find out about upcoming habitat restoration projects and nature outings.

Observe Nature, Contribute to Research - Get hands-on with iNaturalist and eBird learn and how it gets used in research at NCSU.

PBS NC Education - Learn about opportunities to continue the climate conversation at PBS's upcoming unconference.

Seven Directions of Service - An Indigenous activist organization working to develop the next generation of leaders in the environmental movement.

YCS Teen Advisory Board Recruitment Table - Meet the teens who planned this Summit and learn about what it's like to be on the board.

Glossary

Terms from the Youth Climate Summit

Anthropocene - relating to or denoting the current geological age, viewed as the period during which human activity has been the dominant influence on climate and the environment.

Anthropocene extinction - the extinction of species due to human activity.

Biodiversity - the variety of life on Earth.

Blue carbon - carbon dioxide absorbed from the atmosphere and stored in the ocean.

Climate change - a long-term shift in weather patterns resulting from human activities since the Industrial Revolution.

Climate goals - an achievable long-term commitment surrounding climate policy in hopes of limiting climate change effects or reducing contributions to climate change.

Climate justice - a specific faction of the climate crisis focused primarily on the burdens of climate change affecting specific communities disproportionately.

Environmental action vs. climate action - environmental action addresses a particular hazard or environmental issue related to the natural environment or human system. In contrast, climate actions are specific efforts to reduce, minimize, or mitigate climate-related effects on the environment.

Environmentally friendly, green - not harmful to the environment

Environmental equity - addressing the unequal burdens caused by climate change and ensuring the benefits of climate change protection for all. Marginalized communities are harmed by hazardous waste, resource extraction, and other land uses from which they do not benefit

Fossil fuels - organic decayed material that formed in the Earth's crust and was turned into an energy source through burning.

Greenhouse gases - specific types of gases (such as CO²) that are trapped within the planet and remain unabsorbed for thirty to several hundred years.

Global warming - the gradual increase in overall temperature of our planet over time.

Greenwashing - making false or misleading claims about the benefit of a product to produce more sales.

Redlining - a practice of withholding specific services to residents of certain areas due to their race or ethnicity.

Urban heat islands - areas that experience higher temperatures due to infrastructure that absorbs and re-emits heat produced by the sun.

Extra Notes

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