

1.0 Program Objectives

a. Project Summary Page

Title: Green Jobs Corps: Growing a New Generation of Environmental Justice Problem-Solvers

Project Location: This project engages communities and solves problems facing the City of New Haven, CT, with a focus on six neighborhoods most impacted by environmental injustice: West Rock, West River, Newhallville, Dwight/Dixwell, Fair Haven, and The Hill.

Applicant: The New Haven Ecology Project, 501(c)3, is located on 20 acres of city parkland at [REDACTED]. Project Manager: [REDACTED]

Brief Description of Applicant Organization: Founded in 1990, the New Haven Ecology Project is a community organization inviting people across ages and identities to connect to their urban environment, build community, grow into their full potential, and contribute to a just and sustainable world. NHEP leads three linked programs: (1) Common Ground High School, the nation's longest-running environmental justice-focused public charter high school, (2) An urban farm – engaging community, building just food access, and supporting education, (3) An environmental education center, engaging 29,000+ children and adults annually.

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Project Abstract: Between Nov 2023 and Dec 2025, NHEP seeks EPA support to engage New Haven high school students in at least 200 paid jobs as environmental justice problem-solvers. These young people will work with community organizations and residents to set the vision and tackle goals – e.g., by leading community outreach activities for New Haven's next comprehensive city plan. They will directly engage 1,200+ community members in EJ problem solving and take on education and outreach efforts that engage 30,000+ people – e.g., through campaigns to generate street tree requests in their own low-income neighborhoods. They will implement on-the-ground responses to climate change, air quality, urban waters, waste, and chemical use challenges – e.g., by helping to operate our composting operation, planting 200+ street trees, and carrying out projects to reduce disproportionate climate impact. In the process, these young people will grow into environmental leaders, travel pathways to EJ careers, and help build their city's capacity to improve environmental health.

Project Type(s): Green Jobs Corps (GJC) is an environmental job training and leadership development program that engages young people in high-impact roles related to community engagement, public education, and on-the-ground action around EJ challenges.

Special Considerations: Student's work through GJC contributes to Climate Change/Disaster Resiliency – by engaging young people and adults in city-wide resiliency planning as part of city comprehensive planning; supporting youth-led climate justice action projects at the city's high schools; engaging community members in growing the tree canopy in priority neighborhoods; and reducing food miles and redirecting food waste to composting.

Environmental Issues: Green Jobs Corps will contribute primarily to *clean air*, with secondary impacts on *clean water*, *reduced pesticide use*, and *waste reduction*. GJC offers an integrated solution to these linked issues impacting New Haven neighborhoods and residents.

Partners: New Haven City Plan (government), Urban Resource Initiative (CBO/University), New Haven Climate Movement (CBO), Nappesoul (CBO), Haven's Harvest (CBO).

QAPP: This project does not involve research that requires a Quality Assurance Project Plan.

b. Environmental and Public Health information of the Underserved Community

Green Jobs Corps focuses primarily on the City of New Haven, CT, while also creating ripples beyond our small city. New Haven is a racially and economically diverse city of 134,023 residents. Approximately 30% of our city identifies as African-American, 31% Latino, 28% Caucasian, 7% Asian, and 4% other; 18% of residents are foreign-born. Between 2000 and 2020, the poverty rate grew from 22% to 26%, and the pandemic only exacerbated families' economic challenges. According to the 2020 census, more than 1 in 4 residents live below the poverty line, compared to 1 in 10 statewide, and poverty among children was nearly nine times greater in low-income New Haven neighborhoods (44 percent) than in surrounding areas.¹

Across New Haven, residents face a set of environmental burdens and hazards that result in unjust health outcomes and conditions. The life expectancy for New Haven residents is 2.1 years less than for all Connecticut residents. Rates of asthma, food insecurity, diabetes, obesity, and other chronic health challenges are all greater in New Haven than statewide. Lower family incomes, higher housing cost burdens, and lower health insurance rates compound and contribute to these health challenges. Just as importantly, these negative health outcomes disproportionately impact community members living in certain neighborhoods. Life expectancy in the Hill and Newhallville is lower than in 95% or more of communities nationally; in Dixwell and West River, it is lower than in 90% of communities, according to EJSCREEN.

With EPA support, New Haven young people will take on paid roles that contribute to solutions to a set of linked environmental justice challenges facing the neighborhoods in our city most disproportionately impacted. The primary focus of our work is on air quality and climate change:

Air quality. While concerted federal and local action has improved air quality in New Haven, EJSCREEN data demonstrates that we still have progress to make. As a whole, New Haven ranks in the 87th percentile for ground-level ozone, the 85th percentile for traffic proximity, and the 79th percentile for diesel particulates nationally. In the neighborhoods identified above – where household incomes are lowest, and health outcomes are the worst – residents face the worst air quality. Traffic Proximity is in the 95th percentile in parts or all of several of these priority neighborhoods: The Hill, Fair Haven, Dwight/Dixwell, and Newhallville. In The Hill and sections of other priority neighborhoods, the Air Toxics Cancer Risk is in the 90th percentile or higher. Ground level ozone is in the 90th percentile or higher across most of the city.

Climate change. Climate change will only exacerbate existing health and environmental disparities. As a coastal city, New Haven faces dual threats from climate change: increased threat of coastal flooding and increasingly severe coastal storms plus heat vulnerability and urban heat island effect. According to the CT Institute for Resilience & Climate Adaptation (CIRCA), many New Haven neighborhoods (which are the focus of this grant) are significantly more vulnerable to temperature rises due to factors including income, density, air quality, insurance rates, and greenspace access. Other research indicates that Dixwell and The Hill are the neighborhoods most likely to experience urban heat island effect, correlating with low tree cover in both neighborhoods. Other priority neighborhoods – West River, Fair Haven, parts of The Hill – are at greatest risk of flood inundation and coastal storm impacts, according to EJSCREEN data.²

¹ DataHaven 2021 Equity Report, www.ctdatahaven.org/sites/ctdatahaven/files/new_haven_profile_v1.pdf

² https://www.newhavenindependent.org/article/how_climate_change_will_affect_your_neighborhood;

While air quality and climate impact are the primary focus, the work that NHEP and partners take on will also have an impact on other environmental health challenges facing our neighbors:

Land Revitalization. New Haven and Connecticut face a looming solid waste crisis with significant environmental justice dimensions. Historically, nearly all trash is incinerated in two of our largest cities, which already face disproportionate environmental health burdens. Recently, one of those incinerators has been decommissioned, resulting in a significant increase in out of state hauling of solid waste – again, likely to communities that already face disproportionate environmental harms. Food reclamation and diversion represent significant opportunities to reduce solid waste challenges and also to contribute to reduced air pollution by avoiding both incineration and waste hauling. According to research aggregated by Peels on Wheels, a New Haven-based composting operation, households in New Haven produce approximately 200 tons of food scraps per week, and approximately 42% of our trash could be composted. GJC members learn about and contribute to this waste challenge by helping to operate a model medium-scale composting operation at Common Ground High School (CGHS).

Food insecurity: Throughout the United States, 33.8 million people live in food-insecure households (USDA Economic Research Service, 2022). The pandemic has worsened food insecurity in New Haven, especially for people of color. In New Haven, Black and Latinx adults were more than twice as likely to have experienced food insecurity during the pandemic than white adults. In 2019, 58% of adults in New Haven reported good or excellent access to affordable, high-quality fruits and vegetables, contrasted with 83% of neighboring town Hamden. Data from 2019 also shows that food-insecure adults in New Haven are 3.5 times more likely to frequent hospital emergency rooms (Abraham & Seaberry, et al., 2019). GJC members grow/distribute local food, meeting food needs and reducing pollution from food transport.

These environmental justice and public health challenges compound one another. Consider, for instance, the intersection of traffic proximity and food insecurity in New Haven’s lowest-income neighborhoods. A study by the Health Effect Institute concluded that traffic pollution causes asthma attacks in children and may cause a wide range of other effects, including impaired lung function and cardiovascular mortality.³ Despite exposure to traffic, low-income residents experiencing food apartheid are less likely to have the car access needed to travel to grocery stores; transport insecurity among low-income adults in 2018 was 37%, compared to 3% for high-income adults. Only 59% of low-income adults reported access to a car when they need it, vs. “nearly all other adults.”⁴ As a result, strategies that support healthy food access within these neighborhoods – through backyard gardening, mobile farm markets, food recovery programs, etc. – both decrease environmental health burdens and increase healthy food access.

Similarly, planting street trees in low-income neighborhoods has a direct impact on air quality and climate resilience while also yielding a broader set of benefits. Two studies by the Urban Resources Initiative demonstrate that lower-income neighborhoods such as Fair Haven and the Hill have less tree cover (approximately 20%) than wealthier neighborhoods like East Rock and

https://elischolar.library.yale.edu/cgi/viewcontent.cgi?article=1058&context=library_map_prize

³ <https://www.healtheffects.org/system/files/SR17Traffic%20ReviewPressRelease011310.pdf>

⁴ DataHaven. (n.d.). *25th Anniversary and Statewide Data Release Preliminary Results - November 19, 2018.*

<https://www.ctdatahaven.org/sites/ctdatahaven/files/25th%20Anniversary%20and%20Statewide%20Data%20Release%20Summary.pdf>.

Westville (approximately 40%). The disparity in tree cover directly correlates to a loss of ecosystem services – in particular, the amount of air pollution deposited and the amount of stormwater runoff eliminated. One study puts the value of ecosystem services provided by New Haven street trees at \$4,036,796 per year⁵; this value is not distributed fairly.

Through Green Jobs Corps, young people will work together with city residents to generate meaningful, lasting results related to these environmental justice challenges:

- Corps members and community members will contribute directly to improved air quality, decreased climate impact, improved climate resiliency, and other environmental health issues – by planting trees, growing and sharing locally grown food, building gardens with low-income city residents, diverting potential food waste into food recovery and compost operations, creating model climate justice action projects at their public high schools – all with a focus on residents who experience the greatest environmental injustice.
- Corps members will also increase the community’s capacity to problem-solve these issues – by leading community engagement efforts that ensure community members and environmental justice priorities are included in decision-making about the city’s next comprehensive plans; engaging community members as street tree requesters and stewards; leading educational efforts related to composting, food reclamation, and backyard gardening; and using climate demonstration projects to leverage and inspire city-wide action by the Board of Education.

Perhaps most importantly, GJC members build their capacity as environmental justice problems-solvers, and travel pathways to environmental leadership and careers. According to research by Green 2.0, only 12.4 percent of professionals in the environmental sector are people of color. By comparison, more than 75% of GJC members are young people of color. Given that the world’s residents who live in cities will increase to 68% by 2050, we need environmental leaders versed in the environmental challenges facing urban areas. More than 70% of GJC members live in the City of New Haven.

c. Organization’s Historical Connection to Underserved Community

NHEP was founded by city residents in 1990; its commitment to the community has remained steady. In 1997, NHEP took responsibility for 20 acres of abandoned city park land in West Rock, one of the city’s lowest income neighborhoods, and one of the priority neighborhoods in this proposal. Our founders worked with community members to remove dozens of truckloads of illegally dumped garbage and acres of invasive species to reclaim this site as a community resource. On this site, NHEP has created three linked programs, all engaging and responding to the needs of community residents:

- **Common Ground High School (CGHS)**, the nation’s longest-running environmental charter high school. CGHS has 225 students; 80 or more students/year participate in the GJC program, working to improve environmental quality in New Haven. CGHS students and their families reflect the racial, ethnic, and socioeconomic diversity of New Haven. Broadly, nearly 75% of students are people of color, and 63% qualify for free or reduced lunch. A large majority of High School students and their families live in the

⁵ Oversee, Suzanne (2007). Assessment of the Environmental Service Benefits of the City of New Haven’s Street Tree Population. New Haven, Connecticut: Yale School of Forestry and Environmental Science.

neighborhoods that are the focus of this proposal.

- **An environmental education center**, connecting thousands of children and adults each year with programs that build connections to nature while cultivating health and sustainability. The programs of our environmental center engage residents from every New Haven neighborhood and ripple out to these neighborhoods as well; this year, NHEP environmental educators lead a day or more of outdoor environmental education each week at 12 different New Haven public K-8 schools across the city.
- **An urban farm**, modeling sustainable agriculture, engaging city residents in educational opportunities, and providing healthy produce to the surrounding community. The Urban Farm has long been an entry point for many city residents to learn about growing their own food. Last year, our urban farm produced more than 10,000 lbs of healthy food, grown without the use of pesticides. Through free school lunch and a mobile market serving New Haven's lowest-income communities, we distribute this food as a resource for health. Four years ago, the Farm partnered with our Schoolyards Program to produce a series of Farm & Garden Conferences for New Haven public school teachers that were the precursor to the educational work described in this proposal. Farm interns, who often start as GJC students, have gone on to start urban agriculture-based projects in New Haven and other cities. One now teaches Biology at CGHS.

One of NHEP's deepest points of connection to neighborhood-based environmental concerns comes through its workforce development program for the high school students: GJC. Last year, high school students successfully completed more than 130 paid environmental GJC placements. Green Jobs Corps members have increased community capacity in a variety of ways. For instance, Corps members helped to lead high-impact leadership and environmental education programs for children living in public housing, and helped to maintain community and school gardens across the city. They also contributed to the development of a West River Watershed management plan, which made available new funding sources – such as EPA's 319 Grant Program funds for implementation projects – which increased the city's and nonprofits' capacity to address water quality and engage the public. Parcels of city land that were previously inaccessible, the sites of rampant illegal dumping, are now vibrant city parks and neighborhood green spaces because of the joint efforts of neighborhood residents, local environmental groups, and GJC members.

GJC is just one way that our organization builds community capacity. For example:

- In the past six years, 100% of CGHS seniors have successfully defended portfolios showing their growth as community and environmental leaders. More than 32% of last year's seniors expressed interest in pursuing a career or college degree connected to NHEP's mission. Recent CGHS graduates are studying and graduating with degrees in environmental health, environmental science, urban planning, and public health.
- NHEP is a primary organizer in a variety of collaborative, city-wide environmental projects that build community capacity. We are currently partnering with the USDA funded "Compost Collaborative" where partners include the City of New Haven's Food Policy Division, Gather New Haven, and Peels on Wheels.
- NHEP's Board of Directors and staff reflects the diversity of our community, as well. Common Ground's Executive Director, School Director, School Assistant Director, Operations Director, and Green Jobs Corps Director are all people of color who live in the City of New Haven. Half of our Board of Directors are people of color, and spaces are

reserved on our board for our high school students and their parents.

- NHEP strives to ensure that our programs are rooted in and responsive to the neighborhoods that are the focus of this proposal. For instance, NHEP has supported, joined, and convened a grassroots coalition of West Rock residents, CGHS students, and community organizations that successfully advocated for improvements in walkability and bikeability in our neighborhood. In addition, over the past nine years, NHEP's Urban Farm has operated a "mobile market" partnership with local neighborhood groups, community health centers, and senior housing facilities, to bring fresh seasonal produce to parts of the City where residents have difficulty accessing fresh food. In identifying our strategy for our mobile farm market, our staff and students conducted door-to-door outreach and met with tenant associations at public housing projects.

Community Driven Participation: The GJC model at the center of this proposal is the product of ongoing community feedback and improvement based on on-the-ground experience.

NHEP has worked closely with other community organizations to develop the plans described in this proposal. These community partners were chosen specifically because (1) they also have deep, long-standing roots in New Haven and the neighborhoods that are the focus of this proposal, (2) they have a track record of producing environmental results, and (3) they have a demonstrated commitment to high-impact collaborations with NHEP and other organizations.

For example, a partnership with the Urban Resources Initiative results in door to door outreach and the eventual "adoption" of street trees by neighbors because they have had a say in where the priorities lie. The City of New Haven's residents would benefit from street trees planted anywhere, but the long term value comes from resident care for the trees.

d. EJCPS Model

With EPA support, NHEP and our partners will engage more than 100 of our city's young people in more than 200 paid jobs, all connected to parts of the EJCPS program model. Our strategy is to bring young people's capacity and leadership to bear on community problem-solving efforts that are already gaining momentum, and ensure that these efforts reflect a collaborative community-driven process that engages the young people and adults most impacted by environmental injustice as decision-makers and problem-solvers. The proposed project includes each of the seven elements of the EJCPS program model:

1. Issue Identification, Visioning, and Strategic Goal-Setting. Much of young people's work through GJC focuses on addressing issues, working toward vision, and achieving goals already identified through community-based decision-making. For instance, their work on urban agriculture and community composting is informed by broad-based collaborative processes to create an urban agriculture plan for the city of New Haven, and to move toward municipal-scale composting. At the same time, this proposal takes advantage of a unique opportunity for young people to help set the vision and direction for New Haven's comprehensive planning process. Through the newly-formed New Haven City Plan Youth Leadership Team, GJC members will help to lead community outreach efforts that engage other young people and adults in setting the vision for our city for the next ten years, with a focus on ensuring that this plan addresses

environmental justice challenges. Other GJC placements involve opportunities for issue identification and goal setting. For instance, paid Climate Justice Action Team interns at five high schools will facilitate the development and implementation of pilot projects that reduce climate impact and increase resiliency.

2. Community Capacity-Building and Leadership Development. Members of GJC participate in capacity-building and leadership development both across and within specific paid environmental justice work opportunities. NHEP will build the capacity of our project partners to engage young people in environmental justice problem-solving through workshops in late fall 2023 and early fall 2024. We will build young people's environmental justice problem-solving skills and understanding through cross-site capacity building workshops early in 2024 and 2025, and through two annual summits that bring together young people and partners to share their work in June 2024 and 2025. Some of the richest opportunities for capacity building happen within work placements – as staff at job placement partners support young people in developing and implementing outreach strategies, like presentations at community meetings and door knocking campaigns to generate street tree requests in low-canopy, low-income neighborhoods.

3. Development of Multi-Stakeholder Partnerships and Leveraging of Resources. GJC brings together partners from multiple sectors – city government, community organizations, universities, public schools – and engages 100+ young people and 1200+ community residents in active roles in environmental justice problem-solving. NHEP and our partners are also bringing significant resources to the table. For instance, New Haven City Plan is providing all the staff and consultant capacity needed to support young people on their Comprehensive Planning Youth Leadership Team, rather than relying on a subaward to facilitate this work. URI and NHEP have a track record of collaborative fundraising to support our long-standing partnership around youth employment programming, and URI has committed to funding all the plant materials and a significant portion of the staff time needed to supervise Corps members. On the whole, EPA-supported Green Jobs Corps members will lend additional capacity and momentum to larger community-driven efforts, magnifying their environmental justice impact.

4. Consensus Building and Dispute Resolution. GJC members will play important roles in building consensus around solutions to New Haven's environmental justice challenges. For instance, Comprehensive Plan Youth Leadership Team members will help to gather input, and participate in and facilitate community conversations that lead to the inclusion of environmental justice priorities within the city's Comprehensive Plan of Development. Youth Climate Justice Action Team members will facilitate consensus-building around climate action demonstration projects at their respective schools, and build a shared understanding that climate action is needed now. Young people will need to build consensus within their own teams around plans to utilize the \$2,500 mini-grants allocated to support their work.

5. Constructive Engagement with Other Stakeholders. GJC members will work directly with at least 1,200 other community members – e.g., by securing tree requests from residents, and by engaging at least 60 students and staff at their schools in Youth Climate Justice Action Team planning. They will also take on broad-based education and outreach efforts that engage at least 30,000 people – e.g., social media campaigns to generate street tree requests in their own predominantly low-income, racially diverse neighborhoods.

6. Sound Management and Implementation. Much of GJC members' work focuses on implementing on-the-ground projects that will have a direct impact on the environmental health

conditions impacting New Haven neighborhoods. NHEP brings its own expertise in some of these strategies – related to urban agriculture and composting, for instance – and has engaged partners with the expertise needed to ensure sound management and implementation on other fronts – including food recovery and urban street tree planting.

7. Evaluation. Our work plan incorporates cycles of data gathering, partner reporting and reflection, and program improvement that drive improved environmental outcomes. NHEP and our partners will use common systems for evaluating youth leadership capacity-building within GJC placements, report community engagement and EJ impact results each quarter, gather twice yearly to share our experiences and reflect on progress and changes needed, engage in ongoing improvement conversations, and share our results through annual community impact reports.

e. Project Linkages

The proposed project will Promote Environmental Justice and Civil Rights at the Federal, Tribal, State, and Local Levels by (1) investing in the leadership of New Haven young people to understand and contribute to environmental justice problem-solving, (2) contributing directly to improved environmental conditions in the New Haven neighborhoods most impacted by environmental injustice, and (3) building the lasting capacity of residents and organizations in these neighborhoods to work together to address environmental harms.

f. Partner and Collaborate

Common Ground’s commitment to building community and meaningful partnerships is central in our mission statement: to “invite people across ages and identities” to join in our work. Common Ground has consistently looked to community partners to expand the learning and leadership opportunities that we create for our students. The programs proposed in this application put partnering with the community at the center of their focus. We have engaged a number of partners in the development of GJC, and intend to secure funding to continue to do so. GJC student members work at NHEP itself and at a number of partner organizations:

- New Haven Urban Resources Initiative (URI): is a community nonprofit, affiliated with the Hixon Center of Urban Ecology at the Yale School of the Environment. URI empowers and supports communities in the restoration, stewardship, and enjoyment of the urban forest and nature in New Haven. URI is rooted in the New Haven community and brings a deep understanding of community-driven collaborative problem solving. URI works with a network of more than 50 volunteer-driven community greenspace groups and supports them in goal-setting, implementation, and stewardship of their own vision for their neighborhoods. URI also has the sole source contract for street tree planting with the City of New Haven and has planted more than 10,000 trees across the city. A critical part of their program model is that every tree is planted in response to a request from a community member or organization who then helps to steward that tree. URI is motivated to join in this proposed collaborative effort because they recognize the need to engage residents and generate tree requests in the neighborhoods with the least existing tree canopy, which are also the city’s lowest-income neighborhoods with the largest burden of other environmental harms. Our proposal would allow URI to move beyond its current rate of planting – which only replaces trees lost each year, rather than

growing the canopy. With EPA support URI can engage 36 CGHS students, and at least 18 young people from other New Haven Public Schools, in a combination of on-the-ground street tree planting and inventory work and community engagement efforts that generate additional tree requests in priority neighborhoods. URI will provide training and supervision for crew members and all materials and equipment needed for tree planting.

- New Haven City Plan: is a department of the City of New Haven that works to improve the well-being of all residents in the community by creating safe, equitable, healthful, economically vibrant and attractive places. Over the next two years, the City of New Haven is updating its plan of Conservation and Development, which is a blueprint of the City's vision for the future and a policy guide for achieving planning goals. The comprehensive plan will involve substantial engagement of resident leaders in the development of clear and actionable short-, medium-, and long-term goals with a focus on socio-economic justice, equity, and environmental resilience. The City Plan Department and Plan Steering Committee have explicitly stated engagement of local youth is a priority for the planning process. Youth, particularly those in traditionally marginalized communities, are an under-engaged, under-valued, and under-compensated group in public processes despite their unique perspectives to offer on challenges. City Plan is excited to partner with Common Ground to create opportunities for paid youth leadership in the planning process, designed to situate New Haven High School students as key collaborators in integrating and prioritizing Environmental Justice considerations in the Plan. City Plan staff is committed to engaging young people in setting the vision and plan for New Haven's future and approached NHEP for support and guidance in creating paid leadership opportunities for young people in this process. City Plan staff will provide all supervision and support needed to engage 20 New Haven students over the course of the 2-year EPA grant period.
- New Haven Climate Movement (NHCM): NHCM has organized and supported youth involvement in climate education and action in our city for close to eight years. Over the last four years, NHCM has developed and piloted a model in which paid youth interns plan and lead climate justice and health education, resilience, and mitigation projects at their high schools. NHEP has worked with New Haven Climate Movement since its inception, and has hosted paid student interns at CGHS in each of the last two years. EPA support will help to expand this model, supporting teams of two paid interns in each of five New Haven public high schools. With support of the Youth Climate Action Project Coordinator, these interns will lead Climate Justice Action Teams within their high schools – identifying ways that they can reduce their school's and the district's climate impact, increase resilience, and improve climate literacy, and then launching demonstration projects that make a tangible difference.
- Haven's Harvest: Haven's Harvest is a 501(c)3 nonprofit whose mission is feeding the community and reducing food waste through food rescue throughout the New Haven region. Haven's Harvest has developed a strong and deep network of more than 200 community volunteers, organizations, and businesses, who rescue an average of 100,000 pounds of food each month. Haven's Harvest recognizes that food waste is an environmental justice issue, especially given Connecticut's dependence on incinerators and long-distance hauling to and through marginalized communities to deal with food waste. NHEP has partnered with Haven's Harvest as both a distributor of rescued food

and as a source of food; in fall 2022, we began working together to plan paid and volunteer opportunities for students to support their food redistribution network. EPA support will allow NHEP and Haven's Harvest to launch our first paid youth crew.

- **Nappesoul:** Nappesoul, Inc. is a grassroots nonprofit 501(c)(3) located in New Haven, whose mission is to help at-risk youth and families become financially self-sustaining and healthy by providing free or low-cost instruction and training in gardening, landscaping, cooking, clothing design and personal care. In Spring 2023, NHEP worked with Nappesoul launched a new GJC placement supporting the Solomon's Food Forest Project, aiming to design, install, and maintain backyard gardens, with a focus on predominantly low-income, people of color neighborhoods in New Haven. EPA support will allow us to grow this placement to engage up to 18 young people over two years.

NHEP collaborates with these nonprofits by (1) paying the wages of GJC members working at these organizations through our payroll to reduce the burden on these organizations, (2) making sub-awards to partners to support their work to host and supervise GJC members, (3) working on collaborative fundraising efforts and grant applications to ensure our work can continue, (4) providing technical support and coaching around youth development and leadership, and (5) working together on evaluation and quality improvement efforts.

2.0 Project Activities / Milestone Schedule

a. Project Activities

With EPA support, NHEP will sustain and grow GJC, an environmental career and leadership program for CGHS students. The goals of the program are to:

1. Help 100+ young people grow into powerful environmental justice problem solvers, on pathways to environmental careers, with deep and practical understanding of environmental justice issues in our community and country, and the skills to solve them.
2. Make measurable, meaningful contributions to the environmental justice issues impacting the New Haven community – improving air quality by reducing food miles and food waste through urban agriculture, food rescue, and community composting efforts, and growing and stewarding the urban tree canopy in neighborhoods disproportionately impacted by low air quality and urban heat island effect.
3. Engage community residents and organizations in environmental justice problem-solving – building our community's capacity to solve environmental justice problems, now and in the future, and creating a ripple effect beyond our small city.

Paid environmental justice problem-solving experiences are the defining feature of GJC. Placements fit into three seasons: fall (8-12 weeks, 3-10 hours per week), spring (8-12 weeks, 3-10 hours per week), and summer (5 weeks, 25 hours/week). Each member can take multiple placements per year so that, in the course of a year, a Corps member might plant street trees and engage community residents around tree requests, help to operate and expand NHEP's community composting operation, and ensure environmental justice and community voices are part of New Haven's next Comprehensive Plan of Development. With EPA support, GJC will create and manage 200 paid environmental stewardship opportunities on its own 20 acre site, and in partnership with the URI, New Haven City Plan, NHCM, Nappesoul, and Haven's Harvest.

In collaboration with the urban farm, GJC members will:

- Plant, sustain, and harvest produce from our 1-acre production garden – for use in our school food program, sliding scale family farm share program, and on our Mobile Market, which will provide pesticide-free, local food to more than 2,000 community members (primarily seniors and families in priority neighborhoods, young people who qualify for free/reduced lunch). Crew members will also support gardening education workshops and conferences that engage 175 community members each year, participate in environmental techniques and environmental/food justice workshops, engage with community members at farm share pickups and markets, visiting and supporting other community members working on city-wide food justice and urban agriculture work, all building their capacity to grow local food and reduce food miles.
- Help to operate and grow our mid-scale community composting operation, which will divert 45,000+ pounds of food and landscape waste from our school cafeteria and New Haven residents. This crew will also lead educational workshops that engage 200 other CGHS students and staff as active participants in composting.
- Act as assistant leaders for NHEP's farm-to-school cooking program – leading workshops on food justice, advocating for and facilitating additional use of farm produce in Common Ground's school cafeteria and facilitating after-school cooking programs, and engaging 200+ members of our school community in this work.

Urban Resources Initiative GreenSkills Interns will:

- Respond to citizen requests for street trees – planting at least 200 large caliper trees and training homeowners on how to care for these trees. These trees will be planted with a focus on New Haven's most vulnerable neighborhoods, where the tree canopy is least developed.
- Design and conduct door-to-door outreach, presentations at community meetings, and other community engagement campaigns that will encourage residents to request and adopt street trees in front of their homes. These outreach efforts will mix approaches tested by URI in the past and those planned by students, focusing entirely on predominantly low-income communities of color that have disproportionately low street tree cover. This outreach work will take place for three weeks each at the end of the fall and spring planting seasons; young people will aim to reach 2,000 community residents and generate at least 200 new tree requests over the 2-year grant period.

NHCM Youth Climate Justice Action Team Interns will:

- Engage other students, teachers, families, and residents in planning climate projects focused on greenhouse reduction and public health improvements at their schools, including clear objectives and success criteria for each project.
- Organize public education to increase support for action on climate change and educate their school community and the public about problems and opportunities.
- Evaluate and report on the impact of these projects; Publicize these student-led efforts to build greater Board of Education support of student climate leadership.

City Plan Youth Leadership team members will:

- Work weekly side-by-side City Plan staff at City Hall, participating in:

- Staff-led trainings on urban planning and environmental justice topics, including informal conversations with planning staff and staff from other departments
- Virtual trainings led by other organizations such as the CT-DEEP Community Engagement training, CT Institute for Resilience and Climate Adaptation webinars, Sustainable CT Equity trainings, and others
- Preparation for workshops and other community events
- Generation of content content for social media campaigns
- Work weekly with the comprehensive planning consultant team and city staff on direct engagement activities (tabling events, pop-up meetings, canvassing, etc.) and participating on leadership teams including working groups focused on EJ issues and the Comprehensive Plan Steering Committee – engaging 1,350+ community members.

Nappesoul Solomon's Food Forest GJC members will:

- Receive training and install sustainable gardens for 40+ city residents experiencing food insecurity in priority neighborhoods (one day per week)
- Create raised beds with the Nappesoul Garden Program for children (one day per week)

Haven's Harvest Food Recovery GJC members will:

- Participate in staff-led training to become proficient in public speaking about the issue of food waste, its effect on the environment, and the implications of food waste on marginalized communities.
- Create materials and flyers to promote safe handling and supply our partners with the support they need for successful food sharing.
- Create in-person community engagement events and social media campaigns to raise awareness and opportunities to have forums and panel discussions on effective food recovery, sustainable food systems, and how this impacts the community.

Alongside these paid environmental stewardship opportunities, GJC members benefit from a robust set of career development and educational experiences that put them on pathways to careers that improve the environment, part of the Common Ground High School (CGHS) program model. In particular:

- Students follow a four-year pathway to explore career interests and develop post-high school plans. In 9th grade, the focus is developing self-awareness and communication skills. In grade 10, students take career assessments to identify interests and select careers to explore. For example, students learn about the skills, education, and experience needed to become an urban forester. They begin developing business writing skills and building a resume. Juniors have the opportunity to job shadow professionals or take on internships. By the time they graduate, CGHS students have a solid grounding in job search skills, including resume writing, interview skills, and networking. Graduating seniors have gained skills in communications, teamwork, and conflict management.
- Paid work placements are one of a number of ways that GJC members build environmental justice understanding and grow as problem-solvers. As CGHS students, all complete a core curriculum that includes the study of food and agriculture, the air quality and human health impacts of fossil fuels, environmental justice, lead in soils, the consequences of extreme weather, and environmental health. From this base, students can

also choose to take part in elective or early college courses focused on environmental science, community health, food, and the environment. All seniors research an environmental justice issue they are passionate about and complete a capstone project focused on the issue they have chosen.

- Every CGHS student develops an electronic portfolio that shows their growth as an environmental leader over four years of high school while mapping out their post-high school plans. Students must pass an oral defense of this portfolio in order to graduate. In recent years, more than half of graduates have chosen to highlight GJC as one of their most significant leadership development experiences during high school.

With EPA support, NHEP will be able to expand GJC beyond NHEP as well – engaging young people at other NHHS and building the capacity of other organizations to engage young people in environmental justice problem-solving. Specifically, EPA funding will make it possible to:

- Hire, train, and supervise 18 students from other New Haven public high schools, who will work alongside Common Ground students as part of URI GreenSkills crews.
- Engage teams of two climate justice interns at five New Haven high schools, including Common Ground – supported by a coordinator who is a recent public school graduate.
- Bring together partners and young people across GJC sites for shared capacity-building work at supervisor trainings, youth workshops, and annual summits.

b. Milestone Schedule

Timeline (By Quarter)	Milestones
Oct-Dec 2023	<ul style="list-style-type: none"> • Launch recruiting for Fall EPA work opportunities (using non-EPA funds). • Starting in November, use EPA support to extend existing placements to incorporate additional environmental justice problem-solving opportunities (URI GreenSkills, Compost, Food Justice) and launch new placements (Climate Justice Action Teams, City Plan Leadership Team). • Engage all partners/work placement supervisors in initial training workshop, building their capacity to engage young people as leaders in environmental justice problem-solving, and orienting them to common assessment and reporting expectations (Nov/Dec).
Jan-Mar 2024	<ul style="list-style-type: none"> • Gather and analyze fall community impact & engagement results; modify for spring as needed. • Complete recruiting, hiring, orientation for Spring EJ work opportunities – open to 100% of CGHS students, other New Haven high schools. • Engage all fall & spring GJC members in mid-year cross-site workshops, building skills for environmental justice problem-solving and understanding of environmental justice issues.
Apr-Jun 2024	<ul style="list-style-type: none"> • Engage 50 young people in Spring EJ work – URI Greenskills (18), Urban Farm (6), Climate Justice Action Teams (10), Compost (4), Food Justice

	<ul style="list-style-type: none"> (2), City Plan Leadership Team (4), Nappesoul (3), Haven's Harvest (2). ● Complete recruiting and hiring for Summer work opportunities (Application Deadline Apr, Selection Deadline June) ● Hold first Annual Youth Problem-Solving Summit – open to young people and partners across sites, focused on peer-to-peer learning and additional skills building around environmental justice problem-solving. ● Gather and analyze spring community impact & engagement results; modify program plans for summer as needed.
Jul-Sept 2024	<ul style="list-style-type: none"> ● Engage 25 young people in Summer EJ work – Urban Farm (6), Climate Justice Action Teams (10), City Plan Leadership Team (4), Nappesoul (3), Haven's Harvest (2). ● Facilitate cross-site exchanges, workshops, and field experiences for summer crews and peer organizations. ● Evaluate summer placement impact and success; combine with earlier results to create and share GJC Community Impact Report (Aug) ● Complete recruiting, hiring, and orientation for Fall opportunities (Sept) ● Engage all partners/supervisors in start-of-year training (Sept)
Oct-Dec 2024	<ul style="list-style-type: none"> ● Engage 50+ young people in Fall EJ work – URI Greenskills (18), Urban Farm (6), Climate Justice Action Teams (10), Compost (4), Food Justice (2), City Plan Leadership Team (4), Nappesoul (3), Haven's Harvest (2). ● Draft GJC Practice Toolkit – compiling resources that support organizations in engaging young people in paid roles as environmental justice problem-solvers – and share with project partners for feedback.
Jan-Mar 2025	<ul style="list-style-type: none"> ● Gather and analyze fall community impact & engagement results; modify for spring as needed. ● Complete recruiting and hiring for Spring EJ work opportunities – open to 100% of CGHS students, other NHPS. ● Engage all GJC members in cross-site capacity-building workshop. ● Work with project partners to build sustained funding for Green Jobs Corps beyond the grant period.
Apr-Jun 2024	<ul style="list-style-type: none"> ● Engage 50+ young people in Spring EJ work – URI Greenskills (18), Urban Farm (6), Climate Justice Action Teams (10), Compost (4), Food Justice (2), City Plan Leadership (4), Nappesoul (3), Haven's Harvest (2). ● Hold Annual Youth Leadership Summit 2. Include teams of students and adults from peer organizations beyond New Haven in order to create a larger ripple effect and support capacity-building of like-minded efforts.
Jul-Sept 2025	<ul style="list-style-type: none"> ● Engage 25 young people in Summer EJ work – Urban Farm (6), Climate Justice Action Teams (10), Nappesoul (3), Haven's Harvest (2). ● Facilitate cross-site exchanges, workshops, and field experiences for summer crews and peer organizations. ● Evaluate summer impact and success; combine with earlier results to create

	and share GJC Environmental Justice Community Impact Report (Aug).
Oct-Dec 2025	<ul style="list-style-type: none"> ● Mobilize remaining grant funds to support Fall EJ work placements – aiming to engage another 50 young people, pending secure funding from other sources to leverage EPA support. ● Revise, publish & disseminate GJC practice toolkit developed in Year 1.

c. Itemized Budget Sheet / Budget Narrative

An Itemized Budget Narrative is included as an attachment to this proposal, which details the project expenses that would be covered by EPA funding. That budget narrative total is \$499,778.

3.0 Environmental Results – Outputs, Outcomes, Performance Measures (Logic Model)

a. **Logic Model** - see attached.

b. Performance Measurement Plan

The GJC Director and Director of Community Impact & Engagement will work in close collaboration with our project partners to ensure all program-related outcomes and outcomes are met. We will mobilize accountability and measurement systems developed over the 12-year history of GJC, and through previous EPA EJ and EE grants. The chart below shares key results and how we intend to measure progress toward these results:

Key Results	As Measured By ...
<i>Engage 100+ young people in 200+ paid roles as environmental justice problem-solvers – building lasting capacity and commitment to environmental leadership.</i>	<ul style="list-style-type: none"> ● At least 100 young people successfully complete more than 200 paid environmental justice problem-solving opportunities, all aligned with EPA statutory priorities – tracked through spreadsheets and payroll records maintained in partnership with work placement sites and overseen by the GJC Director. ● At least 80% of Corps members demonstrate growth and/or mastery in key environmental leadership skills – based on start and end of placement skill assessments completed by supervisors and participants, gathered by GJC Director, and analyzed by Director of Community Impact & Engagement. ● 100% of GJC members who are students at Common Ground demonstrate their growth as environmental leaders before graduating high school by successfully defending electronic portfolios of artifacts and reflections. ● At least 40% of Common Ground graduates indicate that they are interested in pursuing a career related to environmental, food, and health justice; more than 50% of Common Ground alumni indicate they continue to step up as leaders in community-based environmental justice work; specific Green Jobs Corps program

	<p>graduates continue to follow environmental justice career paths – as measured through annual student and alumni surveys, and through documentation of Corps members post-high school pathways.</p>
<p><i>Make substantial, measurable, lasting contributions to environmental health and justice in the New Haven community – with a particular focus on clean air and climate change.</i></p>	<p><i>GJC members:</i></p> <ul style="list-style-type: none"> ● Contribute 200+ trees to the canopy of priority environmental justice neighborhoods, generate 200+ new tree requests from residents in these neighborhoods, and protect 200+ existing canopy trees by removing invasive vines – moving beyond replacement rate to increase the tree canopy in environmental justice priority neighborhoods (GPS logging and excel spreadsheet of all tree planting maintained by URI and analyzed for focus on low-income, low-canopy communities; photo documentation and excel spreadsheets of areas impacted by restoration efforts, maintained by NHEP and partners; measures of air and water quality impact calculated through research-based modeling). ● Reduce food miles and food waste by helping to grow and distribute 10,000+ pounds of healthy local produce, recovering 100,000+ pounds of food per year, and diverting at least 45,000 pounds of food waste per year to community composting (data tracked by Common Ground farm team members). ● Implement 5+ youth-led demonstration projects at urban public high schools that result in measurable reductions in climate impact and increases in climate resilience within these school communities.
<p><i>Build the capacity of a broader set of community residents and organizations to solve the environmental justice challenges facing our community</i></p>	<ul style="list-style-type: none"> ● Build the capacity of at least 5 community organizations to engage youth in meaningful problem-solving roles through supervisor and corps member trainings, ongoing coaching, and common accountability and evaluation systems (measured through youth outcomes: % of young people successfully completing placements and showing growth in environmental leadership capacity). ● Engage at least 1,200 community members in community-based environmental justice problem-solving that results in (1) meaningful changes in environmental conditions, (2) meaningful decision-making roles for residents, and (3) increased capacity to solve future environmental justice problems. Excel spreadsheets of outreach events and campaigns, and community members engaged in specific activities; documentation of additional capacity developed (e.g., through end of program surveys of greenspace groups by URI)

Twice annual check-ins with subgrantees and NHEP employees who supervise GJC placements will help ensure that there are no delays in expending grant funds and provide ample time to plan ahead should unforeseen difficulties arise with implementation of all the placements.

c. Sustainability Plan and Community Vision

NHEP and our partners are committed and ready to use the results and momentum of this project to achieve our community's goals and objectives. Sustained, meaningful, community-driven change is built into our project plan in a number of ways:

- Corps members will engage peers and neighbors in building environmental justice plans, and actions into our city's Comprehensive Plan for Development, Equity & Resilience.
- Project staff and Corps members will actively share young people's work and impact through local news media, social media, email networks, and direct communications with leaders to generate momentum – engaging at least 30,000 of our neighbors.
- NHEP and our partners will mobilize strong existing networks of community members – the 200+ Haven's Harvest food reclamation volunteers, 225 environmental leaders in training at Common Ground High School, 50+ neighborhood greenspace groups supported by URI, community members who have requested trees and backyard gardens, etc. – and strengthen them by adding the capacity of youth leaders.
- NHEP and our partners have a 15-year track record of securing varied private and public funds to build and grow Green Jobs Corps, and are actively seeking funds to leverage EPA support and continue this work well beyond the grant period. The results and visibility possible with EPA EJCS support will lend real momentum to this effort.

NHEP is also committed to leveraging this EPA investment to support like-minded efforts in other communities. Specifically, we propose to create an online toolkit of resources on engaging young people in paid roles as environmental justice problem-solvers, which we will publish and share using a variety of existing channels (including www.commongroundct.org, www.teachcity.org, the Green Schools National Network, and EPA environmental justice and environmental education online platforms and networks as appropriate). We also propose to invite teams of young people and staff from other cities and organizations to join in the second of our two annual youth summits, and design this summit as a peer-to-peer capacity-building opportunity. NHEP has a strong track record and infrastructure for sharing practices and building capacity beyond our small city; past EPA grants have helped us bring together like-minded schools and youth employment programs across New England and publish online resources, and external and internal evaluation results of these efforts have demonstrated that participants have been able to put what they have learned into action to improve their own programs.

4.0 Programmatic Capability

The New Haven Ecology Project's staff has the proven capacity and strategic strengths necessary for program performance: deep expertise in youth development, community-school connections, standards-based and data-driven reform, authentic place-based instruction, strong interpersonal relationships and work ethic, and deep commitment to our environmental mission. We are attaching resumes for the individuals most responsible for the successful implementation of this proposal. Key staff include:



[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Past Performance

NHEP has proven experience implementing programs and grants of this scale. In the current fiscal year, we are managing approximately \$4 million in state and federal funding. We have successfully administered grants from the Environmental Protection Agency, including several grants through the EPA Environmental Justice Small Grants Program and Healthy Communities Program, including grants that have supported environmental justice work placements through Green Jobs Corps. We have consistently delivered on the outputs and outcomes described in our proposals to EPA and have met all reporting requirements. In the last three years:

- NHEP was awarded a 2019 EPA EE grant to provide 50 educators in 10 urban schools with professional development on NextGen Science standards, focusing on environmental issues of air and water that their students face. Ten teams of teachers came

together for a series of curriculum and professional development workshops and received subgrants to create and implement curriculum units and community projects focused on urban environmental issues. Despite the challenges of the pandemic, Common Ground met or exceeded all project outputs and outcomes. (Grant Contact: [REDACTED]).

- NHEP also received funding through a 2020 EPA EE grant, which supported the work of our GJC through December 2022. We were able to move forward with engaging young people in essential in-person outdoor and virtual stewardship opportunities, following strong COVID protocols, even when schools in our city had to go entirely online. With this grant, GJC members successfully completed more than 200 paid work placements aligned with EPA priorities (target: 162), helping to lead environmental education programs that reached more than 1,600 children (target: 900), and contributing to a range of other environmental stewardship outcomes (e.g., helping to re-direct 45,000 pounds of food waste from incineration to community composting, planting more than 200 street trees). Common Ground also successfully distributed and managed \$25,000 in subgrants. (Grant Contact: [REDACTED]).
- In 2021, NHEP was awarded an EPA Environmental Justice Small Grant to support Eating and Growing Equitably, a project focused on growing food locally and building our City's capacity to improve air quality and public health. With EPA support, New Haven Ecology Project engaged more than 175 community members, 5 farm interns, and 15 Green Jobs Corps farm crew members in educational programs that increased their capacity and commitment to grow food locally, reducing food miles and contributing to improved air quality and food security. NHEP is finalizing reporting connected to this grant. (Grant Contact: [REDACTED]).
- In 2021, NHEP was awarded an EPA Environmental Education grant to support Growing Environmental Education In Urban Schools. In the first two quarters, NHEP has engaged 72 educators and 495 students in ongoing education and stewardship opportunities focused on urban waters, waste reduction, and reclaiming urban land.

A grant through the Environmental Justice Collaborative Problem Solving Program would benefit from the systems and capacity built through past EPA grants and allow us to significantly deepen and expand the impact of GJC. First, this grant would make it possible for GJC to engage young people who attend high schools across the City of New Haven, rather than focusing exclusively on CGHS Students – taking a demonstrated model and expanding it to a whole-city effort. Second, it would expand the roles that young people play from primarily direct on the ground environmental action (e.g., planting street trees, operating our compost system), to include a broader range of community engagement, visioning, and capacity-building efforts. Third, it would allow us to develop and offer workshops, summits, and toolkits that build the long-term capacity of our partner organizations and peer organizations in other cities to lead high-impact environmental justice employment programs.

6.0 **Quality Assurance Project Plan (QAPP) Information**

Since this project does not involve the use of existing environmental data or the collection of new data, we do not believe a QAPP will be required for this project.