



NFWF

Wells Fargo Environmental Solutions for Communities Full Proposal Project Narrative

Instructions: Save this document on your computer and complete the narrative in the format provided. The final narrative should not exceed six (6) pages; do not delete the text provided below or change the margins or font of this document. Once complete, upload this document into the on-line application as instructed.

1. **Activities:** Elaborate on the primary activities that will be employed through the grant. Explain how these activities are expected to lead to the outcome(s). Describe how these activities relate to established plans (management, conservation, recovery, etc.) and priority conservation needs in the specific project location.

Despite its small size Delaware harbors a diversity of wildlife and habitats, from the Atlantic Ocean coastline to the Piedmont border with Pennsylvania. More than 1,000 species of wildlife have been documented in the state, and more than 125 diverse habitats have been identified, including coastal marine waters and brackish marshes, tidal and non-tidal freshwater streams and wetlands, and upland forests and meadows. Delaware State Parks owns and manages 26,000 acres of public land whose ecosystems directly support these native plants and wildlife. All are imperiled due to one dilemma—the encroachment of invasive plants and trees—and the Friends of Delaware State Parks, led by the Friends of Bellevue State Park, are seeking funding to redress the damaging ecological effects of invasive species and to involve youth in the conservation initiative.

Delaware State Park's Environmental Stewardship Program—tasked with managing invasive species—has seen its staff decreased due to a dramatic budget reduction, from \$207,000 in 2006 to \$25,200 in 2015. With only two Field Biologists and seasonal staff, the effort to sustain native ecosystems and to implement prevention strategies on park lands is endangered. Best management practices to control invasive species require early detection, rapid response and a multi-tiered monitoring effort designed to gauge progress and focus resources on designated high priority conservation areas. The need is compelling and demonstrative: According to a report by the Early Detection and Distribution Mapping System, a web-based charting method for invasive species identification, Delaware has a total of 365 discrete invasive plant locations, with New Castle County in northern Delaware reporting the highest amount. The loss of Delaware's native plants results in the loss of the native insects, birds and animals that depend on them for survival: 21 species of birds, 7 species of fish and reptiles, 30 species of insects and 9 species of mammals are listed as endangered in the state.

To assist the Environmental Stewardship Program's Field Biologists in invasive species management, Delaware State Parks initiated a pilot Youth Conservation Corps program in 2014. Under the auspice of Delaware State Park's Volunteer Office, the Youth Conservation Corps' primary objective—to engage youth from all segments of society in the reestablishment of native diversity within priority park lands—was endorsed by the Governor and is a principal recommendation of Delaware's Children in Nature Task Force.

In 2015, the YCC program was expanded to include two teams of young adults—Green Corps North and Green Corps South—and funding was appropriated for the initiative from the State Office of Volunteerism and the Community Environmental Penalty Fund (CEPF)—a 'polluter pays' principle wherein 25% of collected environmental penalty fines are expended on environmental enhancement projects in the impacted communities.

The CEPF funds in the state's reserves are depleted this year, given to worthy environmental projects and programs through a competitive grant process. The Friends of Bellevue were ineligible for a CEPF grant award due to the minimal amount of penalty funds available within their violation area, and are thus seeking funds through the corporate and foundation community. By sponsoring the YCC team for an expanded ten-week program in the summer of 2016, the Friends of Bellevue hope to foster a passion for the environment in young adults and prepare them to become future environmental sustainability leaders.

The core YCC program components are youth employment in conservation projects benefiting the environment, supplemented with an environmental awareness curriculum, community service, and an exploration of the spectrum of

career opportunities in the field of environmental sciences. The ten YCC participants—four males and six females—were recruited from Title I schools, the Latin American Community Center, and Boys and Girls Clubs; the YCC Team Leaders were University of Delaware graduates with Conservation degrees. The YCC participants ranged in age from 16 to 17, with race/ethnicity being 58% white, 33% African-American and 9% Hispanic. The program attained wide-spread recognition through press releases, announcements on Delaware State Park’s website, newspaper articles and through job fairs and is reaching its intended audience of young adults—there were forty-five applicants for the ten YCC member job openings this past summer.

After receiving in-depth conservation education and specialized field training, YCC members and their Team Leaders implemented invasive species management strategies identified and prioritized in Delaware’s *Invasive Species Management Plan*, a government land management improvement scheme prepared by more than forty stakeholders in the environmental field, of which Delaware State Parks was a charter member. The plan is based on the four program elements identified in the U.S. Department of Agriculture Forest Service’s *National Strategy and Implementation Plan for Invasive Species Management*: prevention; early detection and rapid response; control and management; and rehabilitation and restoration.

Specific habitat restoration sites where YCC members served were geographically diverse and located throughout the state: In the north, at Bellevue State Park, prolific urban interloper trees—the Norway maple and the Bradford pear—produce thousands of seeds which drift into the park, producing seedlings that if allowed to mature would force native trees to struggle for survival under their dense shade. In the Piedmont province of New Castle County, the location of several northern state parks, a perennial herb known as lesser celandine is causing severe ecological damage. It is a vigorously growing plant that forms carpet-like patches so dense that literally nothing else grows. On the floodplains where lesser celandine is most often found, a plethora of native plants compete for survival, such as Virginia bluebells, lowland fragile fern, river wild rye, eastern waterleaf and the green-headed coneflower. Due to the aggressive nature of lesser celandine, these once flourishing native species are being eradicated and are in danger of extinction from the state’s flora.

In the middle of the state at Fort DuPont State Park, reforestation is the goal to increase the natural habitat for an estimated 200 species of migratory birds. With targeted spraying for Japanese stiltgrass and mile-a-minute vine, enough trees will attain maturity to ensure a sustainable habitat for migratory birds. Nearby on Fort Delaware State Park’s Pea Patch Island is a migratory bird rookery, considered to be the largest habitat for migratory wading birds north of Florida. The park is carefully monitored each year to evaluate whether the established riparian buffer has provided sufficient sustenance for the estimated 3,000 nesting pairs of herons, egrets, and ibises.

In southern Delaware, in dune areas at Cape Henlopen and Delaware Seashore State Parks, conservation efforts have centered on eliminating the Japanese sedge, which has attained dominance with its prolific seed production and resistance to indigenous pathogens. The Delaware Bay shore beaches and marshes are the sole rest stop for Atlantic Flyway migratory birds on their annual odyssey from their winter feeding grounds in South America to their Arctic breeding sites. More than 100 species of migratory and nesting birds visit portions of this landscape throughout the year, including waterfowl, raptors, shorebirds and songbirds. Invasive species have been causing increasing amounts of stress to this landscape and preserving the health and quality of this crucial stopover for migratory birds has global conservation implications.

2. **Outcome(s):** Elaborate on the outcome(s) summarized previously in the application; discuss what makes this outcome(s) achievable and important.

The environmental outcomes of the program’s conservation activities were quantitative: During the span of the eight-week program, the ten YCC members—guided by their Team Leaders and professionals in the field—removed invasive plants and trees from 6.7 miles of park land, completed 3.5 miles of trails conservation, sprayed 7 acres of invasive plants and served as young adult mentors with elementary schoolchildren in the installation of a raingarden at their school.

The YCC Green Teams completed a total of 2,606 hours of youth engagement with natural resource projects and programs, 70% in habitat restoration projects, 20% in educational activities taught by natural resource professionals, and 10% in career exploration in the field of environmental sciences. At the conclusion of the 2015 program, 75% of YCC members reported considering a career in conservation and/or environmental science, compared with 17% at the

beginning of the summer. In addition, 100% of the YCC team rated their knowledge of invasive plant species as a 5 (of 5) and ranked their knowledge of natural resource career-specific skills a 5.

More subjectively, the Corps programmatic emphasis—meaningful hands-on environmental stewardship—fosters individual potential through teamwork; promotes an appreciation for the state’s natural resources; and encourages personal growth, leadership development and high self-esteem. Preserving the rich and diverse natural habitats within state park lands through reforestation, trail conservation and invasive plant management fosters in YCC participants an enduring ethic of environmental activism. Participants develop awareness that forests and parks are not simply places to see nature—they are the basic life support systems that provide the clean air, water, fisheries, and natural coastal protections that sustain the planet.

Delaware State Park’s Environmental Stewardship Program has implemented a number of strategies to achieve native diversity and can demonstrate the effectiveness of its intervention practices with quantifiable performance outcome data from an established long-term monitoring program: After three years of invasive plant removal and seven years of follow-up management, the 24-acre Tulip Woods—a significant nature preserve within Brandywine Creek State Park—is now 95% native species in all forest layers. Wide swaths of land within the forest once dominated by Japanese stiltgrass and garlic mustard are supporting native wild ginger and bloodroot, and diversity is emerging among the new trees, with native oaks and hickories growing alongside beeches.

3. **Tracking Metrics:** Indicate how the project will monitor/assess progress on the metrics selected previously in the application. Please note any challenges or limitations anticipated with tracking the metrics.

In an expanded ten-week YCC program in summer, 2016, the project success will be gauged utilizing the data collected from the 2015 program as a baseline numerical indicator of outcomes. The goals will be to increase: (1) the number of miles of invasive plants eradicated and trails restored on public lands; (2) the percentage of YCC members reporting a change in attitude and behaviors towards the environment; and (3) the percentage of YCC program graduates interested in pursuing an outdoor- based Natural Resource career.

The YCC Team Leader will be responsible for tracking indicator data to assure results-based accountability—measuring the miles and acres of public lands restored and accessing through a pre-and-post- test survey the YCC members’ skills, knowledge and attitudes towards the environment and their interest in conservation careers. The long-term outcome of the reestablishment of native diversity will be evaluated through field surveys by the Environmental Stewardship Program staff utilizing Delaware’s *Invasive Species Tracking System* as its baseline data set against which treatment effects are measured.

4. **Community Impacts:** Describe community characteristics of the project area and identify any underserved or high need communities. Please use poverty statistics, school lunch data or demographic records to articulate high need or underserved communities.

The conservation projects in state parks are located in all three counties, although park visitors—5,020,518 in 2014—are not limited to Delaware’s residents, and thus the positive impact of natural resource management is regional. Northern Delaware’s New Castle County is the state’s most densely populated area, with 538,000 residents, or 1,263 persons per square mile. Its demographic characteristics are 62% white, 25% African-American, 9% Hispanic and 4% Asian. While 11% of the County’s population lives below the poverty level, in Wilmington, the state’s largest city, that number rises to 24%. YCC Corps members completed 920 hours of invasive species management and trails conservation at six of the state’s northern state parks, impacting an incalculable number of visitors.

In Kent County, Delaware’s fastest growing region, the population is 162,000 and the demographic breakdown is 68% white, 23% African-American, 7% Hispanic, and 2% Asian. According to the U.S. Census, 13% of the populace of Kent County lives below the poverty level. YCC members completed 292 hours of field work at Delaware’s only state park in the county.

In Sussex County, the population is 197,000, and its socioeconomic characteristics are 80% white, 11% African-American and 9% Hispanic, with 13% of the population living below the poverty level. There were 394 hours of

diverse conservation activities completed at the state's three coastal parks, which receive the highest number of annual visitors due to the lure of its pristine beaches.

As an additional element of the program, each of the ten YCC members were required to complete 20 hours of volunteer service outside the scope of their employment responsibilities. Community activities were wide-ranging, from assisting residents at the Delaware Hospital for the Chronically Ill, to weeding and mulching rain gardens at schools, libraries and museums throughout the state.

5. **Volunteer Event:** NFWF and Wells Fargo will coordinate a volunteer event with a limited number of national grantees, mainly based on location and opportunity for the Wells Fargo Green Teams to volunteer with the project. If your project has an opportunity for volunteer involvement, please describe the type of community service event you propose to host for up to 50 Wells Fargo employees and your partnership's capacity to carry out this event. Include location of event, specific activities and approximate date. Most events will take place in spring 2016.

Delaware State Parks staff has partnerships with more than 150 community organizations, including non-profit Friends of State Parks groups, and local government organizations, and hosting NFWF and Wells Fargo Green Teams would be a welcome addition. Volunteerism in state parks is impressive—this year alone, 1,715 volunteers contributed 46,356 hours of community service, completing diverse tasks in visitor services, ground maintenance and environmental education.

If logistics permit, a full day of environmental stewardship activities—reforestation, trail conservation and invasive species management—would be proposed for the entire YCC Green Teams, the Wells Fargo Green Teams and the Friends of Bellevue. Delaware State Parks has Volunteer Coordinators in each county who have the capacity and experience to host an event of this magnitude.

As there are fourteen state parks located in all three counties, the location would be determined by the proximity of the Wells Fargo Green Teams—although Bellevue State Park in northern Delaware would be the Friends' preference—and would be scheduled to coincide with the beginning of the YCC summer youth employment program, in June of 2016.

6. **Project Team:** List key individuals and describe their qualifications relevant for project implementation.

Ashleigh McKinney is the Coordinator of the Youth Conservation Corps Program and is responsible for developing procedures and policies; coordinating and planning member orientation and service training; collecting member hours; aggregation and payroll; and program reporting including impact, and member weekly reports. Ms. McKinney manages funds and ensures programs are in compliance with grant requirements; ensures proper grant reporting and end of year program reports for funders.

Robert Line has been a Field Biologist and Program Manager in Delaware State Park's Environmental Stewardship Program since its inception in the 1990s. A Zoologist, Mr. Line prefers the designation "landscape ecologist" and has been championing native diversity for decades. Mr. Line will be the on-site Field Biologist assigning the YCC members their work details on priority park lands and trails.

7. **Other (Optional):** Provide any further information important for the review of this proposal.

Delaware State Parks was awarded a competitive grant from the Corporation for National and Community Service in spring, 2015 to employ five full-time military veterans in natural resource management on targeted state park lands. As their training began in October, 2015, the goal is to prepare the AmeriCorps Military Veterans to become peer mentors for the 2016 summer YCC Green Teams, creating an intergenerational partnership inspiring the next generation of environmental sustainability leaders.