

# **Bolstering the Water Workforce** with Innovative Programs

A Case Study on Water Workforce Programs in Camden, NJ

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Issued by the Jersey Water Works Combined Sewer Overflow Committee



# **Acknowledgments**

The Jersey Water Works Combined Sewer Overflow Committee includes a subcommittee focused on the water workforce, which spearheaded this project. The Water Workforce Committee includes Co-Chair, Drew Curtis, Project Leader, Kendra Morris, and members: Ciro Scalera, Dan Kennedy, David Zimmer, Gina Sullivan, Kaitlin Barakat, Kate Gibbs, Leigh Peterson, Lynda Jeannette, Kimberley Irby, and Moriah Kinberg. The Committee thanks the various program contacts for both PowerCorps Camden (Megan Lepore, Alyssa Ward, and Antoinette Fugee with Center for Family Services; Scott Schreiber and Doug Burns with CCMUA; and Andy Kricun, formerly with CCMUA and program founder) and Camden Works (Shaniqua Biles and Brian Bauerle with Cooper's Ferry Partnership) who provided the bulk of the information for this case study and reviewed it for accuracy.

# **About Jersey Water Works**

Jersey Water Works is a collaborative effort of many diverse organizations and individuals who embrace the common purpose of transforming New Jersey's inadequate water infrastructure by investing in sustainable, cost-effective solutions that provide communities with clean water and waterways; healthier, safer neighborhoods; local jobs; flood and climate resilience; and economic growth. The goal of the Combined Sewer Overflow Committee is to have municipalities and utilities adopt innovative CSO Long Term Control Plans with cost-effective solutions that meet or exceed permit requirements and provide multiple community benefits. One of the committee's 2020 projects entails developing recommendations and resources that will encourage local hire from environmental justice communities for water workforce jobs, link local residents to stable careers through job training programs, and link utilities and unions to these training programs to find qualified workers. This case study directly informs and supports this project.

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# **Executive Summary**

New Jersey faces critical environmental infrastructure challenges that threaten the health and safety of its communities. These include, but are not limited to, aging infrastructure, affordability, lead service lines, and combined sewer system overflows. Furthermore, the projected retirement of one-third of the water workforce in the next 10 years will likely exacerbate these issues. This presents a challenge to fill vacancies with qualified candidates who will ensure that we have safe, clean drinking water and reliable wastewater services. However, this also presents an opportunity to fill vacancies with demographically diverse, local candidates—ideally those who also understand the importance of investing in upgrades and sustainability like green infrastructure (GI). By bolstering the water workforce with innovative programs, New Jersey communities can benefit two-fold: they can solve these complex challenges, like combined sewer overflows (CSOs), and simultaneously boost the local economy through local hires.

The New Jersey Department of Environmental Protection issued permits to the operators of combined sewer systems requiring that they develop, adopt, and implement plans to control overflows of raw sewage. Jersey Water Works, a 600-member collaborative working to transform the state's inadequate water infrastructure, focuses its efforts on "smart CSO plans" as one of its four main goals. The collaborative's push to encourage local hires in the water workforce aligns with its work to encourage permittees not just to comply with the minimum requirements of the permits, but also to deliver additional community benefits, such as economic revitalization and local jobs.

In the City of Camden, two programs were created to train residents of low-income communities and communities of color in green infrastructure maintenance and/or connect them to employment opportunities, including those in the water industry. One is PowerCorps Camden, a water workforce program that allows local youth (ages 18-26) to learn how to maintain green infrastructure, develop soft skills, engage in college and career readiness workshops, and receive supportive services to scaffold and support their sustained success. Various partners, including the Camden County Municipal Utilities Authority (CCMUA), are involved with the green infrastructure training, whereas the Camden non-profit, Center for Family Services, provides the professional training and social support services.

The other program is Camden Works, which launched as an employment initiative in October 2019 to connect city residents to job training and, ultimately, job placement. Similar to PowerCorps Camden, members have an extra layer of support through case management services that Center for Family Services provides. Other managing partners include Cooper's Ferry Partnership, Latin America Economic Development Association, Hopeworks, Camden County Workforce Investment Board, and representatives from the New Jersey chapter of the NAACP. Though not water-specific and not a technical job training program, staff members work with residents and case managers from Center for Family Services to train them in skills that will help them with their job search and application process. Some of the program participants have gone on to work at companies in the water sector, such as New Jersey American Water.

<sup>1</sup> https://www.epa.gov/newsreleases/epa-announces-water-workforce-initiative-help-recruit-and-prepare-next-generation-clean

This case study details how these workforce training programs are structured, providing an overview that communities can refer to if they wish to create their own program. It also features insight on factors for success and lessons learned as these programs have navigated their first few years of operation. These are a few of the key takeaways that the various program managers have shared:

- A successful program requires a robust management system, whether that is led by the local government or a partnership between various entities.
- Especially in areas with at-risk youth, programs should be coupled with social support to ensure success beyond job placement.
- Technical training and professional training/social support should be managed separately, as both responsibilities are difficult for a single entity to handle alone.
- The technical training component should be varied. For example, including both green infrastructure maintenance and technological training will provide program participants with a wider breadth of options in their pursuit of employment.

Overall, PowerCorps Camden and Camden Works are both exemplary programs that have experienced success by pairing professional training with social support services. These programs have the potential to be replicated in other cities, serving to boost employment and thus quality of life in communities across the state.

# **Background**

Camden is a city in southern New Jersey with a population of 74,000. The city was once an industrial powerhouse in the state, but industrial decline has led to disinvestment, which disproportionately affects the communities of color in the city. Additionally, Camden is one of 21 municipalities that have combined sewer systems in the state. Combined sewer overflows (CSOs) occur during heavy rainfall events when a mix of sewage and stormwater spills from the outfalls of these systems and into waterways. CSOs pose a critical public health problem by allowing raw sewage to flow into rivers and streams and back up into streets, parks, and basements and exacerbate local flooding.

Currently, Camden is one of 25 CSO permit holders that will be submitting a Long Term Control Plan (LTCP) to the New Jersey Department of Environmental Protection later this year. Implementing these plans will be costly and will require careful planning and effort, which underscores the urgency to ensure that the water workforce is not only sustained, but also that community members are involved to the greatest extent possible. One way to ensure that community needs are being met when solving infrastructure issues such as CSOs is to develop a water workforce comprising members who are intimately familiar with the community in which they live.

Jersey Water Works (JWW) is a 600-member collaborative working to transform New Jersey's inadequate water infrastructure through sustainable, cost-effective solutions that provide communities with clean water and waterways; healthier, safer neighborhoods; local jobs; flood and climate resilience; and economic growth. Since its inception, JWW has prioritized "smart CSO plans" and dedicated its Combined Sewer Overflow (CSO) Committee to this task. The main goal of the CSO committee is:

"Municipalities and utilities adopt innovative CSO Long Term Control Plans with cost-effective solutions that meet or exceed permit requirements and provide multiple community benefits."2

One of the sub goals specifically calls for LTCP implementation to deliver significant additional community benefits including economic revitalization and local jobs, among others. One of the committee's 2020 projects addresses this sub goal with the intent to "develop recommendations and resources that will encourage local hiring from environmental justice communities for water workforce jobs, link local residents to stable careers through job training programs, and link utilities and unions to these training programs and to find qualified workers." This case study directly supports this project by highlighting examples of job training programs that connect residents to local employment opportunities, including those in the water sector.

<sup>2</sup> https://www.jerseywaterworks.org/about-the-collaborative/committees/

<sup>3</sup> https://www.jerseywaterworks.org/wp-content/uploads/2020/03/2020-Work-Plan-1.pdf

# **PowerCorps Camden**

#### **Overview**

The Camden County Municipal Utilities Authority (CCMUA) provides the City of Camden's wastewater treatment services. CCMUA, in coordination with the Camden SMART (Stormwater Management and Resource Training) Initiative, has constructed over 60 green infrastructure features in the city. Though the Authority is directly responsible for maintaining these features on property they own, their existing staff do not have the knowledge, experience, or time to maintain these features. The PowerCorps Camden program meets this need by providing the maintenance for the stormwater management features and has the added bonus of providing employment and training for city residents.

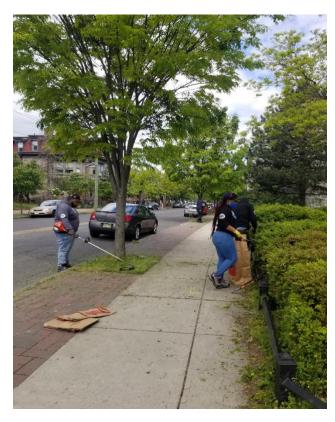


PowerCorps Camden is a program for opportunity youth (i.e., youth that are unattached to school and/or work) ages 18-26 who have a high school diploma. It blends environmental stewardship with support services, provided by Center for Family Services. Every six months, a cohort of 30 members learn how to maintain green infrastructure, develop soft skills, engage in college and career readiness workshops, and receive supportive services to scaffold and support their sustained success.

## **History**

The idea for PowerCorps Camden came from Andy Kricun, former executive director of CCMUA, after he first learned about the original PowerCorps program in Philadelphia. Camden Mayor Dana Redd and New Jersey Governor Chris Christie secured a grant for the City of Camden from the Corporation for National and Community Service under the National Governor and Mayor's initiative, with the Center for Family Services operating as the lead agency for the program. A partnership was developed among the City of Camden, Center for Family Services, CCMUA, and Cooper's Ferry Partnership, to implement PowerCorps Camden in December 2015. As of early 2020, about 300 of Camden's youth have participated in the program.

The program was created to address several issues including stormwater management, as Camden has a flooding problem; illegal dumping, which leads to clogged drainage systems; and the combined sewer system, which leads to polluted waterways and requires a massive financial undertaking to fix. The goal of the program is to improve green infrastructure maintenance and outcomes for opportunity youth in the city. It should also be noted that, because of the grant, the cost of green infrastructure maintenance for CCMUA was roughly the same using the PowerCorps program as it would have been to use a regular green infrastructure contractor. Of course, the former option is more advantageous in that it reaps additional community benefits through helping opportunity youth in the City of Camden.





# Logistics

In Philadelphia, the city government is able to administer the PowerCorps program, including the social service component. Because the City of Camden was unable to do the same, Center for Family Services was tasked to be the lead agency and coordinator of the services. Program staff include a program coordinator, social support coach, and crew leaders. Traditionally, there have been two cohorts per year with 30-35 members in each cohort. To facilitate program completion, member service hours were reduced from 900 to 675 hours to be completed over six months.

The program costs \$800,000 annually. This includes the members' stipend (\$555 biweekly for new members), which is covered by the Corporation for National and Community Service (CNCS), and operational costs including personnel, gear, materials, transportation, and training. Funding is provided by CNCS and matching grants from external funders. Additionally, program graduates are eligible for an educational award that can help pay for them to go back to school or pursue other occupational training.

The program is implemented by three crew leaders, usually staff members who have completed the program before, who each work with eight to ten members. In order to return as crew leaders, members must have a resume and go through an interview; thus, they are able to apply the training that they learned during their first time through the program. Returning PowerCorps Camden members who exhibit leadership qualities within their cohort may be invited to serve in the capacity of assistant crew leaders, which includes additional responsibilities. There are also two educators and two foremen from CCMUA that lead the group, providing environmental science and maintenance instruction, respectively.

# **Typical Curriculum**

#### Overview

Members begin with a week of pre-service orientation to meet partner organizations, such as CCMUA, and learn about initiatives like Camden SMART, and the importance of green infrastructure projects in the city. In lieu of a Parks Department, Rutgers University provides the training, along with the NJ Tree Foundation, as well as the credential for green infrastructure maintenance upon program completion. The pre-program training includes a half day course on stormwater management taught by a Rutgers professor and presentations by CCMUA staff members. Throughout the six-month term, CCMUA connects with other programs and coordinates learning opportunities for the members.

#### Green Infrastructure Maintenance

Days consist of mostly outdoor service, which involves maintaining the rain gardens and parks throughout the city that have been provided by CCMUA. PowerCorps Camden members also work on some of the pre-existing Camden City parks. In total, members help maintain over 53 green infrastructure (GI) installations including 20 rain gardens, 10 city and county parks, 400 vacant lots, and 5500 stormwater inlets that comprise Camden's network. In general, members enjoy this breadth of outside work, as it provides an opportunity for them to be engaged in their surrounding community and physically see the sustainable changes that their work accomplishes.

Specific stormwater management activities include:

- Maintaining parks and rain gardens (mowing, weeding, etc.).
- Maintaining planter boxes and bioswales.
- Watering plants using rain barrel water.
- Cleaning streets, paths, and vacant lots.
- Cleaning storm sewer inlets.
- Planting trees and mulching.
- Building barriers (i.e., fencing) around green infrastructure projects.

Rain gardens are maintained differently depending on size. For smaller ones, members weed them, pick up trash, and even do some planting. For larger ones, in addition to the same tasks, they mow the lawn around the area and clear out the inlets. Photos are taken before and after for each site visit and then shared via social media platforms. CCMUA staff that work closely with the program regularly visit the sites to evaluate the need for maintenance and ask for updates to the schedule. All of the Camden SMART partners have worked with PowerCorps Camden at the sites and on related projects. Photos and descriptions of the Camden SMART green infrastructure sites are maintained online.<sup>4</sup> Members also collect data after they are finished with maintaining the site to report on how much trash was collected, how many acres were treated, and how much debris (weeds, leaves, etc.) was gathered.

<sup>4</sup> http://www.ccmua.org/index.php/green-initiatives/green-infrastructure-projects-completed-and-in-progress/

#### Workforce Development

Members engage with Center for Family Services' workforce development program, InDemand which offers job screening services and life skills training in preparation for the next step in their careers. Center for Family Services is also able to connect members with job opportunities aligned with their interests and skills. A recent example includes two members that were hired for a seasonal tree-planting opportunity with the NJ Tree Foundation.

Professional training provided by Center for Family Services:

- Resume development.
- Interview skills.
- Financial literacy.
- Digital literacy (including online job applications).
- Time management.
- Goal setting.
- · Conflict resolution.
- Customer service.
- CPR and first aid.
- OSHA 10 and 30.
- Security guard training.
- · Home health aide training.

Social support services offered by Center for Family Services:

- Healthy relationships training.
- Grief support.
- Mental health support.
- Securing documentation (birth certificates, etc.).
- Driver's license courses and restoration support.

During the program, members meet with InDemand once a week for job training which covers a variety of skill sets, as listed above. There are two major areas of focus: 1) resume development and identifying a career, and 2) soft skills, such as learning how to work with others. The main goal is to foster skills that will help members get on their feet and stay on their feet. As part of the program, members are paired with a job coach to complete an online career assessment to identify their strengths. Throughout the program InDemand staff utilize both the findings of the assessment and members' self-awareness and growth during their field work to help them find a viable career path.

The core strength of the PowerCorps Camden program lies in the fact that its services extend beyond crafting a resume or practicing for an interview. The number and variety of options that members have, along with the ability for the program to cater to individual interests and needs, set members up for success. If a member is interested in health care, for example, they can become a certified home health aide. If a member has suffered a traumatic experience that impacts their ability to work, a social support coach can facilitate a referral to counseling within Center for Family Services. The integration of employment and social support into the PowerCorps Camden program model is intentionally designed to engage and empower individual members as they build a pathway to future sustainable success, both personally and professionally.

#### Success Rates

When the program requirement was 900 hours, the completion rate was about 40-50%. The service hour requirement was not entirely feasible as some members are parents or designated caregivers for siblings. Additionally, there could be transportation issues or a lack of support at home. The program recently revised the service term requirement to 675 hours starting with the first cohort of 2020 and the projected completion rate is now 80%. Additionally, all members obtain CPR certification, and some may pursue different types of certifications. For example, in a recent cohort, seven members earned their security license and two became certified home health aides.

PowerCorps Camden members explore a variety of pathways as they approach the end of their term of service, including:

- Exit the program before service term is complete (still able to access job readiness and employment support with InDemand as needed).
- Renew for a second service term with the program (must have completed the prior term's service hours).
- Secure employment (could include construction or even retail work).
- Enroll in college or occupational training (utilizing the educational award).
- Enroll in other similar programs (e.g., Hopeworks or Promise Corps).

Proportions can vary by cohort, but on average, most (12-15) members move on to employment after completing the program so that they can earn higher wages. Several (10-12) members will return to the program and a smaller number (8-10) will move on to school or vocational training. Members who go on to attend school may do so to attain educational degrees to qualify for full-time positions in various sectors, including open positions at Center for Family Services. In regard to the water workforce specifically, several past participants are now employed at NJ American Water and CCMUA. The job types at CCMUA include sewage plant operators and attendants.

## **Capacity Analysis for Community Engagement**

The adjustment in service hours from 900 to 675 is one way that the program structure was modified to remove some of the barriers to success that members faced relative to completion of their term. Here are several others:

- The program provides vans/buses for participants to move between work sites.
- To ensure that participants are able to arrive to work sites in time for the start of projects, crew leaders coordinate ride sharing and public transit use, for example.
- Center for Family Services can help members get their permit or license and covers the cost
  of driver's education courses which are provided by an external vendor.
- Center for Family Services can help members enroll children in center-based early childcare programs such as Head Start with sites located near the PowerCorps Camden office.
- Center for Family Services can help members obtain necessary employment documentation, such as a birth certificate.

# **Guidance for Creating a Similar Program**

### Main Steps

- Obtain more detailed information from both the Philadelphia Water Department and CCMUA on how they developed their PowerCorps programs, as they are slightly different in governance structure. This will allow the municipality to adapt an existing program to their own circumstances rather than create a new program from scratch.
- 2. Identify the work to be done. This could be green infrastructure maintenance, park/green space maintenance, cleaning inlets, and/or street sweeping (since in a CSO system, anything in the street ends up in the sewer system after a rainstorm).
- 3. Identify corresponding staffing levels needed to do the work. Estimate the cost of a full-scale professional landscaping company to do the work. This can serve as a baseline against the cost of the workforce program.
- 4. Develop a budget and seek funding to defray costs. Philadelphia and Camden applied for AmeriCorps funding. There may be other sources willing to help fund programs that provide job opportunities and life skills training for opportunity/at-risk youth.
- 5. Identify relatively cost-efficient partners in job training. For example, CCMUA partnered with the Rutgers Agricultural Cooperative, NJ Conservation Foundation, and NJ Tree Foundation to help design the rain gardens, develop a maintenance program, and help train opportunity youth in how to maintain the green infrastructure.

#### Factors for Success

- The program meets everyone where they are and provides social support.
  - Members have dedicated access to a social support coach who serves as a connector to resources and supports during their term of service and upon exiting the program for up to one year.
  - Supporting them throughout the process in an effort to remove barriers to securing and maintaining employment, including childcare, mental health services, and other social services, as needed.
- PowerCorps Camden and InDemand program staff get to know members on a personal level and focus their efforts on team building and job readiness, respectively.
- Training is offered on topics that members are specifically interested in.
- Members are able to see that opportunities exist for them.
- Members are able to connect and network with professionals.
  - The program engages staff from American Water, Cooper's Ferry Partnership, local government departments, and others to discuss job readiness skills, interviewing tips, and career opportunities.
- Members receive an educational award upon completion of service term and required hours.
- The program utilizes existing partnerships (e.g., NJ Tree Foundation) and works to forge new ones to establish a pipeline for jobs and additional training opportunities.

# Camden Works

# **History**

Camden Works launched as an employment initiative in October 2019 to connect city residents to job training and ultimately, jobs. Its creation was spurred by the influx of companies moving to the city, which were enticed by tax incentives. Camden Works was formed to ensure that city residents would have an opportunity to be employed by the new companies.



An important component of this program, like with PowerCorps Camden, is that members have an extra layer of support through case management services that Center for Family Services provides. This is not a job training program, but staff members work with residents and case managers from Center for Family Services to train them in skills that will help them with their job search and application process. Companies look for local employers to hire individuals that have completed the program. Participants are connected with partner employers and supported through the application and interview process. The program has had success so far, which includes individuals transitioning to PowerCorps Camden. Camden Works places individuals with water infrastructure organizations such as American Water, Camden County and CCMUA. Other program partners include Cooper's Ferry Partnership, Hopeworks, NAACP, Camden County Workforce Investment Board, Latin American Economic Development Association, and Volunteers for America.

# Logistics

The program is targeted to youth, college graduates, displaced workers, and re-entry residents, but is open to anyone who is interested. To apply for the program, candidates fill out a quick application online, submitting basic information. This is sent to Center for Family Services and the candidate is usually contacted within 48 hours. This is a private initiative, with funds raised from corporations and foundations who wish to support the effort.

# **Typical Curriculum**

Camden Works is committed to helping Camden residents find employment by guiding them through the entire process from preparation, skills development, recruitment and placement. By providing resources, case management and wrap-around services to encourage job-retention, Camden Works offers holistic support to residents of Camden looking for pathways to a viable career. The program does not provide training itself but works with Center for Family Services to connect residents with existing job-readiness, workforce development and skills training programs to support residents through their career path.

Similar to PowerCorps Camden, training is catered to individuals and their education and interests. If a job they are interested in requires a certain certification, such as OSHA 10, this program can help connect them with programs to work towards it. They can help them get their GED as well. If

there are barriers to transportation, the program can help participants get their driver's licenses. Some participants already have the training and just need help updating their resumes, for example. For those who are new to the job market, with no work experience, Center for Family Services can help develop resume and interview skills and fine-tune soft skills. After program participants obtain a job, they still have case work for several months up to a year after to make sure that everything is going well for them and that there are no setbacks. If they have issues during their employment, Center for Family Services can help them as they arise. Center for Family Services also serves as a mediator with the employer for the first 90 days.

#### **Success Rates**

A total of 181 individuals have participated in the program since the beginning of November 2019. Since then, just over half, or **96 residents, have been placed in permanent jobs in Camden with four hired by companies in the water industry.** These companies include NJ American Water and job types include GIS analysts and technicians. Again, even after residents are placed in jobs, there is continual case work and follow up to ensure their success while they're on the job. Additionally, if circumstances change for program participants and they are no longer able to pursue employment, the program will follow up with them as well.

The program works with local employers to learn about available positions and gain information on the skill requirements for the positions. Because Center for Family Services knows the requirements in advance, they are able to offer supplementary training or job preparedness training to individuals with relevant existing skills. The program recognizes that placement is not enough, and that retention is the ultimate goal. It is their priority that residents not only secure jobs but are able to perform well and grow in the company.

# **Capacity Analysis for Community Engagement**

There are no educational or professional prerequisites for this program and the program is active in reaching out to the community, asking them what they are looking for in terms of employment opportunities. Additionally, there was one instance in which the program addressed a potential barrier to facilitating job placement. A company that was in the process of moving to Camden was eager to start onboarding Camden residents immediately but was located a 50-minute drive away. Camden Works provided shuttle buses in the short-term to alleviate transportation issues. Once the company locates in Camden, they will be able to onboard and hire even more when transportation ceases to be an issue.

This program also provides access to the same services that Center for Family Services provides to PowerCorps Camden members: counseling, childcare services, etc. One of the reasons that the program is partnering with Center for Family Services and Hopeworks is that they want to bring everybody's expertise to the table, knowing that no one organization can resolve all the issues. Therefore, they are prioritizing a holistic approach, with not just one organization handling everything, but a group of partners working together to ensure they apply best practices and identify shortcomings to improve upon.

# **Lessons Learned**

Some of the interviewees offered specific recommendations for others who are currently operating or wish to establish these types of workforce programs.

#### 1. Expand technical training to include multiple types.

Moving forward, Andy Kricun, former Executive Director at CCMUA, hopes that PowerCorps Camden can partner with Hopeworks, a youth development nonprofit that provides various types of training, focusing on technological skills, and connects youth to enterprising businesses in or around Camden. Given that the water infrastructure field requires more than just plant operators or green infrastructure maintenance staff, he believes that it will be important to equip PowerCorps Camden participants with other skills, such as technology literacy, which will expand the number of opportunities available to them. On the technical side, receiving only green infrastructure training may be limiting. Thus far, the job placement ratio for PowerCorps Camden has been about 50%, whereas PowerCorps Philadelphia reports about 90% job placement results. Mr. Kricun envisions that partnering with Hopeworks will ultimately improve job placement rates.

## 2. Implement methods that allow for a smoother transition to the workplace.

PowerCorps Camden offers a very necessary, but as it stands, not always sufficient assistance for permanent job placement. PowerCorps Camden members had social services support to help navigate the program. This type of support is not always available at companies, which can result in difficulty navigating a new professional environment. A period of transition before full-time employment can help program graduates acclimate to their new working situations. Given this, the program partners are currently exploring an apprenticeship program that members can participate in after finishing the program. They would still receive social services they need while being able to learn the methods of an organization or company. This would ideally facilitate a smoother transition from PowerCorps Camden, which has built-in flexibility, to a more regimented work structure. This apprenticeship program would be separate from PowerCorps Camden but would work outside the hiring company's payroll. Scott Schreiber, Executive Director at CCMUA, recommends that other programs build this into the structure from the onset.

## 3. Ensure that the social support and technical training components are separate.

Mr. Schreiber believes that one of the most critical parts of the PowerCorps Camden program is the social service component, which addresses different needs outside of the green infrastructure training. The program initially asked crew leaders that lead the members on the green infrastructure activities to provide both technical and social service support. It takes a lot of time and energy to work with members on a daily basis, especially considering that some come from troubled backgrounds. Thus, they soon realized that these need to be two separate parts of the program for it to be successful.

# **Conclusions**

One of Jersey Water Works' four goals is "Smart CSO Control Plans," which entails that, "Municipalities and utilities adopt innovative CSO Long Term Control Plans (LTCPs) with cost-effective solutions that meet or exceed permit requirements and provide multiple community benefits." One of the four sub goals is "Serving Host Communities" which states: "Implementation of the LTCPs reflects early input of community stakeholders and delivers significant additional community benefits including improved public health, green space, economic revitalization and local jobs." Both PowerCorps Camden and Camden Works have the potential to greatly influence the community benefits of economic revitalization and local jobs, especially as the implementation of the Long Term Control Plans creates new employment opportunities. Again, Camden is just one of 21 municipalities with CSO permits. Other communities throughout the state, with CSOs or without, can replicate these programs and reap the same community benefits.

In Camden, the PowerCorps program has succeeded as the second of its kind, which shows that a workforce training program like this is replicable. Furthermore, the program has proven to be adaptable to a given city's circumstances. Camden's program is able to operate despite the fact that the city is smaller than Philadelphia and the city government could not manage the program. The Camden Works program, a four-year private pilot initiative, fills employment opportunities in the city by serving as a bridge between employers and residents seeking jobs. In its first year, the program has helped build pathways for residents to participate in the city's economic growth by working with employers and helping residents overcome common barriers to gaining employment.

Many workforce development programs are unidirectional. Both PowerCorps Camden and Camden Works are different in that they provide much more to their members on a personal level. For example, if a member is dealing with childcare or transportation issues that will hinder their ability to get a job, the program will help them mitigate the issues as much as possible so that when they get a job offer, they are ready to start without worrying about those types of hurdles. Additionally, members have control over what they want to prioritize and which barriers they want to address. Ultimately, the program facilitates getting them to the stage where they are ready and able to fully dive into employment.

These programs are innovative because, in addition to connecting local residents to water jobs, they are making a substantial difference in people's lives. Moreover, these types of programs can have a three-fold impact: environmental, through supplying qualified workers to water sector vacancies; economic, through bolstering the local economy by hiring local residents; and social, through empowering those who come from traditionally disadvantaged communities. There is potential for these programs to be expanded throughout the state, particularly in the context of LTCP implementation to solve issues related to combined sewer overflows.

# **Appendix**

#### **Interviewees**

## PowerCorps Camden

- Megan Lepore Director of Development and Sustainability at Center for Family Services
- Alyssa Ward PowerCorps Camden Program Coordinator at Center for Family Services
- Antoinette Fugee Pathways to Success Manager at Center for Family Services
- Andy Kricun Former Executive Director and Chief Engineer at CCMUA
- Scott Schreiber Executive Director at CCMUA
- Douglas Burns Chief Accountant at CCMUA [email correspondence]

#### Camden Works

- Shaniqua S. Biles Project Manager at Cooper's Ferry Partnership
- Brian Bauerle Director of Community Development at Cooper's Ferry Partnership

#### **Interview Questions**

- 1. What is the history of the program?
- 2. What is the typical program curriculum?
- 3. How was the green infrastructure built and how is it maintained? (If applicable)
- 4. What is the success rate of training completion?
- 5. What is the success rate of job placement? (If applicable)
- 6. What is the capacity analysis of a community to become engaged?

#### **Supplemental Information: Green Infrastructure in Camden**

The CCMUA formed the Camden SMART (Stormwater Management and Resource Training) Initiative along with New Jersey Department of Environmental Protection (NJDEP), Rutgers University, NJ Tree Foundation and Cooper's Ferry Partnership. Rutgers designed the rain gardens, in conjunction with the CCMUA's civil engineer, NJ Tree Foundation provided advice about which trees to use, and Cooper's Ferry took the lead on community outreach. Then, the CCMUA constructed the rain gardens which, for the most part, were funded through the New Jersey Infrastructure Bank, a low interest loan program that includes some principal forgiveness as well.

The NJDEP helped facilitate the loan process; the CCMUA paid back the low interest loans over a 20 year, and then later, a 30-year period. Because of the long loan repayment periods, and low interest, the CCMUA was able to construct 60 rain garden projects, plus four large riverfront parks, without raising rates. Additionally, the CCMUA paid for the design costs (to Rutgers, NJ Tree Foundation and the aforementioned civil engineer), which were also included in the NJ Infrastructure bank financing.