



**National Recreation  
and Park Association**

# **Can Green Infrastructure Provide Community-based Solutions?**

***Urban Waters National Training Workshop  
July 25, 2016***

www.nrpa.org





# National Recreation and Park Association



Historic Fourth Ward Park, Atlanta, GA





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- **The Great Urban Parks Campaign**
  - Joint initiative of NRPA and American Planning Association (APA)
  - Multiple objectives of GUPC including model project development; evidence-based research; training and professional development for parks, planning, and landscape architecture professionals
  - First major project of campaign: Green infrastructure stormwater management in parks to benefit underserved communities
  - Funded by major grant from JPB Foundation

[www.nrpa.org](http://www.nrpa.org)





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- **Why Green Infrastructure in parks?**
  - Parks are an ideal location for green infrastructure stormwater management
  - **Economic benefits**
    - Greater cost/benefit
    - Reduced maintenance
  - **Environmental benefits**
    - Better stormwater control
    - Improved water quality
  - **Social and community benefits**
    - Community engagement





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- **Why Underserved Communities?**
  - **Greatest need**
    - Underserved and low income communities most often the most park-poor
    - Environmental justice factors
    - Health factors
  - **Greatest opportunity**
    - Green infrastructure projects can be more than just functional
    - Benefits are multiplied
  - **Social equity benefit**
    - Community engagement and empowerment





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***What are key factors to successfully  
Employing youth and young adults  
in green infrastructure projects ?***







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***Maryland Conservation Corps  
Patuxent River Park***







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## *Maryland Conservation Corps Merkle Wildlife Sanctuary*



Background image: CH2M

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- Supervision
  - Training
  - Equipment
  - Safety
  - Uniforms
  - Enviromental education
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- Self-confidence
  - Work ethic
  - Responsibility
  - Satisfaction







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# Jobs for the Future

Opportunities in Green Infrastructure for  
Unskilled, Semi-Skilled, and Skilled Workers



# Stream Restoration Construction





# Shoreline Stabilization





# Embankment Repair





# Rain Garden / LID Construction





# Typical Job Description: Construction Laborer

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Angler Environmental is accepting applications for a Construction Laborer. The Construction Laborer will perform tasks involving physical labor for earthwork construction projects including stream and pond restoration.

## Requirements:

- Must be able to lift 50 pounds regularly
- Must be able to operate construction tools
- Must pass drug test
- Must have dependable transportation and valid driver's license





# Typical Job Description: Construction Laborer Landscaping Experience Preferred

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Angler Environmental has an immediate opportunity for Construction Laborers with mowing and landscaping experience preferred. The position will be based out of Warrenton, VA.

## Requirements:

- Previous lawn mowing experience preferred
- Previous landscaping experience preferred
- Must be willing to travel overnight





# Typical Job Description: Park Maintenance Worker I

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Under close supervision, and with on-the-job training, performs park/general maintenance work involving some responsibility, complexity, and variety. This includes performing general grounds maintenance and routine building maintenance in parks, golf courses, recreation centers, and other sites. Operates various hand tools, push mowers, and small riding mowers. Performs custodial maintenance. Performs work of increasing difficulty and responsibility to develop and improve skills. Performs other related duties as assigned.

## **Requirements:**

Ability to: (1) understand a system of procedures; (2) read and write routine materials and records; (3) provide courteous service; (4) perform manual work requiring physical effort dexterity and (5) lift up to 100 pounds desirable.

1. Pass Commission medical examination
2. Age 18
3. Ability to read and write

## **Working Conditions**

Primarily works outside, but may work inside on occasion or as assigned. May work weekend evenings, and holidays. Exposed to weather, dirt, waste, odors, caustic chemicals, pesticides, wildlife, and potentially harmful insects (for example, bees, hornets, wasps, etc.)





# Typical Job Description: Park Maintenance Worker II

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Under general supervision, performs general and some skilled park maintenance work involving moderate responsibility, complexity, and variety. Performs general grounds maintenance and routine building maintenance at parks, golf courses, recreation centers, and other sites. Operates a variety of equipment (for example, trucks, tractors with attachments, riding mowers). This is park/general maintenance work at the experienced level, involving operation of most equipment and specialized assignments requiring training and experience. Incumbents of this class regularly perform assignments as part of a group, but may occasionally work alone. Performs other related duties as assigned.

**Important Worker Characteristics:** Knowledge of: (1) grounds keeping; (2) landscaping; (3) parks and park/general maintenance operation; (4) safety; (5) turf maintenance; (6) pesticides and their application; (7) basic auto and equipment maintenance; (8) cleaning agents and cleaning procedures; and (9) Commission organization, policies and procedures\*.

**Skill in operation of:** (1) hand and power tools; (2) riding mowers; (3) tractor with attachments; and (4) trucks and/or truck trailer combinations.

**Ability to:** (1) understand a system of procedures; (2) read and understand labels; (3) read and write routine reports and correspondence; (4) provide courteous service; and (5) lift up to 100 pounds desirable.





# Relevant Certifications

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The following certifications or trainings are recommended for all field staff. Angler typically provides in-house training and certification once an employee is hired.

- Basic First Aid / CPR Training\*
- OSHA 30 Hour Course\*\*
- Bi-Annual & Weekly Safety Trainings\*
- Confined Space
- HAZWOPER

*\*Required for all Field Staff*

*\*\* Required for all Crew Superintendents*







# National Recreation and Park Association

- **Recent Developments**

- **National Urban Green Infrastructure Workforce Project**

- **Green Infrastructure Worker Certification Program by Water Environment Federation and Jobs for the Future with DC DOE.. USDA NUCFAC grant with support from Kresge Foundation**

- [www.jff.org/initiatives/natureworks/](http://www.jff.org/initiatives/natureworks/)

- **Green Infrastructure Workforce Survey**

- **Natureworks National Green Infrastructure Workforce Project, National Green Infrastructure Certification Program**

- [www.ngicp.org](http://www.ngicp.org)

- **Understanding potential of U.S. green infrastructure workforce; report on survey of municipal and local government agencies to be released this fall**



# ***Jobs for the Future***



- JFF has recently completed a national survey of 485 “green infrastructure” contractors about workforce issues.
- JFF is analyzing “real-time” labor-market information to identify characteristics of employer demand for green infrastructure installation, maintenance and inspection (IMI) occupations.
- JFF has worked with city officials in six selected cities to identify green infrastructure IMI job titles, wage levels and minimum educational requirements. Cities include:
  - Austin
  - Denver
  - Ann Arbor
  - Charlotte
  - Lincoln (NE)
  - Portland (OR)

***Final report will be available in late September 2016***



# ***National Green Infrastructure Certification Program (NGICP)***



- The certification is intended for workers entering the GI field as installers, maintenance workers, and inspectors
- Program is being built in accordance with the ANSI/ISO/IEC accreditation guidelines for certifying individuals
- First certification will be awarded in January 2017
- Recertification will be required to ensure that workers stay current with rapidly evolving GI practices





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**Thank you**

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