

Learn more about the growing green infrastructure sector and how to get into this type of work

ATLANTA CLEAN JOB OPPORTUNITIES

Green Infrastructure

Green infrastructure jobs can include a wide range of skill sets, ranging from construction, landscaping and groundskeeping, urban forestry, tree care, ecological restoration, maintenance and repair, mechanics, engineering and landscape architecture, among others. Green infrastructure is one of the most effective approaches to flood protection and helping communities stay healthy and safe, while also saving money that would've otherwise been spent to deal with stormwater damage. Additionally, green infrastructure projects add significant value for the community with diverse habitat and beautiful green spaces.

What is Green Infrastructure?

Green infrastructure utilizes plants and vegetation to: 1) absorb and filter runoff from heavy rainfall to prevent flooding and improve water quality; 2) protect natural green spaces and ecosystems; 3) help urban areas stay cool during hot summer days; 4) provide communities with opportunities for recreation and physical activities; 5) add economic value to the places we live.

Types of green infrastructure may include green roofs, bioswales, rain gardens, permeable pavement, parks, rows of trees along a street, wetlands, and more.

- ➔ The Atlanta Department of Watershed Management currently has more than 1,400 employees, and almost **half of those employees will be eligible for retirement in the next 5-10 years.**
- ➔ Overall, 4,950 new green infrastructure jobs are expected to be created in the Atlanta area by 2029.
- ➔ This means that **the City of Atlanta will be looking to hire new skilled workers in the coming years, which makes green infrastructure a great long-term career choice for young professionals.**

EDUCATION & SKILL REQUIREMENTS

Careers may range from installer to designer to entrepreneur, where entry level positions often require a high school diploma or previous experience in landscaping. Careers focused on the design of green infrastructure such as landscape architects, horticulturalists, hydrologists, and engineers, typically require Bachelor's or Master's degrees and certification or accreditation programs. For career growth in green infrastructure, desirable certifications can include:

- Leadership in Energy and Environmental Design (LEED)
- Accreditation from the National Green Infrastructure Certification Program (NGICP)
- Experience with Geographic Information Systems (GIS)

LEARN MORE ABOUT GREEN INFRASTRUCTURE JOBS

OCCUPATION	FUNCTION	PEOPLE STARTING IN THIS CAREER USUALLY HAVE	AVG. ATLANTA SALARY	AVG. U.S. SALARY	ACTIVITIES ON THE JOB	PROGRAMS THAT CAN PREPARE YOU IN ATLANTA
Landscaping and Groundskeeping Workers Gardener, Greenskeeper, Grounds Maintenance Worker, Grounds Person, Grounds Specialist, Grounds Worker, Groundskeeper, Landscape Specialist, Landscape Technician, Outside Maintenance Worker	Landscape or maintain grounds of property using hand or power tools or equipment. Workers typically perform a variety of tasks, which may include any combination of the following: sod laying, mowing, trimming, planting, watering, fertilizing, digging, raking, sprinkler installation, and installation of concrete wall units.	High school diploma or equivalent No work experience 1 to 12 months on-the-job training	\$34,210	\$35,240	<ul style="list-style-type: none">• Dispose of trash or waste materials.• Operate grounds maintenance equipment.• Drive trucks or other vehicles to or at work sites.• Irrigate lawns, trees, or plants.• Trim trees or other vegetation.	<ul style="list-style-type: none">• Applied Horticulture/Horticulture Operations, General• Golf Course Operation and Grounds Management• Greenhouse Operations and Management• Landscaping and Groundskeeping• Ornamental Horticulture• Plant Nursery Operations and Management• Turf and Turfgrass Management
Septic Tank Servicers and Sewer Pipe Cleaners Drain Cleaner, Drain Technician, Public Works Technician, Septic Cleaner, Septic Pump Truck Driver, Septic Tank Service Technician, Service Technician, Sewer Bricklayer	Clean and repair septic tanks, sewer lines, or drains. May patch walls and partitions of tank, replace damaged drain tile, or repair breaks in underground piping. <i>Part of keeping the environment clean is cleaning up waste, whether natural or manufactured, and septic tank servicers and swere pipe cleaners play a big role in managing waste-generated pollution. In addition, natural debris and waste can create environmental hazards and reduce effiency of systems, leading to flooding and other negative environmental impacts.</i>	High school diploma or equivalent No work experience 1 to 12 months on-the-job training	\$37,590	\$45,390	<ul style="list-style-type: none">• Communicate with other construction or extraction personnel to discuss project details.• Drive trucks or truck-mounted equipment.• Inspect plumbing systems or fixtures.• Clean equipment or facilities.• Record operational or environmental data.	<ul style="list-style-type: none">• Plumbing Technology/Plumber
Tree Trimmers and Pruners Arborist, Climber, Grounds Worker, Groundsman, Laborer, Plant Health Care Technician, Tree Climber, Tree Trimmer, Trimmer	Using sophisticated climbing and rigging techniques, cut away dead or excess branches from trees or shrubs to maintain right-of-way for roads, sidewalks, or utilities, or to improve appearance, health, and value of tree. Prune or treat trees or shrubs using handsaws, hand pruners, clippers, and power pruners. Works off the ground in the tree canopy and may use truck-mounted lifts.	High school diploma or equivalent No work experience Less than 1 month on-the-job training	\$42,070	\$47,450	<ul style="list-style-type: none">• Operate grounds maintenance equipment.• Drive trucks or other vehicles to or at work sites.• Trim trees or other vegetation.• Clean equipment or supplies.• Climb ladders or vehicles to perform duties.	<ul style="list-style-type: none">• Plant Nursery Operations and Management• Landscaping and Groundskeeping• Turf and Turfgrass Management
FirstLine Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers Field Manager, Golf Course Superintendent, Grounds Crew Supervisor, Grounds Foreman, Grounds Maintenance Supervisor, Grounds Manager, Grounds Supervisor, Groundskeeper Supervisor, Landscape Manager, Landscape Supervisor	Directly supervise and coordinate activities of workers engaged in landscaping or groundskeeping activities. Work may involve reviewing contracts to ascertain service, machine, and workforce requirements; answering inquiries from potential customers regarding methods, material, and price ranges; and preparing estimates according to labor, material, and machine costs.	High school diploma or equivalent Less than 5 years work experience No on-the-job training	\$50,090	\$53,270	<ul style="list-style-type: none">• Establish work standards.• Plan employee work schedules.• Inspect buildings or grounds to determine condition.• Inspect work to ensure standards are met.• Supervise maintenance workers.	<ul style="list-style-type: none">• Applied Horticulture/Horticulture Operations, General• Greenhouse Operations and Management• Landscaping and Groundskeeping• Ornamental Horticulture• Plant Nursery Operations and Management• Turf and Turfgrass Management
Environmental Science and Protection Technicians, Including Health Environmental Technician, Laboratory Technician, Public Health Sanitarian, Sanitarian, Water Quality Analyst, Water Quality Specialist	Perform laboratory and field tests to monitor the environment and investigate sources of pollution, including those that affect health, under the direction of an environmental scientist, engineer, or other specialist. May collect samples of gases, soil, water, and other materials for testing.	Associate's degree No work experience No on-the-job training	\$52,370	\$50,550	<ul style="list-style-type: none">• Confer with clients to exchange information.• Record research or operational data.• Prepare scientific or technical reports or presentations.• Direct natural resources management or conservation programs.• Develop environmental sustainability plans or projects.	<ul style="list-style-type: none">• Environmental Chemistry• Environmental Geosciences• Environmental Toxicology• Environmental/Environmental Engineering Technology/ Technician• Geography and Environmental Studies• Hazardous Materials Management and Waste Technology/ Technician• Physical Science Technologies/Technicians, Other• Science Technologies/Technicians, Other• Sustainability Studies• Water Quality and Wastewater Treatment Management and Recycling Technology/Technician
Geoscientists, Except Hydrologists and Geographers Engineering Geologist, Environmental Protection Geologist, Exploration Geologist, Geological Specialist, Geologist, Geophysicist, Geoscientist, Hydrogeologist, Mine Geologist, Project Geologist	Study the composition, structure, and other physical aspects of the Earth. May use geological, physics, and mathematics knowledge in exploration for oil, gas, minerals, or underground water; or in waste disposal, land reclamation, or other environmental problems. May study the Earth's internal composition, atmospheres, and oceans, and its magnetic, electrical, and gravitational forces. Includes mineralogists, paleontologists, stratigraphers, geodesists, and seismologists.	Bachelor's degree No work experience No on-the-job training	\$64,430	\$103,550	<ul style="list-style-type: none">• Design research studies to obtain scientific information.• Conduct research to gain information about products or processes.• Interpret research or operational data.• Analyze geological or geographical data.• Research geological features or processes.	<ul style="list-style-type: none">• Geological and Earth Sciences/Geosciences• Earth Systems Science• Geographic Information Science and Cartography• Geography
Environmental Scientists and Specialists, Including Health Environmental Analyst, Environmental Health and Safety Specialist, Environmental Programs Specialist, Environmental Protection Specialist, Environmental Scientist, Environmental Specialist, Hazardous Substances Scientist, Registered Environmental Health Specialist (REHS), Research Environmental Scientist	Conduct research or perform investigation for the purpose of identifying, abating, or eliminating sources of pollutants or hazards that affect either the environment or public health. Using knowledge of various scientific disciplines, may collect, synthesize, study, report, and recommend action based on data derived from measurements or observations of air, food, soil, water, and other sources.	Bachelor's degree No work experience No on-the-job training	\$83,810	\$81,240	<ul style="list-style-type: none">• Develop environmental sustainability plans or projects.• Advise others about environmental management or conservation.• Compile environmental or climatological data.• Research environmental impact of industrial or development activities.• Provide technical information or assistance to public.	<ul style="list-style-type: none">• Environmental Chemistry• Environmental Geosciences• Environmental Science• Environmental Toxicology• Environmental/Environmental Engineering Technology/ Technician• Geography and Environmental Studies• Sustainability Studies
Landscape Architects AP BD+C (Accredited Professional in Building Design and Construction), Architect, Golf Course Architect, Land Planner, Landscape Architect, Landscape Designer, Landscape Planner, Park Planner, Planner, Professional Landscape Architect (PLA)	Plan and design land areas for projects such as parks and other recreational facilities, airports, highways, hospitals, schools, land subdivisions, and commercial, industrial, and residential sites.	Bachelor's degree No work experience Internship/residency	\$84,710	\$74,980	<ul style="list-style-type: none">• Create graphical representations of structures or landscapes.• Discuss designs or plans with clients.• Incorporate green features into the design of structures or facilities.• Inspect facilities or sites to determine if they meet specifications or standards.• Analyze physical, survey, or geographic data.	<ul style="list-style-type: none">• Environmental Design/Architecture• Landscape Architecture



Images 1 & 2. Arborists may work to cut away dead or excess branches from trees or shrubs to limit overgrowth, improve appearance, and maintain tree health; urban gardeners add value to their communities by growing plants that improve air, water, and soil quality, keep cities cool, and provide local, healthy food (Source: Matt Boman/Flickr, U.S. Department of Agriculture).

RESOURCES TO LEARN MORE

- Explore occupation profiles including information on salaries, required qualifications, training opportunities, and much more on the [Career One Stop](#) website and [O*NET Online](#) website. Career One Stop also presents [a summary](#) of other common green infrastructure jobs, their respective education and training requirements, and any opportunities for training within your community. You can also click around the Certification Finder to explore certification programs and resources that will help you boost your qualifications for a green infrastructure job.
- Learn about apprenticeships and other pathways for green infrastructure careers on [Apprenticeship.gov](#), including guidance on where to find and how to access these opportunities.
- [Staying Green and Growing Jobs](#): Green Infrastructure Operations and Maintenance as Career Pathway Stepping Stones (*Green for All* and *American Rivers*, 2016)
- The [Interlocking Concrete Pavement Institute](#) continues to serve as the growing segmental concrete pavement industry's information, technical, education, and workforce development resource.
- Background on the [Green Infrastructure Worker](#) (*Work for Water*)
- Learn about the energy policies that are contributing to green infrastructure job growth in Atlanta:
 - [Strategic Plan 2022: A One Water Vision](#) (*City of Atlanta Department of Watershed Management*, 2022)
 - [Green Infrastructure Strategic Action Plan](#) (*City of Atlanta Department of Watershed Management*, 2018)

This factsheet is part of a collaborative effort between Smart Growth America (SGA) and the Partnership for Southern Equity (PSE) to support Atlanta's current and future workers' participation in the growing clean economy. The factsheets include introductory information on jobs within the following clean economy sectors: (1) energy efficiency, (2) solar energy, and (3) green infrastructure.