

MORGAN GARNER

GIS Specialist

Morgan has a background in GIS analysis, geologic field mapping, hydrogeology, geochemistry, and natural resource management. She has experience extracting high-quality data from long-term research projects, applying spatial data to support environmental and resource management initiatives, and delivering prompt and high-quality technical reports. Morgan joined the Geospatial team in 2022 to provide technical expertise to urban tree canopy assessments, contributing to quality assurance/quality control (QA/QC) of land cover data, management of GIS data sets, and reporting of urban forest metrics. Prior to Plan-IT Geo, Morgan was a Research Associate at Clemson University, where she led the analytical team and directed diverse client-driven research projects by evaluating environmental data of raw materials. While in school, she interned with the Georgia Tree Council to share her knowledge and passion for urban tree care by promoting the health and diversity of the nation's urban canopy.



EDUCATION

Master of Science in Geosciences | Georgia State University, 2019

Bachelor of Science in Geosciences | Georgia State University, 2017

PROFESSIONAL CERTIFICATES

ArcGIS Pro Foundation 2101, Esri, 2022

GEOSPATIAL PROJECTS

Orangeville, Ontario UTC Assessment (2022)

Morgan visualized urban forestry metrics by creating assessment maps at various geographic planning scales. Morgan quantified the environmental benefits of the town's trees by calculating air quality, stormwater run-off mitigated, as well as the amount of carbon stored and sequestered.

Lexington-Fayette, Kentucky UTC Assessment and Change Analysis (2022)

Morgan performed remote sensing classification of land and canopy cover of the city. She extracted vegetated areas unsuitable for plantings, such as baseball fields and golf courses. By collaborating with the city, she has ensured the accuracy of land cover classes and performed QA/QC on newly planted residential trees and trees that were obscured in the shadows of large buildings.

Bellevue, Washington UTC Assessment & Report (2022)

Morgan compared land cover datasets from the City of Bellevue to measure canopy change over the last decade. Morgan authored an encompassing report to analyze correlations between tree canopy and socio-demographic indicators to prioritize new tree plantings in effort to promote environmental equity.

Pinellas County, Florida UTC Assessment StoryMap (2022)

Morgan presented the county with an interactive StoryMap that illuminated the distribution of tree canopy, potential planting areas, and canopy change over time.

