



ENVIRONMENTAL SERVICES
FOR RENEWABLE ENERGY
SOUTHEASTERN U.S.



Supporting Renewable Energy in the Southeast

SWCA Environmental Consultants (SWCA) provides clients with a local team of experienced project managers and subject matter experts who work throughout the Southeastern United States. Several of our staff have more than 20 years of experience working with species, cultural resources key regulatory issues, and agency staff at both the federal and state levels in the region. This experience gives our team the ability to provide well-informed, strategic, and defensible work products that minimize uncertainty and risks to your project and project schedule.

REGIONAL EXPERIENCE AND EXPERTISE

Our local team has successfully supported over 200 clients on more than 600 renewable energy projects throughout the region. We understand the key issues and have experience navigating the often complex regulatory requirements common to the area, such as:

- Supporting state siting processes
- State-specific permitting requirements
- Designing baseline studies and assessing project risk to bats, eagles, and other rare, threatened, and endangered species with the knowledge of state and regional agency expectations and navigating ever-changing regulations
- Extensive knowledge of state-specific guidelines regarding cultural resources among State Historic Preservation Offices (SHPOs) throughout the Southeast
- Understanding of landowner concerns, including agricultural impacts, visual impacts, and mineral rights

KEY

- SWCA Offices
- Engineering services provided through SWCA Environmental Consulting & Engineering, Inc, an affiliate of SWCA



SOUTHEAST
RENEWABLE ENERGY
CLIENTS

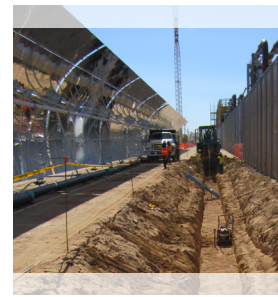


SOUTHEAST
RENEWABLE ENERGY
PROJECTS



SOUTHEAST STAFF

SWCA Services in the Renewable Energy Development Process



SITE SELECTION

- Critical Issues Assessments
 - Project Area Boundaries
 - Land Use
 - Ground Transportation
 - Aviation and Radar
 - Visual Resources
 - Biological Resources
 - Water Resources and Wetlands
 - Geologic Hazard Zones
 - Recreation
 - Air Quality
 - Noise
 - Cultural Resources
 - Native American Concerns
 - Environmental Justice
 - Socioeconomics
 - Political Context
- Stakeholder Engagement
- Permitting Strategies
- Land Development Services

PRE-CONSTRUCTION

- National Environmental Policy Act Compliance
- Section 106 Reviews
- Archaeological Surveys, Excavation, Testing and Data Recovery
- Site Probability Modeling based on Geoarchaeology
- State/Tribal Historic Preservation Office Collaboration
- Historical Building Documentation through Historic American Building Survey/Historic American Engineering Record/Historic American Landscape Survey Reports
- Endangered Species Act, Migratory Bird Treaty Act, and Bald and Golden Eagle Protection Act Compliance and Permitting
- Biological Studies (Avian, Bat, Wildlife, Plants, Wetlands, and Aquatic Resources)
- Visual Assessments and Simulations

ENVIRONMENTAL PERMITTING

- Air Permitting
- Bird and Bat Conservation Strategies
- Species-Specific Conservation Plans
- Environmental Compliance Management Plans
- Worker Environmental Awareness Programs and Training
- Restoration, Invasive Species, and Revegetation Plans
- Unanticipated Discovery Plans
- Stormwater Pollution Prevention Plans and Spill Prevention, Control, and Countermeasure Plans

CONSTRUCTION

- On-the-Fly Planning, Field-Staking, and Workarounds
- Compliance Monitoring and Reporting
- Assistance Obtaining Variances
- Wetland Mitigation Implementation
- Compliance Issue Resolution
- Cultural Resource Monitoring
- Geoarchaeological Monitoring

POST-CONSTRUCTION

- Environmental Monitoring and Reporting
- Mitigation Monitoring
- Adaptive Environmental Management
- Environmental Audits
- Enforcement Resolution
- Site Decommissioning, Restoration, and Reclamation



RENEWABLE ENERGY PROJECT SUCCESS

CONFIDENTIAL SOLAR ENERGY PROJECT MANATEE COUNTY, FLORIDA

The SWCA team performed natural and cultural resources services to gain the appropriate regulatory permits and approvals for construction to begin. This included wetland delineations, Tier 1 & 2 Site Characterization, gopher tortoise surveys, burrowing owl surveys, a tree inventory to meet Manatee County Land Development Code requirements, and a Phase I cultural resources survey. Additionally, SWCA provided consultation with the USACE, USFWS, FDEP, FWC, and Florida Division of Historical Resources.

CONFIDENTIAL SOLAR ENERGY PROJECT BAY COUNTY, FLORIDA

SWCA is providing natural, cultural, and permitting services through the development and construction of a solar project in Bay County, Florida. Services include wetland and waterbody delineations; gopher tortoise surveys and relocations; southeastern American kestrel surveys; tree inventory surveys; cultural resources surveys; agency consultations; and obtaining federal, state, and county permitting for the project. SWCA has also assisted the Overall Project team in managing all permit applications and needs and ensuring data needs from other team members were sufficient for agency requirements..

FLORIDA SOLAR PROJECT SITING MULTIPLE COUNTIES, FLORIDA

SWCA provided guidance on potential fatal flaws for siting of solar projects in Florida. Services included due diligence and reviews of the regulatory processes for gaining easements on federal, state, and locally owned conservation lands. SWCA provided summaries that allowed our client to make informed decisions on project site selection and viability.

LAND DEVELOPMENT PROJECTS STATEWIDE FLORIDA

SWCA has completed several land development projects throughout the state of Florida with a range of tasks. The most common tasks included wetland and waterbody delineations, gopher tortoise surveys and relocations, obtaining Environmental Resource Permits, conducting other as needed protected species surveys, cultural resources surveys, county required tree inventories, and agency consultations.

CONFIDENTIAL SOLAR PROJECT ORANGEBURG COUNTY, SOUTH CAROLINA

SWCA provided natural resources support for a proposed solar generation facility near Orangeburg, South Carolina. Responsibilities included a desktop-level assessment of natural, cultural, and land use issues to identify potential project fatal flaws. SWCA subsequently conducted a wetland and aquatic resources delineation and threatened and endangered species habitat assessment. Additionally, SWCA provided land services to support the project. Included in these services was the lease negotiation of approximately 1,375 acres as well as the negotiation and acquisition of required rights-of-way and substation purchase agreements.



RENEWABLE ENERGY PROJECT SUCCESS

SOLAR FARM STABILIZATION PLAN

DAVIDSON COUNTY, NORTH CAROLINA

SWCA developed a stabilization and revegetation plan for an existing solar farm in Davidson County, North Carolina. Due to poor stabilization and soil management practices during construction (approximately 10 years ago), this site was experiencing significant erosion, which was threatening the on-site infrastructure. Proposed improvements included restoring topsoil to areas that were previously stripped of topsoil during the grading/construction process, installation of vegetated swales and rock swales to convey stormwater flows off of the site, and specified seeding and mulch to stabilize the site. The project construction started in the fall of 2021.



SOLAR SITE SELECTION

NORTH CAROLINA

SWCA supported a project containing an utility-scale solar farm. SWCA was responsible for the scouting and acquisition of land to engage with landowners on lease/purchase negotiations; community and local government engagement; setting and tracking expectations with developing team; assessing property suitability for renewable energy projects through site documentation; and confirmation of local electrical infrastructure.

EDGECOMBE SOLAR PROJECTS

EDGECOMBE COUNTY, NORTH CAROLINA

SWCA worked on multiple projects on a site in Edgecombe County, North Carolina. One project consisted of a desktop cultural review. Another project consisted of a Phase II evaluation. SWCA also provided pre-construction natural resource surveys and a Phase I CR Survey for the facility that will generate up to 75MW and associated transmission line and substation.



SOLAR ENERGY FACILITY

NORTH CAROLINA

The Solar Energy Facility was first conceived as a 74MW wind energy facility. From 2010 to 2012, SWCA worked with 22 landowners to secure approximately 11,000 acres through lease options, purchase options, and transmission right-of-way agreements. Between 2016 and 2017, the client decided to convert the site to a solar photovoltaic facility. This required new land agreements with existing and new landowners totaling approximately 6,000 acres. In support of this project, SWCA secured local zoning approval and maintained project permits during a local government moratorium on solar facilities and testified before the North Carolina Utilities Commission in support of the Certificate of Public Convenience and Necessity. The 73MW Wilkinson Solar Energy Facility was constructed in 2019 and is operational.



CONFIDENTIAL SOLAR PROJECT

GLOUCESTER COUNTY, VIRGINIA

SWCA provided natural resources support for a proposed solar generation facility near Yorktown, Virginia. Responsibilities included a desktop-level assessment of natural, cultural, and land use issues to identify potential project fatal flaws. SWCA subsequently conducted a wetland and aquatic resources delineation and threatened and endangered species habitat assessment.

RENEWABLE ENERGY PROJECT SUCCESS

CONFIDENTIAL SOLAR ENERGY PROJECT

CRITTENDEN COUNTY, ARKANSAS

SWCA was responsible for data collection, field surveys, and reporting associated with the development of a 1,500-acre, 200 MW solar energy project and gen-tie transmission line in Eastern Arkansas. An SWCA employee was responsible for the coordination and production of a site characterization report (following the Tier 1 and 2 of the WEG), field efforts including wetland and waters delineations, cultural resources review, raptor nest surveys, and sensitive area/habitat surveys as well as environmental assessment document as part of the Arkansas Public Service Commission (PSC) requirements.



CONFIDENTIAL SOLAR ENERGY PROJECT

CARROLL COUNTY, MISSISSIPPI

SWCA provided environmental support for a proposed 100-MW solar generation facility and gen-tie transmission project in central Mississippi. Responsibilities included wetland and aquatic resources delineations, coordination of cultural resource surveys within potential USACE jurisdictional crossing areas, agency coordination, and Clean Water Act (CWA) Section 404 permitting strategy for the project.

CONFIDENTIAL SOLAR ENERGY PROJECT

ASHLEY COUNTY, ARKANSAS

The SWCA team completed natural resources and cultural resources surveys on a proposed 1,300-acre, 200-MW solar and associated gen-tie project within existing paper/timber production land. Tasks included completion of an aquatic resource delineation, cultural resource surveys, Phase I environmental site assessment due diligence, threatened and endangered species assessment, cultural resource unanticipated findings plan, and CWA Section 404 permitting technical memorandum/permitting strategy.



CONFIDENTIAL SOLAR ENERGY PROJECT

TUNICA COUNTY, MISSISSIPPI

SWCA provided environmental support for a proposed solar generation facility and gen-tie transmission project on 470 acres in northwest Mississippi. Responsibilities included site reconnaissance and data collection as part of a critical issues analysis (CIA) identifying natural and potential cultural resource issues, as well as potential local, state, and federal permitting associated with the development of the site.



CONFIDENTIAL SOLAR ENERGY PROJECT

SUNFLOWER COUNTY, MISSISSIPPI

SWCA staff completed a critical issues analysis, aquatic resources delineation, and phase I environmental site assessment associated with the development of a proposed solar development in Sunflower County, Mississippi. Data collected included natural resources, cultural resources, and state, federal, and local permitting constraints that potentially influence the project's development.

CONFIDENTIAL SOLAR PROJECT

ST. CHARLES AND ST. JOHN THE BAPTIST PARISHES, LOUISIANA

SWCA provided environmental development services such as site characterization, cultural resources assessment, wetland delineation, and agency consultation.

CONFIDENTIAL SOLAR PROJECT

TANGIPAHOA PARISH, LOUISIANA

SWCA provided environmental development services such as site characterization, cultural resources assessment, wetland delineation, and agency consultation.

SWCA'S TEAM IN THE SOUTHEAST



DAVID A. CRAWLEY, JR.
Office Director -
Pensacola and Tampa
22 years of experience

David.Crawley@swca.com

A Florida native and life-long resident living in Gulf Breeze, David Crawley serves as team lead for SWCA's Pensacola and Tampa offices. His expertise includes attaining environmental permits, clearances, and approvals necessary for projects to move into construction. This includes extensive experience working with federal and state agencies in the southeast such as the Federal Energy Regulatory Commission (FERC), USACE, USFWS, and various state agencies in Alabama, Florida, Georgia, and Mississippi.

David specializes in siting, design, environmental permitting, construction oversight, and post-construction monitoring for energy development projects, specifically pipelines. He has worked on hundreds of energy projects in the Southeast, including large-scale, new pipeline developments and many natural gas pipeline operations and maintenance projects throughout Florida, Georgia, Alabama, and Mississippi. He also has completed offshore energy siting studies off the Florida Atlantic coast, and several energy development projects in the Outer Continental Shelf area of the Gulf of Mexico.



HARRIS FRAMPTON
Senior Client Services Lead
21 years of experience

HFrampton@swca.com

Harris Frampton has over 21 years of experience enabling him to work effectively in complex environmental work with respect to State and Federal regulations. His expertise is in CWA permitting and compliance; threatened and endangered species surveys; leading field crews; and integrating technical scientific knowledge with the needs and goals of environmental resources, regulatory agencies, landowners, project developers, and resource managers.

In his role as project manager and environmental specialist, Harris has worked on a range of projects, including renewable and conventional energy, power generation and transmission, land development, and transportation. His expertise allows him the ability to (1) interpret environmental policies that affect projects from design to completion; (2) understand the science supporting those policies; and (3) develop strategies that allow clients to meet their objectives.



BRENT HANDLEY
Cultural Resources Director
31 years of experience

Brent.Handley@swca.com

Brent Handley is a registered professional archaeologist (RPA) with 31 years of experience in academic research and cultural resource management projects. Previous cultural resource management projects have included cultural resource assessment surveys (CRAS), pipeline and transmission line testing, monitoring, test excavations, block excavations, above ground historic surveys, remote sensing, and predictive modeling. These types of surveys have been completed in Alabama, Arizona, Connecticut, Florida, Georgia, Maine, Massachusetts, Mississippi, New Hampshire, New Jersey, New York, Rhode Island, and South Carolina. These projects have been successfully completed for clients such as the Department of Veterans Affairs (VA), United States Coast Guard, the Army Corps of Engineers, United States Navy, Army National Guard, National Park Service, United States Department of Agriculture, United States Department of Agriculture Forest Service and NRCS, and the Department of Transportation, local, county and state agencies, as well as private companies, telecommunication companies, and public utility companies.

Brent is a Cultural Resource Director who supervises all phases of cultural resource assessment, including logistical organization, daily field operations, primary and background research, artifact analysis, and the writing of final reports, as well as business development, people development and all financial performances. As a RPA, Brent is permitted under the Secretary of the Interior's guidelines to conduct independent archaeological fieldwork and obtain permits to work on State and Federal lands.

SWCA'S TEAM IN THE SOUTHEAST



HEATHER MCFEETERS
Senior Natural Resources
Specialist
22 years of experience
HMcfeters@swca.com

Heather McFeeters is a Senior Natural Resource Specialist with more than 22 years of experience in various disciplines within the environmental field, including regulatory compliance, water resource management, and engineering. She provides consultation in the public and private sectors on projects including renewable energy projects; natural-gas well and pipeline development; public utility infrastructure; and commercial, industrial, and residential land development. Heather has regulatory and permitting experience relative to CWA 404/401 utilizing both the USACE Nationwide Permit Program as well as State Programmatic General Permit Programs. She has managed and completed projects requiring consultation with USACE, U.S. Fish and Wildlife Service (USFWS), and multiple state environmental protection agencies (EPAs) throughout the northeast, midwest, and southeastern United States.

Heather's experience also includes serving as an environmental engineer for a state environmental agency overseeing the review and permitting of erosion and stormwater control facilities. She also has extensive experience conducting waters of the U.S. (WOTUS) delineations and reporting, Phase I Environmental Site Assessments (ESAs), as well as rare, threatened and endangered (RTE) species habitat assessments.



RACHEL BELL
Project Management
Technical Director - FERC
19 years of experience
Rachel.Bell@swca.com

A life-long Alabama resident currently living outside of Birmingham, Rachel Bell is SWCA's Project Management Technical Director - FERC. She is a certified Project Management Professional (PMP) with a focus on National Environmental Policy Act (NEPA) compliance for energy projects. She has experience preparing NEPA documents including environmental reports (ERs), EAs, EISs. Additionally, Rachel has substantial experience with Endangered Species Act (ESA) Section 7 consultation, USACE CWA Section 404 and Section 10 Rivers and Harbors Act (RHA) permitting, CWA Section 401 Water Quality Certifications, National Pollutant Discharge Elimination System (NPDES) stormwater permitting and compliance, NPDES hydrostatic test permitting and compliance, state and local permitting, wetland delineations, and protected species surveys.

Rachel's relevant experience includes project management, siting, design, NEPA compliance, environmental permitting, environmental training, and construction and post-construction oversight and compliance for energy projects throughout the southeast, including pipelines, compressor stations, solar developments, hydroelectric facilities, and nuclear facilities.



HEATH GARNER
Senior Project Manager/
Wildlife Ecologist
29 years of experience
Heath.Garner@swca.com

Heath Garner is an ecologist and project manager specializing in aquatic resources delineations, Section 401 and 404 permitting, mitigation planning and design, and habitat and species mitigation planning associated with project study design and technical data collection. He possesses comprehensive knowledge of federal and state regulatory requirements including NEPA, ESA, CWA, MBTA, BGEPA, and serves as a technical lead of the SWCA renewable energy team with expertise in rangeland grouse species, bald and golden eagles, migratory birds, and a diversity of bat species across North America.

Heath has conducted ecological and environmental permitting for conventional power generation and transmission and renewable energy development projects in the Mississippi Alluvial Valley and the southeastern United States for the last 10 years. He is also a Tennessee Department of Environment and Conservation (TDEC) certified Qualified Hydrologic Professional, allowing him to complete stream determinations throughout Tennessee Valley Authority jurisdiction.

SWCA'S TEAM IN THE SOUTHEAST



CHRISTINA PILLA
Project Manager
10 years of experience

Christina.Pilla@swca.com

Christina Pilla has educational, professional, and field experience with aquatic and terrestrial ecology throughout ecosystems of the southeastern United States. She has worked on a broad range of interdisciplinary projects in cooperation with federal agencies such as the USFWS, USACE, and the FERC, as well as state agencies and private developers.

Christina primary responsibilities include preliminary site assessments, listed species surveys and permitting, biological monitoring, aquatic resource assessments, construction monitoring, coastal assessments, wildlife relocations, wetland delineations and assessments, ecological site assessments, environmental permitting, and data management.



MATTHEW JORGENSON
Senior Cultural Resources
Team Lead
30 years of experience

matthew.jorgenson@swca

Matthew Jorgenson has 30 years of experience throughout the eastern United States in cultural resources management with an emphasis on archaeological compliance. During this time, Matthew acquired extensive experience in all levels and facets of archaeological studies and compliance with appropriate federal, state, and local historic preservation regulations. Matthew has had ample opportunity to work with underwater archaeologists, geophysicists, geomorphologists, historic architectural studies, National Environmental Policy Act (NEPA) compliance, and multidisciplinary permitting.

As a Registered Professional Archaeologist, Matthew is permitted under the Secretary of the Interior's guidelines to conduct independent archaeological fieldwork and obtain permits. Additionally, he guides teams through cultural resource surveys and consultations utilizing his in-depth knowledge of local resources and existing relationships with State Historic Preservation Offices.



CHARLIE BENTON
Senior Natural Resources
Team Lead
26 years of experience

charlie.benton@swca

Charlie Benton is a Natural Resource Manager in SWCA's Raleigh-Durham, North Carolina, office with over 26 years of experience in environmental sciences. His strengths lie in wetland, stream, and environmental compliance projects. He has worked as an environmental scientist for a variety of federal and state government agencies, as well as private companies. His extensive experience includes water resources permitting process and employs innovative and successful methods to offset the impacts. He has successfully helped his clients obtain Section 404 U.S. Army Corps of Engineers (USACE) Individual and Nationwide Permits (NWPs), Section 401 State Water Quality Certifications (WQCs), Coastal Zone Determinations, Section 10 Navigable Waters Permits, and U.S. Coast Guard bridge permits.

Charlie possesses expertise in the delineation, restoration design, and construction monitoring of freshwater and tidal wetlands habitats. He is a certified Professional Wetland Scientist experienced in conducting wetland functional assessments using a variety of methodologies. He has designed both freshwater and tidal restoration projects. Charlie is Rosgen Level IV certified and employs natural channel design for stream restoration projects. He is experienced in conducting stream functional assessments using a variety of methodologies, including the North Carolina Stream Assessment Method and the USACE Stream Quality Assessment Method.

SWCA'S TEAM IN THE SOUTHEAST

LOCAL EXPERTISE, BIG FIRM SUPPORT

SWCA offers a wide variety of services, but they all share a common theme — they allow us to help our clients meet their project goals in the context of environmental resources and regulations. We provide flexible solutions to challenging projects by identifying both opportunities and limitations to efficiently bring projects to fruition. While guiding and representing our clients throughout the project development process, we build trusting relationships as we navigate local markets and blend local insights with professional expertise. This helps bridge the gap between our clients' needs and stakeholder and community interests.

WHO WE ARE

SWCA is a nationwide environmental consulting firm. Since 1981, we've helped our clients navigate the environmental compliance process. We are recognized leaders for bringing sound science and creative solutions to every project.

Markets we serve: generation, transmission, oil and gas, government, water, mining, transportation, and land development.

For more information, visit SWCA.com.

100% *Employee* OWNED

CONTACT



STEPHANIE HUDGINS
Vice President-Client Services
Power & Energy
20 years of experience
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If you have any questions regarding SWCA's qualifications, please contact Stephanie Hudgins at Stephanie.Hudgins@swca.com.