

Brittany A. Banko

Senior Ecologist



Expertise

Environmental Permitting and Compliance

Wetland Delineation, Evaluation, Mitigation and Restoration

Aquatic System Evaluation

Wildlife Ecology and Permitting

Education

B.S., Environmental Science and Policy, University of South Florida, 2008

Certifications

SWFWMD Wetland Assessment Procedure (WAP)

US Department of Labor MSHA 30 CFR Part 46 and Part 48 Certifications

FDEP Qualified Stormwater Management Inspector

SSI Open Water Diver

Authorized Gopher Tortoise Agent, GTA-15-00007

FDEP Stream Condition Index and Habitat Assessment

Memberships & Affiliations

Florida Native Plant Society

Florida Association of Environmental Professionals

Florida Stormwater Association

Brittany has in depth experience in permitting projects that require environmental resource permits, mangrove trimming and alteration, as well as sovereignty submerged land authorizations. She has also developed experience in wetland delineation, scientific diving, Geographic Information Systems (GIS) and gopher tortoise relocations. Her primary responsibilities include conducting wetland delineations/evaluations, mitigation monitoring, environmental permitting, wildlife surveys, and participating in client and agency interactions.

ENVIRONMENTAL PERMITTING & COMPLIANCE

Project Ecologist - Substation and Transmission Line, Throughout Florida

Provided site assessments, wetland delineations, general and species-specific listed species surveys, U.S. Fish and Wildlife Service (FWS) and Florida Fish and Wildlife Conservation Commission (FWC) listed species permitting, listed species relocations, and permit compliance monitoring for several substations and transmission lines in Florida.

Project Manager/Ecologist – Environmental Permitting Assistance, Throughout Florida

Developed and prepared application materials for submittal to state, federal, and local regulatory agencies. Worked with large teams including clients, engineers, scientists, and attorneys and participated in agency negotiations.

Project Manager – Stormwater Pollution Prevention Plan Design, Permitting, and Compliance – Throughout Florida

Designed and implemented Stormwater Pollution Prevention Plans (SWPPP) associated with linear projects throughout the state of Florida. These projects included assessments to identify site specific approaches to protect natural resources, development of maps and SWPPP documents, installation of erosion and sedimentation controls, and evaluation of each control throughout construction to assure compliance with applicable permits and the Clean Water Act.

Project Manager/Ecologist – Environmental Compliance, throughout Florida

Developed compliance organization strategies for clients with projects in the design and construction phase. Compliance efforts included tracking compliance conditions from state, federal, and local regulatory agencies, providing third party compliance inspections, inspection summaries, and project recommendations.

WETLAND DELINEATION, EVALUATION, MITIGATION, AND RESTORATION

Project Manager/Ecologist – Wetland Delineation and Evaluation Throughout Florida

Conducted state (FDEP and Water Management District (WMD)) and Federal (U.S. Army Corps of Engineers (USACE) wetland delineations and evaluations utilizing the Uniform Mitigation Assessment Method (UMAM) and Wetland Rapid Assessment Procedure (WRAP).

Project Manager – Wetland Mitigation Monitoring, Central Florida

Managed a variety of mitigation monitoring projects for private and public sector clients. Developed work scope and budgets, proposal writing, performed data collection, data set manipulation, statistical analyses and technical report writing, trained staff in all mitigation monitoring permit compliance tasks, performed agency site visits and ongoing project management.

Project Ecologist –Jurisdictional Wetland Determination, Hardee County, Florida

Conducted wetland delineation consistent with the methods outlined in 62-340, Florida Administrative Code. Assisted wetland delineation teams using methodologies outlined in USACE 1987 Wetland Delineation Manual. The resultant wetland lines were submitted as part of a Formal Determination of Wetlands. In addition, the delineation was used as the basis for a federal wetland delineation consistent with the USACE.

Project Ecologist – UMAM Rule Development and Field Testing – Throughout Florida

Participated in testing of the FDEP draft UMAM scoring method and compared raw scoring variables, risk, functional loss, and/or functional gain to scores for assessment areas previously approved by FDEP during the ERP application process.

Project Ecologist – Environmental Transect Monitoring Implementation, Hardee County, Florida

Assisted with the Environmental Transect Monitoring (ETM) to satisfy several conditions of a Water Use Permit (WUP) for a client in Central Florida. This monitoring provides an ongoing qualitative description of each protected wetland system to track changes annually. These efforts included standardized data collection for vegetative composition and zonation, soils, and other physical features of wetlands.

Project Ecologist – Wetland Assessment Procedure Assessments in Pasco and Hillsborough Counties

Managed wetland assessments according to the Wetland Assessment Procedure (WAP) for 104 sites for Southwest Florida Water Management District. Trained additional staff in proper procedure and plant identification. Responsible for data compilation and coordination of field teams.

AQUATIC SYSTEM EVALUATION

Project Ecologist – Stream Evaluations, Pasco County, Florida

Conducted evaluations of several stream monitoring sites associated with the Pasco County National Pollutant Discharge Elimination System (NPDES) MS4 Permit. This evaluation consisted of biological assessment methods and water quality data collection. Duties included stream habitat assessment, benthic macroinvertebrate sampling, and water quality measurements using YSI Data Sonde as part of the SCI biological assessment method.

Project Ecologist – Stream Velocity Measurements – Hardee County, Florida

Measured stream velocities within nine systems in accordance with FDEP SOP-001/01 FT 1800 using a Hach FH950 portable velocity meter. The velocity measurements were taken thrice-weekly during an uncharacteristically rainy September and used to calculate discharge. These systems were all low-order streams with ephemeral to intermittent flow.

Project Ecologist – Stream Mapping and Evaluation – Hardee County, Florida

Developed a detailed baseline depiction of the $\pm 4,000$ linear feet of stream using a combination of high-resolution aerial imagery and Global Positioning System (GPS) equipment. For conveyances in areas of primarily native upland or wetland land cover, and for conveyances in agricultural areas exhibiting more-or-less natural stream sinuosity, a Trimble sub-meter GPS unit was used to record a track along center of the channel. The line features collected this way were later traced at a scale of 1:600 using ArcGIS software. This smoothed centerline was created in order to remove the extra "noise" from the GPS antenna movement during data collection. Nested GPS points and photographs were collected to demarcate and illustrate changes in channel dimensions, substrate or overbank area characteristics. Overall segment sinuosity ratios and local bend geometries (radius of curvature) were calculated from these GPS lines of each stream segment. Each stream segment was also observed for barriers to fish passage, such as hanging culverts.

WILDLIFE ECOLOGY AND PERMITTING

Project Ecologist – Gopher Tortoise Surveying and Relocation, Throughout Florida

Surveyed, excavated and relocated gopher tortoises and gopher tortoise burrow commensals to on-site and off-site recipient sites as an assistant to an FWC Authorized Gopher Tortoise Agent (GTA) in compliance with GTA permits. Tasks involved survey effort, permit application preparation, agency field review participation, Florida One-Call utility location coordination, excavation or trapping, tortoise transport, and installation and removal of exclusionary fencing.

Project Ecologist – Sand Skink Survey, Polk County, Florida

Conducted a sand skink cover board survey on a $19.8 \pm$ mile linear project located within the Sand Skink Consultation Area. This survey was conducted to determine if the species was present within the project footprint and determine any permitting or mitigation requirements that may be necessary.

Nightly Penguin Research and Habitat Restoration – Phillip Island Nature Park, Australia

Conducted nightly penguin counts with park rangers to assist in estimating population changes, constructed and installed artificial nests, re-vegetation/restoration projects, and removal of exotic species.