

Mike T. Pshar, M.S., PWS

Senior Ecologist



Expertise

Water Resource Management

Wetland Ecology, Delineation
Evaluation and Permitting

Wildlife Ecology and
Permitting

Marine Aquatic Systems
Evaluation and Permitting

Education

M.S. Ecological Restoration,
University of Florida, 2017

B.S., Marine Science Biology,
University of Tampa, 2004

Certifications

FWC Authorized Gopher
Tortoise Agent, GTA-13-00027

Professional Wetland
Scientist, #2674, Society of
Wetland Scientists

FDEP Stream Condition Index
Certification, Current

FDEP Lake Vegetation Index
(LVI) Certification, Current

FDEP Qualified Stormwater
Management Inspector,
#13217

SWFWMD Wetland
Assessment Procedure (WAP)
Training 2006-Current

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

PADI, Advanced Open Water
Diver and Rescue Diver

Mike is knowledgeable in wetland and stream ecology; his professional experience coupled with his graduate school experience at the University of Florida, exhibits a diverse background in ecological restoration. Additional areas of expertise include listed species evaluation and permitting, water resource management and marine natural resource surveying and reporting. Mike also assists the Flatwoods team in the state and federal wetland permit application process, Uniform Mitigation Assessment Method (UMAM) analysis, and wetland jurisdictional determinations in accordance with state and federal guidelines. He has been trained by the Southwest Florida Water Management District (SWFWMD) in the Wetland Assessment Procedure (WAP) and by the Florida Department of Environmental Protection (FDEP) as a Qualified Stormwater Management Inspector and has demonstrated to FDEP staff to be proficient in Stream Condition Index (SCI) sampling methods and protocols. Mike is a Gopher Tortoise Agent as authorized by the Florida Fish and Wildlife Conservation Commission (FWC). He also has completed US Department of Labor Mine Safety and Health Administration (MSHA) training. Mike is a member and active participant of the Tampa Bay Association of Environmental Professionals (TBAEP) and Society of Ecological Restoration (SER).

WATER RESOURCE MANAGEMENT

Ecological Project Manager - Morris Bridge Wellfield Hydrological and Ecological Monitoring Program, Hillsborough County, Florida

Managed the ecological monitoring program that was developed for the Morris Bridge Wellfield. Services have included quantitative and qualitative monitoring of vegetative changes (WAP), assessment of wetland condition, statistical analyses, expert witness testimony, aerial photographic interpretation, and analysis of water levels in nearby water bodies to determine potential wellfield effects during drought periods.

Project Manager – Tampa Bay Water Recovery Assessment Plan, Hillsborough and Pasco Counties, Florida

Assisted with the development of a quantitative measure (metric) to assess recovery for connected wetland systems (e.g. river and creek floodplain forests) from a hydrological and ecological perspective. Assessments utilized cursory water level data, historic and current aerial imagery, and literature review. Field assessments focused on ecological data collection using the wetland habitat assessment form which considers vegetative components, soil characteristics, and hydrological indicators, and also included the establishment of specific elevation markers (wetland edge, ecotones, wetland interior, and the landward extent of soils subsidence and significant tree fall).

Project Manager – Environmental Management Plan Implementation, Hardee County, Florida

Implemented the Environmental Management Plan (EMP) to satisfy several conditions of a WUP for a client in Central Florida. This plan included the installation and monitoring of permanent monitoring transects to allow for standardized vegetative, soils, and hydrologic monitoring. Wetland evaluation procedures included WAP, the United States Department of Agriculture Stream Visual Assessment Procedure (SVAP), and UMAM. Data collected during this effort was compiled, organized, analyzed, and stored in a Microsoft Access database as part of the environmental monitoring.

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.

WETLAND ECOLOGY, DELINEATION, EVALUATION AND PERMITTING

Project Manager/Lead Ecologist – Wetland Delineation, Evaluation and Permitting, Throughout, Florida

Conducted state (FDEP and Water Management Districts (WMD)) and federal (Natural Resources Conservation Service (NRCS) and U.S. Army Corps of Engineers (USACE) delineation reviews and wetland assessments using Florida's UMAM or Wetland Rapid Assessment Procedure (WRAP). Developed, prepared and submitted application materials to federal, state and local regulatory agencies. Worked with large teams including the client, engineers, scientists and attorneys and participated in agency negotiations.

Project Manager – Wetland Mitigation Monitoring, Central and South Florida

Managed a variety of mitigation monitoring projects for private and public sector clients. Developed work scopes 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.

Assistant Project Manager – Comprehensive Wetland Assessment, Hardee County, Florida

Developed comprehensive data collection methods for a complex (multi-habitat type) wetland system, managed and led field teams in the implementation of data collection methods, performed wetland assessment and habitat mapping, managed data, data sets, and calculations, completed technical report writing vegetation results sections, assisted in client correspondence and ongoing project management tasks.

Project Ecologist - Substation and Transmission Line, Throughout Florida

Provided site assessments, wetland delineations, general and species-specific listed species surveys, FWS and FWC listed species permitting, listed species relocations, and permit compliance monitoring for several substations and transmission lines in Florida.

WILDLIFE ECOLOGY AND PERMITTING

Project Ecologist – Avian Protection Plan, Indiana, Ohio, Kentucky, North Carolina, South Carolina

Assisted Project Manager with field data collection to validate modeling data inputs for creation of an avian protection plan for a large utility company to reduce avian interactions with electrical utilities. Aspects of the plan included conducting biological surveys, research and development of construction and retrofitting techniques to make electrical utilities avian-safe, developing standard procedures to address avian injuries/mortalities, nest management techniques, and developing an employee training program.

Project Manager/Project Ecologist - Gopher Tortoise Relocations, Throughout Florida

Excavated and relocated hundreds of gopher tortoises and gopher tortoise burrow commensals to on-site and off-site recipient sites as an FWC Authorized Gopher Tortoise Agent. Tasks involved survey effort, permit application preparation, agency field review participation, Florida One-Call utility location coordination, excavation or trapping, tortoise transport, installation and removal of exclusionary fencing and completion of After Action Reports.

Project Ecologist – Listed Species Surveys, Collier County, Florida

Conducted pre-construction surveys and periodic monitoring, to determine potential construction-related impact to protected species. Comprehensive Everglades Restoration Program (CERP) project consisted of road removal and filling of ditches and canals within portions of lands of the State. Target species included Florida panther, Florida black bear, Everglades mink, manatee, eastern indigo snake, wood stork, bald eagle, Everglades snail kite, and migratory and wading bird species. Required close coordination with FWS, SFWMD, and Division of Forestry (DOF) staff to ensure compliance with all permit conditions.

MARINE AQUATIC SYSTEMS EVALUATIONS

Project Ecologist – Benthic Habitat Survey, Seagrass Mapping, Franklin County, Florida

Conducted formal seagrass survey per FWC Recommended Survey Protocols for Estuarine and Marine Submerged Aquatic Vegetation (SAV) along a 5-mile., sea bottom transect, utilizing SCUBA. Tasks included mapping and photographing presence of hard bottom benthic communities and presence of seagrass along unconsolidated sandy ocean bottom in preparation of infaunal cable installation. SAV was mapped, species identified, blade counts conducted where applicable and assigned appropriate cover class (Braun Blanquet method).

Project Ecologist – Benthic Habitat Survey, Seagrass Mapping (*Halophila johnsonii*), Palm Beach County, Florida

Conducted formal seagrass survey per FWC Recommended Survey Protocols for Estuarine and Marine SAV along a 1500 ft., sea bottom transect, utilizing SCUBA. Tasks included mapping and photographing presence of *Halophila johnsonii* (Threatened Species, State and Federal) along unconsolidated sandy ocean bottom in preparation of infaunal cable installation. SAV density was mapped where applicable and assigned appropriate cover class (Braun Blanquet method).