

Eesa Ali

Senior Water Resource Analyst



Expertise

Water Quality and Wastewater Compliance

- Rapid Aquatic Biological Assessments
- Surface, Ground and Potable Water
- Industrial and Domestic Wastewater Compliance

Environmental Resources Compliance

Wetland Ecology, Delineation, Evaluation and Permitting

Education

B.S., Biology, University of North Florida, 2010

Certifications

FDEP Stream Condition Index and Habitat Assessment Certification, Current

FDEP Lake Vegetative Index Certification, Current

FDEP Groundwater, Surface Water and Wastewater Sampling Certification

FDEP Qualified Stormwater, Erosion, and Sediment Control Inspector

40- Hour OSHA HAZWOPER

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

Public Pesticide Applicator license, FDACS

Aquatic Pest Control licensed, FWC

Eesa Ali has extensive experience performing audits on surface water discharges throughout Florida. He has been trained by the Florida Department of Environmental Protection (FDEP) in ambient water sampling and water quality evaluations, including being certified in Habitat Assessments (HA), Stream Condition Index (SCI) & Lake Vegetative Index (LVI). Other areas of expertise include, National Pollutant Discharge Elimination System Compliance Enforcement Inspections (NPDES CEI), Planning and Monitoring associated with Total Maximum Daily Loads (TMDLs), Basin Management Action Plans (BMAPs) and wetland delineations. Eesa also instructs on water quality sampling technique, instrument calibration and data verification and quality assurance & control (QA/QC).

WATER QUALITY AND WASTEWATER COMPLIANCE

Project Manager/Lead Ecologist – Horse Creek Stewardship Program, Hardee and DeSoto Counties, Florida

Collected and analyzed water quality, aquatic habitat, aquatic macroinvertebrate, fish samples and land use data at multiple sites in and around the Horse Creek Basin. Project requirements included regular biological assessments, species diversity assessments and the design and implementation of impact assessments following abnormal events.

Project Manager/Lead Ecologist – Horse Creek Stewardship Program Impact Assessment, Hardee and DeSoto Counties, Florida

Compiled and analyzed historical data collected through several publicly-available and Client-generated datasets. These datasets include the annual HCSP field sampling, groundwater data, discharge monitoring reports, available United States Geological Survey (USGS) flow and level datasets, and any applicable Florida Department of Environmental Protection (DEP) data from the Impaired Waters Rule (IWR) Database.

Lead Ecologist – Pasco County MS4 Compliance Biological Assessments, Pasco County, Florida

Conducted biological assessments in six waterbodies in Pasco County to determine compliance with MS4 permit. Employs Stream Condition Index (SCI) and Stream and River Habitat Assessment (HA).

Lead Ecologist – King Lake Water Quality Monitoring, Pasco County, Florida

Conducted baseline and monthly water quality assessments of King Lake to determine the existing trophic state and screen for any legacy pesticides and herbicides. Monthly water quality parameters included nutrients and fecal coliform, as well as dissolved oxygen, specific conductivity, pH, depth, temperature and turbidity meter readings. Performed Lake Vegetation Index (LVI) sampling to assess the lake plant communities.

Project Manager/Lead Ecologist – NPDES Wastewater Audits, Evaluation and Permitting throughout North Florida, FDEP

Audited historical Discharge Monitoring Reports (DMRs), inspected water quality labs, conducted detailed analysis of effluent and receiving waters' chemical and biological response. Verified flowmeter calibrations and flow-proportional sampling programs were in accordance with NPDES permit requirements. Employed Stream Condition Index (SCI), Rapid Periphyton Survey (RPS), Linear Vegetative Survey (LVS), Lake Vegetative Index (LVI), Lake Condition Index (LCI), Stream and River Habitat Assessment (HA), BioRecon, Wetland Condition Index (WCI), and various tailored biological test (where applicable) to measure receiving waters response to point sources.

Project Manager/Lead Ecologist – Surface Water Assessment and Monitoring Program (SWAMP), FDEP

Designed and implemented large-scale sampling plans and rapid biological assessments of lakes, streams and rivers across 21 counties, including the Upper East Coast, Lower St Johns, Suwannee, Nassau, St. Mary's River Basins in Florida in support of the Impaired Waters Rule (IWR). Methodologies employed included Stream Condition Index (SCI), Rapid Periphyton Survey (RPS), Linear Vegetative Survey (LVS), Lake Vegetative Index (LVI), Lake Condition Index (LCI), Stream and River Habitat Assessment (HA), BioRecon and Wetland Condition Index (WCI).

Instructor – Surface Water Assessment and Monitoring Program & Industrial Wastewater inspection, FDEP

Developed curricula and taught NPDES Compliance Enforcement Inspections, Rapid Biological Assessments, Water Quality Sampling Techniques, Water quality Instrumentation, Data QA/QC, HAZWOPER-24 & Geographic Information Systems (GIS). Class attendees included district staff, local government as well as staff from regulated entities with hazardous waste, wastewater, potable water and solid waste backgrounds. Advised wastewater engineers regarding biological reporting, instrument calibration, flow measurements, water quality and data integrity.

ENVIRONMENTAL RESOURCES COMPLIANCE

Project Ecologist – Reference Wetland Monitoring Implementation, Hardee County, Florida

Performed monitoring data collection of high-quality Reference Wetlands as required by Specific Conditions within ERP. Reference Wetland locations and monitoring methods were developed, submitted to and approved by the FDEP prior to implementation. Reference wetlands were sampled in accordance with the approved sampling plan.

WETLAND ECOLOGY, DELINEATION, EVALUATION AND PERMITTING

Project Ecologist – Wetland Mitigation Monitoring, Central and South Florida

Provided the determination of wetland delineations, vegetation monitoring, soil sample collection, planting oversight, and site visits to determine permit compliance of wetland mitigation areas throughout Central Florida.

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 FWC listed species permitting, listed species relocations, and permit compliance monitoring for several substations and transmission lines in Florida.