

BROOKE AUMANN, GISP

Education

BA – Geography, University of South Florida, 2004

Specialty Certifications

Geographic Information Systems Professional (GISP)

Professional Affiliations

Florida/ Tampa Bay Association of Environmental Professionals (FAEP/ TBAEP)

Florida Urban and Regional Information Systems Association (FLURISA)

Tampa Bay GIS Users Group (TBGIS)

South West Florida GIS Users Group (SWFLGIS)

Professional Experience

Brooke Aumann has 14 years of experience in the field of GIS, 2 years with SCS Engineers, and 12 years with other firms. As a Project Professional with SCS Engineers, Brooke is responsible for implementing and providing GIS support services for a variety of projects in environmental services and landfill gas and design practices to the southeast region and nation-wide. Brooke's specialty is streamlining workflows and development of tools through GIS to provide efficiency and enhance decision making processes. Responsibilities include data management, data creation, spatial analysis, data research and collection, map production, GPS data collection, and creating web based maps and applications. Projects experience includes feasibility studies, land use and transportation planning, Phase I and II environmental site assessments, remedial action plans, facility siting studies, permitting, design, and construction services.

Relevant projects are detailed below:

Environmental Services

13th Floor Investments Soil Development Oversight and Environmental Assessment, Avalon Trails, Senior GIS Analyst, (June 2018- present). Provide GIS data management, analysis, and oversight to implement ESRI digital field data collection applications to improve soil management activities including soil sampling for the presence of arsenic with an X-ray fluorescence (XRF) analyzer, excavation documentation, soil blending, analysis and map creation for report deliverables.

Paccon GeoEnvironmental Inc, GIS Support Services, Senior GIS Analyst, (July 2019-present). Provide GIS support services including Data Development and Analysis, Database Management, and Figure/Map Production. Data Development and Analysis, Cut/Fill Analysis, Database Management,

and Figure/Map Production for Site Assessment, Soil Management to support remedial action activities currently being planned.

Miami-Dade County, Florida, Confidential Client, Environmental Assessment. Project involved soil and groundwater assessment over an eight-mile tract of land. Brooke created custom GIS forms for field data collection and trained field staff in data collection. Used GIS tools for soil sample analysis and created multi-page map book of figures used for reporting.

Homestead, Florida, Confidential Client, Environmental Assessment. Supported environmental site assessment and soil management plan activities for an agricultural to residential land-use conversion project. Used GIS tools to develop random soil sampling strategy and created figures for groundwater monitoring reports and soil management plan.

Solid Waste

Manatee County, Florida, Confidential Client, Landfill Siting Analysis. Responsible for the collection, organization, and cataloging of datasets used to analyze sites for suitability for a landfill. Mapped group of potential sites based on criteria provided by client. Shared data with CAD for further development in conceptual engineering.

Landfill Gas Management

Manatee County, Florida, Landfill Liquid Level Assessment. Developed a new process for well-status analysis that involved converting CAD data to GIS format for use on GPS-enabled device. Trained staff on data collection. Analyzed collected data for well status and created report figures to aid project manager decisions. The new process sped up the decision-making process.

Projects from Other Firms

Westshore Alliance Special Assessment Preparation and Documentation, Hillsborough County, FL. GIS Specialist responsible for the Westshore Alliance's annual preparation and documentation of the database related to the Westshore Special Assessment District non-ad valorem assessment roll. Ms. Aumann was responsible for the procurement and manipulation of parcel, tax roll and appraisal data acquired from the Hillsborough County Property Appraiser; the utilization of collected GIS-based information to define the pool of property owners to receive legal notifications, generate mailing labels for property owner notifications; as well as the development of the rationale and methodology that clearly define the objectives of the assignment. The assessment is ultimately used by the Westshore Alliance to fund improvements related to transportation, marketing, and security.

US 27 PD&E Study, Polk County, FL. Senior GIS Specialist responsible for providing updates and support to planners, engineers, and scientists. Maps and compiles potential environmental impacts using proposed alignment and right-of-way data and data collected in the field by scientists, planners and engineers. Sets up GPS Units for field data collection for a variety of tasks including wildlife habitat assessment. Provides hardcopy and digital maps as well as tables of impacts at conclusion of analysis for various purposes including permit applications. Has also assisted out in the field with data collection.

GIS Specialist, BP Oil Spill Clean Up Efforts, Mobile, AL. Provided GIS expertise and mapping support to BP for the Gulf Coast Region (Mississippi, Alabama, and Florida) clean-up effort. Worked daily within the Planning and Situation Units to provide GIS solutions to several branches of the US Military, Operations, Resources, Safety, Decontamination, and Logistics Units. Created mapping

products including Common Operational Picture, On-shore and Vessel Decontamination, Site Safety, Vessels of Opportunity maps for daily briefing meetings, numerous daily special request maps and maps for presentations to local, state and national government entities.

GIS Analyst, Panama Canal Bridge, URS, Colon, Panama. Was responsible for the collection, organization, and cataloging of over 150 datasets to be used in the development of bridge and tunnel alignment options. These datasets were used in a Land Suitability Analysis (LSA) evaluation using various weighted criteria specific to canal operations, natural and built environment and socioeconomic features. This evaluation yielded a series of constraint maps that lead to the development, analysis and evaluation of 11 bridge and 4 tunnel alignments, leading to the recommendation of 2 bridge and 1 tunnel alignment for further development in conceptual engineering."

GIS Analyst, Hillsborough River Watershed, URS, Hillsborough County, Florida. Digitized and attributed watershed geodatabase layers based on environmental resource permits and other data. Performed updates to geodatabase as needed. Throughout the management plan, provided quality assurance and control techniques – such as relationship classes, topology rules, file structure, and spatial and attribute checks using Data QE – to ensure integrity of data delivered to client.

GIS Analyst, Veterans Expressway Alignment Study, Florida's Turnpike Enterprise, Hillsborough County, Florida. Provided GIS updates and support to planners, engineers, and scientists. Mapped and compiled potential environmental impacts using proposed alignment and right-of-way data. Collected updated information from the client and County to reassess potential impacts. The production of maps was streamlined through the use of a map book generator script. Gathered information was put into map form and provided to environmental team for permitting.

GIS Analyst, Federal Emergency Mapping Agency (FEMA) Digital Flood Insurance Rate Map (DFIRM) Updates, Florida. Created Digital Flood Insurance Rate Maps (DFIRM) for various counties in the state of Florida using FEMA's Guidelines for the Map Modernization Program. Created and attributed digital data from the Effective FIRM's. Revised flood plain boundaries generated through engineering protocol. Produced Preliminary DFIRM maps using GeoFIRM tools created specifically for the Map Modernization Program.