

Eric Bushèe

Lead CAD Designer/GIS Analyst



Education and Credentials

B.S., Anthropology and Biology,
University of Kentucky,
Lexington, Kentucky, 1994

Continuing Education and Training

Hazardous Waste Operations and
Emergency Response 40-Hour
Certification (2010)

AutoCAD Civil 3D-Introduction
(2010)

First Aid and CPR Training

Professional Profile

Mr. Eric Bushèe is a CAD designer and GIS analyst with more than 20 years of experience. Mr. Bushèe's experience includes producing CAD construction drawings for both transportation and civil engineering projects, as well as AutoCAD Civil 3D modeling and analysis for soil and sediment remediation, and stormwater runoff and source control. In addition to being skillful in Civil 3D, he is also proficient in MicroStation, and is adept at managing data sharing between CAD and GIS software environments.

Mr. Bushèe is a GIS analyst with extensive experience in spatial analysis, including the planning and implementation of spatial interpolations in both 2D and 3D environments. He regularly uses both ArcGIS (3D Analyst, Spatial Analyst, Geostatistical Analyst) and C Tech's Earth Volumetric Studio software to construct interpolation grids for soil, sediment, and groundwater modeling. He routinely develops complex spatial grids to estimate volumes, assess predictability errors, and guide future sampling efforts.

Mr. Bushèe has produced technical maps and graphics in GIS and other software for a variety of environmental and technical documents. He specializes in creating complex maps—often drawing from multiple, varied data sources—that are both aesthetically pleasing and technically accurate. He has created maps for RI/FSSs, engineering evaluation and cost analysis (EE/CA) studies, sampling and analysis plans, environmental impact statements, environmental assessments, Clean Water Act Section 404 jurisdictional delineations, site-specific permits, cultural and biological resources evaluations, community wildfire protection plans, and parks and open space master plans.

Relevant Experience

CAD Design/Production

Port of Kalama Dredging Program, Kalama, Washington—Project manager and CAD designer for dredging construction design drawings. Prepared complete sets of drawings for annual dredging plans, including preparing estimated dredge volumes and areas based on bathymetric surveys.



Electric Power Generating Station, Hawaii—CAD designer for construction design drawings for sediment and tunnel solids source control action. Prepared complete sets of drawings for source control actions, including capping and excavation design, and BMP implementation.

Mission Bay Ferry Landing Project, San Francisco, California—CAD designer for construction drawing set for an engineered cap to address contaminated sediments at a ferry terminal. Drawings including capping plans, cross-sections, and details.

Interim Remedial Measure, Manufacturing Site, New Jersey—CAD designer for construction drawing set for excavations and capping of site. Drawings included capping plans and cross sections, and erosion and sediment control plan.

Perfluoroalkyl Substance Water Treatment, New Jersey—CAD designer for construction drawing set for the expansion of a 1.2 million gallon per day potable water treatment plant to add treatment for the removal of perfluoroalkyl substances. Drawings included piping and instrumentation diagrams, and site treatment piping plans and cross sections.

Steel Mill, Portland, Oregon—CAD designer for riverbank stabilization construction design drawings. Prepared complete sets of drawings for riverbank design, and erosion and sediment control plan. Riverbank existing and final grades were modeled in Civil 3D to provide soil volume estimations.

Former DDT Manufacturing Facility, Portland, Oregon—CAD designer for stormwater construction design documents. Prepared complete sets of construction drawings for Stormwater Source Control Measures and Erosion Sediment Control Plan. Modeled stormwater site features, including detention basins, channels, berms, and fill areas in Civil 3D to prepare a final composite topographic surface across the site.

North Boeing Field/Georgetown Steam Plant Interim Action, Seattle, Washington—CAD designer for complete set of construction drawings for interim action soil removal activities. Soil removal (dredged) areas were modeled in Civil 3D according to specific analyte cleanup levels. Removal areas were incorporated into existing topography to create a composite excavated surface for accurate cut/fill volume estimates.

Berry's Creek Superfund Site, New Jersey—Incorporated light detection and ranging (LiDAR) elevation data into existing topographic surveys to create composited surface to support future hydrodynamic modeling efforts. Used Civil 3D to merge LiDAR data with surveyed stream and channel outlines to better characterize the topographic surface across the site. Final site surfaces were output to GIS to produce a final site Digital Elevation Model.

Laurel Hill Site Remedial Design, Queens, New York—CAD designer for site-specific cap at a former refinery site. Grading plans were included in the construction drawings, and a final grading surface was created in Civil 3D to provide accurate cut/fill estimates.



GIS Analysis/Production

Berry's Creek Superfund Site, New Jersey—GIS analyst and cartographer for remedial investigation report for the Berry's Creek Study Area Superfund site. Provided GIS support, including map production, spatial analysis, and database management. Prepared site-wide digital elevation model, which was developed from a variety of sources, including bathymetric surveys, LiDAR surveys, CAD topography, and small-scale ground surveys.

Kerr-McGee Chemical Corp. Superfund Site, Columbus, Mississippi—GIS analyst supporting the CERCLA process to characterize and remediate environmental impacts associated with a former wood treatment facility. Provided GIS support, including map production, spatial analysis, and database management for remedial investigation and risk assessments, as well as feasibility studies.

Assessment of Hazardous Materials in Soil, Various Public Schools Statewide, Hawai'i—GIS analyst to assist the State of Hawai'i Department of Education on building-exterior and open space soil studies at various school campuses in Hawai'i. Provided GIS support, including map production, spatial analysis, and database management for soil management plans and interim environmental hazard management plans.

Wood Rosin and Turpentine Manufacturing Site, Georgia—GIS analyst for revised conceptual site model to support an alternate integrated remedial approach. Provided 3D modeling support to visualize volatile organic compound plumes in multiple groundwater zones.

Portland Harbor CERCLA RI/FS, Portland, Oregon—GIS analyst for sediment remedial investigation report that contained more than 600 maps. Provided GIS support, including map production, spatial analysis, and database management.

Former DDT Manufacturing Facility, Portland, Oregon—GIS analyst for the in-water EE/CA for a sediment removal action at a former chlor-alkali manufacturing facility within the Portland Harbor Superfund site on the Willamette River. GIS analysis included mapping chemical concentrations of multiple analytes in surface and subsurface sediment. Used 3D modeling to estimate the amount of buried sediment exceeding remedial action levels.

Deepwater Horizon, Gulf of Mexico—Worked in conjunction with the consulting team in responding to the *Deepwater Horizon* accident and oil spill in the Gulf of Mexico. Provided mapping for a series of data reports, as well as participated in quality assurance procedures for spatial data. Additionally, laboratory work included the processing of sediment samples for analysis.

Reservoir Sediment Investigation, Pueblo of Santa Ana, New Mexico—GIS analyst for sediment investigation throughout a dry reservoir bed in the Rio Jemez in New Mexico. Concentrations of eight separate metals were analyzed and mapped in ArcGIS.

Former Mining Site, Rosiclare, Illinois—GIS analyst for field sampling plan for risk assessment and remedial planning. GIS tasks included locating and mapping city parcels and lots using coordinate geometry descriptions from older plat maps, as well as parcel descriptions.



San Jacinto River Waste Pits RI/FS, Harris County, Texas—GIS analyst for the RI/FS for the San Jacinto River Waste Pits site. Technical maps and figures were produced in support of multiple sampling and analysis plans, including those for soil, sediment, and tissue sampling. Concentrations of chemical contaminants were analyzed and mapped in GIS.

New York State Brownfield Cleanup Program, 34th Street and 42nd Street, West Side, Manhattan, New York—GIS analyst for multiple investigations to address New York State Spills and Brownfield Cleanup programs. Figures and maps were created to support Phase I and II investigations, remedial action work plans, interim remedial work measure work plans, and RI/FSs.

