

Qualifications Summary

- More than 30 years of experience in dredged material management, permitting and environmental assessment
- Managed ACOE environmental services contracts and Task Orders to support the ACOE mission in the New England region
- Managed several large projects involving multiple field tasks for water quality monitoring, sediment sampling and laboratory analyses
- Managed several projects in New England on Superfund sites (New Bedford Harbor, Fletchers Point) and other hazardous facilities (et. Aberjona River)
- Experienced with federal and state agencies and their regulations and has successfully negotiated permit conditions for a multitude of coastal projects, involving dredging, various disposal methods, marinas, shoreline development and mitigation programs
- Has prepared a variety of documents related to ACOE projects including dredged material management plans, sampling and analysis plans, and dredge impact studies

JAMES J. BAJEK, B.A., A.A.

Senior Biologist/Project Manager

Professional Affiliations

Connecticut Harbor Management Association
OSHA 1910.120 HazMat Supervisor Training

Fields of Expertise

Mr. Bajek has over 30 years of experience in coastal and fresh water regulatory permitting, dredged material management and environmental assessment. He has been a regulator with the U.S. Army Corps of Engineers for 12 years and private consultant for the past 19 years. His expertise is particularly strong in the areas of federal and state agency interaction, dredging assessment, sediment characterization, ocean disposal assessment, marina improvements and coastal permitting. Mr. Bajek has managed several large projects involving water quality monitoring contaminated sediments, dredging and disposal in open water and upland. His past experience as a regulator provides his clients with expertise in resolution of conflicts with agencies regarding unauthorized activities, developing mitigation programs and conforming projects to the various regulations.

Higher Education

B.A., Biology, University of North Florida (1978)
A.A., Mechanical Engineering, Thames Valley State Technical College, Norwich, CT.

Employment History

2000-Present Principal, James J. Bajek, LLC.
1988-2000 Normandeau Associates, Inc.
1980-1987 U.S. Army Corps of Engineers, Waltham, MA
1976-1980 U.S. Army Corps of Engineers, Jacksonville, FL
1970-1974 U.S. Navy

Key Projects

U.S. Army Corps of Engineers, New England Division, Waltham, MA

Was employed with New England Division from 1980-1987 in the Dredged Material Management Section, Regulatory Branch. Served as the Division's expert on all aspects of dredged material evaluation. This involved various activities involving the Disposal Area Monitoring System (DAMOS) program, including serving as temporary Section Chief overseeing the entire program. He served on the DAMOS Committee, which evaluated the dredged material disposal site impacts from disposal activities, developed field study scopes of work, interfaced with the DAMOS contractor and reviewed field activity reports. Also served as Project Manager on several open water and ocean disposal site selection and designation studies. Was the Division's analyst for in-house and permitting issues relating to dredged material sampling and testing. This involved extensive review of several hundred federal and non-federal projects to determine project information requirements including appropriate sampling and testing, analysis of test results regarding suitability for various disposal alternatives with respect to applicable laws and regulations. Major duties also included establishment of Corps policies relating to dredged material management, permit special conditions including capping requirements for contaminated sediment, and the management of the Division's bioassay testing and laboratory inspection programs.

U.S. Army Corps of Engineers, Jacksonville District, Jacksonville, FL

Was employed with the Jacksonville District from 1976-1980 in the Regulatory Branch Permitting Section. Was responsible for managing various types of permit applications for the southern Florida area. Examples of permit projects include construction of marinas, dredging, dredged material disposal, housing development involving filling in waters of the U.S. and navigable waters. Permitting activities included development of public notices, evaluation of public, state and federal comments, interagency meetings, public hearings and preparation of environmental assessments. Other responsibilities included wetlands determinations, responses to Congressional inquiries and development of general permits to streamline the regulatory process.

Various Marine Environmental Services

U. S. Army Corps of Engineers, New England District, Concord, MA

Lead Senior Project Manager for a multi-year Task Order Contract with the Corps' New England District for conducting various field and laboratory studies to support the District's planning, regulatory, contaminant remediation, and navigation programs. This program is on-going. Projects to date have included the following:

- Conduction of vibracoring sampling and physical, chemical and biological testing for planned maintenance and improvement dredging in Boston Harbor, as well as dredging in Wellfleet Harbor, MA, Sagamore Creek, NH, Pt. Judith Pond and Little Narragansett Bay, RI, Bucks Harbor, ME, Beals Harbor, ME and several harbors in Connecticut (Guilford, Old Saybrook, Milford, & Greenwich).
- Preparation of Quality Assurance/sediment and water sampling plans for water quality monitoring in New Bedford and Providence Harbors.

Key Projects (continued)

- Water quality monitoring, including toxicity testing in New Bedford Harbor.
- Sediment remediation studies in contaminated waterbodies including New Bedford Harbor, Aberjona River, MA and Souhegan River, NH.

Sediment Vibracoring Services for Proposed Dredging Projects - Various Commercial Marina's and Private Boat Docking Facilities Throughout New England

Principal who developed a versatile sediment vibracoring system to support marine and freshwater projects involving sediment characterization for dredging and dredged material disposal assessment and site remediation. Key components include a shallow draft self-propelled platform with tripod and heavy duty winch, an electric vibracoring unit capable of deep water sediment coring and flexibility on core retrieval choices, which include rigid stainless steel, see-through polybuterate, and flexible thin-walled poly liners. Recent projects have involved coring through sediments having multiple layers in areas requiring both "maintenance" and "new" dredging and coring in close quarters near piers, bulkheads and various berthed vessels.

Marina Dredging and Water Related Renovations Permitting - South River Yacht Yard, South River, Hummarock, MA

Project Manager for major renovations and maintenance dredging at an existing commercial 90-slip marina. Work included permitting of a shoreline stabilization area, bulkhead and travel lift replacement, reconfiguration of the marina float system and dredging of approximately 15,000 cubic yards of sediment with disposal at the Cape Cod Bay Disposal Site. Agencies involved in permitting included the Scituate Conservation Commission, Massachusetts DEP (Ch 91, WQ Cert & CZM) and the U.S. Army Corps of Engineers.

Permitting Assistance for Waterfront Development and Petro Terminal - Gulf Oil Limited Partnership, et al, Chelsea, MA

Project Manager for permitting assistance for an active petroleum marine terminal in Chelsea River, MA and a tidal waterfront parcel in Rockport, MA. This involved researching historic state permits, establishing the Commonwealth's tidelands jurisdictional boundaries and assisting the client in permitting shoreline structures and dredging, and site development. Coordinating agencies included the Chelsea Conservation Commission, Massachusetts DEP Office of Water Quality Certification, Chapter 91 and MEPA offices, and U.S. Army Corps of Engineers.

Permitting and Resource Characterization for Offshore Natural Gas Pipeline Confidential Client, Massachusetts Coast

Technical Support for environmental impact assessment for a natural gas pipeline along a 29-mile coastal route. This included development and implementation of a sediment sampling and testing program to characterize the proposed alignment and to assess the expected water quality impacts of construction. The project will involve development of environmental impact reports for filing with FERC under NEPA. Other coordinating and permitting agencies include Massachusetts DEP, the U.S. Army Corps of Engineers and National Marine Fisheries Service.

Key Projects (continued)

Water Quality Monitoring for the Boston Harbor Dredging Project Great Lakes Dredge & Dock Co. Boston Harbor, MA, U. S. Army Corps of Engineers Massachusetts Port Authority

Project Manager for conducting an extensive water quality monitoring program involving dredging and disposal of approximately 1 million cubic yards of contaminated sediment into in-channel containment cells. This involved interagency coordination, field sampling, laboratory testing, and report preparation over a 15-month period. Monitoring activities included evaluation of turbidity using two types of sealed dredge bucket technologies, turbidity plume mapping during dredging and disposal activities, water chemical evaluation during disposal and chemical uptake in blue mussels during dredging and disposal activities during a 90-day period. The monitoring conditions were complex, involving adverse weather conditions, difficult schedules, including nighttime activities, working around busy harbor traffic and testing/reporting under very tight turnaround requirements.

Permitting for Maintenance Dredging at Several Marine Terminals in Boston Harbor: Massport Authority, Charlestown, MA Coastal Oil, Revere, Boston, MA BP Oil Co., Revere, MA Gulf Oil Limited Partnership, Chelsea, MA Boston Edison, Boston, MA

Project Manager for several marine terminals and a power plant water intake for maintenance dredging. This involved development of sediment sampling and testing programs, evaluation of dredging methods, dredged material disposal options and federal, state and local permitting. Disposal options included ocean disposal at the Massachusetts Bay Disposal Site, nearshore containment and dewatering, and landfill disposal. Several of the projects included construction oversight.

New Bedford Harbor Superfund Cleanup Monitoring U.S. Army Corps of Engineers, New Bedford, MA U. S. Environmental Protection Agency

Project Manager for conducting water and sediment quality monitoring during the Hot Spot dredging cleanup of PCB contaminated sediment in New Bedford Harbor. This involved a 16-month program of intense monitoring during the hydraulic dredging of sediments containing up to 150,000 ppm of PCBs. This work was part of EPA's Superfund program with the Corps of Engineers technical oversight. A field program involving several teams conducting synoptic water quality sampling included 24 hour turn around of PCB and heavy metals testing. This also involved design, construction and operation of a multiport water sampling facility a field lab for processing samples and project operations. Additionally, health and safety plans were prepared and sediment coring was conducted at level C protection.

Key Projects (continued)

Dredging Alternatives Evaluation and Ecological Risk Assessment for Remediation of Sediments at Creosote Contaminated Pier Site, Park National Service, Boston Harbor, MA SEA Consultants

Principal Author for evaluating the sediments in the vicinity of a pier impacted by excessive creosote. This included evaluation of potential methods, costs and impacts for remediating the PAH impacted sediment. Field and laboratory studies were conducted to evaluate existing biological conditions to aid in determining the level of contaminant exposure to marine organisms.

Mack Point Marine Terminal Dredging Project, Searsport, ME Maine Dept. of Transportation

Fay, Spofford & Thorndike, Inc.

Principal Scientist and technical lead on developing and implementing the necessary sediment characterization studies for maintenance and improvement dredging approximately 73,000 cubic yards of sediment at a marine cargo terminal. This involved the development of a sediment sampling and testing program to evaluate the impacts dredging and disposal of the materials using a variety of techniques involving open water and land alternatives. Responsibilities included coordination w/client and the various state and federal permitting agencies, developing proper sampling protocols, overseeing sampling and testing activities and evaluating test data in relation to possible disposal alternatives.

Beverly-Salem Bridge Reconstruction Massachusetts Highway Dept., Salem, MA

Principal Scientist and technical lead on developing and implementing a sediment characterization study as well as state and federal permitting for the necessary dredging for new bridge piers in the Danvers River. This work involved developing a sediment sampling plan, interagency meetings and coordination, overseeing sediment sampling and testing, evaluation of test results and report preparation. This required compliance with the Coastal Zone Management office, U. S. Army Corps of Engineers, Massachusetts DEP offices and various federal resource agencies.

Private Dock Permitting for Several Coastal Connecticut Sites Westport, Norwalk, Rowayton, Darien

Project consultant for the design and permitting for several private recreational boat docks in coastal areas. Many sites required detailed evaluation of the existing resources (ie., tidal wetlands, mudflats, navigational concerns and exposure to severe coastal storms) for proper siting. The docks also were designed to comply with the Army Corps of Engineers and CT DEP regulations, policies and guidelines relating to docks and other coastal shoreline structures.

Dredge Permitting to Restore Navigation and for Aquatic Plant Control Mallard's Landing Association, Belmont, NH

Project Manager for restoration of navigation to a private boat docking facility. This included conducting a water depth survey, mapping aquatic vegetation and developing a dredging and disposal plan. The selected option involved hydraulic removal of approximately 2600 cubic

Key Projects (continued)

yards of sediment with disposal into an upland earthen berm containment site. The bottom restoration also included removal of milfoil, a nuisance aquatic plant that has impacted the boating area. Also, the Associations boat mooring area was redesigned to improve efficiency and reduce navigational conflicts. Plans and specifications were prepared for contracting. The work also included construction oversight. Prepared all permit applications for the New Hampshire Department of Environmental Services, Division of Safety Services and U.S. Army Corps of Engineers.

Marine Sediment and Water Quality Investigations at Petro-Chemical Facility Confidential Client, Port Arthur, TX

CH2M Hill

Project Manager and Task Manager for conducting several field investigations as part of a facility-wide remedial investigation of potentially impacted coastal areas. This involved managing the development of Health and Safety Plans, preparation of Field Implementation Plans, subcontracting documents and quality control measures and management of field activities involving several disciplines and field teams. Field programs included a 12-month water quality study of a drainage canal network and associated tidal connections as well as sediment vibracoring and grab sampling at over one hundred locations along 15 miles of tidal and freshwater locations. Laboratory coordination included sample shipping, tracking and quality control.

Marina Site Evaluation and Regulatory Agency Coordination Marshall's Express, Stamford, CT

Project Manager for conducting a site assessment of a subtidal area and intertidal mudflat for the development of a marina. This involved site investigations including a shellfish study to determine the importance of the site as an oyster habitat and overall benthic value. Several agency meetings were held to determine resources of concern in relation to possible construction options.

Dredge Permitting and Construction of Berthing Area at Naval Shipyard U.S. Navy-Northern Division, Philadelphia, PA

Moffatt & Nichol, Engineers

Project Manager for site characterization and permitting of 100,000 cubic yards of sediment dredged from the Philadelphia Naval Shipyard Reserve Basin to support the long-term mooring of inactive reserve ships. This involved assessment of dredging and disposal impacts and the preparation of U.S. Army Corps of Engineers and state (New Jersey and Pennsylvania) permit applications. The dredged material assessment included the collection of vibracore samples, physical and bulk chemical and TCLP analyses, as well as an evaluation of impacts on water quality, fisheries and other environmental resources. Due to the unique site conditions, two dredging methods (hydraulic and clamshell) and two separate disposal sites (a nearby upland containment area and a NJ disposal site) were considered for this project.

Key Projects (continued)

Sediment Characterization and Permitting Assistance for a Public Marina Lockwood City Marina, Charleston, SC

Moffatt and Nichol, Engineers

Project Manager for sediment sampling, testing and regulatory agency coordinating for maintenance dredging at an existing marina. This involved sediment coring and heavy metals, PCBs, PAHs and grain size analyses to evaluate ocean disposal of dredged material. This included participation in meetings with the U.S. Army Corps of Engineers, the South Carolina Coastal Council and other agencies to develop an appropriate sampling and analysis plan.

Dredged Material Permitting at Terminal in Flushing Bay, New York Independent Cement Corporation, Queens, NY

Project Manager for sediment characterization and permitting of 5000 cubic yards of maintenance dredged material. This involved developing a sediment sampling and testing plan with the U. S. Army Corps of Engineers (ACOE) and New York DEC. Sampling was conducted by vibracoring several feet at each location. Laboratory analyses followed protocols developed by the ACOE, New York District, the EPA, Region 2 and State of New York. Federal and state permit applications were prepared and a capping plan was developed for disposal of the dredged material at the Mud Dump in New York Bight.

Beach Nourishment and Breakwater Permitting at Private Facility, Long Island Sound, The Tokeneke Club, Darien, CT

Project Manager for permitting an existing rock breakwater and for beach nourishment at a private beach club. This included oversight for a water and shoreline condition survey, evaluating several options for stabilizing an exposed beach and renourishing the beach, which was severely impacted by a coastal storm. A subterranean gabion was selected as the best solution for protecting the re-established beach from future erosion. This included preparation of federal and state permit applications and assisting the client in obtaining a contractor for conducting the work.

Review and Critique of Draft Ocean Dumping Manual for Dredged Material (Green Book), American Association of Port Authorities, Moffatt & Nichol, Engineers

Project Manager for reviewing the draft revised Implementation Manual developed by the U.S. Environmental Protection Agency and Army Corps of Engineers. The purpose of this assessment was to provide AAPA with information regarding how the proposed changes in testing protocol and data interpretation may affect economical and operational activities of ports that require periodic dredging with ocean disposal. A comprehensive report was prepared which detailed several concerns as well as recommendations as to how AAPA might respond to EPA and the Corps to rectify those issues. AAPA was also accompanied as their technical consultant at agency hearings in Washington, DC. This effort resulted in significant changes to the draft manual, which are reflected in the final document published in the spring of 1991.

Maine-New Hampshire Dredged Material Management Study U.S. Army Corps of Engineers, New England Division

Principle Author for evaluating and documenting the historic and future dredging and dredged

Key Projects (continued)

material disposal needs of the coastal rivers and harbors of Maine and New Hampshire. This included extensive interviews with federal, state and local authorities and facility operators, as well as a file search and review of all known historic permits issued for dredging in both states. Additionally, research was conducted to identify all known dredged material disposal options. The purpose of this study was to identify the potential dredging and disposal site needs for each major navigation harbor and river over the next 50 years. A comprehensive report was prepared that summarizes the findings and provides short and long-term projected needs. The intent of this study was to assist regulators and project proponents with dredged material management information.

Development of a Dredged Material Handbook for Great Lakes Region

U.S. EPA, Region 5, Chicago, IL

Task Manager for developing a handbook outlining the decision-making process utilized by Region 5 and the Army Corps for assessing dredged material in the Great Lakes region. This included coordination with the various states, EPA and Corps to summarize their respective processes for evaluating and regulating dredged material disposal. The resulting handbook describes the various sediment classification methods and the removal and disposal options available for various pollutional classes of sediments.

Maintenance Dredging at Nuclear Power Station Cooling Water Intake

Vermont Yankee Nuclear Generating Station, Connecticut River, Vernon, VT

Task Manager for sediment characterization and permitting at the plant water intake area. This involved oversight of a hydrographic condition survey, development of a sediment sampling and testing program, evaluating various dredged material disposal options and preparation of federal and state permit applications. After reviewing several dredging and disposal options, hydraulic dredging with containment in geotextile bags was selected for the 2000 cubic yards of material. The regulatory agencies supported the concept of this method of containment even though it was unique for New England. The project was very successful and is a model for other similar future dredging projects.

Diagnostic Study of Birge Pond for Recreational Use and Dredging

City of Bristol, Bristol, CT

Project Manager for conducting a study of Birge Pond, a small urban waterbody used for public recreation. This involved field studies including a water depth survey, sediment sampling and testing, inspection and evaluation of a concrete dam, and general ecological and watershed evaluation. The purpose of this study was to evaluate the existing sediment and water quality towards improving the pond as a recreational center for Bristol. The evaluation also included interviews with key city officials and the local community, including a public session to obtain input and local preferences. The final report included a plan for maintenance of pond water quality in the future, as well as an economic, regulatory and physical feasibility evaluation of dredging alternatives.

Key Projects (continued)

Five Mile River Maintenance Dredging Several Private Clients, Darien and Rowayton, CT

Project Manager for obtaining federal and state permits for dredging several marinas and private docks in the Five Mile River. This work included sediment sampling and testing following the U.S. Army Corps of Engineers (ACOE)(New England District)/U.S. EPA (Region 1) and Connecticut DEP regional protocol. Additionally, there was extensive interaction with the Five Mile River Commission to organize the proposed dredging as a Harbor-wide community effort. This included meetings with the ACOE regarding potential dredging of the Federal channel to alleviate area-wide shoaling, which had substantially hindered boating use of the area. This effort also involved organizing several of the dredging projects as part of a larger Sound-wide dredging and capping program at the Central Long Island Sound Disposal Site during the fall of 1996.

Dredged Material Assessment and Permitting for Several CT Marinas Tallmadge Brothers, Inc./Brown Boat Works, Norwalk and Stratford, CT

Project Manager for assisting a commercial oyster industry and several recreational and commercial marinas that require maintenance dredging and other water related activities. Each project required evaluation of existing site conditions, water depth surveys, and development of sediment sampling and testing programs for federal and state regulatory permit requirements. Project activities included sediment characterization, plans preparation and permit applications. Dredged material disposal alternatives were also evaluated for each facility.

Publications and Presentations

- Pembroke, A.E., J. Bajek, J. Hansen and D. Haden. 1998. Creative Resolution to the Problem of Disposal of Boston Harbor, MA (USA) Maintenance Material Unsuitable for Unconfined Open Water Disposal. Success Through Coordination and Cooperation. Proceedings of the Fifteenth World Dredging Congress, 1998. WODCON XV, Dredging Into the 21st Century. Vol. 2. R.E. Randall, ed. Pp. 821-834.
- Pembroke, A.E., C. Swanson, V. Treworgy, D. Babb-Brott, and J. Bajek. 1997. Development of a PC-Based Tree for Dredged Material Disposal Planning: Lessons Learned. Presented at Coastal Zone '97, Boston, MA.
- Bowen, M., A. Pembroke, and J. Bajek. 1989. An Evaluation of Environmental Assessment Techniques for Coastal Marina Permitting. Pp. 121-142 In: N. Ross, ed. 1989 Marine Research. Int'l Marine Institute. Wickford, RI.
- Fredette, T., R. Morton, J. Germano, and J. Bajek. 1987. Dredged Material Behavior at a Deep Water, Open Ocean Disposal Site. 20th Annual Dredging Seminar, Toronto, Canada.
- Bajek, J. 1985. Dredged Material Evaluation Through Harbor Characterization in New England. Coastal Zone '85, Volume 1.