

4.0 TECHNICAL CAPACITY

4.1 PROJECT TEAM

The team assembled to complete the Bingham Wind Project has broad experience in the development and construction of multiple utility-scale wind power projects in Maine and in other states.

The project development team includes Blue Sky West, LLC and Blue Sky West II, LLC (Applicants);¹ Stantec Consulting (natural resource assessments, shadow flicker assessment, permitting); DeLuca Hoffman (civil engineering, stormwater analysis); SGC Engineering, LLC (electrical engineering); LandWorks, (visual impact analysis); Kleinschmidt Associates, LLC (user surveys); Bodwell EnviroAcoustics, LLC (sound assessment); TRC/Northeast Cultural Resources (prehistoric archaeological resources); Independent Archeological Consulting (historic archaeological resources); Public Archeology Lab (historic architectural resources); Albert Frick Associates, Inc. (soils); Reed & Reed (contractor); Sewall Engineers (decommissioning plan); and Verrill Dana (legal counsel).

Each consultant was chosen because of their extensive expertise and experience in their respective disciplines. Resumes of the key personnel are attached (Exhibit 4A).

¹ Blue Sky West, LLC is the wind energy project entity; Blue Sky West II, LLC is the electrical generator lead entity.

Exhibit 4A: Resumes of Key Personnel

David Fowler

First Wind
129 Middle Street
3rd Floor
Portland, ME 04101



November 2008-Present **Development Manager, New England**, First Wind, Portland

David Fowler has been a Development Manager for First Wind in New England since 2008, responsible for all aspects of project development, from site identification, to acquisition and permit application development. During that time, he has secured Right, Title, and Interest for more than 150MW of potential wind generation in the State of Maine. David has also secured the Right, Title, and Interest for a 58-mile generator lead. In addition to being the lead developer for the Bull Hill Wind Project, he is also the co-developer of the Oakfield Wind Project.

2007-1993 **President and Owner**, Dave Fowler Builder, Inc., Casco, Maine

As President and Owner, David proved himself an accomplished professional in the acquisition, development planning and utilization of raw land for residential and commercial use. Decisive leader and results oriented individual with proven success developing and managing land parcels for multi-million dollar timber and building products company located in the Northeast. Direct experience in a wide range of land development activities including acquisition phase, creation of subdivision and infrastructure development plans, conservation and resource protection plans, all phases of local and state permitting process, supervise construction of roadways and utilities, and marketing and direct sales of finished product. David conducted contract negotiations with buyers/sellers, secured leases for non-timber assets, developed land acquisition feasibility analyses, oversaw local and state permitting process, controlled all facets of construction, developed and managed budgets and schedules, oversaw road and utility construction, developed resource/conservation plans, and managed crews of up to 50 people.

2007-2005 **Non Timber Asset Manager**, Hancock Land Company, Casco, Maine

1993-1987 **Project Manager, Account Manager**, Hancock Land Company, Casco, Maine

Managed construction budgets and schedules, oversaw daily construction operations, managed multiple projects, served as a master carpenter, developed and maintained relationships with trades and professionals, interfaced with local and state officials, and controlled all phases of construction.

EDUCATION

A.A. Forestry Management, University of Maine, Orono, 1981

A.A. Business Management, University of Maine, Orono, 1981



Dave Cowan
Vice President,
Environmental Affairs

Executive Summary

Dave Cowan oversees environmental assessment, permitting, and compliance for the development and operation of First Wind's utility-scale wind energy development projects throughout North America.

Career Highlights

Mr. Cowan has over 25 years of experience in project management, environmental assessment, regulatory, permitting, and mitigation services for major utility, transportation, and renewable energy projects throughout the U.S.

His previous experience includes Project Manager and Senior Scientist positions with Devine, Tarbell & Associates; Duke Engineering & Services; and Normandeau Associates offices in Maine and New Hampshire. Prior to entering the environmental consulting field, he was a Research Associate with the Cornell University Lab of Ornithology.

Among his wind energy career highlights, Mr. Cowan served as Senior Scientist on the team that successfully permitted the first utility-scale wind energy project in New England in 1994—the 640-turbine New England Wind Energy Station in Maine's Western Boundary Mountains. More recently he was the Project Manager for permitting of Evergreen Wind Power's 50 MW Mars Hill wind farm project in Northern Maine.

In addition, Mr. Cowan led the development of the first Habitat Conservation Plan (HCP) for a wind energy project in the U.S. (Maui's Kaheawa Wind project) and oversaw environmental permitting for the Sheffield Wind project in Vermont.

As Vice President of Environmental Affairs, Mr. Cowan and his team are involved in projects from their earliest inception, screening for feasibility and flaws, identifying potential environmental concerns, and developing plans to avoid or minimize adverse environmental impacts, often in cooperation with regulatory resource agencies and project stakeholders. In addition, he advises the President and CEO on each project's potential permitting risks/opportunities and secures the necessary documentation for financing.

Mr. Cowan represents First Wind before environmental and energy siting boards, and participates in regional and national environmental forums on behalf of the industry, actively shaping environmental regulations and wind power policy.

Education and Credentials

- Master of Science, Marine Biology, SUNY Stony Brook, Marine Sciences Research Center
- Bachelor of Science, Wildlife Biology, SUNY Syracuse College of Environmental Science and Forestry
- Certified Wildlife Biologist and Professional Wetland Scientist

Matt Kearns

First Wind
129 Middle Street
3rd Floor
Portland, ME 04101



Matt Kearns is First Wind's Vice President of Business Development for the northeast region. He manages a team of project developers in the region and has been with First Wind since 2006. During that time Mr. Kearns has overseen the development and permitting of 380 MW of new wind generation and brought 232 MW in Maine, Vermont, and New York into construction. The Stetson I & 2 Projects (83 MW) in Maine are currently in operation. The Sheffield Project (40 MW) in Vermont is the State's first modern, utility scale wind farm.

Mr. Kearns worked in business development for Tetra Tech, FW prior to joining First Wind and prior to that spent five years with FPL Energy (now NextEra Energy) in their environmental permitting group.

EDUCATION

B.A. English and Environmental Studies, Colby College, 1993



The First Wind Executive Team

Paul J. Gaynor

**President,
Chief Executive Officer**

Executive Summary

Paul J. Gaynor is responsible for the strategic direction and day-to-day management of First Wind projects in North America.

Career Highlights

Mr. Gaynor has more than 20 years of experience in the energy field, encompassing leadership and finance roles in the energy, power, and pipeline sectors. In addition, he has been engaged in several landmark energy and power financings across the globe.

Mr. Gaynor was formerly Chief Financial Officer of Noble Power Assets, LLC, a private equity-backed power acquisition company. Prior to that, he was the Senior Vice President and Chief Development Officer of Singapore Power Group (SP) and Chief Operating Officer of SP International (SPI).

Mr. Gaynor led a comprehensive restructuring of SP and oversaw project development and asset management at SPI. He joined SP as Senior Vice President and Chief Financial Officer, where he was responsible for all financial matters, including leading the initial public offering and introducing world-class finance practices into the organization.

From 1998 to 2000, Mr. Gaynor was the Senior Vice President and Chief Financial Officer of PSG International, a pipeline development company owned by GE Capital and Bechtel Enterprises. PSG developed, financed, built, owned, and operated gas, oil, and water pipeline systems across the globe. Mr. Gaynor assisted in the establishment of the company and oversaw financial matters. He was also responsible for acquiring a 32.5% interest in a natural gas system in Mexico and subsequently sat on the board of directors. In addition, he led the fundraising process for the \$3 billion TransCaspian Gas Pipeline project in Central Asia.

Before PSG, Mr. Gaynor was Vice President and Manager of Asia Pacific operations for GE Capital's Structured Finance Group (SFG). He was responsible for deal analysis, execution, and internal approvals, leading a team that evaluated over 20 power projects between 1994 and 1998. Mr. Gaynor also led the Group's \$400 million investment in Paiton Energy and Quezon Power, and he received internal approval for over \$1 billion of projects. He also worked at GE Capital SFG in the U.S. before moving to Asia, and he sold power plants for GE Power Systems prior to attending business school.

Education and Credentials

- Master of Business Administration, University of Chicago Graduate School of Business
- Bachelor of Science, Mechanical Engineering, Worcester Polytechnic Institute



Kurt Adams

**Executive Vice President,
Chief Development Officer**

Executive Summary

Kurt Adams oversees the development of all First Wind's projects nationwide.

Career Highlights

Prior to joining First Wind, Mr. Adams was Chairman of the Maine Public Utilities Commission from 2005 to 2008, where he served as Maine's primary regulator of transmission infrastructure. While chairman, he served as a member of the New England Conference of Public Utilities Commissions, the National Association of Regulatory Utility Commissions ("NARUC"), the NARUC Electricity Committee, the NARUC Competitive Procurement Committee and as Maine's representative on the New England State Committee on Electricity.

Prior to his position with the Maine PUC, Mr. Adams was Governor John Baldacci's chief legal counsel from 2003 to 2005.

Before joining the Governor's staff, Mr. Adams was a partner in the law firm of Bernstein, Shur, Sawyer & Nelson in Portland, Maine.

Education and Credentials

- Juris Doctor from the University of Maine School of Law
- M.A. in International Affairs from The George Washington University
- B.A. Skidmore College



Michael Alvarez
Executive Vice President,
Chief Operating Officer

Executive Summary

Michael Alvarez is responsible for First Wind operations and asset management, as well as the firm's commercial transactions and mergers and acquisitions.

Career Highlights

Mr. Alvarez joined First Wind from Edison International, where he was the Vice President of Strategic Planning. Prior to Edison, he served as Executive Vice President, Chief Financial Officer, and General Counsel at Nexant Inc., a privately held San Francisco-based company that provides software and advisory services to the global energy industry.

Before Nexant, Mr. Alvarez was at PSG International in London, where he managed the development of the \$2.3 billion, 1,700-kilometer TransCaspian natural gas pipeline.

Previously, he was a senior executive at Kenetech Energy Systems Inc., successfully managing the development of electric generation projects, as well as a global operating portfolio of wind, gas, biomass, and oil-fired projects.

Mr. Alvarez began his career with the San Francisco law firm of Thelen, Marrin, Johnson & Bridges (now Thelen, Reid & Priest), where he was a partner specializing in commercial and project finance.

Education and Credentials

- Juris Doctor, University of Virginia
- Bachelor of Art, Economics, University of Virginia
- Trustee, California State Parks Foundation
- Member of the Bar of California, New York and Washington, D.C.



Lori Erickson
Senior Vice President
Human Resources

Executive Summary

Lori Erickson has overall responsibility for strategic direction of human capital needs for First Wind's workforce of more than 150 employees.

Career Highlights

Ms. Erickson joined First Wind in 2008, bringing over 20 years of experience in driving the HR agenda of technology and services companies of varying size and scope. Prior to First Wind, Ms. Erickson served for 4 years as the Senior Vice President of Global Human Resources at Monster Worldwide. During her tenure with Monster her focus was on providing the company with the capabilities to attract, develop, and retain the highest caliber talent in the industry and to drive organizational effectiveness and employee engagement.

Prior to Monster Worldwide, Ms. Erickson was Senior Vice President of Human Resources for StorageNetworks where she provided strategic HR direction for the emerging company during a period of rapid organic growth. She has also held a variety of Human Resource roles at Honeywell Bull, Computervision, I-Cube/Razorfish and Shiva.

Education and Credentials

- Bachelor of Science, Computer Science and Business Management, Franklin Pierce College



Carol J. Grant
Senior Vice President,
External Affairs

Executive Summary

Carol J. Grant is responsible for external affairs at First Wind, including public affairs, public relations and communications.

Career Highlights

Ms. Grant served as Chief of Operations for Mayor David Cicilline in the City of Providence from 2003 to 2007, leading ten departments and two strategic initiatives in the areas of neighborhood services and economic growth. She was previously vice president of human resources for Textron. From 1983 to 1997, Ms. Grant held executive positions in law, external affairs, and operations for NYNEX, including leadership of the entire business in Rhode Island. She also served as the founding Chair of the Rhode Island Airport Corporation during the period that the quasi-public organization was created and the new terminal at T.F. Green Airport was built.

Ms. Grant has held a wide variety of civic leadership roles, including Chair of the Greater Providence Chamber of Commerce and membership on the Governor's Economic Policy Council and the Board of the Rhode Island Foundation.

Education and Credentials

- Juris Doctor from University of Michigan School of Law
- B.A. from University of Missouri
- HONORS: Athena Award, the New England Council's Women in Leadership Award

Dale F. Knapp

Senior Project Manager, Wetland Scientist, Soil Scientist



Mr. Knapp is a Senior Project Manager and the Director of the Water Resources Division at Stantec. His primary responsibilities include staff and client management, project administration and management, proposal response coordination and work scope development, ecological field surveys, strategic planning for permitting, and report preparation. In addition to managing and implementing large scale permitting and restoration projects, Mr. Knapp has conducted a variety of field biological sampling efforts to determine risk to ecological receptors and water quality determinations. He has also provided expert witness testimony regarding the findings of various ecological field surveys. Mr. Knapp also has extensive experience in soil mapping, morphology, and subsurface wastewater design.

Under Mr. Knapp's direction, the Water Resources Division performs wetland delineations, vernal pool surveys, threatened and endangered species surveys, ecological community characterizations, permitting, biological assessments, environmental planning, fish and wildlife surveys, wetland mitigation and compensation, project management and document preparation in accordance with the state and federal regulatory agencies.

PROFESSIONAL EXPERIENCE

- Stantec Consulting. 2007-present. Senior Project Manager, Director of Water Resources.
- Woodlot Alternatives, Inc. 2005-2007. Project Manager.
- Corinne Leary. 2002-2005. Field Scientist.
- Leary Soil Works. 2001-2002. Construction.

EDUCATION

BA, University of Maine, Orono, Maine, 2003

MS, Southern New Hampshire University, Brunswick, Maine, 2012

Preserving the Wetland Landscape - Tools for Successful Mitigation, Grappone Center, Concord, New Hampshire, 2006

Hydric Sandy Soils Workshop, Maine Association of Professional Soil Scientists, Scarborough, Maine, 2006

Basic and Advanced Erosion Control Practices, Maine Non-point Source Training and Resource Center, Portland, Maine, 2007

40-Hour HAZWOPER Certification, OSHA, Topsham, Maine, 2012

Heartsaver CPR Certified, SOLO, Topsham, Maine, 2012

Subsurface System Inspector, Joint Environmental Training Coordination Committee, Portland, Maine, 2012

REGISTRATIONS

Certified Soil Scientist #479, State of Maine Department of Professional and Financial Regulation.

Onsite Sewage Disposal System Inspector #523, State of Maine, An Office of the Department of Health and Human Services - Subsurface Wastewater Program

Apprentice Wetland Scientist #WSA-18, New Hampshire Joint Board

Licensed Site Evaluator #386, State of Maine, An Office of the Department of Health and Human Services - Subsurface Wastewater Program

Enviro-Septic Certified #5058MEES, Presby Environmental Inc.

* denotes projects completed with other firms

Dale F. Knapp

Senior Project Manager, Wetland Scientist, Soil Scientist

MEMBERSHIPS

Past President, Maine Association of Wetland Scientists

President, Maine Association of Site Evaluators

Member, New Brunswick Environment Industry Association

Member, Society of Wetland Scientists

Professional Member, Society of Soil Scientists of Southern New England

Recognized Wetland Delineator, New Brunswick Department of Environment

Member, Association of State Wetland Managers

Member, Maine Association of Professional Soil Scientists

PROJECT EXPERIENCE

Natural Resource Services

Gas Pipeline Realignment Vernal Pool Surveys, Old Town, Maine

Senior Project Manager responsible conducting vernal pool surveys along a proposed landfill gas pipeline corridor in Old Town, Maine. The corridor included four individual segments ranging in lengths from 2.5 miles to 6 miles. Assisted in the completion of required mapping and reporting products and Maine Department of Inland Fisheries and Wildlife vernal pool data forms.

Dragon Quarry Artificial Pond Alteration Support, Portland, Maine

Senior Project Manager responsible for preparation of U.S. Army Corps of Engineers Jurisdictional Determination forms in order to allow Dragon to alter a 3.5-acre artificial impoundment area, which would result in an expanded area for materials storage and pre-cast products, as well as improved water quality on the site.

University of Maine Natural Resource Identification, Orono, Maine

Field Manager and Technical Lead responsible for overseeing natural resource consulting services on the Orono campus, including wetland delineations, function and value assessments and vernal pool surveys, as well as preparation of state, federal, and local permit applications for a major building expansion project, two multi-use path projects, a new snow disposal area, a botanical garden enhancement project, and a foot bridge.

TransCanada Fifteen Mile Falls Project, New Hampshire and Vermont

Senior Project Manager responsible for overseeing and facilitating natural resource evaluations, rare species and habitat identification, wetland delineations, design preparation, and permit application preparation for numerous fisheries mitigation projects in the Fifteen Mile Falls area of Vermont and New Hampshire.

Vermont Broadband Enhanced Learning Link Project, Vermont

Senior Project Manager responsible for overseeing the development and submittal of an Environmental Assessment for the Vermont Broadband Enhanced Learning Link Project, which is designed to stimulate and support economic growth throughout Vermont, and nearby Plattsburgh, New York and Lebanon, New Hampshire by effectively connecting community partners to the rest of the world via reliable, efficient, and affordable high-speed Internet access (broadband). Additional efforts included facilitating the development of a U.S. Army Corps of Engineers Permit under Section 10 of the Rivers and Harbors Act for several stream crossings within the project area.

Stetson II Wind Project, Washington County, Maine

Senior Project Manager responsible for organizing and managing all natural resource surveys for a 60-million dollar wind project consisting of 17 turbines along mountain ridgelines and a 32,183-linear foot collector line connecting this project to the Stetson Wind Project. Survey efforts included wetland delineations, vernal pool surveys, and rare, threatened and endangered species plant and wildlife surveys. Also oversaw the QA/QC of natural community mapping and permitting efforts, which included Maine Department of Environmental Protection, U.S. Army Corps of Engineers, and local permit applications. The project became fully operational in 2010.

* denotes projects completed with other firms

Dale F. Knapp

Senior Project Manager, Wetland Scientist, Soil Scientist

Dragon Quarry Expansion Project, Thomaston, Maine

Senior Project Manager responsible for conducting a wetland delineation and function-value assessment in association with a proposed expansion project at the quarry. Efforts also included preparing Natural Resource Protection Act and U.S. Army Corps of Engineers permit applications, and conducting a Forensic Site Law Application review consisting of studying the existing Site Location of Development Permit applications and modifications submitted and approved for previous expansion projects at the quarry.

Bowers Wind Project, Penobscot and Washington Counties, Maine

Senior Project Manager responsible for organizing and managing all natural resource surveys for a 136-million dollar wind project consisting of 27 turbines, associated access roads, up to four permanent 80-meter meteorological towers, a 34.5-kilovolt electrical collector system, an electrical collection substation, and an Operations and Maintenance building and other potential ancillary improvements associated with the foregoing. Survey efforts included wetland delineations, vernal pool surveys, and rare, threatened and endangered species plant and wildlife surveys. Also oversaw the QA/QC of natural community mapping and permitting efforts, which included Land Use Regulation Commission, U.S. Army Corps of Engineers, and local permit applications, and provided expert witness testimony and support following application filing. Construction of the project is anticipated in early 2012.

Bull Hill Wind Project, Hancock County, Maine

Senior Project Manager responsible for organizing and managing all natural resource surveys for an 80-million dollar wind project consisting of 19 turbines along Bull Hill and Heifer Hill ridges in T16 MD, Hancock County. Survey efforts included wetland delineations, vernal pool surveys, and rare, threatened and endangered species plant and wildlife surveys. Also oversaw the QA/QC of natural community mapping and permitting efforts, which included Land Use Regulation Commission, U.S. Army Corps of Engineers, and local permit applications, and provided expert witness testimony and support following application filing. Construction of the project is anticipated in late 2011/early 2012.

Pine Tree Landfill Restoration Project, Hampden, Maine

Senior Project Manager responsible for conducting natural resource surveys and developing and implementing a restoration plan to repair and rehabilitate habitat affected by an incidental release of liquid material of unknown composition from a gas-to-energy recovery system at the Pine Tree Landfill.

Rollins Wind Project, Penobscot County, Maine

Senior Project Manager responsible for organizing and managing all natural resource surveys for an extensive 60-megawatt wind project consisting of 40 turbines, 2 transmission lines, an electrical substation, and an operations and maintenance building. Also helped address agency questions and concerns, including those of the U.S. Fish and Wildlife Service regarding impacts to eagles and oversaw the QA/QC of natural community mapping and permitting efforts, which included Maine Department of Environmental Protection, U.S. Army Corps of Engineers, and local permit applications. The project is expected to be fully operational in 2010.

Oakfield Wind Project, Oakfield, Maine

Senior Project Manager responsible for organizing and managing all natural resource surveys for a 34-turbine wind project encompassing 600 acres, including 12 miles of collector line, capable of generating 51 megawatts of renewable energy. Survey efforts included wetland delineations, vernal pool surveys, and rare, threatened and endangered species plant and wildlife surveys. He also oversaw the QA/QC of natural community mapping and permitting efforts, which included Maine Department of Environmental Protection, U.S. Army Corps of Engineers, and local permit applications. The project is expected to be fully operational in 2010.

Old Port Village Peer Review, Kennebunkport, Maine

Senior Project Manager. Reviewed documents filed by the applicant as they pertained to natural resource impacts associated with a proposed subdivision and the presence or absence of rare, threatened, and endangered (RTE) species that may occur within the proposed project area. Work done on behalf of an abutting property owner to the proposed development.

Dale F. Knapp

Senior Project Manager, Wetland Scientist, Soil Scientist

Penobscot River Restoration Natural Resource, Penobscot County, Maine

Technical Lead. Coordinated and participated in natural resource assessment of three dam impoundments along a 10-mile stretch of the Penobscot and Piscataquis Rivers. Characterized existing ecological resources and collected existing infrastructure information. Tasks included wetland reconnaissance, site specific delineation and Function Value Assessments along the backwater of all three impoundments. In addition, coordination of invasive/exotic plant management and supporting development of ecological changes post removal.

Wind Farm Development Surveys and Risk Assessments, Maine

Senior Project Manager responsible for managing preconstruction wind farm development surveys and assessments at multiple sites throughout Maine. These assessments include site prospecting for wind farm sites, landscape analyses, fatal flaws, and ecological community characterization.

Hoosac Wind Project, Massachusetts

Field Manager/Senior Project Manager. Conducted a series of wetland delineations in concert with other environmental team members. Field surveys included confirming mapped wetlands and other natural communities and delineating the boundaries of wetlands, streams, and other natural resource features. Also conducted extensive botanical field surveys within the project area to determine if any state- or federal-listed rare plant species were present.

Cabelas Retail Development, Scarborough, Maine

Wetland Scientist. Conducted wetland delineations and vernal pool surveys. Completed a systematic mitigation site search through several counties in support of permitting efforts.

Highland Wind, Maine

Senior Project Manager responsible for the organization and management and oversaw the QA/QC of the wetland delineations, vernal pool surveys, natural community mapping, and RTE plant and wildlife surveys conducted on an approximately 1,500-acre project area.

Line 56, Maine

Senior Project Manager responsible for organization and management of all natural resource work along more than 50 miles of transmission line corridor.

Maine Power Connection Transmission Corridor, Maine

Senior Project Manager responsible for the organization and management and oversaw the QA/QC of the wetland delineations, vernal pool surveys, natural community mapping, and RTE plant and wildlife surveys conducted along over 140 miles of existing and proposed power line corridor between Haynesville and Chester, Maine.

Grand Manan Wind Farm Phase I, New Brunswick

Senior Project Manager responsible for organization and management of all wetland delineations and impact assessments for a 20 MW wind project covering 250 acres on the island of Grand Manan.

Stetson Wind Farm, Maine

Field Manager responsible for completing natural resource surveys on a 1,300-acre project area for this 24 MW wind project. Functioned as field leader responsible for leading teams of 4-6 person crews. Studies included wetland delineations, vernal pool surveys, natural community mapping, and RTE plant and wildlife surveys. Assisted in the completion of required state and federal permit applications filed in support of the project.

Record Hill Wind Farm, Roxbury, Maine

Senior Project Manager supporting the Record Hill wind project, which is a 22-turbine, 55 MW wind project on a forested ridge environment in the western Maine mountains. This project has included planning and feasibility studies, wetland delineations, wildlife impact studies, noise and visual impact assessments, and coordination of all state and federal environmental permitting.

Redington Wind Farm, Maine

Field Manager responsible for completing natural resource surveys on a 1,700-acre project area. Functioned as field leader responsible for leading teams of 4-6 person crews. Studies included wetland delineations, vernal pool surveys, natural community mapping, and RTE plant and wildlife surveys. Assisted in the completion of required state and federal permit applications filed in support of the project.

* denotes projects completed with other firms

Dale F. Knapp

Senior Project Manager, Wetland Scientist, Soil Scientist

PUBLICATIONS

Knapp, Dale and T. Tetreau. Adaptive Techniques for Large-Scale Wetland Delineation. *Poster presented at the International Association for Ecology Annual Meeting, Orlando, FL, 2012.*

Hart, Brett and D. Knapp. Collaborative Project Execution: Strategies to Meet Deadlines and Save Money. *Poster presented at the American Wind Energy Association Northeast Regional Conference, Portland, ME, 2012.*

Carpentier, Geno, D. Knapp, and D. Tetreau. Stetson Wind Project Line 56 Pre- and Post-Construction Vernal Pool Production Monitoring. *Poster presented at the Northeast Partners in Amphibian Reptile Conservation Annual Meeting, Millersville, MD, 2011.*

Emerson, B., D. Knapp, and G. Carpentier. Potential Alteration of Wetland Functions and Values from Dam Removal. *Poster presented at New England Water Environment Association 2010 Annual Conference, Boston, Massachusetts, 2010.*

Guest Lecturer: College Level Course PSE 413/PSE 533 Wetland Delineation and Mapping. *University of Maine, Orono, Maine, 2009.*

Presentation: The Dirty Side of Wetland Science. *Distinguished Speaker Series: University of Maine Fort Kent, Fort Kent, Maine, 2009.*

Emerson, B., D. Knapp, J.D. DeGraaf, and G. Carpentier. Potential Impacts to Wetland Functions and Values from Dam Removal. *Poster presented at The Diadromous Species Restoration Research Network Science Meeting, University of Maine, Orono, Maine, 2009.*

Guest Lecturer: College Level Course PSE 413/PSE 533 Wetland Delineation and Mapping. *University of Maine, Orono, Maine, 2008.*

Workshop: Hydric Soil Determination. *Stantec Consulting, 2007.*

Guest Lecturer: College Level Course PSE 413/PSE 533 Wetland Delineation and Mapping. *University of Maine, Orono, Maine, 2007.*

Workshop: Intro to Soil Science. *Stantec Consulting, 2006.*

Mr. Gravel is a Project Manager at Stantec responsible for coordinating ecological inventories and environmental resource evaluations, including wildlife surveys, avian and bat impact evaluations, and habitat studies. Mr. Gravel has most recently been involved in organizing and conducting large-scale natural resource investigations associated with wind power and transmission projects. He has provided permitting and expert testimonial support to several New England wind projects and managed Stantec's New England based wildlife biologists. His field biology experience has allowed him to conduct avian radar surveys, breeding-bird surveys, winter track surveys, bat surveys, raptor surveys, and natural community surveys in Maine, New Hampshire, Vermont, Pennsylvania, Ohio, West Virginia, Virginia, and New York. Mr. Gravel takes an innovative, solution oriented approach to survey design and implementation which has enabled Stantec to conduct ecological surveys in some of the Northeast's most remote and challenging locations.

PROFESSIONAL EXPERIENCE

- Stantec Consulting. 2007-present. Project Manager.
- Woodlot Alternatives, Inc. 2004-2007. Project Manager.
- New Hampshire Division of Forests and Lands. 2003. Field Research Technician.
- University of New Hampshire. 2002-2003. Research Lab Technician.
- University of New Hampshire. 2002. Field Research Assistant.

EDUCATION

BS, Wildlife Management, University of New Hampshire, Durham, New Hampshire, 2003

40-hour HAZWOPER Certified, OSHA, Topsham, Maine, 2009

REGISTRATIONS

Certified Wildlife Biologist, The Wildlife Society

PROJECT EXPERIENCE

Natural Resource Services

Georgia Mountain Community Wind Project, Milton, Vermont

As Project Manager for this proposed 4.5 megawatt wind project, Mr. Gravel coordinated a nocturnal migration study using X-band radar. He also provided support for the Section 248 process, including participation in meetings with Vermont Agency of Natural Resources biologists and development of a work scope for nocturnal radar surveys. Mr. Gravel prepared and submitted pre-filed testimony and responses to discovery requests, and he provided expert witness testimony during subsequent evidentiary hearings before the Vermont Public Service Board.

Adam J. Gravel

Project Manager, Certified Wildlife Biologist

Groton Wind Project, Grafton County, New Hampshire

Mr. Gravel is Project Manager for the proposed Groton Wind Project, which will consist of up to 25 2.0 MW turbines on the forested ridges of Tenney and Fletcher Mountains in the Sunapee Uplands of New Hampshire. He has coordinated numerous studies to address wildlife-related issues present in the vicinity of the project, including avian radar studies, acoustic bat surveys, and Breeding Bird Surveys (BBS) using the United States Fish and Wildlife Service BBS methods. Mr. Gravel worked with the New Hampshire Fish and Game Department to develop protocol and perform spring and fall raptor surveys, and collaborated with New Hampshire Audubon to conduct monitoring of peregrine falcons near the project area. He was involved in the drafting of an avian risk assessment that evaluated the potential impacts to birds and bats as a result of the project and provided expert witness testimony and support during the New Hampshire Site Evaluation Committee process.

Highland Wind Project, Somerset County, Maine

Highland is a proposed wind energy facility consisting of 48 turbines. Mr. Gravel acted as Technical Lead during the planning process and was responsible for wildlife studies including nocturnal radar migration surveys, acoustic bat surveys, raptor migration surveys, and rare threatened or endangered species surveys. He acted a liaison between the client and state and federal resource agencies to develop work plans and avoidance and minimization measures during the planning phase of the project. Mr. Gravel also assisted in generating permit application materials for the project.

Mars Hill Wind Farm, Aroostook County, Maine

Mars Hill is a 28 turbine wind energy facility situated on a low-elevation ridge in Aroostook County, Maine. Mr. Gravel acted as Technical Lead during the planning process and was responsible for avian and bat studies including nocturnal radar migration surveys, acoustic bat surveys, raptor migration surveys, and morning bird stopover surveys. He also assisted in the design of a post-construction avian and bat monitoring program.

Wind Farm Development Bird and Bat Surveys and Impact Studies, Mid-Atlantic, New England, Pennsylvania, Ohio, and New York

Mr. Gravel has managed and conducted pre-construction wildlife impact assessments at proposed wind energy projects at multiple sites in the Mid-Atlantic, New England, Pennsylvania, Ohio, West Virginia and New York. These assessments include habitat analyses, critical issues analyses, nocturnal migration surveys using marine radar, acoustic bat surveys, breeding bird surveys, raptor migration surveys, and ecological community characterizations. Mr. Gravel has effectively served as liaison between clients and regulatory agencies to ensure that studies and monitoring plans are in accordance with federal and state guidelines. Study results and determinations of risk have been provided to clients to assist with their project planning and permit applications in compliance with applicable local, state, and federal natural resource regulations. Mr. Gravel has also provided expert witness testimony for projects in Vermont and New Hampshire.

Hounsfield Wind Farm, Galloo Island, New York

As Project Manager for the nocturnal migration surveys conducted to determine site suitability for this proposed wind energy project located on Galloo Island in Lake Ontario. Mr. Gravel negotiated and designed a marine radar survey reflective of the unique location of this island site. Solutions to transport, maintenance, and site coverage were carefully determined in order to produce one of the most extensive migration surveys to date, successfully documenting avian abundance, flight patterns, and flight altitudes surrounding the site. Mr. Gravel and his project team were praised for their thoroughness and insights provided to state agencies.

Adam J. Gravel

Project Manager, Certified Wildlife Biologist

Granite Reliable Wind Park, Coos County, New Hampshire

Mr. Gravel has acted as the Project Manager on this long-term project, supervising and conducting a variety of natural resource surveys to assess potential concerns raised by the proposed project. Surveys included several seasons of nocturnal radar surveys, wetland and vernal pool reconnaissance surveys, multiple seasons of acoustic bat surveys, rare plant surveys, a raptor migration survey, and a Natural Community Characterization. A winter track survey was also conducted within the project site to document occurrence of American marten (State Threatened) and Canada Lynx (Federally Threatened). Mr. Gravel gave several agency presentations to summarize the multiple seasons of environmental surveys and their implications for the project and he has provided expert witness testimony regarding the work conducted at the site.

Stetson Mountain Wind Farm, Washington County, Maine

Stetson is a 57 MW generation facility consisting of 38 turbines on a 6.5-mile, low-elevation ridge in Washington County, Maine. Mr. Gravel acted as Technical Lead responsible for avian and bat studies during the planning process and assisted in the design of a post-construction avian and bat monitoring program.

Lempster Wind Project, New Hampshire

As the Project Manager, Mr. Gravel was responsible for coordinating and conducting environmental surveys and providing permitting support for this 24 MW wind project, the first in New Hampshire. Tasks included developing and negotiating work plans with agencies, performing avian and bat studies, rare species investigations, vernal pool surveys, and providing testimonial support. Mr. Gravel was also involved in the initial development of post-construction bird and bat monitoring protocols for the project.

Record Hill Wind Farm, Maine

Mr. Gravel acted as Project Manager for the Record Hill wind project, which is a 22-turbine, 55 MW wind project on a forested ridge environment in the western mountains of Maine. For this project, he coordinated planning and feasibility studies, wetland delineations, wildlife impact studies, noise and visual impact assessments, and helped to coordinate all state and Federal environmental permitting.

Adam J. Gravel

Project Manager, Certified Wildlife Biologist

PUBLICATIONS

Pelletier, S.K., G.C. Kendrick, T.S. Peterson, and A.J. Gravel. Atlantic Offshore Bird & Bat Pilot Study: 2009 Results. *Poster Presentation at AWEA Offshore Energy Conference, Atlantic City, New Jersey, 2010.*

Giumarro, G. and A. Gravel. Assessing The Risk Of Avian And Bat Mortality At Commercial Wind Farms. *Presentation at the Windpower 2009 Conference and Exhibition, Chicago, Illinois, 2009.*

Pelletier, S., G. Kendrick, G. Giumarro, T. Peterson, and A. Gravel. Gulf of Maine Offshore Bat and Bird Project. *Poster Presentation at AWEA Offshore Energy Conference; Boston, Massachusetts, 2009.*

Pelletier, S.K., A.J. Gravel, and T.S. Peterson. Nocturnal avian flight heights relative to risk of collision with wind turbines. *Poster presentation at the NWCC Wind Wildlife Research Meeting VII in Milwaukee, Wisconsin, 2008.*

Pelletier, S.K., C.W. Meinke, T.S. Peterson, and A.J. Gravel. 2008. Radar and acoustic bat surveys in pre and post-construction bird and bat mortality monitoring. *Poster presentation at the 2008 American Wind Energy Association conference in Los Angeles, California, 2008.*

Gravel, A. Windpower and Wildlife an Overview of Pre-construction Survey Methods and Results. *Presentation to State and Federal Natural Resource Agencies, 2008.*

Education:

- DeLuca-Hoffman Associates, Inc.
Since 2008
- BS – University of New Hampshire,
Durham, New Hampshire
- Licensed Professional Engineer,
Maine #11695
- In Private Practice Since 2002

Mr. Blake is a Project Engineer with DeLuca-Hoffman Associates, Inc.'s Land Design and Engineering Services Group. He performs the preparation of preliminary and final design, as well as permit applications for a variety of civil/site engineering and environmental projects. Mr. Blake's expertise includes civil/site design, hydrologic and hydraulic analysis.

Oakfield Wind Farm, Oakfield, Maine:

Responsible for design of access roads and crane roads associated with multiple ridge line turbine strings. Coordinated with team members and environmental consultants on the road alignment and turbine pads to minimize resource impacts. Completed stormwater management analysis and erosion and sediment controls "tool box" measures.

Reconstruction of Old Alfred Road, Arundel, Maine:

Responsible for providing bid documents for the reconstruction and realignment of Old Alfred Road in Arundel, ME. The design included approximately 750 linear feet of full depth roadway reconstruction and 400 linear feet of pavement reclamation. The design included provisions for realigning a portion of the existing roadway to provide adequate site distance. Other facets of the project included regrading of existing driveways and installation of culverts and ditches for stormwater conveyance.

Alfred Road Reconstruction (PIN #017476.00), Kennebunk, Maine:

Performed design for the Alfred Road Reconstruction Project in Kennebunk, Maine. The project was partially funded by the Maine DOT as a Locally Administered Project. The project included reconstruction and widening of approximately 3,400 LF of roadway including new bike lanes, sidewalks, on-street parking and storm drain facilities. The roadway reconstruction included full depth reconstruction, reclaiming, and the application of cement treated base.

Gorham Elementary School, Gorham, Maine:

Design and permitting for the construction of a 60,000 square foot Elementary School and associated site improvements in Gorham, ME. The project included stormwater analysis involving hydrologic modeling (TR-20 HydroCAD Software), and design of a wet detention basin and underdrained soil filters to detain stormwater and provide water quality treatment associated with the development. The overall project includes the disturbance of approximately 24 acres, of which approximately 25,000 square feet of wetland will be filled to construct the building, the 150-space parking areas, 4 new athletic fields and access drives. Other facets of the project included the design of a 1400 linear foot public entrance drive and wetland creation areas.



Mt. Blue Learning Campus in Farmington, Maine

Mt. Blue Learning Campus (RSU #9), Farmington, Maine:

Performed site design and permitting for the Mt. Blue Learning Campus Renovation and Expansion Project. The project included the construction of new parking facilities, access drives, sidewalks, utilities, athletic fields and stormwater facilities to support the renovation and expansion of the 226,000 SF school. The stormwater facilities include 2 wet ponds and 3 vegetated underdrain filters to provide both detention and treatment. Permitting included a MeDEP Site Law Permit and Local Site Plan Permit.

Redington Fairview General Hospital, Skowhegan, Maine:

Performed site design and permitting for the Redington Fairview General Hospital Masterplan which consolidated several ancillary buildings into the recently constructed medical office building. The project consisted of the construction of a new 145 stall parking lot, access drives, pedestrian walkways, and stormwater facilities. Stormwater facilities consisted of a wetpond, vegetated underdrain filters, proprietary Filterra units, and underground storage chambers. Permitting included an amended MeDEP Site Law Permit, NRPA wetlands impact permit, and local site plan permit.

Education:

- DeLuca-Hoffman Associates, Inc.
Since 1990
- BSCE – University of Maine
Orono, ME
- MBA – University of New
Hampshire, Durham, NH
- Licensed Professional Engineer,
Maine #7429
- Certified Professional in Erosion &
Sediment Control, #3087
- In Private Practice Since 1987

**Permitting, Civil Design and
Construction:**

Miscellaneous engineering services for municipal, commercial, institutional and private projects:

- New Tank 16 for Global Companies
Inc. Fore River Terminal, South
Portland, Maine
- Higgins Beach Granite Revetment
wall, Town of Scarborough, Maine
- Sawyer Road drainage and
infrastructure improvement for
Public Works Dept., Scarborough,
Maine
- Gorham Public Safety/ Narraganset
School Complex Master Plan and
Phase 1 Design Plans, Gorham,
Maine
- Higgins Beach Drainage Study and
Design Services, Public Works
Department, Scarborough, Maine
- Ocean Avenue triple box culvert
replacement on Fall Brook.
- Murray Street double box culvert
replacement on Fall Brook.
- Washington Avenue triple box
culvert replacement on Fall Brook.
- Ray Street bridge replacement on Fall
Brook.

Mr. Bushey is a Senior Engineer with DeLuca-Hoffman Associates, Inc.'s Land Design and Engineering Services Group. He directs the preparation and review of preliminary and final design as well as permit applications for a variety of civil/site engineering projects. Mr. Bushey's expertise includes site feasibility/selection, civil/site design, street reconstruction and culvert design, hydraulic and hydrologic analysis.

Mercy Hospital Relocation, Portland, Maine:

Completed master planning, permitting and design for the proposed 450,000 s.f. Hospital relocation to the Fore River parcel in Portland. Completed state and local permitting for campus design that includes the hospital, multiple medical office buildings and both surface and structured parking. Responsible for public presentations and coordination between all review agencies and team members. Currently assisting the hospital on future phase relocation activity planning.

The Forefront at Thompson's Point, Portland, Maine:

Oversaw design and permitting for \$100+ million commercial site development including 4,500-seat Event Center, Hotel complex, multiple office buildings and ancillary development. Completed State and Local permitting efforts that included a public railroad crossing segment, utilities designs, stormwater management and general site demolition and clean-up. Project involved multiple public presentations and coordination with regulatory officials.

Oakfield Wind Farm, Oakfield, Maine:

Oversaw design for access roads and crane roads associated with multiple ridge line turbine strings. Coordinated with environmental consultants on the road alignment and turbine pads to minimize resource impacts. Oversaw completion of stormwater management analysis and erosion and sediment controls "tool box" measures.

Green Acres Phase 1 and Phase Drainage and Street Infrastructure, Scarborough, Maine:

Responsible for civil design and construction administration for over 3 miles of public street and infrastructure improvements including drainage design and sidewalks completed in 2009.

The Mill at Saco Falls, Biddeford, Maine:

Completed full design and local and State Permitting for the conversion of a more than century old factory mill building into 66 units of residential housing. The project included new parking facilities, utility extensions and site landscape enhancements to improve the site's setting along the Saco River. The project was completed in 2010.



Old Town Elementary School

Mt. Blue Regional Learning Center, Farmington, Maine:

Assisted with permit applications for High School renovation and expansion project, Athletic Fields and supporting infrastructure. Oversaw work of design team during preparation of all permit applications. Currently under construction to be complete in 2012.

Freeport High School Performing Arts Center and Science Wing Addition, Freeport, Maine:

Developed site layout and civil design of new Performing Arts Center expansion. Coordinated with architectural team regarding permitting and construction.



Mercy Hospital Relocation

Maine Criminal Justice Academy, Vassalboro, Maine:

Assisted State agencies with site selection and assessment process. Responsible for all site design and permitting activities for conversion of the former Oak Grove Coburn School to the new Maine Criminal Justice Academy. Completed State Department of Environmental Protection permitting and all onsite infrastructure design.

City of Portland, Engineering Services, Portland, Maine:

Provided general contract administration, design and construction phase services for a 5-year contract with the City. Completed multiple infrastructure improvement projects including sewer, storm drain, combined sewer separation and culvert replacements amounting to near \$10 million of construction. Responsible for overall project management, client coordination and management of subconsultants for work across multiple City departments.



Bradley Street Drainage Improvement Portland, Maine

First Roach Pond Subdivision Development- Plum Creek Land Company:

Assisted Plum Creek Land Company with their development of eighty nine (89) residential camp lots on First Roach Pond near the Moosehead Lake Region. Participated in initial Master Planning and Comprehensive Plan presentations to the Land Use Regulation Commission and provided technical support relating to Phosphorous studies, road design, and initial lot layout. Prepared multiple subdivision plans for each phase of the first Roach Pond development and made applications to LURC for each. Responsible for lot layout, existing and new road access and other technical design measures associated with each subdivision. Presented to LURC while attending multiple public hearings and meetings.



Academic Background

B.S. Mechanical Engineering
Technology
University of Maine – 1996

INTRODUCTION

Mr. Hale is a Senior Engineer who has over fifteen years experience in providing engineering solutions for electric utilities and industrial facilities. He has been directly responsible for numerous projects in the planning, design and construction phases, in the areas of: transmission design, distribution design, substation design, material procurement, permit acquisition, and cost estimating.

He has specific experience in the following areas:

- **Transmission Design Engineering:** Route selection, right of way acquisition, line design, contract and construction management.
- **Substation Design Engineering:** Bus design, structure design, grounding systems, contract and construction management.
- **Distribution Design Engineering:** Overhead and underground design, utility standards development, line design, construction management.

REPRESENTATIVE PROJECTS

- **Record Hill Wind Farm:** Completed substation design for 34.5kV to 115kV, 50 MW step-up collector substation. Project involved foundation design, structure design, bus design, equipment specifications, and construction oversight.
- **Island Falls Substation:** Completed substation design for 44kV to 12.47kV distribution substation. Project involved foundation design, ground grid design, conduit system design, structure design, bus design, material specifications, material procurement and construction oversight.
- **Line 6901 Rebuild and Upgrade:** Project initiated by the Local utility to address concerns over the reliability of the Northern Maine Transmission Grid. Project involved design of 11 miles of 69kV transmission line upgrade and a preliminary design of a new 138kV to 69kV substation.
- **Fish River Substation:** Project involved the design of a three bay substation with two bays of 69kV to 34.5kV and one bay of 69kV to 12.47kV. Substation included one incoming 69kV line and four outgoing circuits, two at 34.5kV and two at 12.47kV. Project scope included cost estimating, site selection, civil design, structural design, electrical design, material specification, material procurement, and construction oversight.
- **Ashland Substation – Close ring bus:** Project involved the installation of a 69kV breaker to complete a ring bus. Project also involved upgrades to the existing station from 600 to 1200 amps.



REPRESENTATIVE PROJECTS (continued)

- Mars Hill Wind Farm: For Maine's first large wind farm project, completed 69kV Transmission Line design using PLS-CADD. Completed substation design for 34.5kV to 69kV, 50 MW step-up collector substations. Prepared substation design for a three-breaker ring-bus switching station for the interconnection with the utility, Maine Public Service Company (MPS). Design of a dual circuit 34.5 kV sub-transmission circuit from collector station to mountain top.
- Line 6910 Rebuild: 69kV Transmission Line for MPS. Project involved the design of 15 miles of new line to replace an aging and undersized line. Participated in all aspects of transmission line design; cost estimating, route selection, right-of-way acquisition, line design (using PLS-CADD), construction package development, material procurement, and construction management.
- Line 6912 Rebuild: 69kV Transmission Line for MPS. Project involved the rebuild of five miles of single pole structures with a new line to replace an aging and undersized line. Tasks associated with the project included: cost estimating, line design (using PLS-CADD), construction package development, material procurement, and construction management.
- Line 3875: 138 kV Transmission Line for MPS. Project initiated by the Maine Public Utilities Commission to address concerns over the reliability of the Northern Maine Transmission Grid. Project involved design of 11 miles of new line to create a new interconnection with NB Power. Aspects of Transmission line design that were utilized; cost estimating, line design (using PLS-CADD), Environmental permitting, route selection, right of way acquisition.
- McCain Foods Inc. Plant Expansion: Led the project which involved a short 69 kV transmission line, 69kV to 4kV, 5 MVA substation, and 4kV distribution system upgrades.
- Ashland 69kV to 34.5kV Substation Expansion: Responsible for civil/site engineering, steel design, material specification and procurement as well as construction monitoring for adding a 34.5kV bay to an existing substation.
- Sherman and Patten Substations: Served as the lead engineer for civil/site engineering, steel design, material specification and procurement as well as construction monitoring for two new 44kV to 12.47kV distribution substations.
- Westfield Substation: 69kV to 12.47kV, 5MVA Distribution Station for MPS. For this new substation, completed the design of station foundations, structure, and electrical circuits.
- Mars Hill Switching Station Expansion: Responsible for steel design, electrical layout, material recommendations, and material approvals for the expansion of an existing 69kV three-breaker ring-bus to a five-breaker ring-bus arrangement.
- Stetson Wind Project: 115kV to 34.5kV Substation: For a 58MW wind park in northern Maine, a assumed responsibility for oversight of the substation package. This entailed review and approval of the steel design and material specifications proposed by the subcontractor. This substation is being built as part of the collector system located on the mountain.



TECHNICAL / MANAGEMENT SKILLS

- Fast Track Project Philosophy: Ability to apply fast track project management and design approach.
 - Allows improved start to finish schedule.
 - Ensures information and materials are available to the construction crews when needed to meet milestone schedule.



Academic Background

Bachelor of Science
Civil Engineering
Clarkson University, 1996

Professional Registrations

Professional Engineer
Maine - #12433
Massachusetts - #45045
New Hampshire - #13264
Vermont - #18.0071768
New Brunswick - #L4337

INTRODUCTION

Mr. Henaghen is the Director of Civil Engineer for SGC Engineering, LLC. He is a registered professional engineering with over 15 years of experience providing civil engineering services for commercial, industrial, municipal, utility and residential projects.

Mr. Henaghen has significant experience in the areas of: site planning and design, development feasibility and due diligence studies, stormwater analysis and design of best management practices and utility design and coordination.

REPRESENTATIVE PROJECTS

- Line 51 & Line 93 Rebuild: Project manager for the design of the rebuild of this 20+ mile 115 kV transmission line to support a line re-rating. The project include modification or replacement of every structure.
- Epping Substation Connection: Project manager for the design of line modifications to three existing transmission lines to accommodate the connection to a new substation built adjacent to the lines.
- Line 69 Fiber Replacement: Project manager for the analysis and design required for the replacement of an existing static wire with a new OPGW cable.
- Record Hill Wind Project: Project manager for the construction level electrical design for the collector system and generator lead. Project included 22 wind turbines with an underground collector system. The scope of the project also included communications design and load flow and short circuit studies for the 50 MW project.
- Hawkesdale and Ryan Corner Wind Projects: Project manager for these 2 wind projects on separate sites in Victoria, Australia. The projects were designed under a single contract. Combined project included 99 2 MW turbines (31 and 68 turbines, respectively). The scope of the project included the design of the 33 kV underground collector system for each project, including coordination of the switchgear at the base of the tower.
- Stetson II Wind Project: Project Lead responsible for coordinating the electrical design of the 34.5kV collector system for this 17-turbine wind farm development. Responsible for coordinating with the developer and other project consultants to complete the permitting level and construction level designs for this project.



REPRESENTATIVE PROJECTS (continued)

- Rollins Wind Project: Electrical Project Lead responsible for coordinating the electrical design of the 34.5kV collector system for this 40-turbine wind project. Responsible for coordinating with the developer and other project consultants to complete the Issued for Construction plans for this project.
- Stetson Substation Design: Engineer responsible for the preparation of the civil/structural design plans and specifications associated with the construction of this substation. Design included foundations, grading, stormwater management, oil containment and fencing. Project required planning for the future expansion of the substation to accommodate the Stetson II Wind Farm in the future. Provided construction administration services during construction including review of shop drawings and responding to RFIs.
- Rollins Substation: Provided civil support with regards to the geometric layout, grading, stormwater management and oil containment associated with the construction of this 34.5/115kV substation required to support the Rollins Wind Farm project.
- Littleton Substation: Project Manager and Design Engineer responsible for the preparation of the civil design plans to support the permitting of this substation expansion project. Design included geometric layout, grading, stormwater management and fencing and coordination with others for survey and foundation design. The project required Dredge and Fill Permit from the New Hampshire DES and a Zoning Board approval from the Town of Littleton, New Hampshire.
- Hancock Substation: Design engineer responsible for the preparation of the civil design plans to support the permitting of this fast track design-build project. Design included geometric layout, grading, stormwater management and fencing and coordination with others for survey and foundation design. The project required Site Plan Review and a new driveway permit from the New Hampshire Department of Transportation.
- Lawrence Airport Industrial Park, MA: Preparation and filing of various Federal Aviation Administration (FAA) documents required to obtain a land release from the FAA to allow for the development of an industrial park on airport-owned property.
- Weathervane Village and Weathervane Golf Course, MA: Responsible for the site design and permitting for the expansion of this on-going project to include 31 additional housing units and extension of the golf course from a par 32 to a par 36 layout.
- Meredith Way Residential Development, MA: Responsible for site design and permitting for this residential cluster development in Weymouth, MA. The development was designed to avoid impacts to three vernal pools and their associated habitat. In addition, the stormwater management system was designed to mitigate existing drainage problems identified by abutters. The project also included an environmental assessment of impacted fill material on the property.
- Cook Estate Age-Restricted, Mixed-Income Residential Development, Cohasset, MA: Preparation of a feasibility and master plan study for a 45-unit cluster development on a 28-acre site in Cohasset, MA. Master plan minimized off-site and environmental impacts while creating a quaint, New England coastal, mixed-income development consistent with the intent of the Cohasset planning staff.
- Westwood Housing Development Study, Westwood, MA: Assisted the owner to assess the development potential for multi-family residential development of a 28-acre parcel in Westwood, MA; completed four concept layouts with various densities and products to include single family detached, duplex/triplex, town houses and 4-story flats.
- Wrentham Town Center Multi-Use Development Study, Wrentham, MA: Assisted nationally based developer to assess the site suitability and potential for housing development on this 75-acre DEP-listed former industrial site; included preparation of over ten mixed-use and residential development schemes, site development cost estimates and phasing plans.

Patrick Olstad, B.S., LEED AP :: Project Manager

EDUCATION

B.S. in Landscape Architecture, May 1996, California Polytechnic State University, San Luis Obispo, California

EMPLOYMENT HISTORY, PROFESSIONAL SKILLS, & DUTIES

Project Manager, July 2007-Present LandWorks, Middlebury, Vermont

- Involved in various landscape and planning projects focusing on community revitalization, downtown enhancement, master planning, commercial design, residential design, resort development, Act 250 permitting, and pedestrian and transportation systems;
- Manage, develop and execute various projects which include site surveying, site analysis, cost estimating, conceptual design development, design development, plant selection, preparation of construction documents and details, attending construction progress meetings, and supervising and coordinating installations;
- Consult with Principal to review company operations and administrative activities and to coordinate long- and short-term goals;
- Evaluate and allocate expenditures for individual projects and ensure work is completed within contracted time frames;
- Organize and participate in engagements and communicate with clients, architects, engineers, local and state officials, and interested stakeholders;
- Assist in the research, analysis, and writing of detailed project reports such as Inventory and Assessment reports and provide recommendations;
- Orchestrate and participate in community meetings, public workshops, and design charrettes; and
- Conduct site visits to explore issues, needs and opportunities of project areas.

Project Landscape Architect, 2001-2007 H. Keith Wagner Partnership (formerly Wagner McCann Studio), Burlington, Vermont

- Project management and site planning for downtown / mixed use, institutional and residential design projects

Project Designer- Manager, 2000-2001 Garden Architecture, Berkeley, California

- Project management, landscape design and construction observation of high-end residential planning projects

Project Designer- Manager, 1998-2000 Carducci & Associates, San Francisco, California

- Construction documentation, grading, planting design and project management for institutional and commercial projects.

Project Designer, 1996-1998 The Office of Katie O'Reilly Rogers, Santa Barbara, California

- Created illustrative plans and construction documentation for commercial and high-end residential projects

PROFESSIONAL REGISTRATIONS

- Registered Landscape Architect - New York

COMPUTING SKILLS

- Proficient in use of Mac: Adobe Photoshop, InDesign, Illustrator, AutoCAD, Nemetschek VectorWorks, Microsoft Word, Microsoft Excel

HONORS & AWARDS

- National Award for Smart Growth, 2006
Environmental Protection Agency
Project: Winooski Downtown Redevelopment
- Smart Growth Award, 2006
Vermont Forum on Sprawl
Project: Winooski Downtown Redevelopment
- Merit Award, 2004
Vermont Public Spaces Awards, ECHO at Leahy
Center for Lake Champlain
- Merit Award, 2002
Vermont Planners Association
Project: Winooski Downtown Redevelopment

David Raphael, B.A., M.L.A. :: Principal/Landscape Architect & Planner

EDUCATION

M.L.A., Harvard University Graduate School of Design, 1977 Cambridge, Massachusetts

B.A. in English, Tufts University, Cum Laude, Minor in Ecology, 1972 Medford, Massachusetts

School of the Museum of Fine Arts, 1971, Boston, Massachusetts

Diploma, Dartmouth College Outward Bound Program, 1970, Hanover, New Hampshire

EMPLOYMENT HISTORY, PROFESSIONAL SKILLS, & DUTIES

1986-present: *LandWorks, Middlebury, Vermont*

- Founded the firm and has been Principal Landscape Architect & Planner for most of the company's projects.

1984 - 1985: *Alexander, Truex, deGroot, Architects, Burlington, Vermont*

- Consultant and staff, Landscape Architect/Planner

1980 - 1982: *Kiley-Walker, Charlotte, Vermont*

- Associate Landscape Architect

1976 - 1979: *Massachusetts Department of Environmental Management*

- Planner/Landscape Architect

TEACHING/ACADEMIC APPOINTMENTS

1982-present: Lecturer, Rubenstein School of Environment & Natural Resources, University of Vermont

1992-1994: Visiting Instructor, Middlebury College, Middlebury, VT

1991-1993: Adjunct Faculty Member, Vermont Technical College

1988- 1989: Director; "Design Vermont" project of the Vermont Council on the Arts and the Governor's Institute on the Arts, funded by the National Endowment of the Arts & held at Castleton State College, July 1989

1983: Visiting Assistant Professor, School of Architecture, University of Arkansas

1982-1984: Adjunct Associate Professor, Graduate Program in Urban and Environmental Policy, Tufts University

PROFESSIONAL REGISTRATIONS

- Registered Landscape Architect - State of Vermont and Rhode Island
- Passed Uniform National Examination: eligible for registration in other states
- Registered with the Professional Ski Instructors of America

MEMBERSHIPS

- Member, American Society of Landscape Architects
- Member, American Planning Association
- Member, Society of Environmental Graphic Designers
- Member, Board of Trustees, Lake Champlain Land Trust
- Member, Board of Directors, Vermont State Craft Center at Frog Hollow
- Chairman, Town of Panton Planning Commission and Development Review Board 1985 - present
- Delegate, Addison County Regional Planning Commission
- Member, Agency of Natural Resources, Design Issues Study Committee
- Member, Town of Middlebury, Design Advisory Committee
- Member, Vermont Natural Resources Council

PARTIAL LISTING OF RESEARCH AND PUBLICATIONS

"I Believe: Green is the Infrastructure of the 21st Century, Let's Begin the Blueprint" Burlington Free Press, Dec. 6, 2009

"BGO (Big Graphics on Campus) Signs and environmental graphics that impact collegiate environments" Signs of the Times, Oct. 2003

"A New Vision for Vermont," Landscape Architecture Magazine, December 1999

Special Correspondent, Burlington Free Press, Burlington, Vermont, 1994 to 1998

"Brave New Vermont," Vermont Magazine, June 1995, Contributor.

Sign Management: Aesthetics, Economics, Environment - The Vermont Experience, 1992 ("Best of the Conference" award at national conference on sign management, 1992)

"Prospect," Landscape Architecture Magazine, September/October 1985.

"Grounds for Playful Renaissance," Landscape Architecture Magazine, July 1975.

Richard P. White Award, Horticultural Research Institute, Washington, D.C., 1983-1984 Windbreaks and Shelterbelts for the Northeast

Rivers Downtown: Riverfront Revitalization in Vermont, for the Winooski Valley Park District, October 1981; funded with a Housing and Urban Development and Research Grant

"Evolutionary Trends and Essential Themes of Wilderness Preservation" in Public Space, Peter Trowbridge, Ed. and with an Introduction by J.B. Jackson; Harvard University, Cambridge 1975.

AWARDS

2012 Honor Award, Vermont Public Space *Built Environment Landscapes & Views Maps* | Vermont Chapter American Society of Landscape Architects

2010 Plan of the Year *Vergennes Municipal Development Plan* | Vermont Planners Association

2007 Award of Excellence *Lake George Upland Protection Program* | Vermont Chapter American Society of Landscape Architects

2007 Certificate of Merit for Outstanding Planning Project *Guiding Growth in Burke* | Vermont Planners Association

2005 Public Space Award *View From the Road* Vermont Chapter American Society of Landscape Architects

2005 Award of Excellence *Island Line Sign & Amenities Plan* | Vermont Chapter American Society of Landscape Architects

2005 Merit Award *Lake Morey Resource Conservation Project* | Vermont Chapter American Society of Landscape Architects Public Space

2005 Public Space Award Honorable Mention *Danville Transportation Enhancement Project* | Vermont Chapter American Society of Landscape Architects

2004 Honor Award *Manchester Design Guidelines* Vermont Chapter American Society of Landscape Architects

2003 Certificate of Merit for Outstanding Planning Project *The Pownal Municipal Plan & Land Use Regulations* | Vermont Planners Association

2002 Certificate of Merit for Engineering Excellence *Danville Route 2, Danville, Vermont* | American Council of Engineering Companies

2001 Merit Award *Stowe Ridgeline Ordinance: Ridgeline & Hillside Overlay District* | Vermont Chapter American Society of Landscape Architects

2001 Certificate of Merit for Outstanding Planning Project *The University of Vermont Wayfinding System & Design Standards* | Vermont Planners Association

Natalie Steen, B.A., B.S. :: Planner

EDUCATION

B.S. in Land Use Planning, Environment, & Resources, December 2000, Metropolitan State College of Denver, Denver, Colorado

B.A. in Political Science, Minor in Business, May 1996 Pennsylvania State University, University Park, Pennsylvania

EMPLOYMENT HISTORY, PROFESSIONAL SKILLS, & DUTIES

Planner, April 2001- Present LandWorks, Middlebury, Vermont

- Involved in various planning projects focusing on community revitalization, downtown enhancement, master planning, zoning revision and rewrite, Act 250 permitting, aesthetic analysis, pedestrian, bicycle and transportation systems;
- Manage, develop, and execute various projects from research, planning, and writing of reports, to organization, communication, and supervision of staff;
- Investigate, develop, and draft goals, policies, and implementation strategies for town plans, as well as related bylaws, ordinances, and subdivision regulations;
- Research, analyze, and write detailed project reports such as Conceptual Alignment Analyses, Feasibility Reports, or Corridor Management Plans;
- Consult with Principal to review company operations and administrative activities and to coordinate long and short-term goals;
- Evaluate and allocate expenditures for individual projects and ensure work is completed within the contracted timeframe;
- Organize and partake in collaborative engagements, and communicate with clients, local and state officials, and interested stakeholders;
- Orchestrate and participate in community meetings, public workshops, and design charrettes;
- Study, classify, and prioritize public comments, client orders, and other stakeholder needs into workable designs and plans;
- Conduct site visits to explore issues, needs, and opportunities of project areas;
- Explore, develop, coordinate, and write Request for Proposals and attend pre-bid conferences/interviews when necessary; and
- Utilize GIS/ArcView software, including Spatial Analyst and 3D Analyst, to research land use conditions and to generate maps for various reports

and public meetings, including zoning maps, resource inventories, and viewshed analyses.

Planning Assistant, May 2000 - March 2001, Summit County Planning Department, Community Development Division, Frisco, Colorado

- Researched, analyzed, and prepared preliminary reports and summaries as needed for various master plan updates and other current planning needs;
- Contributed in the development and drafting of goals, policies, and implementation strategies for various master plan revisions;
- Assisted with several wetland master planning efforts, from research to policy development;
- Investigated and evaluated various wetland issues for the Environmental Planner/Wetlands Specialist;
- Responsible for the formulation, design, and implementation of the official Community Development/Planning Department website;
- Provided assistance to the public by answering questions about the planning and development review process, Summit County Land Use and Development Code, and various master plans;
- Planned and executed detailed build-out analyses for master plan updates;
- Utilized GIS/ArcView software to research various land use questions and to generate maps for public meetings and reports;
- Presented reports to the Planning Commission for various master plan updates;
- Participated in community and work group meetings, answered questions, and organized and summarized public comments for master plan updates; and
- Participated as a team player in all planning efforts by partaking in various meetings and engaging in group discussion.

COMPUTING SKILLS

- Proficient in use of Macintosh and PC programs: Adobe Photoshop, InDesign, MSOutlook, Word, Excel, Access, and PowerPoint
- Skilled in ArcView GIS software including Spatial Analyst and 3-D Analyst

MEMBERSHIPS

- Member, American Planning Association (APA)
- Member, Northern New England Chapter of the APA
- Member, Executive Committee of the Vermont Planners Association (VPA)

PROFESSIONAL RESUME
MARCIA L. PHILLIPS
SENIOR RESOURCE ECONOMIST

Marcia L. Phillips holds an MS in Agricultural and Resource Economics from the University of Maine, Orono (1994) and a BS in Natural Resources from the University of Maine, Orono (1987). Ms. Phillips specializes in resource planning and management pertaining to outdoor recreation and regulatory compliance activity, including supply and demand studies for outdoor recreation, impact analyses and EA preparation. Ms. Phillips taught two semesters of an Environmental Policy class at the University of Maine, Department of Resource Economics and Policy. She has co-authored numerous reports, journals, and peer-reviewed papers pertaining to recreation and non-use valuation studies. The following is a representative list of Ms. Phillips' experience at Kleinschmidt:

Bingham Wind Project User Survey
First Wind, Portland, ME

Technical lead for design and conduct of intercept surveys of boaters, campers and hikers to identify the potential influence a proposed wind farm would have on users of scenic resources in the area of the proposed project. Research supported the visual impact assessment for a siting permit application. Late season interviews were completed with recreationists accessing Wyman Lake and Bald Mountain Pond, and with hikers on top of the 2,629-ft Bald Mountain. Results showed that almost all individuals indicated they were likely to return to the location regardless of the presence of the proposed wind farm.

Baskahegan Lake User Survey
First Wind, Portland, ME

Technical lead for design and conduct of an access-point contact survey to assess the visual impact of an existing wind farm on visitation to and enjoyment of a lake. Results showed the existing wind farm did not negatively influence visitation and enjoyment of the lake. Further, people did not avoid the lake, or choose alternate locations to visit because of the presence of the wind farm. This study demonstrates a counterpoint to the argument that the presence of wind farms negatively influences people's experience with and use of an area in its presence.

Bowers Wind Project User Survey
First Wind, Portland, ME

Technical lead for design and conduct of survey research supporting visual impact assessment of how the aesthetics associated with a proposed wind farm would influence users of four lakes in rural Maine. On the water, contact surveys were completed from boats by intercepting boaters while they were engaged in their activities on the water. On shore, interviewers typically landed the boat and approached respondents on foot. Results showed that even while the proposed wind farm would result in lower scenic values of the area, there remained a high likelihood of return, indicating that aesthetics has little bearing on people's use of the area.

Recreation Use and Needs Study
Duke Energy Carolinas, Charlotte, NC

Technical lead for study to characterize geographic and temporal recreational use and economic value of recreation generated by the Keowee-Toxaway Hydroelectric Project in northern South Carolina. Work includes aerial boat counts, traffic and trail counts, exit interviews and personal interviews on water and on shore (n=4,950), mail and web-based surveys of agencies and NGOs, shoreline homeowners and county residents (n=1,200). Study area includes remote portions of national forest lands and highly developed locations with modern amenities. Results will support federal relicensing of the project.

Dam Inventory and Survey of Dam Owners in Maine
NOAA National Marine Fisheries Service
Orono, ME

Technical lead for identifying and surveying owners of approximately 420 small dams in the Penobscot, Merrymeeting Bay, and Downeast Coastal Salmon Habitat Recovery Units in Maine. Study entails developing a questionnaire, receipt of federal approval for implementation from the Office of Management and Budget, and implementation. Results will support management of the endangered Atlantic salmon habitat in Maine. The survey was administered via telephone and personal interviews and was conducted concurrent with a physical survey of each dam. The survey area extended across approximately 17,800 square miles. Work was completed approximately 9 months ahead of schedule.

Broadband Expansion Environmental Assessment
Tilson Technology and Maine Fiber Company, Inc.
Portland, ME

Coordinator and section author for this EA accepted by the National Telecommunications and Information Administration (NTIA) in support of a federal award to expand affordable high-speed internet access to over 1,100 miles of rural and underserved areas in Maine. The Assessment was completed on an accelerated schedule and achieved a Finding of No Significant Impact.

Lake Martin Economic Value Study
Alabama Power Company, Birmingham, AL
Authored the sampling plan for onshore and on water intercept surveys for three target groups: boaters and anglers; tailwater users; recreation site users. Lake Martin encompasses approximately 40,000 acres of surface area and 700 miles of shoreline. Results supported estimation of the economic impact of recreation and tourism at Lake Martin and estimates of recreational use of the Lake. Sampling plan was designed to accommodate year-round survey research.

Saluda Project Relicensing
South Carolina Electric and Gas, Columbia, SC
Prepared recreation, land use, and project operations sections of ICD; completion of the Resource Utilization Report, Public Safety and Outreach Plan and management plans for woody debris, buffer zones, and shoreline erosion/sedimentation. Provided technical support and review for recreation site inventory, exit interviews (n=1600) at recreation sites, and use assessment for the 48,000-acre Lake Murray and the Lower Saluda River.

Recreation Report
Consumers Energy
Cadillac, MI
Consumers Energy required recreation site inventories and annual recreation use estimates to support relicensing of its Calkins Bridge Hydroelectric Project, in rural Allegan County, Michigan. Kleinschmidt prepared materials and protocols upfront, presenting them to our client at the kickoff meeting for initial discussion and review. Kleinschmidt also scheduled the site inventory to

The following is a representative list of Ms. Phillips' project experience prior to joining Kleinschmidt:

Glen Canyon Non-Use Value Study
U.S. Bureau of Reclamation, AZ
While at Hagler Bailly Consulting, was the Project Analyst in this project nonuse value of the Colorado River resources below Glen Canyon Dam for various water release levels. Supervised the administration of seven survey versions to a sample of approximately 6,000.

Department of Agricultural and Resource Economics
University of Maine, Orono, ME
Responsible for designing and administering mail questionnaires to the population of Maine wildlife managers to collect non-market values for selected species of Maine's wildlife, and to compare management preferences of the public with wildlife managers in Maine. The public survey comprised a sample of 2,000.

U.S. Fish and Wildlife Service
Federal Aid Division, Arlington, VA
Participated in research to develop a predictive model to

occur immediately after the kickoff meeting, resulting in travel cost savings and condensed study schedule. On-site monitoring and intercept surveys were completed during three seasons. The study was completed on schedule and on budget in time to support relicensing efforts.

P.B. Power
Programmatic EIS Recreation Studies, Boston, MA
Project manager in charge of completing a recreation study in support of a large programmatic EIS. Managed study to identify recreational use and economic impacts associated with recreational use, and user preferences under alternatives proposed for consideration in the EIS for this extensive 35 reservoir system covering portions of seven states. Led a team of three subconsultants specializing in the fields of survey research (4,587 contact surveys; 2,327 mail surveys), recreation expenditures, and behavioral modeling, and completed associated portions of the EIS.

Recreation Studies
Nantahala Area Projects
Duke Power
Project manager of a recreation study completed in support of relicensing efforts for Duke Power's seven Nantahala Area Hydroelectric Projects over approximately 800 square miles. Initiated in the fall of 2001, the study included onsite counts of and interviews with recreators at public parks and marinas, as well as mail and telephone interviews with shoreline property owners (total of approximately 1,500).

estimate state-level participation rates for fishing and hunting activities. Assisted in the development of sample selections, data collection and computer entry. Assisted in refining the 1991 National Survey of Fishing, Hunting and Wildlife Associated Recreation instrument and reporting materials.

Economic Impact of Maine's Fish and Wildlife Resources
Department of Agricultural and Resource Economics
University of Maine, Orono, ME
Participated in a study to determine non-market values for selected fish and wildlife species, and their economic impact on Maine's economy using mail questionnaires (approximately 9,000 total) sent to residents of Maine, and hunters, anglers, and trappers in Maine. Managed all hourly employees, supervised sample selections, survey administration, coding and data analysis, and writing of reports. Maintained contact with personnel from state resource management agencies and maintained project supplies.



R. Scott Bodwell, P.E.

Principal

Bodwell EnviroAcoustics, LLC

Summary

R. Scott Bodwell, P.E. is the founder and principal of Bodwell EnviroAcoustics, LLC, an engineering consulting firm that services the energy and industrial sector and specializes in Environmental Acoustics.

Professional Experience

Mr. Bodwell has over 25 years of experience in environmental assessments, project engineering and design, and regulatory permitting for major utility, energy production, and transmission projects in the northeast United States.

As a consulting engineer in Maine since 1987, Mr. Bodwell has conducted acoustic studies on over 300 industrial development projects and is recognized as a leading authority on Environmental Acoustics in Maine. Mr. Bodwell was the lead acoustical engineer on the first two utility-scale wind energy facilities in Maine at Stetson Mountain in Washington County and Mars Hill Wind Farm in Aroostook County. He also conducted the acoustic study for the wind turbine installation at University of Maine at Presque Isle.

Mr. Bodwell has worked closely with the Maine Department of Environmental Protection and Maine Land Use Regulation Commission and independent acoustical consultants to develop and refine procedures and methods for assessment and measurement of sound from wind turbines. Specialized measurement techniques were developed based on several hundred hours of sound testing for operating wind turbines in Maine and are considered to be some of the most advanced and thorough testing procedures in the United States.

Mr. Bodwell has provided expert testimony at state hearings and municipal reviews in successful support of major industrial and energy projects in Maine including Stetson Wind Project, Rollins Wind Project, Maritimes & Northeast Pipeline, Bath Iron Works, Maine Medical Center, Stratton Power Project, St. Joseph's College of Maine, and Waste Management of Maine. He also developed and conducted an Environmental Acoustics seminar for project managers and technical staff at the Maine Department of Environmental Protection.

Mr. Bodwell has conducted peer reviews of environmental assessments by others for the Maine DEP, the Saco River Corridor Commission and several municipalities in Maine, and assisted municipalities with the development of noise control ordinances.

Education and Credentials

Mr. Bodwell is an Engineering Sciences graduate of Dartmouth College and has completed numerous graduate and continuing education courses in engineering and acoustics.

Mr. Bodwell has been a licensed professional engineer in Maine since 1994.

EDUCATION

Ph.D., Anthropology, University of Alberta, 1985
M.S., Quaternary Sciences, University of Maine, 1981
B.A., Anthropology, University of Arizona, 1976

PROFESSIONAL REGISTRATIONS

List of Approved Archaeologists, Maine, 1987
List of Approved Archaeologists, New Hampshire, 2000
List of Approved Archaeologists, Vermont, 2005

AREAS OF EXPERTISE

Dr. Will has over 20 years of experience encompassing:

- Large and Small Scale Archaeological Surveys
- Archaeological Site Data Recovery
- Cultural Resources Management Plans
- Native American Consultation
- Report Writing and Editing

WINDPOWER EXPERTISE

- Archaeological Phase 1A, 1B, and II Investigations of the Kibby Wind Power Project, Franklin County, Maine (2007)
- Archaeological Phase 1B/II Investigations of the West Hill Wind Power Project, Stockbridge, Lincoln, Smithfield, and Madison Counties, New York (2007)
- Archaeological Phase 1A/1B/II Investigations of the Stetson Wind Power Project, Penobscot County, Maine (2006-2008)
- Archaeological Phase 1B Investigations of the St. Lawrence Wind Farm Project, Cape Vincent, New York (2008)
- Archaeological Phase 1A Investigations of the Number Nine Wind Power Project, Aroostook County, Maine (2008)
- Archaeological Phase 1A/1B Investigations of the Oakfield Wind Power Project, Aroostook County, Maine (2008-2009)
- Archaeological Phase IA Investigations of the Bowers Wind Project, Penobscot and Washington Counties, Maine (2010)
- Archaeological Phase IA Investigations of the Bull Hill Wind Project, Hancock County, Maine (2010)

PROFESSIONAL AFFILIATIONS

- Adjunct Professor, Institute for Climatic Change, University of Maine
- Chair (ex officio), Maine Historic Preservation Commission
- Member, Maine Historic Preservation Commission
- Research Associate (ex officio), Abbe Museum
- Member, Board of Directors (ex officio), Maine Humanities Council
- Member, Board of Directors (ex officio) Woodlawn Museum

RESUME

Kathleen L. Wheeler, Ph. D.

Director and Principal Archaeologist

Independent Archaeological Consulting, LLC

97 Morning Street
603 430-2970

Portsmouth, NH 03801
kwheeler@iac-llc.net

Education

- 1992 Ph. D., Anthropology, University of Arizona. Dissertation Title: *The Characterization and Measurement of Archaeological Depositional Units: Patterns from Nineteenth-Century Urban Sites in Portsmouth, New Hampshire*. University Microfilms International, Ann Arbor, Michigan
- 1985 M. A., Anthropology, University of Arizona
- 1981 B. A., Anthropology, University of New Hampshire (*summa cum laude*)

Certification

Meets and exceeds Secretary of Interior 36-CFR-61 standards for Archaeologist;
Member of RPA (Register of Professional Archaeologists);
Approved for all levels of archaeological investigation in New Hampshire, Vermont, Massachusetts, and New York
Certified Level 2 Historic Archaeologist in the State of Maine (approved for all levels of archaeological investigation)
40-hr HAZWOPER training

Experience and Expertise

Dr. Wheeler has more than 20 years experience working in New England and has authored or co-authored more than 300 technical reports and articles for New England area projects. She serves as Director of Independent Archaeological Consulting, LLC, a woman-owned small business certified as a W/DBE by the New Hampshire Department of Transportation. IAC provides a full range of archaeological assessment services to clients in Northern New England, assisting civil engineers, city and town planners, developers, and historic house museums meet state and federal regulations by providing archaeological studies to protect historic resources prior to development.

Selected Projects

- Maritimes and Northeast Natural Gas Pipeline Survey, Portland – Baileyville, Maine, over 30 sites identified and evaluated at Phase I and II levels from 1996 to 2006
- Phase I, II, and data recovery: Exit 5 Highway Project, I-293, Manchester, New Hampshire, from 1999 to 2007
- Phase I and II: Sewer Interceptor, Manchester, New Hampshire: Nearly one dozen Native American archaeological sites discovered, 1995 to 2004
- Phase I and II Survey, I-93 Widening, Salem-Manchester, 2003 to present
- Court Street Reconstruction – Phase IA, IB, and Monitoring (2000, 2003-2004, 2006-2007)
- Bangor-Hydroelectric Transmission System: 90-mile transmission corridor through Penobscot, Hancock, and Washington Counties (2004-2005)
- Epsilon Associates: Cultural Resource Management for MBTA Greenbush Restoration Project, Braintree to Cohasset, Massachusetts (2001-present)
- Phase I: Route 125 Improvement, Plaistow-Kingston, New Hampshire (2003-2004, 2006-present)
- New Hampshire Department of Transportation: Phase I and II surveys at multiple sites since 1998 (e. g., Orford-Fairlee, Newfields, Pittsburgh-Clarksville, Rte. 26 Colebrook, Epping)
- Civil Engineering Associates, Shelburne, Vermont: Sensitivity assessments for almost two dozen paving projects from 1994-2002
- Portsmouth Naval Shipyard: Cultural Resource Inventory from 1995 to 2005
- York Historic District Commission: Sensitivity Assessment and Phase I Survey, 1989 to 1994
- Phase I and II: New York Power Authority Hydropower Relicensing, 2005 to present



STEPHEN A. OLAUSEN

EXECUTIVE DIRECTOR/SENIOR ARCHITECTURAL HISTORIAN

EDUCATION

MA, University of South Carolina, Applied History and Historic Preservation, 1988

BS, Roanoke College, History, 1984

EXPERIENCE

Years with PAL: 10
Years Experience: 21

CERTIFICATION

Basic First Aid - American Red Cross

Adult CPR -American Red Cross

OSHA 29 CFR
1910.120(e) 40-Hour
Hazardous
Waste/Emergency
Response

OSHA 29 CFR
1910.120(e) 8-Hour
Hazardous
Waste/Emergency
Response Supervisor

PROFESSIONAL DEVELOPMENT

Section 106: Working with the Revised Regulations

Workshop on the New 36 CFR Part 800: Highlights of Changes

Federal Energy Regulatory Commission Section 106 Compliance Seminar

As a PAL Senior Architectural Historian and Project Manager, Mr. Olausen conducts cultural resource management projects that require consideration of historic architectural and landscape properties. He has extensive experience in the coordination of projects requiring review under Section 106 of the National Historic Preservation Act, the National Environmental Policy Act, and Section 4(f) of the Department of Transportation Act. His project responsibilities include the preparation of technical proposals; project administration and communication; supervision historic architecture staff in conducting project research, fieldwork, and report production. He is fully qualified under the Secretary of Interior's Professional Qualification Standards for History and Architectural History (36 CFR Part 61).

Mr. Olausen's experience includes the completion of more than 150 historic property survey and evaluation projects, more than 100 successful National Register of Historic Places nominations, and a large number of HABS/HAER and state-level documentation projects. Other areas of expertise include the preparation of cultural resource management plans, Section 106 documentation reports, Section 4(f) statements, architectural design guidelines, historic preservation tax incentive certifications, the development of interpretive educational materials and displays for the purpose of disseminating information about cultural resources and the work that PAL performs to the general public. Mr. Olausen also specializes in adapting computer applications to provide solutions for cultural resource management data collection and has a broad range of experience in computer assisted design (CAD), database management, geographical information systems (GIS), and desktop publishing.

Mr. Olausen has conducted projects for a wide variety of clients, including federal, state, and municipal agencies; private and non-profit organizations; and private developers. Since joining PAL in 1997, he has served as project manager for a number of large-scale projects, including the completion of the cultural resource mitigation phase of Amtrak's Northeast Corridor - New Haven to Boston Electrification; I-95 Ramp Improvements in Providence, Rhode Island; and Manchester Airport Expansion in Manchester, New Hampshire. He has managed survey, planning, and registration projects for a number of federal agencies, including the U.S. Army Corps of Engineers, U.S. Coast Guard, Federal Emergency Management Agency, Federal Passenger Railroad Corporation, General Services Administration, and National Park Service. Since 1998 he has served as the lead cultural resource management consultant for the Deerfield and Connecticut River Hydroelectric Projects in Vermont, New Hampshire, and Massachusetts. He also manages ongoing work for the Rhode Island Department of Transportation and projects conducted under PAL's on-call services contracts with the departments of transportation in Connecticut, Maine, and Massachusetts.

In 1999, Olausen was named Executive Director of PAL. In that capacity, he oversees the administrative operations of PAL, including the information systems, production, and human resources departments.

Albert Frick

EDUCATION: Master of Science 1978
University of Maine at Orono, Orono, Maine
Program: Soil Science (Resource Utilization)

Bachelor of Science 1972
Bates College, Lewiston, Maine
Program: Geology

WORK EXPERIENCE:

Apr.1985-Present **Consulting Soil Scientist. Albert Frick Associates, Inc.**
Gorham, Maine

President and Senior Consulting Soil Scientist of small consulting firm which produces high intensity soil maps, subsurface wastewater disposal system designs, environmental studies, and subdivision planning with regard to soil utilization.

Oct.1978-Apr.1985 **Soil Scientist. Division of Health Engineering, State of Maine**

Responsible for administering the Site Evaluation program for the State of Maine. Duties included licensing of Site Evaluators, review of soils, and administration of the State of Maine Subsurface Wastewater Disposal Rules.

May 1978-Oct.1978 **Consulting Soil Scientist. Self-employed**

Site evaluations, land use consultation, site selection.

Jan.1976-May 1978 **Consulting Soil Scientist. University of Maine, Orono, Maine**

Examined soil potential for land use planning in communities of Maine to develop soil potential ratings for Maine soils that are utilized as a planning tool to guide towns in land use decisions.

Research Assistant. University of Maine, Orono, Maine

Examined land application of potato wastes. Investigated nutrient movement through soil and associated ground water quality in adjacent monitoring wells. Nutrient budgets were calculated and acceptable loading rates were identified.

Albert Frick

Jan.1974-Jan.1976 **Engineer Technician. Thomas Griffin Associates**

Duties included assisting in selection and design of sanitary landfill sites, report preparation, drafting, surveying, field investigations.

June 1971-Sept.1971 **Assistant Geologist. National Science Foundation**

Member of a research team examining pollution of Lake Lillinonah, Milford, Ct. Investigated stream turbidity and sediment loading, nutrient levels in recharge water and eutrophication process.

June 1970-Sept.1970 **Assistant Geologist. Wesleyan University, Middletown, Ct.**

Investigation of aeromagnetic anomalies in western Connecticut. Correlated strike, dip, overburden, and concentration of magnetite veins with computer modeling.

PUBLICATIONS: Site Evaluation of Subsurface Wastewater Disposal in Maine (August 1983)
Maine Department of Human Services, Division of Health Engineering.

Soil Potential for Land Use Planning at a Local Level in Maine (December 1977)
Bulletin 747, University of Maine.

Life Expectancy, Systems Design and Land Use of Subsurface Wastewater Disposal Systems in Maine (December 1984)
On-site Sewage Treatment- the Fourth National Symposium on Individual and Small Community Sewer Systems.

Maine Environmental Planning Guide (1990)
Cumberland County Soil and Water Conservation District
Chairman of the Soil Advisory Committee which developed the Soil Information Chapter 2 of the Manual.

AWARDS: Fred Griffie Award 1997
Outstanding graduate student in Life Science and Agriculture College, University of Maine at Orono

PROFESSIONAL AFFILIATIONS AN ORGANIZATIONS:

Maine Certified Soil Scientist #66
Maine Licensed Site Evaluator #163
Maine Association of Professional Soil Scientists
Maine Association of Site Evaluators (Charter Director)
(Past President)
National Society of Consulting Soil Scientists (Charter Member)
Maine Association of Landscape Architects (Associate Member)
Maine Board Certification of Geologists and Soil Scientists
(Consulting Soil Scientist Board Member) Governor McKernon appointee

QUALIFICATIONS AND EXPERIENCE

Soil Mapping

Albert Frick is a certified Soil Scientist and licensed Site Evaluator with 25 years experience in soil science and subsurface wastewater disposal system design.

Albert Frick Associates, Inc. has soil mapped thousands of acres in Maine for various clients including the Passamaquoddy Indian Tribe, Colby College, St. Joseph's College, Southern Maine Vocational Technical Institute, Lewiston High School, Brunswick Hospital, Proposed Mid-Coast Regional Hospital (Brunswick), Augusta Mental Health Institution Complex (Maine Department of Environmental Protection) and Inland Fisheries and Wildlife, Club Sebago and Endless Energy.

Albert Frick Associates has designed over 15,000 subsurface wastewater disposal systems in the State of Maine, from pit privies to large community systems, including residential, commercial and industrial uses, for private and public clients. Albert Frick Associates has provided numerous subsurface wastewater disposal designs for the Maine Department of Inland Fisheries and Wildlife warden facilities; and provided soils information for the Department of Environmental Protection Site Location and Development Application for the State of Maine Complex expansion in Augusta and President George Bush.

Mr. Frick was employed by the State of Maine Department of Human Services, Division of Health Engineering from 1978 to 1985, during which time he was responsible for administering the Site Evaluation program for the State which included implementation of the Maine Subsurface Wastewater Disposal Rules, licensing of site evaluators, and review of the State of Maine Subsurface Wastewater Disposal Rules.

Mr. Frick was appointed by Governors John McKernan and Angus King to serve on the Maine Board of Certification of Geologists and Soil Scientists. Mr. Frick has served as Chairman of the Maine Association of Site Evaluators, Technical Review Committee responsible for reviewing and making recommendations for proposed Subsurface Wastewater Disposal Rules. He also served on the Maine Association of Professional Soil Scientists Technical Review Committee. In addition, he is intimately familiar with current and proposed codes and regulations governing on-site systems and site mapping standards.

Mr. Frick also completed training in 1997 for Stormwater Practices Design and Designing Erosion and Control Plans.

Publications

Albert Frick co-authored the Handbook of Subsurface Wastewater Disposal in Maine, which is utilized throughout Maine by Site Evaluators, Local Plumbing Inspectors, Contractors, Planning Board members and Regulators.

Albert Frick was principal author for both 1979 and 1983 editions of the Site Evaluation for Subsurface Wastewater Disposal in Maine. This has been used by the Division of Health Engineering as a manual for Site Evaluators.

Mr. Frick was a contributing author of the Soils Section of the Environmental Planning Guide (1990) which provides guidance in mitigating potential adverse environmental impacts from development.

Mr. Frick was contracted to provide technical editing to *TREAT IT RIGHT Alternative Wastewater Systems That Protect Water Quality* (1993).

Albert Frick also co-authored Soil Potential Rating-for Land Use Planning at a Local Level in Maine (1977)

John C. Cooney, CPA, CCIFP

12 Baxter Lane
Brunswick, Me 04011
(207) 721-8606

Summary: Over twenty-seven years experience in accounting, financial management and business development with a proven track record in public accounting and private industry.

E x p e r i e n c e a n d A c c o m p l i s h m e n t s

Reed & Reed, Inc. and Affiliates

August 1994 to Present

Woolwich, Maine

Vice President Finance and Development, promoted from CFO of a \$125+ million group of heavy/commercial construction companies that are operationally and geographically diverse. Responsible for business development and the supervision of the accounting, tax, treasury, benefits, finance/surety, risk management and information system functions.

Lead role in support of project development function. Shared responsibility for increasing percentage of private sector wind energy work from 20% to 80% in two years during a very difficult economy.

Manage Caribbean operations from November 2006 through January 2008.

Member of the joint venture policy committee responsible for the oversight of \$85M Prospect – Verona cable-stay bridge project.

Led all phases of the successful acquisition of a local competitor contractor including research, due diligence, financial modeling, planning, negotiations and closing.

Restructure administration of three operating companies, with cost reductions in excess of forty percent.

Successfully establish “double breasting” operation and administration.

Design, implement and administer a 401K/profit sharing retirement plan with over 200 participants.

Develop and implement various systems conversions, resulting in substantial administrative efficiencies.

Responsible for compliance with DOL, IRS, and all State Agencies.

Bread Loaf Construction Co.

December 1993 to August 1994

Middlebury, Vermont

Controller / CFO for a \$40 million general building contractor. Generate, sell and implement a cost reduction, turn-around plan that reduced overhead by 40% within six months. Revise financial reporting package to a format consistent with industry standards and enhance performance of risk management program.

Research and execute tax-planning strategies, which saved \$80,000 in the first year.

Sullivan and Merritt, Inc.

April 1990 to December 1993

Bangor, Maine

Treasurer, promoted from Controller, reporting directly to President and shareholders of \$25 million group of construction companies. Member of upper management responsible for strategic and tactical planning. Key participant in the management decision-making process.

Restructured job cost accounting applications, which generated meaningful management reports and saved \$350,000 in two years. Trained project managers to effectively utilize revised reports.

KPMG Peat Marwick

September 1986 - April 1990

Boston, MA and Portland, Maine

Advanced In-Charge for an international public accounting firm. Specialized in the banking and construction industry. Planned, supervised and completed numerous major audit engagements.

Professional Status: Certified Public Accountant, Maine & New Hampshire.

Affiliations: CFMA Director, Maine BLS Director, Maine WCB Director – Governor Appointee.

Education: BS Accountancy, Bentley College, Dean’s List.

References: Furnished upon request.

DUSTIN LITTLEFIELD

Project Manager

YEARS OF EXPERIENCE

Total: 11 Current Firm: 8 Similar Role: 8

EDUCATION

BS, Construction Management Technology with minor in Business Administration, University of Maine, Orono, 2001

REGISTRATIONS / CERTIFICATIONS

ACI Concrete Field Testing Technician – Grade I

PTI Level I Bonded PT – Field Installation

NETTCP – Quality Control Technologist

PROFILE

As the Project Scheduler, Dustin Littlefield will play an important role. He will be primarily responsible for creating the initial CPM project schedule and for performing monthly updates. Dustin will take the lead in tracking the project progress against the project baseline schedule and working with the Project and Construction Managers to re-sequence work or change durations as challenges or delays occur.

Dustin has eleven years of construction experience. His skills include scheduling, project controls, and project engineering. He has been involved in several large bridge and design-build projects. Dustin's attention to details, follow through and his constructive management approach make him a valuable asset on this project team.

RELEVANT EXPERIENCE

- **Veterans Memorial Bridge Replacement, Portland, ME (MDOT; \$63M): *Assistant Project Manager*** for this replacement bridge that connects Portland to South Portland. He was involved in the preconstruction phase and oversaw project scheduling, project controls, QC implementation, and project engineering. The distinctive and innovative design of this project allowed construction without the need for full closure or partial closure of the existing bridge and the connecting roadways, saving the State significant expense. Our design provided for an alternative bridge alignment that offered significant improvement to the overall traffic flow in the area and the existing intersection.
- **Kibby Wind, Chain of Ponds, ME (TransCanada; \$105M): *Assistant Project Manager*** for the design and construction of this complex and challenging wind energy project (132 mw; 44 turbines). Critical responsibilities included project schedule creation and monthly updates, project controls, owner & subcontractor coordination, coordination of transportation route upgrades, and monthly requisitions. This project involved working in highly sensitive environmental areas with access roads, crane paths, and turbine pads in wilderness areas; and project safety with equipment, working at high altitudes, and over 200 personnel on the site working over an extended site under a myriad of weather conditions.

- **Ocean Gateway Marine Terminal (MDOT; \$16M): *Assistant Project Manager*** for this expansive, multi-disciplinary project on the Portland waterfront. His responsibilities included scheduling, project controls, subcontractor coordination, buyout, estimating, and project closeout oversight. This showcase project helped lead the redevelopment of Portland's East End. Work included construction of a new terminal building, receiving building, pier expansion, ship fender system, ro-ro ramp for ferry traffic, vehicle inspection booths, and 1,300 lf of new city streets. Because the original bids were over budget, MDOT asked for value engineering and cost savings ideas. Reed & Reed was selected on the basis of its creativity and savings to the project. Reed & Reed performed all of the marine work, structural building trades, and much of the site work with its own forces.
- **Colby College Alumni Center, Waterville, ME (Colby College; \$4.7M): *Assistant Project Manager*** on this new two-story, 30,000 s.f. Alumni Center. Responsibilities included project controls, scheduling, subcontractor coordination, buyout, estimating, and project closeout oversight. This project was delivered under a construction management approach where Reed & Reed provided preconstruction design development support and estimating services prior to the commencement of construction. The project included cast-in-place foundations, structural steel and light gage metal framing, brick veneer, copper roofing, meeting and function rooms, offices and support facilities. The Georgian style architecture blends seamlessly with other buildings on campus and is LEED certified.

Janine S. Murchison, P.E.

Project Manager, Engineering & Survey Division

Ms. Murchison joined James W. Sewall Company in 2007 with over 20 years of experience in the civil engineering field. Ms. Murchison has managed, designed, and monitored construction activities on a wide variety of projects including roadway, storm drain, water, and sewer systems. She also has practical experience with downtown revitalizations, airport improvements, pedestrian trails, landfill closures, boat landings, parking lots, site design, environmental permitting, and all aspects of construction services.

EDUCATION

B.S., Civil Engineering, University of Maine, 1986
M.S., Business, Husson College, Caribou, Maine 1995

PROFESSIONAL CERTIFICATIONS AND AFFILIATES

Registered Professional Engineer, Maine #7125
Trustee, Caribou Public Library
Trustee, Caribou Utilities District

RELEVANT EXPERIENCE

Bowers Mountain Wind Project, Penobscot and Washington Counties, Maine. Currently managing the civil design for a proposed wind farm including up to 27 Siemens wind turbine generators. Design includes turbine micro-siting, site layout, roadway plan and profile, stormwater management and erosion & sedimentation control plans. Assisting project team with civil site narratives and drawings for development permit submittal to the Maine Land Use Regulation Commission.

Stetson II Wind Project, Washington County, Maine. Managed and prepared civil design for a 25MW wind farm including 17 GE 1.5MW wind turbine generators. Design included site layout, roadway plan and profile, stormwater management and erosion & sedimentation control plans. Assisted project team with civil site narratives and drawings for successful application of the Development Permit submission to the Maine Land Use Regulation Commission. Additionally, managed and prepared final design drawings and specifications for bidding and construction phases.

Twin Pine Camps, LLC Expansion Project, T1 R8 WELS, Maine: Managed and prepared successful application for an Amendment to Development Permit per Maine Land Use Regulation Commission (LURC) requirements. Assisted with site design of roads, driveways, and parking lots for the addition of nine (9) transient Cove Cabins and a library/sauna building. Coordinated the efforts of the owner, environmental, and architectural team members.

KTAADN Resorts, T1 R8 WELS, Maine: Currently in the final stages of managing and preparing a Development Permit application per Maine Land Use Regulation Commission (LURC) requirements for the 'Adventure Lodge' portion of the resort. Managed the site design development of the proposed access roads, the proposed Lodge, a hotel/restaurant/conference center, in addition to the proposed 21 transient Family Cabins adjacent to the Lodge. Coordinated the efforts of the owner, environmental, and architectural team members.

Downtown Master Plan, Presque Isle, Maine: Managed and prepared a 20-year master plan, with 5-year implementation strategies for the downtown's focus area. Conducted a downtown workshop to discuss strategies and priorities; managed land use analysis, branding recommendations, funding option recommendations, and conceptual designs; prepared transportation and parking analysis; updated goals, strategies, and action plans and broke information down based on the four-point approach for downtown development: organization, economic restructuring, design, and promotion. Presented the final report and design concepts at separate meetings with the downtown committee, the city council, and the planning board. Coordinated the efforts of the city and the downtown committee as well as the landscape architect and urban planner team members.

Prior to joining James W. Sewall Company, Ms. Murchison worked on numerous projects, primarily in the northern Maine area; several of which are outlined below:

Maysville Street Extension and Reconstruction Project; Presque Isle, Maine: Assisted with the preparation of a Site Location application; designed roadway, storm drain and sewer collection systems; managed concrete bridge, landscape, traffic and lighting design; managed construction monitors and provided construction services for one mile stretch of road adjacent to and in conjunction with the Aroostook Centre Mall. Also coordinated the work between engineering subconsultants, financially interested parties, and the Maine Department of Transportation (MDOT).

Big Rock Ski Area; Mars Hill, Maine: Assisted with the preparation of a site location application for proposed improvements to include additional ski trail development, additional ski lift sites, base area building construction and renovations, and parking area expansions; managed design improvements to ski trail lighting system. Also prepared a Spill Prevention, Control, and Countermeasure (SPCC) Plan for the facility.

Allagash Road Reconstruction Project; Dickey, Maine: Designed and monitored the reconstruction of a portion of the Allagash Road (Rapid Road) between the Little Black River Bridge and the St. John River Bridge as a result of previous flooding. This project involved coordination with MDOT as both the Little Black River and St. John River Bridges were being reconstructed simultaneously with this project. The Maine DEP and the Army Corps of Engineers were also involved due to the road's proximity to the rivers and correlated flood plain wetland issues.

Presque Isle Boat Landing; Maine: Designed access road and boat launch on the Aroostook River; project included concrete launch planking, paved parking lot and access road; provided construction monitoring and construction services. Environmental permitting was also completed as required by the Maine DEP and the Maine Department of Inland Fisheries and Wildlife.

Caribou Downtown Revitalization Project, Phases I and II; Maine: Completed site topographical survey and managed Design Charrette for conceptual site and façade design master planning. Managed and prepared the preliminary and final designs of the Phase I Sweden Street portion of the project and the Phase II Downtown Mall portion of the project. Improvements included the removal of a 26' x 280' mall canopy and associated concrete sidewalks as well as the installation of sidewalk trees, historic lighting, decorative pole banners, and the removal and reuse of existing concrete sidewalk pavers. The project also included electrical coordination with Maine Public Service for the removal of an underground transformer and the subsequent replacement with an above-ground transformer, serving 32 businesses. Provided construction monitoring and administrative services for both phases of the project. Each portion was funded, in part, by CDBG.

Juliet T. Browne

Partner
Verrill Dana, LLP
One Portland Square
P.O. Box 586
Portland, Maine 04112
T: (207) 253-4608
jbrowne@verrilldana.com

Biography

As chair of the firm's Environmental Law Group, Juliet assists clients in all aspects of environmental law, including project permitting and compliance under federal, state and local laws, litigation of environmental matters in state and federal courts, redevelopment of contaminated properties, and a wide variety of natural/resources-based transactional matters. Juliet has been recognized frequently for her ability to manage large-scale, complex permitting and development matters. These matters often involve areas with high natural resource values, and include the successful permitting of several of the largest wind power projects in the northeastern United States, the expansion of interstate natural gas pipeline facilities, the revolutionary proposal by a team of conservation groups and the Penobscot Indian Nation to remove several dams located on the Penobscot River in Maine, and representation of a leading provider of comprehensive waste and environmental services in North America on permitting and compliance with state and federal regulations.

Juliet's approach to environmental permitting often involves bringing together diverse interest groups to minimize opposition to projects, resulting in a smoother, more efficient permitting process. In addition, her knowledge of environmental and energy law has been called upon by regulators and stakeholder groups to develop, revise, and update environmental laws and regulations, and she recently served on the groundbreaking Governor's Wind Power Task Force in Maine. Juliet also advises timber investors and other landowners on broad range of environmental matters, including the potential for wind power development on their landholdings. Juliet joined Verrill Dana in 1996, after practicing law at Skadden, Arps, Slate, Meagher & Flom in San Francisco, and serving as Assistant Attorney General for the Republic of Palau, a former U.S. Trust Territory located in the Western Pacific.

When not solving her client's legal problems, Juliet enjoys hiking and skiing with her husband and daughter, practicing Bikram yoga, and catering to the every need of her new puppy.

Public Service

Board of Trustees, Unity College
Advisory Board, Maine's Corporate Wetlands Restoration Partnership
Governor's Wind Power Task Force
Steering Committee for The Nature Conservancy's Corporate Conservation Council of Maine

Memberships

Maine State Bar Association

Education

University of California, Boalt Hall School of Law (J.D., 1990)
University of Michigan (B.A., 1984)

Bar Admissions

California, 1990
Republic of Palau, 1993
Maine, 1996

Honors

Recognized in *Chambers USA: America's Leading Lawyers for Business* under Environment
Listed in *The Best Lawyers in America*® under Energy Law, Environmental Law, Litigation - Environmental and Natural Resources Law
Selected as one of the "Top 50 Women" by *New England Super Lawyers*®
Selected by peers for inclusion in *New England Super Lawyers*® under Environmental, Energy & Natural Resources and Land Use/Zoning