

Chicagoland Methane Recapture Project: Reducing GHG Emissions and Producing Renewable Natural Gas from Waste

Lead Applicant Information

Fox Metro Water Reclamation District

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Prepared For

Chicagoland Renewable Natural Gas Coalition

KAREN K. CLEMENTI

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EXPERIENCE

Fox Metro Water Reclamation District | District Manager | December 2022-Present

- Responsible for overall management, technical direction, and strategy for entire utility.
- Successfully interface and build relationships with elected Board of Trustees.
- Provide corporate leadership on internal and external policies and procedures.
- Maintain positive relationships with government agencies and the general public.
- Ensure compliance with local, state, and federal regulations.
- Oversee interview, hiring, safety, and training employees.
- Negotiate service agreements and bargaining unit agreements.
- Address complaints and solve problems with union and nonunion staff.

Fox Metro Water Reclamation District | Assistant District Manager/Interim Regulatory/P.R. Manager | July 2019-December 2022

- Served as technical and advisory resource for all District departments.
- Successfully planned PR items: PAFRs, public open house, social media campaign, tours.
- Coordinated timely completion and submission of multiple regulatory reports.

Deuchler Environmental, Inc./Deuchler Engineering Corp. | Partner, Vice President/Environmental Manager | January 2011-July 2019

- Managed environmental projects and staff task assignments for municipal and institutional clients.
- Built, developed and maintained positive and collaborative client relationships.
- Coordinated the completion of complex projects on time, within scope and within budget in a team setting.
- Became proficient in applicable local, state, and federal regulations and confidently interface with both clients and regulators.
- Prepared, negotiated, and managed contracts ranging from \$600 to six-figures.
- Provided quality assurance for outgoing client work products.
- Communicated with oral presentations and reports to a wide variety of audiences, including the general public and media.

Education

Western Illinois University, Macomb, IL, M.S. Biology
Graduate Thesis: Lead Accumulation in the White Heel-Splitter Mussel (*Lasmigona complanata*)

Western Illinois University, Macomb, IL, B.S. Zoology
Minor in Botany. Graduated Magna Cum Laude. Biology Honors Program Scholar.
WIU Four-Year Foundation Scholarship recipient.

Trainings/Certifications

Institute of Sustainability Infrastructure Certified Environmental Sustainability Professional (ENV SP)

Phase I Environmental Site Assessment Environmental Professional ("EP")
OSHA 40-hour HAZWOPER training and applicable refresher courses
40-hour Wetland Delineation training and ongoing continuing education

KAREN K. CLEMENTI (cont.)

Deuchler Environmental, Inc. | Senior Biologist/Scientist | May 2000-January 2011

- Prepared and lead facility inspections and audits for various permit compliance, including industrial pretreatment, land, air, and water permits.
- Completed multiple tasks for NPDES permit and CSO Long Term Control Plan compliance.
- Designed and conducted biological surveys of fish, macroinvertebrates, and mussels.
- Design, collected, and managed ambient water quality studies and data.
- Completed U.S. Army Corps of Engineers jurisdictional wetland delineations.
- Conducted over 150 Phase I and Phase II Environmental Site Assessments.

Huff & Huff, Inc., LaGrange, IL | Scientist | October 1999-May 2000

- Conducted jurisdictional wetland delineations.
- Completed U.S. EPA Tier I and Tier II industrial reporting.

OTHER RELEVANT EXPERIENCE

Oswegoland Park District Foundation | Board Member/ Treasurer | April 2017-January 2024

- Actively volunteer for a nonprofit organization to raise funds and create goodwill.
- Track income and expenditures, create budgets, manage investments.
- Volunteer time and complete federal and state permits for Veterans Serenity Park.

Fox River Study Group | Member/Technical Liaison | 2002-Present

- Provide technical expertise in a nonprofit organization.
- Complete administrative duties, including grant compliance, reporting, consultant requests for proposals, and meeting minutes.
- Assist with consultant oversight and data quality control.

Kendall County Zoning Board of Appeals | Member/Vice Chair | July 2010-January 2021

- Actively listen and diffuse tension with petitioners and the general public.
- Provide sound recommendations to the Kendall County board.

JAMES M. KERRIGAN, PE

630-301-6866 | jkerrigan@foxmetro.org

EXPERIENCE

19 years of progressive experience in the project management, design and construction of municipal water supply, drainage and treatment solutions. Responsibilities have included applying for and administering state and federal loan and grant funding for municipal projects. Development of contract documents and specifications, hydraulic and hydrologic analysis and system modeling, permit preparation and compliance, project cost opinions, project scheduling, site inspection, management of multiple engineering disciplines and sub-consultants, consultant contract negotiation, green infrastructure implementations, equipment procurement, coordination and outreach with government agency and public interest bodies, engineering construction management services, and operation and maintenance manual development

Fox Metro Water Reclamation District | Senior Project Engineer | May 2023-Present

Responsible for planning, design and construction management of district capital improvement projects for wastewater treatment plants and collection systems. Developed capital budgets for proposed improvements to treatment facilities to ensure compliance with state and federal water pollution control permits. Performed engineering studies for facility energy assessment and digester methane gas reuse and capture onsite. Performed construction management and inspections for in-house construction projects. Assisted in completion of bi-annual rate study for compliance with district fiscal policies, management and coordination of engineering consultants on district projects, development of district 5-year strategic Capital Improvement plan.

Fox River Water Reclamation District | Senior Project Engineer | October 2013-May 2023

Responsible for planning, design and construction management of all district capital improvement and operational and maintenance projects for three wastewater treatment plants and collection systems. Performed construction management inspections for municipal pipeline and treatment plant projects. Developed district budgets for proposed improvements to treatment facilities to ensure compliance with state and federal water pollution control permits. Responsible for applications for multiple grant funding for projects, from federal and local sources for both energy efficiency projects and equipment upgrades. Administered studies for energy assessment across all treatment plants and collection systems, evaluated feasibility of on-site construction of solar energy generation, and digester gas capture and reuse on site for energy generation and beneficial reuse. Administered State Revolving Loan Funding for multiple simultaneous projects for phosphorous pollution reduction projects, digester gas and mixing improvements and sludge transfer piping. Managed permit

Education

B.S. Civil Engineering,
Napier University,
Edinburgh, Scotland, 2005

Registration

Professional Engineer: IL,
MI

Affiliations

Water Environment
Federation, Central States
Water Environment
Association

Member of Air Quality and
Odor Control Committee,
Water Environment
Federation

Member of Biosolids and
Energy Efficiency Recovery,
Central States Select
Society of Sanitary Sludge
Shovelers (7's Society),
Biosolids and Energy
Efficiency Resources, and
Operations Committees,
CSWEA

Irish Engineers and
Contractors of Chicago

Proficiencies

AutoCADD—Land
Development Desktop and
MEP, MS Project, MS
SharePoint, MS Office,
Primavera, Procore,
Submittal Exchange,
MikeURBAN, AERMOD, Bay
Area Sewer and Toxic
Emissions (BASTE),
WWCost Modeling, ESRI
GIS

JAMES M. KERRIGAN, PE (cont.)

applications for multiple federal, state, and local jurisdictions, including air emission permits, wetland delineation, environmental impact assessments and endangered species surveys.

Greeley and Hansen LLC, Chicago, IL | Project Manager | June 2006-October 2013

Design of multiple sanitary sewer pumping stations and pipelines to meet requirements of the District's Long-Term Control Plan for combined sewer overflow reduction. Project Engineer for design of new ultraviolet disinfection facilities on an accelerated design schedule for major municipal wastewater treatment facility. Engineer for Thorn Creek Basin Sanitary District Capital improvement projects including the design of a new cover for an anaerobic digester, replacement of flow control gates, and the evaluation and redesign of existing HVAC systems. Project Manager for DC Water, DC Clean Rivers LTCP Tunnel Project including preliminary design of large and small diameter tunnels, along with diversion structures and sewers for a \$3 billion Long Term Control Plan implementation.

Project Engineer for the design of the Gary Sanitary Districts new chemical storage and distribution system on an accelerated design schedule. Project Engineer for the design and construction of the City of North Las Vegas new 50 mgd membrane water reclamation facility.

Project Engineer for the study and design of the odor control for the Metropolitan Water Reclamation District of Greater Chicago's Stickney WRF. Project Engineer for the City of Ann Arbor new odor control treatment and containment system associated with a new 29 mgd solids handling facility. Project Engineer for the Pima County Regional Wastewater Reclamation Department, 25-year \$500 million Regional Optimization Masterplan.

HGL O'Connor Civil Engineering Consultants, Galway IRL | Civil Engineer | 2005

Designed wastewater treatment facilities for municipal, residential and commercial developments; performed bid analysis, project management and field supervision.

OTHER RELEVANT EXPERIENCE

Co-author of Water Environment Federation Special Publication - "Managing Wet Weather Events at Water Resource Recovery Facilities", and WEF MOP 8 Series "Standards for Design of Water Resource Recovery Facilities."