

Jason Orton <jason2@h2oboy.net>

# New submission from Apply for the WLA Experience

MichaelKrondak <info@righteyedigital.com>
To: jason2@h2oboy.net

Thu, Nov 30, 2023 at 3:05 PM

#### Name

Michael Krondak

### Address

3401 W. F Street North Platte, Nebraska 69101 United States Map It

#### **Email**

mmkrond@nppd.com

#### **Home Phone**

(308) 520-6673

#### **Cell Phone**

(308) 520-4353

#### **Business Name**

Nebraska Public Power District

# **Address**

North Platte Office 402 East State Farm Road North Platte, Nebraska 69101 United States Map It

## File

- MMK-Resume-2023-11-17-v2.docx
- Nebraska-Water-Leaders-Academy-Program-Interest-MMK-2023-11-30.docx
- Michael-NE-Water-Academy-11-29-30.docx

## How did you hear about the Academy?

· a friend or colleague



# Michael Krondak

michaelkrondak@gmail.com 308-520-4353

#### **EDUCATION**

Oklahoma State University, Stillwater, Oklahoma Master of Science in Environmental Engineering: July 2004

Kansas State University, Manhattan, Kansas Bachelor of Science in Civil Engineering: December 1997

#### **LICENSURES**

Professional Engineering License in Environmental Engineering in the State of Nebraska (License No. E-12819) Water Well Monitoring Technician in the State of Nebraska (License No. 79650)

#### **PROFESSIONAL EXPERIENCE**

Water Resources Advisor: March 2023 to Present

Environmental & Water Resources Engineer: December 2020 to February 2023

Hydrologist: September 2005 to December 2020

Water Resources Department, Nebraska Public Power District

- Managed Paxton Siphon Geophysical Study, teamed with UNL CSD using resistivity and self-potential methods for study
- Managed hydrogeologic and water balance investigation of area near Gothenburg Canal, teamed with UNL CSD to complete investigation
- Analyzed potential dam breach inundation areas with HEC-RAS 5.0 2-D software.
- Teamed with Water Systems staff and Water Resources staff to help create Annual Operating Plans for Sutherland Project
- Compiled and analyzed natural flow and storage water use for NPPD's irrigation canals and contract canals during the irrigation season to assist Water Systems staff in making operational decisions.
- Analyzed Sutherland Project and Lake McConaughy historical flow and storage data to resolve questions raised about 1954
   Agreement.
- Participated as Technical Committee member for the COHYST2010 integrated model of the Platte River Valley. Integrated model included watershed, surface water, and groundwater components.
- Determined required GGS inlet canal dredging quantities to reduce hydraulic losses in canals by creating HEC-RAS models of both canals using bathymetric data.
- Coordinated and oversaw installation of instrumentation to monitor groundwater and seepage levels at Kearney Lake Dam.
- Developed dam breach scenarios and flood inundation areas for Kearney Lake Dam using SITES, BREACH, and HEC-RAS for update of DNR-required Emergency Action Plan. Created inundation area maps using ArcGIS.
- Managed project and consultant for Lake Maloney Water and Wastewater Study. Study involved determining most suitable
  wastewater and water systems for residents around Lake Maloney, system costs, and residents' response to the
  recommended system. Project included public relations component to interact with concerned public in open houses,
  presentations, mailings, and polling.
- Developed DAMBREAK computer models of Lake Maloney and Sutherland Reservoir dams to determine flood inundation areas for update of FERC-required Emergency Action Plan.
- Modeled Gerald Gentleman Station (GGS) Well Field operations on an annual basis using MODFLOW and Groundwater Vistas. Determined any impacts to neighboring landowners.
- Obtained field data on GGS Well Field monitoring wells and checked data quality received from wells on SCADA.
- Prepared annual presentation to Landowner Committee on GGS Well Field operations.
- Prepared monthly Platte River Water Supply Update for NPPD Board Committee reports.
- Developed Sutherland Project Assessment using multiyear normal and dry season analyses with the Water Systems surface water operations model and the GGS Well Field groundwater model. Prepared presentation of study results for management.
- Prepared and implemented process for selection of a consultant for Conjunctive Use Management Plan technical work.
- Obtained field data for flows and seepage on four irrigation canals in study area for use in computer models for Conjunctive Use Management Plan.

Staff Engineer: June 2002 to September 2005

#### Infrastructure Planning Department, Black & Veatch

- Projected future flows for Elgin, IL Comprehensive Water Master Plan.
- Wrote assessment guidelines for Madison, WI Water System Infrastructure Plan.
- Created RRWRD interceptor system wastewater model.
- Calibrated and modeled RRWRD interceptor system wastewater model. Identified interceptors with possible capacity limitations. Modeled RRWRD trunk system in InfoWorks.
- Calibrated Cheyenne water model using H2OMap water modeling software.
- Developed HydroWorks model, calibrated model using flow and rainfall data, performed hydraulic analysis for present system, created CIP for future design years for Lawrence Wastewater Master Plan.
- Evaluated sewer capacity constraints by serving Comprehensive Planning Districts using Hydra and investigated reported backups upstream of siphon using HydroWorks for Modesto Sewer Capacity Analysis.
- Reviewed sewer inventory data and prepared inventory for HydroWorks model in McDowell Creek Basin Flow Study.
- Assisted lead engineer in hydraulic analysis of sewer expansion areas, costing CIP, and sizing of future improvements in Tulsa Wastewater Master Plan.

Engineer: January 1998 to August 2000

# System Planning and Development Division, Water and Sewer Department, City of Wichita, Kansas

- Modeled operational scenarios using water distribution software for city's system.
- Teamed with contractor on Water Master Plan Update to create new model of City's water distribution system.
- Assisted with Sewer Master Plan Update.
- Fielded questions from public at open houses about Northwest Sewer Master Plan. Answered questions from concerned citizens over the phone and person about impacts to their property from new wastewater treatment plant.

Public Works Inspector: June to August 1996 and June to August 1997 Construction Division, Public Works Department, City of Wichita, Kansas

- Assisted city survey crews on street replacement projects.
- Inspected and tracked quantities for concrete repair and asphalt replacement projects.

### **ACADEMIC EXPERIENCE**

Research Assistant: September 2000 to May 2002

# Civil and Environmental Engineering Department, Oklahoma State University

- Sampled VOCs in air phase for Tinker Air Force Base IWTP Air Emissions Risk Assessment.
- Repaired pilot plant for Tinker Air Force Base IWTP Pilot Plant Evaluation.
- Collected and analyzed samples for Tinker Air Force Base IWTP Metals Removal Project.

Tutor: September 2001 to May 2002

## Academic Enhancement Center, Oklahoma State University

Tutored Hydraulics, Mechanics of Materials, Statics, and Chemistry for wide range of students

# SKILLS/TRAINING

HEC-RAS. Groundwater Vistas, MODFLOW, ArcGIS, BREACH, DAMBRK, AutoCAD, Microsoft Office

## **MEMBERSHIPS AND HONORS**

Association of State Dam Safety Officials Nebraska Geological Society

#### COMMUNITY INVOLVEMENT

President: Jan. 2010 to July 2014; Vice President: Jan. 2007 to Jan. 2010; Board Member: Sept 2006 to July 2014 North Platte Community Day Care Center, North Platte, NE

Center's goal as a nonprofit organization is to provide affordable, quality child care for the North Platte area. The Center has 50 full- and part-time employees.

- Initiated fundraiser to aid center in meeting future needs
- Responsible for employment/release of center's management employees, the yearly budget, employee salary raises, yearly bonuses, and the policies that guide the daily operation of the center.

"Always there when you need us"

November 30, 2023

Mr. Lee Orton Nebraska State Irrigation Association 1233 Lincoln Mall, #201 Lincoln NE 68508

Dear Mr. Orton:

**RE: Nebraska Water Leaders Academy** 

Thank you for considering me for the 2024 Nebraska Water Leaders Academy. I am excited about the possibility of being the first person from my department to attend the Academy. My career at NPPD has focused on NPPD's water resources needs and how they impact the future of NPPD. NPPD uses water resources for thermal power plant cooling, for hydropower production, and for meeting surface water irrigation customer needs. NPPD also provides electrical power to many irrigators who use groundwater throughout the state. I have been involved in many aspects of all these purposes. Attending the 2024 Nebraska Water Leaders Academy will help me to provide better service to NPPD's customers in the state of Nebraska.

My wider career has also focused on water resources. My earlier career experiences include working in the public sector for a city's water and wastewater utility, where I provided water distribution and wastewater collection modeling and planning. I also provided similar services in the private sector as an engineer in an engineering firm. In both instances, the goal was to ensure people had the water services they needed now and into the future.

By working on all these various aspects of water I feel I am prepared to benefit greatly from the experiences that the Nebraska Water Leaders Academy provides. These prior experiences have given me a wide awareness of water resources, and I anticipate that the Water Leaders Academy experience will further widen my awareness of how important water is to the future of the state of Nebraska and allow me to contribute to that future in a fuller and deeper way.

I am looking forward to meeting new people who work in all aspects of water resources throughout the entire state of Nebraska by being a member of the 2024 Nebraska Water Leaders Academy.

Best Regards,

Michael Krondak, PE Water Resources Advisor NPPD November 29, 2023

Mr. Lee Orton Nebraska State Irrigation Association 1233 Lincoln Mall, #201 Lincoln NE 68508

Dear Mr. Orton:

RE: Nebraska Water Leaders Academy

I understand that the Nebraska State Irrigation Association are accepting applications for the 2024 Nebraska Water Academy. I would like to recommend Michael Krondak for participation in the 2024 class. Michael currently serves as a Water Resources Advisor in Nebraska Public Power District's (NPPD) Water Resources Department. Michael has extensive experience in water modeling and planning. I believe Michael's participation would benefit the 2024 class as well as advance his personal growth in the area of water resources. Please give Michael due consideration.

Regards,

John J. Shadle Water Resources Supervisor NPPD