

Water: Michigan's Most Valuable Resource Challenges ♦ Opportunities



Choose a career that makes a difference



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“Water links us to our neighbor in a way more profound and complex than any other.”

- John Thorson

A career in water offers the opportunity to protect public health and the environment; it offers options for all levels of education; it offers **the chance to make a difference** in your community and in the world.

“We forget that the water cycle and the life cycle are one.”

-Jacques Cousteau

These pages are filled with people who are proud to call themselves water professionals. Read their stories and learn more about what it takes to seize your opportunity at www.h2omich.org

“Anything else you’re interested in is not going to happen if you can’t breathe the air and drink the water. Don’t sit this one out. Do something. You are by accident of fate alive at an absolutely critical moment in the history of our planet.”

- Carl Sagan

💧 Electrician

BRYAN CLOR

City of Warren WWTP

Bryan began working for the City of Warren ten years ago performing electrical inspections when his electric company moved out of state. This opportunity opened doors to new experiences and a chance to broaden his skills, as he joined the wastewater plant and earned his Operator A License.

Bryan loves programming their Supervisory Control and Data Acquisition (SCADA) system for process control. He also works all new electrical projects from design to implementation. He finds great satisfaction in seeing a project through from start to finish, and seeing the overall results translated into their biological process and overall treatment. Bryan says he loves to understand how the equipment works and how it relates to the treatment process, tying it all together and making it work.

Bryan received cross-training through his facility, which thoroughly educated him on wastewater treatment. By learning some of the nuances of his particular facility, he applies his electrical expertise to create more automated, efficient, and better performing processes for their facility.



Education/Experience

- **B. S. Biology,**
Oakland University
- **Master Electrician**
- **PLC Rockwell Training**
- **WW Operator A License**

“It’s so much more than being an electrician and crimping wires”

🔹 Environmental Programs Coordinator



CHERYL VOSBURG City of Marshall

Cheryl entered the Water Environment Industry when she answered a want ad in college, and she has spent the last 22 years serving as a “one person

environmental department” for the City of Marshall. Cheryl is very glad she found and pursued the opportunity, as it introduced her to a field in which she would come to enjoy a long career. Her responsibilities range from industrial wastewater, storm water, and drinking water, to environmental site assessments, to forestry, landscaping, and parks, to overseeing the Farmer’s Market! She also acts as liaison to volunteer committees, as well as writing grants to benefit related projects.

Cheryl loves the autonomy to choose and prioritize her own work. Her responsibilities are so varied that she is always learning something new. She loves that her job requires self-motivation and passion, as she often has to “champion” environmental issues and educate the public. She also enjoys the energy and enthusiasm volunteers bring to the job.

Education/Experience

- **B. S. Biology/
Chemistry, Western
Michigan University**
- **IPP Coordinator,
Benton Harbor-St.
Joseph Wastewater
Treatment Plant**
- **3 years as Lab Tech for
the City of Battle
Creek Wastewater
Treatment Plant**
- **22 years as the
Environmental
Programs Coordinator
for the City of Marshall**

“I never get bored. I tell others often that ‘I have the best job in the world’ and they believe it, because I believe it!”

Operator In Training



MATT BARRY

Coldwater Board of Public Utilities

Above all else, Matt values serving his community with great purpose. This tenet is evident in his decade long military history. He was introduced to the Water Environment Industry during his deployment with the Army, where he was trained in water and wastewater infrastructure.

Matt has continued to use his water treatment training to serve his community now that he has returned home, as he is training to become an Operator with the Coldwater Board of Public Utilities. He enjoys the problem-solving challenges presented by his current position. This position has opened his eyes to how much science is involved in the Water Environment Industry, and he has gained a new appreciation for the field.

He loves the laid-back atmosphere, which he finds very conducive to learning. Matt appreciates learning from his more experienced coworkers, and trying to solve problems himself by trial and error. He feels very grateful to have the opportunity to give back to his community in a meaningful way.

Education/Experience

- Attended Olivet College
- Left college to join the U.S. Army
- Trained as a Medic in the Army
- D License Exam scheduled for May 2016

“I really enjoy the challenge and problem solving aspects my job. Until I started working in the water field, I never realized how much science is involved. I love that part of the job; using science and sometimes, trial and error, to get to the root of a problem.”

💧 Utilities Manager



JASON LANEY

Village of Quincy

Jason's 12 years of experience as a licensed carpenter led him to seek a more stable position so he could better

provide for his family. He found the job security, benefits, and professional satisfaction he was looking for when he accepted a position with the Village of Quincy.

He now manages the drinking water and wastewater systems, and is also responsible for all Michigan Department of Environment Quality (MDEQ) reporting. Jason and the four employees he

supervises have recently undertaken a renovation project to upgrade and replace the wastewater lagoon process.

In addition to the job security and benefits he hoped to obtain, Jason found a great sense of pride in keeping the water safe for his hometown. The importance of providing safe drinking water and effectively treating wastewater is not lost on Jason or his crew. One of his favorite parts of the job is his "excellent" staff, which helps to make these great responsibilities easy.

Education/Experience

- Graduated High School
- Two Years of College
- 12 years experience as licensed carpenter

"Young people should recognize the growing opportunity in the Water & Wastewater field for people who are willing to learn and accept responsibility for the health & safety of their community."

💧 Contract Operations Regional Manager

CATHERINE GARNHAM

F&V Operations & Resource Management, Inc.

Catherine graduated from Oakland University with a Bachelor of Arts in English Literature, and a few chemistry classes under her belt. She drew upon her experience in chemistry and found a position as a laboratory technician/operator at a wastewater treatment plant. Though she planned for this job to be temporary, she realized that she wanted to be part of the community of water environment professionals.

As a regional manager, Catherine oversees contract operations and maintenance of water and wastewater treatment systems in Northeast Michigan. She deals with both wastewater and drinking water, supervising a 2.4 million gallons/day (MGD) wastewater treatment plant, as well as a 5.4 MGD drinking water filtration plant. In all, she oversees approximately 160 miles of sewer/water main. It is the sight of the majestic Lake Huron which reaffirms her dedication to protecting the water environment and the health and safety of the communities she serves.



Education/Experience

- B. A. English Literature, Oakland University
- Coursework in chemistry at Michigan State University and Oakland University
- 25 years experience in wastewater and water treatment, both in municipal and contract operations
- Class A wastewater treatment certification
- Class F-1 certification in drinking water

“As I learned more about the wastewater treatment industry...I realized that I wanted to be part of the community of water environment professionals.”

💧 Water Utility Supervisor



JEFF KEOWN

City of Ann Arbor Water Treatment Plant

While in college pursuing a business degree, Jeff took a job reading water

meters. He found this experience exciting and challenging, and decided to change his degree to Environmental Science. Since graduation, he has worked in the Water Environment Industry for about 15 years. During this time he has progressed from Water Utility Technician, to understudy for a SCADA System Specialist, to his current position of Water Utility Supervisor.

In his current role, Jeff enjoys the influence he has on the daily operations. He loves that he is kept fully engaged on a daily basis, and is proud to face new challenges head-on. He is responsible for operating and maintaining the Ann Arbor Water Treatment Plant and distribution system. His duties include operating high service pumps, water quality analysis, chemical dosing, staff management, purchasing, and strategic planning of long-term maintenance of his facility. Jeff sees a great future for up-and-coming job seekers in the industry.

Education/Experience

- Associates Degree in Environmental Science
- 5 Years experience as Water Utility Technician in Pittsfield Township
- 6 Years experience as Water Utility Technician in Ann Arbor
- Understudy for Supervisory Control and Data Acquisition(SCADA) System Specialist
- F2 Drinking Water and S4 Water Distribution license
- Level 3 MWEA Maintenance Certification

“With such a vast demographic of trades and professionals needed in this field, an aging infrastructure, population increases and global pollution, this field should be on the rise for years to come.”

💧 Manufacturer's Representative - Outside Sales

JENNIFER ZELSKI

Hamlett Environmental Technologies Co.

Combining her strong technical background in calculus, chemistry, biology, physics, and engineering with her Psychology degree from Michigan State University, Jennifer found her place in the Water Environment Industry in technical sales. In this position, she works with municipalities to assess and fulfill their technology needs, promoting process solutions and equipment, and providing service, repair and support.

Jennifer initially worked in outside sales in another industry, and sought a position that would better suit her interests. Being mechanically inclined and knowledgeable of many technologies made her a well-informed representative, and her love of working with people means she enjoys her work! Jennifer finds this job challenging and rewarding, and likes to learn about each water and wastewater treatment facility. She loves that she has the opportunity to work with people in so many different roles in the industry. She takes great pride in working with other people who share her passion for providing the invaluable services of protecting public health and preserving our water resources and environment.



Education/Experience

- **B.S. Psychology, Michigan State University**
- **Educational background in Math, Biology, Chemistry, Physics & Engineering**
- **On-the-job & factory training, previous experience in Outside Sales**
- **Entered the Industry in 2007, joined her father's organization in 2013.**
- **Works with Michigan Municipalities to provide equipment solutions, equipment, service & repair**

“Working in Technical Sales in this Industry allows me never to have the same day twice. Each day brings a new challenge, new solution, and great new people.”

💧 Project Manager



MICHAEL MASTRACCI, Jr. **De-Cal, Inc.**

Michael grew up in a family of plumbing contractors, and it seems his love of all things water was inherited. As he grew up, Michael

progressed from watching his father to helping him. He loved learning the way it all worked, and how to pinpoint and fix the problems.

He chose to find employment in the Water Environment industry in order to apply his education to his passion for plumbing and water, and began working for De-Cal, Inc. immediately after college – a choice he felt was “very natural” for him to make.

Education/Experience

- **B. S. Construction Management, Michigan State University**
- **Eight Years Experience as Project Manager for De-Cal Inc.**

As a project manager, Michael’s duties vary greatly, a variety he enjoys immensely. The projects he oversees are very diverse, and he must meet and overcome each new set of challenges in order to make every project a success. Some of his tasks include scheduling projects, cost and budget tracking, cost projections, man-hour tracking, jobsite logistics such as material and equipment procurement and delivery, and managing subcontractors.

“I grew up watching and helping my father do plumbing and I have always had an interest in it.”

💧 Facility Staff Supervisor

KATE MOWBRAY

Odawa Casino Wastewater Treatment Plant

Like many other professionals in the Water Environment Industry, Kate did not pursue education specifically geared towards this industry. Luckily, she took enough math and science courses in college that she was able to pass the entry level testing to obtain an open position at a local wastewater plant. She also did not really plan to *stay* in this industry long-term, yet she finds that this position is still working well for her 18 years later.

Kate is responsible for all the daily operations and maintenance for the wastewater plant, along with maintaining an Environmental Protection Agency (EPA) certified drinking water lab. She oversees the water system and lab, collection system, storm water system, and one satellite water system about an hour away from her plant. Kate also oversees capital improvement projects and equipment replacement budgets. She also gets involved herself and does everything from pulling pumps to running a mop over the floor.



Education/Experience

- College courses in Criminal Justice and Safety Engineering
- 18 Years experience learning on the job
- Work in both municipal and private treatment plants

“I got into this line of work by accident. I was working as a police officer just out of college and very quickly realized that I was in the wrong line of work. My parents were going to kill me if I asked to go back to school to change majors, so I started looking for available job openings.”

💧 Repair Center Manager



MIKE HORN

Kennedy Industries

Mike was motivated to join the water environment industry because he found an opportunity for employment readily available to him. He knew he needed a job when he graduated, and he began working in the maintenance department at Kennedy Industries the day after he left high school.

All of his training has been received on-the-job. He has learned a vast number of valuable skills through various positions he has held within the company over the last 21 years. He has been a maintenance worker, truck driver, and mechanic, as well as working in CAD Design and supervising the machine shop.

Mike now manages a large repair center that is capable of working on pumps of up to 90 feet in size and pipes and fittings of up to 16 feet in diameter. He is responsible for the five supervisors and a total of up to 31 employees in equipment repair facility. He also quotes all pump repairs, prepares repair reports, schedules all pickup and delivery, and oversees building maintenance as well. Mike says that his job includes ensuring that his employees are successful and having fun!

Education/Experience

- Graduated High School
- 21 Years experience in:
 - Pump Repair Business
 - Maintenance
 - Mechanic
 - CAD Design
 - Staff Supervision
 - Shop Organization

“When I started I had no shop experience or even any knowledge of tools. I have worked my way up through various positions and am currently the Repair Center Manager.”

💧 Watershed Professional/ Environmental Analyst



LAURA GRUZWALSKI Johnson & Anderson, Inc.

As a “nerdy grade-schooler,” Laura urged her parents to recycle and save water. She believes she inherited her father’s respect for the environment, just as he taught her to fly fish. Her lifelong passion for environmental protection and water conservation is clearly reflected in her work as an Environmental Analyst and Marketing Coordinator for Johnson & Anderson, Inc.

Laura manages several different types of tasks, from monitoring water quality in her laboratory, to designing storm water management best practices, to marketing and business development. She enjoys the great diversity of the projects in which she is involved.

Her favorite part of her current position is the opportunity she has to work with so many different kinds of people, especially networking with like-minded individuals to solve problems. Laura likes working with organizations like the Michigan Water Environment Association (MWEA) to promote the water industry and water awareness to the masses.

Education/Experience

- **B. S. Environmental Science, Lake Superior State University**
- **Substitute K-12 Teacher**
- **Environmental Chemist in Livonia**
- **14 Years as Environmental Analyst**

“For all you nerdy grade-schoolers out there that dream of a healthier planet and cleaner water - keep the dream alive!”

💧 Municipal Engineer



NAVID MEHRAM, P.E. Office of Oakland County Water Commissioner

Navid has worked in several areas of water treatment in multiple treatment plants, with experience in material testing, land surveying, site development, designing and constructing large diameter transmission mains, steel pipelines, pump stations varying from 3-50 million gallons/day (MGD), and multiple plant processes. He also manages the facility, supervises the operational staff, institutes rates, develops long-range planning, handles staffing, creates standard operating procedures, and manages the industrial pretreatment program.

Education/Experience

- **B.S. Civil Engineering, Wayne State University**
- **11 Years Engineering experience**

When he was working in survey and land development, Navid was asked to assist in completing a treatment plant design project. During that period he gained a tremendous respect for the challenges and the components involved in wastewater treatment plants. He learned first-hand that water resource engineering is unique and incorporates a wide variety of professional disciplines including architectural, electrical, structural, civil, mechanical, instrumentation and controls. He particularly values the opportunity to control the schedule for improvements while making decisions geared for long-term solutions to help build a long-lasting and efficient facility.

“The complexity of the system and the opportunities for harvesting energy from the product keeps me engaged in this critically important industry.”

💧 Regulation Compliance Professional

CHRIS CONN

Michigan Department of Environmental Quality

Chris grew up in awe of the Great Lakes, and spending time in the Upper Peninsula inspired him to join the Water Environment industry. He realized early on in college that he wanted to pursue work devoted to environmental and natural resource protection. Chris enjoys working on issues related to water resource recovery principles. He stresses the importance of understanding that wastewater is more than just water – it's also nutrients and energy. He feels lucky to work in the water environment industry and on issues that can positively affect the environment, economy and people.

He has worked in many areas in this field, including enforcement, storm water and wastewater compliance, spill response, and permitting functions. He currently works in the National Pollutant Discharge Elimination System (NPDES) program of the MDEQ's Water Resources Division. This program is a hallmark of the Clean Water Act, and implements requirements for municipal and industrial wastewater discharges to assure the protection of the environment and public health.



Education/Experience

- **B. S. Environmental Policy, Michigan State University**
- **Master of Environmental Law & Policy, Vermont Law School**
- **Environmental Quality Analyst**
- **15 Years experience in Water Resource Protection**

“To quote a former supervisor and mentor, ‘People are our greatest resource’, and we all need to work together to solve problems and work on issues that matter for our communities.”

💧 Utility Administrator



PERRY HART

City of Battle Creek

Perry has been a certified Water Operator since 1987 and in the water profession since 1985, beginning his career in Grand Forks, ND. He has gained additional experience through positions as the Water Superintendent in Crookston, Minnesota and in Michigan where he has worked as a Cross- Connection Control Inspector for three years with Hydrocorp and is now is serving as the Utility Administrator for Battle Creek.

In his time in the industry he has witnessed much technological advancement in metering, meter reading, Supervisory Control and Data Acquisition (SCADA) and facility management.

He originally entered this profession for the security (better pay and benefits) offered in working for a municipality. He soon realized that a career in safe drinking water touched everyone in the community. His current position continues to provide educational opportunities and the challenges that come with serving the public. Perry enjoys that fact that even now, after 30 years, technologies continue to advance and provide ways to become more effective.

Education/Experience

- **Sales, Marketing and Management Program, Northland Community and Technical College.**
- **Associates Degree, Grand Rapids Community College**
- **Over 30 years experience in Water Environment industry**

“The future should provide great career opportunities as recent events have brought the need for secure and updated infrastructure into the attention of the public that we all serve in Public Works.”

💧 Equipment Operator

JUSTIN FOOTE

Lansing Board of Water and Light

Joining the Water Environment Industry was an easy decision for Justin, who understood at a young age how important water is. While working in construction after high school, he realized that he could see himself operating heavy equipment professionally. His lifelong love of ‘playing in the dirt’ with Tonka trucks evolved into a career as an equipment operator for the Lansing Board of Water and Light.

On any given day Justin might operate a backhoe and excavator to repair a water main, drive a dump truck to haul product to and from job sites, replace or repair fire hydrants, or install water service lines going to homes or businesses.

His favorite part of this position is the sense of pride he feels upon completing work at a job site. He drives down freshly paved roads looking at the homes to which he has helped restore safe water service, and he thinks of the people that his work directly affects.



Education/Experience

- Graduated High School
- Some College Courses
- 14 Years Experience in Water Construction
- S-4 License

“Without water, there are no living things. It’s more than just a job. It’s about doing something good for the people.”

Collection System Maintenance



MATT KELLEY

City of Auburn Hills Public Utilities

Matt broke into the Water Environment Industry with a part-time summer job working for the City of Auburn Hills. This opportunity blossomed into a full-time career for Matt, who has enjoyed working for the City for over a decade now.

A timeless proverb advises, “variety is the spice of life,” and Matt totally agrees! His daily tasks vary from preventative maintenance on valves and hydrants, to inspecting and maintaining pressure reducing valves, lift stations, water towers, and booster stations. He also installs water taps at new construction sites, monitors SCADA at various locations, and assists instrumentation specialists with work at sites.

His favorite part of this position is the freedom he is allowed to manage his own schedule as he completes his projects during the work day. He finds great professional satisfaction in overcoming challenges presented by new projects.

Education/Experience

- Graduated High School
- Learned on the job with City of Auburn Hills in Fleet Maintenance
- 10 Years in Water and Sewer General Maintenance
- S4 Water License

“I enjoy the freedom that the City allows for us to manage our own schedules and complete our projects during the work day.”

💧 Laboratory Manager

AMY VAIL

City of Cadillac

Like many others in the Water Environment Industry, Amy did not initially endeavor to seek employment in the water treatment field. Upon moving to a new area, she had difficulty finding a full-time teaching position. Luckily, Amy had laboratory experience from college, and she soon began working as a lab assistant for the City of Cadillac. That position quickly evolved into laboratory manager, and she has now worked as lab manager for ten years.

Amy loves working with other industry people as well as clients. Ever the teacher, she loves helping them find answers to their questions, or helping with their lab and/or water issues. As laboratory manager, Amy enjoys the freedom she is granted to expand the lab to meet customers' needs and add new programs to educate the public. She also manages the quality control program, inventory, maintenance, and staffing for the lab. Outside the lab, her duties include communicating with department supervisors, regulatory personnel, and contract clients.

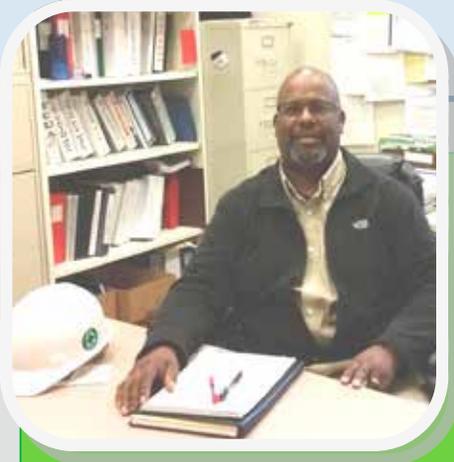


Education/Experience

- **B. S. Biology**
- **M. S. Education**
- **8th and 9th Grade Science Teacher**
- **Lab Assistant and Lab Manager, City of Cadillac**

“There is something for everyone at every interest and education level from high school graduates who like to get their hands dirty to someone with a degree who is interested in designing water systems.”

💧 Health and Safety Supervisor



SCOTT ROBINSON

Ypsilanti Community Utilities Authority

Scott has been interested in the Water Environment Industry since he attended a tour of a wastewater facility as a middle-schooler. As a young man in search of a stable job with potential for growth, he ran into the supervisor who led his tour so many years ago, who advised Scott of the advantages the Water Environment Industry has to offer the workforce, community, and environment.

Since then, Scott has enjoyed a career spanning over three decades, and has risen from Plant Operator, to Shift Foreman, to Health & Safety Supervisor. In this position, Scott oversees the occupational health and safety work practices of all employees. This includes the management and compliance of all safety-related programs required of water professionals and the organization and implementation of safety training for staff.

He credits the success of the Safety Program as a joint effort by great personnel, and is honored to lead as his team's "quarterback."

Education/Experience

- Michigan DEQ Class B Municipal Wastewater Operator Certification
- Certificate in Industrial Hygiene Management, Columbia Southern University
- Safety Compliance Specialist, Michigan Chamber of Commerce

"Do what you need to do safely each and every day, so that you can go home at the end of the day the same way you came in."

Information Technology Administrator



RANDALL ROOST

Lansing Board of Water and Light, Water Operations

Randall has served as a planner in the water department for the Board of Water and Light for over 33 years, and has helped oversee the expansion of the water system from serving just the City of Lansing and Delhi Township to incorporating 9 different townships and two cities.

He has been responsible for the preparation of the water department master planning documents, water demand forecasts, and emergency response plans.

Randall credits much of his success in the industry to former managers and good mentors who had already achieved success for themselves in the industry. He says they helped instill a passion for the public water supply, and were a key driver in his increased involvement within the industry. Randall takes great pride in the knowledge that whenever anyone opens a tap in his system, they have no fear that the water is safe to drink.

Education/Experience

- **B. S. Packaging Engineering, Michigan State University**
- **MBA in Technology Management, University of Phoenix**
- **33 Years as Planner in the Water Department**

“I get to work with some of the brightest and most dedicated people in the world who have committed themselves to the water industry.”

🔹 Environmental Engineer



PRASAD GULLAPALI Hubbell, Roth & Clark

A high school Environmental Science class piqued Prasad’s interest in helping his community by providing clean water. After completing his Masters of Science in Environmental Engineering, he began working for Hubbell, Roth & Clark as an Engineer.

He enjoys working with other similarly passionate people in this field – people who understand that the need for clean water is pervasive. From the manufacturing industry, to healthcare and recreation, water is integrated into our life in more ways than our daily uses.

Prasad’s daily duties as an Environmental Engineer include working with the Process, Asset Management, and

Environmental Departments. He has performed wastewater treatment design, stormwater drainage reviews, soil erosion permit reviews, and asset management. He enjoys working through challenges to meet the needs of his clients’ communities. He strongly believes that this work adds value to the lives of the people of the local communities.

Education/Experience

- **B.S. Environmental Engineering, Johns Hopkins University, 2011**
- **M.S. Environmental Engineering, Michigan State University, 2014**
- **CWSO – NPDES Certified Storm Operator for Construction Sites**
- **Engineer in Training Certification**
- **Leadership in Energy and Environmental Design (LEED) Green Associate**

“Living in Michigan, we have such a vast resource of fresh water. It’s our responsibility to take care of it.”

💧 Laboratory Analyst

SANDRA BUCHNER

City of Grand Rapids

After taking a high school conservation class, Sandra pursued her interest in the Water Environment Industry when she accepted a summer position with the county soil conservation district working on stream bank and shoreline erosion mitigations. Like most young people, she didn't yet know exactly what her future would hold, but she "knew it needed to relate to protecting the environment."

Sandra has contributed to several water environment agencies throughout her career as a chemist, and has been in her current position since 2005 with the wastewater laboratory for the City of Grand Rapids. Currently, she performs metal analysis by ICP-OES and ICP-MS, as well as hosting approximately 70 tour groups annually as tour guide for her facility.

Sandra worked for four years as a high school science teacher, and still enjoys interacting with students on tour. She finds it particularly rewarding when students ask good questions about the wastewater treatment process, and inquire about career opportunities.



Education/Experience

- **B. S. Biology, Michigan State University**
- **Teacher Certification, Grand Valley State University**
- **Air Quality, City of Grand Rapids**
- **Analytical Wet Chemist, FTC&H**
- **Environmental Service Laboratory, DEQ**
- **High School Science teacher, 4 years**

"Figure out what you're passionate about and make that not only your career but your mission."

**1 out of 3 water professionals
are eligible for retirement**



**Consider joining the
water environment profession**



For more information go to H2OMich.org