

It's been an Interesting Journey



It's funny the things you remember over a fifty year career. I was the first in my family to go to college. I entered Northeastern University to study Civil Engineering in 1961. Graduating in 1966 with a 1.4 gpa, my friends and neighbors helped me select my career path. I received my draft notice a month before I received my college degree. After doing my basic training at Fort Leonard Wood, Missouri, I was asked if I wanted to go to Officer's Candidate School. It was the last thing I ever volunteered for in my life. I spent the next 23 weeks having Tack Officers yelling at me to wipe that grin off my face and trying to make an officer and gentleman out of me. Obviously they failed and upon graduation, I was shipped off to Vietnam. I remember the first day that I arrived. I was not a very happy camper. I was having a beer at the officer's club when a major came over to me and told me I had to play volleyball. There was an old man on the court who everyone was kowtowing to. To vent my anger, the first three times I got the ball I jammed it down the old man's throat. I was asked to leave the game and was told that the old man was General Duke who headed up all the engineering forces in Vietnam. It wasn't a good first impression. Within an hour, I was put on a helicopter and shipped up to the Central Highlands where I was told a second lieutenant's life expectancy was limited.

What did they know? I completed my tour in Vietnam and was flying home. In New York City, I missed my flight to Boston so I spent the night in the airport. I got the first flight home in the morning. There were about 6 people on the plane and just as the plane was taking off the flight attendant broke down in hysterics. My first thought was that I just survived a year in Vietnam and I was going to die on the way home. After I was able to calm the young lady down, she told me that Robert Kennedy was just killed and that was why she had lost it. I made it home at about 7 in the morning and no one was expecting me. My mother recognized my footsteps as soon as I entered the house. It was good to be home.

Two weeks later in 1968, I reported to the Corps of Engineers in Waltham. They did not know what to do with me so they asked me if I wanted to do a water quality survey on the Merrimack River. I said, "Sure, but what the

hell is a water quality survey?" For the next two months, my two companions and I documented the water quality condition of the Merrimack River. It wasn't pretty. As a result of the raw waste from the paper mills in the White Mountains and the Nashua River, from the slaughter houses in Manchester, from the textile mills of Lowell and Lawrence, the Merrimack River was totally polluted. Yet many communities were still taking water directly from the river as their main drinking water source. As a result of this survey, the Merrimack River was proclaimed one of the 10 most polluted rivers in the country. The following year, I headed up a water quality survey of the Connecticut River. I remember one day playing cards all night and spending the next day taking water quality samples on the Moore Reservoir, which separated northern New Hampshire from Vermont. We found no DO in the reservoir and at 6 o'clock in the evening we packed our van. We drove 50 fifty feet and got a flat tire. God was still punishing me. We spent the entire summer getting water quality data on the Connecticut River from the Canadian border to Long Island Sound. On weekends all the power dams along the Connecticut River shut off the flow of water so we could only take samples from Tuesday to Friday. In the fall we hired an intern from MIT and entered all water quality data on fortan cards and developed the first river-wide water quality model in the world or so I was told. The computer cards took up more space than our big conference room.

Back in those days, everyone was protesting the Vietnam War but students were also becoming more concerned about our environment. I played a small part in organizing the first Earth Day in April of 1970. The group I was working with at the Corps of Engineers had an opportunity to work with Senator Muskie's staff of Maine to write the Water Pollution Control Act of 1972, which later became the Clean Water Act of 1977. At that time the Corps had all kinds of grandiose ideas on how to solve our water pollution problems. We had plans to pump all of greater Boston's wastewater to southern New Hampshire to land apply it. That is how the concept of zero discharge of pollutants came about. Everyone knew how the Corps used cost-benefit ratios to justify pork barrel projects for their favorite congressmen, so we coined the term cost-effective projects. It was fun seeing how a law was put together. But when it was enacted they left the Corps out and they created a new agency to implement the law. EPA was founded.

I wanted to be part of the program to clean up our environment so I applied for a job with EPA. I was hired to work as an assistant to Merrill Holman, who was charged with setting up EPA's organization for New England (Region I). I spent the next year in meeting after meeting to help develop EPA's organization. I soon learned that I was not cut out to be a manager and I requested a pay cut to be put in charge of the group that did water quality surveys for EPA. One of the first studies I was involved with was the Long Island Sound Study. In March of 1975, I issued a report that recommended that "EPA should initiate a special study to evaluate nutrient enrichment in western Long Island Sound and determine how much nitrogen removal WWTPs should achieve in order to attain water quality goals."

In the early 1970s, EPA was providing all kinds of grant money to develop water quality programs for each state. I was the project manager of grant money that we provided Connecticut and Rhode Island under section 208 of the Clean Water Act. Connecticut and Rhode Island used this money to develop their operator certification regulations and Connecticut developed a Leaking Underground Storage Tank (LUST) Program. In 1977, EPA started providing grant money to upgrade and build our wastewater treatment facilities. As a condition of the states getting grant money, they had to assure EPA that they had regulation to ensure competent operators would operate these facilities. I worked with all the New England states to help them develop their operator certification programs. There was no national guidance on how to put together an operator certification program so each state developed unique regulations that could work for them. Back in the early '70s, if a town employee screwed up anywhere in town, he was sent to work at the WWTP as punishment. Many of the elected officials appointed their cronies to manage these facilities. Someday, I might write a book about these early

days, but just a couple of examples: I was appointed inspector of the Deer Island WWTP in the early 1970s. It was just a blip in the pipe where Boston and some 30 other communities pumped their wastewater to the Deer Island WWTP, which provided less than primary treatment before it was pumped into Boston Harbor. At that time there were over 1,000 employees working on the island. The night crew broke the equipment so the day crew would have something to do to put the equipment back together again. After each shift, the operators would stop at the Elks Club in Winthrop to get refreshed. I used to know the bartender at the Elks Club and he used to call me and tell me about what was going on at Deer Island. At that time, my office was on the 21st floor of the JFK Building and I could look out over Deer Island. About once a month, the engines at the main pump station on Deer Island WWTP would catch on fire and I would take a ride out there. Each time I would have a list of things that needed to get fixed. (The superintendent never knew how I knew so much about what was going on.) At that time the legislators got their constituents jobs on the island, but the Governor controlled the purse strings. They needed legislative approval to spend over \$300 to fix any equipment. Each time I went out to the island, I would have to declare a state of emergency and tell them they had to spend whatever money was needed to fix the equipment on my list. After this went on for several years, I was finally able to convince my agency that Deer Island needed to be upgraded to provide secondary treatment. I acted as monitor for EPA during this \$3 billion project, which was completed on schedule and under budget. As part of this project, we developed a staffing plan and training program for the staff of the new Deer Island WWTP. It now has less than 1/3 the employees it used to have, and the water quality of Boston Harbor has improved significantly.

I remember the first time I inspected the Naugatuck, CT WWTP. I had to call around to find out who was in charge. I finally located a man in town hall who was the superintendent. I called him to meet me at the WWTP. He did not know where it was so I had to go to the town hall to pick him up and drive him to the WWTP. I also remember the first time I went to the Bridgeport, CT WWTP. It was a brand new 30 MGD WWTP and was just starting up. I called up the chief operator and told him I would be down there the next day. When I arrived the next day, I could not find anyone working there. I walked around and finally found a worker hiding in the tunnel. I asked him where everyone was. He brought me to the lab and there was a bulletin board that listed all the employees who were out at a drug rehab program that day. That was the way it was. Buy me a beer and I will tell you stories about what things were like at Lowell, Lawrence, Lynn, Springfield, Brockton, Fall River, New Bedford, Providence, Cranston, Waterbury, New Haven, Bridgeport and many other facilities that had interesting personnel and management problems that impacted the operation of these facilities.

Since I started my environmental career, I have been fascinated with wastewater treatment facilities and the personnel who made them work. As part of the construction grants program to upgrade WWTPs (which was the biggest public works program in our country from the late '70s to the late '80s), I was responsible for evaluating and approving all innovative, alternative and advanced WWTP projects that received grant funds in New England, and I helped these facilities during startup. With 104(g) funding, I helped develop a comprehensive operator training and technical assistance program with each of our states. Members of our team included Roy Fredricksen from Connecticut, George Neill from New Hampshire, Jon Jewett and Paul Olander from Vermont, Woody Hartley from Massachusetts, Don Albert from Maine, Bill Patenaude from Rhode Island, and Tim Miller and Greg Gendron from New York. We worked together as a team and provided on-site technical assistance to over 100 WWTPs each year, and we developed the most effective training program in the country. To help enhance public support for our wastewater treatment plants, I helped put together an O&M awards program that was made a national program in 1986. For the past 25 years, award-winning staffs were recognized for their commitment to clean water at the New England Water Environment Association Annual Conference. During my time with EPA, I would visit the town of each award recipient and invite the press and the local elected officials to the WWTP to present the award locally. In many cases this was the first time the local officials had visited

their WWTP and the awards heightened public awareness of the contribution the WWTP staff made in cleaning up the waters and encouraged public support for their efforts. In 1990, with Mary Settle from EPA headquarters in Washington, I helped put together the Youth and the Environment Program. This program was originally conducted in Boston and Lowell, MA, and later expanded to other cities in Massachusetts, Rhode Island, Maine, Connecticut and Vermont. The program was established to help meet the workforce needs in the wastewater field and to introduce high school students to career opportunities in the environmental field.

In my last 20 years with EPA, I would visit over 100 WWTPs each year and determine what type of support these facilities needed to operate successfully. In terms of technical assistance, a major part of the wastewater treatment business is problem solving. To determine how to turn the problem around, it takes working together with the plant staff to find cost-effective solutions. It takes working together with the town officials to get the resources the facility needs to implement the solutions. It takes training of the facility staff so that they can perform their jobs well and knowledgeably. It takes knowing what new WWTP technology exists or what worked well in other situations. I had the advantage of working on a variety of problems and then applying what I learned to other situations. In my years with EPA, I visited over 500 WWTPs in New England and many outside New England. I was called TC (travelling Charlie) by my counterparts at EPA and I was proud of what I accomplished. In 1998, I was told that EPA was getting out of the on-site technical assistance business and I would have to spend more time in the office. So in November 1998, I retired from EPA and I joined NEIWPC to head up its operator training program.

When I started with NEIWPC, the operator training program had pretty much been decimated. Rural Water had told me that they were going to put me out of business within a year. When I put out my first training calendar, Rural Water scheduled similar classes for less money at nearby locations. I was able to contact my friends who I had worked with over the years and they agreed to support my classes. Over the last 14 years, we have kept improving and expanding our training material. With Don Kennedy and James LaLiberte, NEIWPC has built the most diverse and high quality training program in the country. We put on over 70 training programs, which draw over 1,700 students each year. I enjoyed providing on-site technical assistance to WWTPs in Connecticut and Rhode Island and after 9/11 conducting over 70 vulnerability assessments at various WWTPs throughout New England and New York. I enjoy helping the operators prepare for their certification exams and provide them the skills they need to operate more sophisticated wastewater systems. Over the past several years, I have enjoyed helping to develop and participate in the Management Training Programs in Rhode Island, Maine, Massachusetts, New Hampshire and now Connecticut. These programs will prepare the future superintendents of our WWTPs. My former friends at EPA are amazed that I would take an interest in management. They all said that I was non-manageable. Even though early in my career I realized that I was not cut out to be a manager, I recognize what skills a wastewater manager needs and I have enjoyed watching my former students grow into their positions.

Time goes by fast when you are having fun. It has been a long journey since I travelled down the Merrimack River in 1968. We have spent billions to upgrade our wastewater infrastructure. Over the past 40 years, I have enjoyed working with wastewater personnel to optimize the performance of our wastewater treatment investment. As a nation, we can't afford to backslide on our commitment to clean water. To protect and improve water quality for both the present and the future, it is essential that we maintain our support for the frontline troops fighting against water pollution—our wastewater facility operators. I would like to thank my friends and all those I have worked with over the years for helping me find a career that brought me so much satisfaction.

Charles R. Conway

Footnote: Charles's depiction of his "interesting journey" has generated a great many responses from the many people he worked with over the years. See below for a small sample of the replies he received.

Chuck,

That's quite a story through life you just described never mind through wastewater!

I would like to thank you for all the help, guidance and assistance you have given me over the years. You have been a guiding friend, mentor and (believe it or not) a professional role model.

I know I would not be as successful as I am now if I didn't know you and you did not influence my life.

So thank you my good friend both personally and professionally for what you have done for me and the Lowell Regional Wastewater Utility.

Best wishes for your retirement and we WILL keep in touch!

All the Best

Mark Young

Mark A. Young | Executive Director

Lowell Regional Wastewater Utility

The City of Lowell

451 First St Blvd (Rte-110) | Lowell, MA 01850

t: 978.970.4248 X 1601 - f: 978.459.3826

Chuck,

Thank you for being a good civil servant and enjoying your career. That positive can-do attitude came through and hopefully rubbed off on a few of us. I appreciated your time with the Youth and the Environment program and various other times we worked together. I am very impressed with your full life, Vietnam to the Clean Water Act and beyond. My hats off to you Chuck. Keep in touch.

Gary Zrelak Director of Operations

Greater New Haven Water Pollution Control Authority

260 East Street

New Haven, CT 06511

Chuck,

I can't tell you in words what an honor it has been to work with you.

(but I'll try)

I have always appreciated your insight, frankness and the passion for what you do. I hope that I have some of those qualities when I get to your level of "experience".

I thank you for the opportunities you've given me to help foster the education of professionals in our field. It is something that I truly enjoy and find great satisfaction in helping make a difference - to the people we work with, the communities where we live, and the environment.

Finally, to be at least moderately successful in consulting you need to have credibility. My association with you over these years (only a fraction of your career but a large part of mine), has absolutely grown my recognition and credibility in our industry. You've helped to make me a better engineer with our interactions and improved my stature as a professional.

I thank you for what you've done for me and all who you've worked with.

Keep in touch,

Paul Dombrowski, Woodard & Curran

Good morning Chuck:

I loved the chronology and sentiment. You have certainly played an important part in the evolution of wastewater treatment operations. I'm glad that I will be retiring soon, because not having "Chuck" around will be tough to adjust to. You are an icon to those of us in the business. No smoke.

Enjoy retirement and whatever you decide to do with it.

James Clifton

Simsbury Water Pollution Control

36 Drake Hill Road

Simsbury, CT 06070

Chuck,

Thanks for the Career write-up and thank you for your service to the wastewater cause.

Our gates and doors at the MDC - Poquonock facility are open if you happen to be in the area.

Regards,

Carl Veilleux

Metropolitan District

Poquonock WPCF

1222 Poquonock Ave

Windsor, Ct 06095

Chuck, seems like only yesterday when we first met – you at EPA and me at RIDEM. I have enjoyed working with you over the years. You have an awful lot to be proud of as you reflect back. Best of luck in the future. Some of us are not that far behind!

Paul Nordstrom, Narraganset Bay Commission

Hi

I love your story. I am so grateful because I had the opportunity to work with you. You were a great mentor. I wish you the best.....

Iliana Raffa. CTDEP

Hi Chuck,

Iliana forwarded me your “It’s Been an Interesting Journey” document. I’m so glad she did. You did a great job writing it. I knew you did a lot, but I didn’t realize how much you were involved in!

You’re one in a million and you’re going to be missed. Thank you for educating me. By that I mean, in the classroom (I’ve taken several of your classes) and outside the classroom door. You’ve taught me, and thousands of others some very valuable lessons, and you will be missed.

Thanks for all you’ve done, and I hope you enjoy your retirement. Although, I almost don’t believe it. I just have this feeling that someday, somehow, you’ll still be getting yourself into trouble around these parts. Either way, I wish you much love, luck, laughter, health, and happiness.

Craig Motasky - Wastewater Operator Certification Coordinator, CtDEP