AWRA Women in Water Resources Interview #4: Carol Collier



This interview is the fourth of a six part series, written/conducted by AWRA President Martha Narvaez, celebrating the role of AWRA Women in Water Resources.

Length of Time in the Water Resources Field 35+ years

Current Positions

- Senior Advisor, Watershed Management & Policy, Academy of Natural Sciences of Drexel University
- Director, Environmental Studies and Sustainability, Department of Biodiversity, Earth and Environmental Science (BEES) Department, Drexel University

Positions Held

- Executive Director, Delaware River Basin Commission (DRBC) 1998 2014
- Executive Director, PA Governor's 21st Century Environment Commission 1997-1998
- Director, PADEP Southeast Region Office 1995-1997
- Student intern Vice President– BCM Engineers, Inc. 1976 1995
- Research Assistant University of Pennsylvania, Veterinary School and Hospital of the University of Pennsylvania (HUP), 1973-1976

Education

- MRP (Regional Planning), University of Pennsylvania, (Ian McHarg's program) -1977
- A., Smith College, Biology major, 1973

Honors and Appointments

- Touchstone Award (1st offered), Society of Women Environmental Professionals (SWEP), 1997
- Woman of Distinction Award, Philadelphia Business Journal, 1998
- American Water Resources Association (AWRA) Mary H. Marsh Medal for exemplary contributions to the protection and wise use of the nation's water resources, 2007
- S. Army Corps of Engineers Bronze Order of the DeFleury Medal, 2014
- Delaware Estuary Jonathan Sharp Lifetime Achievement Award, PDE, 2014

Q&A

How did you get involved in the water resources field? I grew up a "water rat" at the Jersey shore. My freshman year in college was the 1st Earth Day. I was deciding between a major in math or theater (crazy) and was so influenced by Earth Day that I switched to becoming a biology major. While I was working at UPenn, I took a limnology course with Dr. Ruth Patrick. My future was set! I could see a path of using my water and biology interest to make a difference in the environment.

And with AWRA? I had been involved in grad school and a member in my early professional career. In the late 1990's I was exploring which professional organization I really wanted to dedicate some time. AWRA came out on top. I had been involved in a number of "silo" water/environment organizations, but looking for something that supported holistic watershed science and management and which had a diverse membership. AWRA was it. Members are really genuine.

How has the water resources field changed since you started your career? It has gone from being a male dominated, engineering directed field to one that requires a multiplicity of disciplines (ecology, hydrology, geology, planning, socioeconomics, law, etc.) to effectively manage water resources. It has gone from a top-down, regulatory-directed program to one that has both top-down and bottom-up aspects. There is an understanding that residents and other stakeholders in a watershed need to be engaged. Trust has to be built. Solutions include grey and green options. You can't improve the creeks and rivers without changing the way we think about land use.

How will the water resources field change in the next few years? I do believe that climate change will be a huge driver. After big floods and multi-season droughts, there will be a wake-up call.

Biggest career success? Delaware River Basin Commission (DRBC)

- a) Changing the staff culture to one of openness and inclusion of the basin community.
- b) Implementing the Special Protection Waters Program, (keeping the clean water clean).
- c) Developing a stringent PCB standard in the estuary that will result in the elimination of fish consumptions advisories for PCBs. Equally important was the development of an implementation plan that created a level playing field for reaching the goal.

Biggest lesson learned in your career? Act like a duck, – stay calm (unruffled) on the surface and paddle like crazy below! It's usually not as bad in the morning as it looked when you got home from work!

Biggest regret? No big regrets, I've had a great run. I will never get to 10,000 hours on my mandolin! On further thought, here are two:

- Not getting floodplain reform (stricter regulations) thru DRBC
- Not getting a low flow program to support instream communities thru DRBC (ran out of time! TNC did a
 wonderful study supplying the science of flow needs for different stream and river zones, but the policy has
 not yet followed.

Share a leadership story? Back when I was at BCM, I went to a meeting with some high powered clients with our toxicologist (female) and a wetland scientist (male). The clients assumed he was in charge. Instead of making a big deal, I let the wetland scientist take the lead. After a few minutes, it was obvious that he was not the manager and they turned their attention to me. I think that if I had made a big deal in the beginning and actively took over the meeting, the clients (all male) would have been turned off.

Biggest challenge as a woman in the business? Finding that point of balance – assertive when necessary, but not too assertive. Can't let them take advantage of you, but you also need to fit in and be team player.

One piece of advice you wish someone told you early on in your career? Let people know you are interested (sitting on a non-profit board, professional organization, new job assignment, etc.). It makes a difference if people know that you are interested and willing to engage. You'll be surprised how soon you get asked to step up.

True inspiration?

- Ruth Patrick
- My staff at DEP and DRBC and the "30-somethings" I work with now.
- Every time I look out across a river or out to sea.

As mentioned, this is a six-part series on AWRA's Women in Water. Watch for the fifth interview next month with AWRA Past President Jan Bowers.

Author Martha Narvaez is AWRA's President. Email: president@awra.org