

Cynthia Carlson Advisory Council

Dr. Cynthia Carlson is an experienced water resources engineer with demonstrated technical and managerial expertise in a wide range of engineering projects, including stormwater management, watershed planning and management, decision support, and hydraulic/hydrologic modeling. She is an accomplished instructor and researcher with diverse research interests and collaborations.

Currently Dr. Carlson is a tenured Associate Professor of Civil Engineering at Merrimack College. She teaches a variety of courses, including Environmental Engineering, Introduction to Geographic Information Systems, Water Resources and Hydraulics, Environmental Design, Transport Systems for Sustainable and Healthy Communities, and Urban Hydrology and Stormwater Management. She also serves as the faculty advisor for the student chapter of the Society of Women Engineers at Merrimack.

In the private sector, Dr. Carlson worked with Camp Dresser and McKee (CDM, now CDM Smith) on a variety of domestic and international projects, including the following:

- development of a water quality monitoring program with the Public Utility Board of Singapore for the utilization of stormwater as a potential water source;
- field investigations with the U.S. Agency for International Development (USAID) to locate and design seven wastewater treatment plants in the Bekaa Valley of Lebanon;
- maintenance/repair activities at five deep well drinking water pumping locations in the West Bank with Palestinian Water Authority (PWA) and West Bank Water Department (WBWD) personnel;
- phase 2 stormwater regulation readiness for New England community clients.

"I see myself as a practical visionary. I enjoy imagining the positive future, but then also planning for that future and working towards creating that future. If these barriers (political, economic, cultural, etc.) are not recognized, the status quo will win... in a team setting I often find myself playing the role of negotiator, scenario developer, brain stormer and way-around proposer, helping to find ways to build coalitions and move towards a future that works for us all."

Dr. Carlson earned a B.S. degree in Civil Engineering, Summa Cum Laude at the University of Massachusetts, Amherst, with an Honors Thesis "Use of Local Soil for Landfill Liner Material". Her M.S. degree in Environmental Engineering is from Dartmouth College with her Thesis "Single Plume Model for Open-Ocean Deep Convection." Dr. Carlson's Ph.D. thesis in the Natural Resources and Earth Sciences Program, Civil Engineering Department from University of New Hampshire was "Efficiency of the Built Environment: Interdependence in Transportation, Development Form, Public Health and Infrastructure Costs." Dr. Carlson is a Registered Professional Engineer in the State of New Hampshire, is widely published and a frequent contributor at professional conferences, and is widely published.