



**EBC Rhode Island Program**  
**The State of Stormwater in Rhode Island - Water Quality, Stormwater Permits & Sea Level Rise**

Wednesday, May 2, 2018

Department of Environmental Management | Providence, Rhode Island

**Thank you to our Sponsor:**



**AGENDA**

- 8:00 a.m.**      **Welcome – Jackson Bailey**, Communications and Marketing Coordinator  
Environmental Business Council of New England
- Program Introduction & Overview**
- Cynthia Baumann, Program Chair & Moderator  
Principal, CDM Smith Inc.
- 8:10 a.m.**      **State of Stormwater in New England**
- Thelma Murphy, Chief, Stormwater and Constructions Permits Section  
U.S. Environmental Protection Agency
- 8:30 a.m.**      **Water Quality in Rhode Island**
- Elizabeth Scott, Deputy Chief, Surface Water Protection, Office of Water Resources  
Rhode Island Department of Environmental Protection
- 8:50 a.m.**      **2018 RI Multi Sector General Permit (MSGP) Reissuance Update**
- Margarita Chatterton, Senior Sanitary Engineer, Office of Water Resources  
Rhode Island Department of Environmental Management
  - Joseph Haberek, P.E., Supervising Sanitary Engineer, Office of Water Resources  
Rhode Island Department of Environmental Management
- 9:10 a.m.**      **RI Municipal Separate Storm Sewer System (MS4) General Permit Initiatives**
- Jennifer Stout, Senior Sanitary Engineer, Office of Water Resources  
Rhode Island Department of Environmental Management

- 9:30 a.m.      **RI Stormwater Design and Installation Standards Manual and RI Construction General Permit Reissuance Update**
- Eric Beck, P.E., Chief of Groundwater & Freshwater Wetlands, Office of Water Resources  
Rhode Island Department of Environmental Management
- 9:50 a.m.      **Networking Break**
- 10:20 a.m.     **Climate Change in New England**
- David Vallee, Hydrologist-in-Charge, National Weather Service
- 10:40 a.m.     **Coastal Green and Resilient Infrastructure Project in Rhode Island**
- Pam Rubinoff, Associate Coastal Manager, Coastal Resilience Extension Specialist  
Coastal Resource Center, University of Rhode Island
- 11:00 a.m.     **Panel Discussion**
- Panel Moderator:** Cynthia Baumann, CDM Smith Inc.
- Panel Members:**
- Eric Beck, RIDEM
  - Margarita Chatterton, RIDEM
  - Joseph Haberek, RIDEM
  - Thelma Murphy, US EPA
  - Pamela Rubinoff, CRC
  - Elizabeth Scott, RIDEM
  - Jennifer Stout, RIDEM
  - David Vallee, National Weather Service
- 12:00 p.m.     **Adjourn**

### **PROGRAM CHAIR**

**Cynthia Baumann, P.E., BCEE, CFM**, Principal  
CDM Smith Inc.  
260 West Exchange Street, Suite 300, Providence, RI 02903  
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Ms. Baumann is a civil engineer with 28 years of experience in stormwater with an emphasis on stormwater quantity and quality. Her experience includes drainage system evaluations, modeling and design; construction services; wetland evaluations; BMP design; CSO evaluation; stormwater sampling; and permitting. She received her B.S. in Civil Engineering from Valparaiso University and is a registered PE, Board Certified Environmental Engineer and Certified Floodplain Manager.

### **SPEAKERS**

**Eric Beck, P.E.**, Chief of Groundwater and Freshwater Wetlands  
Office of Water Resources  
Rhode Island Department of Environmental Management  
235 Promenade Street, Providence, RI 02908-5767  
(401) 222-4700 ext. 7700 | [eric.beck@dem.ri.gov](mailto:eric.beck@dem.ri.gov)

Graduated from Merrimack College with a B.S. in Civil Engineering. Registered Professional Engineer in the State of Rhode Island.

Employed by the RIDEM for the past twenty-nine years, Mr. Beck has been in his current position since April 2017 and is involved in developing and implementing a broad range of environmental regulatory programs involving permitting of municipal and private wastewater and storm water systems and activities that might impact groundwater or freshwater wetlands.

Mr. Beck has been involved in development and implementation of the RIPDES General Permit for Construction Stormwater, the Multi-Sector General Permit for Industrial Stormwater and the Small MS4 general permit. Mr. Beck was also actively involved in the development and implementation of RI's 2010 Storm Water Design Manual, and the 2014 Soil Erosion and Sediment Control Handbook. In his new position, Mr. Beck is responsible for the RI DEM's Office of Water Permitting Programs and implementation of the RI Storm Water Design Manual, On-site Wastewater Treatment System Regulations, Freshwater Wetlands Regulations, Groundwater/Underground Injection Control Regulations, and Water Quality Regulations.

**Margarita Chatterton**, Senior Sanitary Engineer  
Office of Water Resources – RIPDES Permitting Program  
Rhode Island Department of Environmental Management  
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Graduated from Boston University with bachelor degrees in Physics and Geology, and MS in Environmental and Civil Engineering from the University of Rhode Island. I started working in the Department of Environmental Management in 1993. I worked in the CERCLA and UIC permitting Programs before joining RIPDES in 1998, where I have been involved in various aspects of adoption and implementation of the Phase II Stormwater Program in Rhode Island.

**Joseph Haberek, P.E.**, Supervising Sanitary Engineer  
Office of Water Resources – RIPDES Permitting Program  
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Graduated from the University of Rhode Island with a BS in Chemical Engineering. Registered Professional Engineer in the State of Rhode Island. 5 Years of Industrial experience in the plastics coating and textile industries in process and environmental engineering. Have been with the Department of Environmental Management since 1997 in the Office of Water Resources working on NPDES Permitting, Industrial Pretreatment, and Water Quality. Currently the Supervising Sanitary Engineer in the RIPDES Program.

**Thelma Murphy**, Chief, Stormwater and Construction Permits Section  
U.S. Environmental Protection Agency  
5 Post Office Square (OEP06-1), Boston, MA 02019  
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I am the Section Chief for the Stormwater and Construction Permits Section at EPA New England. I began this position in March 2012. Prior to assuming this role, I was the regional storm water coordinator. My section oversees the implementation and oversight of the storm water program in all areas except enforcement. I also provide oversight for other regionally issued general permits such as

dewatering general permit, remediation general permit, non-contact cooling water and others. I've worked on the development and implementation of all stormwater general permits (Construction General Permit (CGP), the Multi-Sector General Permit (MSGP) and the Small MS4).

My section has reissued both the Massachusetts and New Hampshire Small MS4 General Permits and we are currently working on drafting the individual permits for Boston and MassDOT, reissuance of the Small POTW general permit and the hydro- electric power generating facility general permits. My section also works with the states authorized to implement the NPDES program to provide support in the implementation of their storm water programs.

I've been at the EPA since 1987. During my years here, I've worked as an NPDES permit writer, the regional biosolids (aka sewage sludge) coordinator, and as mentioned previously, the regional stormwater coordinator. I have a Bachelor's Degree in Chemical Engineering from the University of Massachusetts at Amherst.

**Pam Rubinoff**, Associate Coastal Manager  
Coastal Resilience Extension Specialist  
Coastal Resource Center - University of Rhode Island  
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Pam Rubinoff is a Coastal Resilience Specialist at the Coastal Resources Center and RI Sea Grant, at URI's Graduate School of Oceanography. Over the past two decades at URI, Rubinoff has combined her skills in engineering and coastal policy to advance an interdisciplinary coastal resilience portfolio in Rhode Island and developing nations throughout the world. In collaboration with a diverse group of partners, Pam facilitates the use of climate science for effective policy, planning and action by coastal communities, state governments, and private sector stakeholders. Current projects include municipal training, green infrastructure in coastal environments, and supporting RI Preparedness efforts through physical modeling and social science research.

**Elizabeth Scott**, Deputy Chief, Surface Water Protection  
Office of Water Resources  
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Elizabeth has over thirty years' experience in water resources management in Rhode Island. Since 1999, Elizabeth's responsibilities have included supervision of the state's Shellfish Program responsible for classification, monitoring, and management of the state's shellfish growing waters consistent with the National Shellfish Sanitation Program requirements, and the Total Maximum Daily Load (TMDL) Program which aims to restore the quality of the state's surface waters through the development and implementation of water quality restoration plans (aka TMDLs). Elizabeth also supervises the biennial preparation of the state's 303d list of impaired waters and related water quality assessment required by section 305b of the Clean Water Act. Elizabeth also oversees efforts to monitor the state's freshwaters for the occurrence of cyanobacteria blooms and with the RI Department of Health on issuance of public health advisories to prevent exposure to potentially harmful blooms.

Elizabeth's water quality restoration efforts have led to involvement in development of policies, guidance documents and programs to advance stormwater management in Rhode Island. She works closely with regulatory programs at RIDEM in ensuring consistency with TMDL provisions and with RIDEM and EPA in evaluating compliance with stormwater permit requirements stemming from

approved TMDLs. Elizabeth has worked extensively with municipalities and watershed organizations to implement watershed specific stormwater requirements and providing technical support to 14 municipalities in their efforts to develop stormwater utilities.

Elizabeth has served in advisory capacity and/or as a board member for the RI Water Resources Board and RI Office of the Natural Resources Conservation Service, and on numerous other ad hoc committees addressing water resource and water quality management issues in Rhode Island. Elizabeth received a Bachelor of Science in Natural Resources from Cornell University, and Master of Arts in Marine Affairs from the University of Rhode Island.

**Jennifer D. Stout**, Senior Sanitary Engineer  
Office of Water Resources – RIPDES Permitting Program  
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(401) 222-4700 ext. 7726 | [Jennifer.stout@dem.ri.gov](mailto:Jennifer.stout@dem.ri.gov)

Graduated from the University of Rhode Island with a BS in Civil and Environmental Engineering. Registered Engineer-in-Training in the State of Rhode Island. Have been with the Department of Environmental Management since 2000 in the Office of Water Resources working on Freshwater Wetlands Permitting, NPDES Permitting, Municipal Stormwater (MS4) Permitting and Compliance, and Water Quality.

**David Vallee**, Hydrologist-in-Charge  
NOAA/National Weather Service/Northeast River Forecast Center  
46 Commerce Way, Norton, MA 02766  
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David Vallee is the Hydrologist-in-Charge of the National Weather Service's Northeast River Forecast Center. The center provides detailed water resource and life-saving flood forecasting services to National Weather Service Forecast Offices and the hundreds of federal, state and local water resource entities throughout the Northeast and New York.

David has worked for the National Weather Service for 30 years, serving in a variety of positions including Intern Meteorologist from 1987-1993 at both the Boston and Providence offices, Senior Service Hydrologist at the Taunton Weather Forecast Office from 1993-2000 and as Science and Operations Officer from 2001-2006. David has extensive experience leading hydrometeorological forecast and warning operations and directing weather research and training programs. David has served as the NWS lead investigator with the State University of New York, at Albany, on a multi-year project addressing Land Falling Tropical Cyclones in the Northeastern United States. This has improved the forecasting of heavy precipitation associated with these land falling tropical cyclones as well as developing a better understanding the mechanisms which lead to the recurvature and rapid acceleration of tropical cyclones as they approach the Northeast. David led the initiative to develop a short-range ensemble river forecast system which leverages short range numerical weather prediction guidance to drive a suite of probabilistic river forecasts for the region. Recently, David has been leading an effort at the Northeast River Forecast Center to examine changes in precipitation and temperature patterns across New England and its impact on flood behavior.

David is most known locally for his outreach and education work on the behavior of New England Hurricanes, including many appearances on local radio and T.V. networks as well as the Weather Channel, the History Channel and the Discovery Channel. David has been the recipient of numerous regional and national awards including the prestigious National Isaac Cline Award for Leadership.

David is a graduate of Lyndon State College. He is a life-long resident of the Rhode Island, living in the northeast part of Cumberland. He considers it a tremendous privilege to be serving the people of the very region he calls home.

## **UPCOMING EBC PROGRAMS**

### **MAY 2018**

- May 3 – New England Regional Conference of State Solid Waste Directors
- May 8 – Energy Resources Program: Electric Vehicles – Charging Ahead and Gaining Speed
- May 10 – Ascending Professionals: Communicating with Municipal Officials
- May 14 – Water Resources Committee Program Planning Luncheon
- May 15 – Briefing from U.S. Army Corps of Engineers Colonel Conde
- May 16 – Evening Program with Newly Appointed U.S. EPA Regional Administrator Alexandra Dunn
- May 17 – PCB & Emerging Contaminants Subcommittee Program Planning Meeting & Presentation
- May 18 – Briefing from the Massachusetts Clean Energy Center Leadership
- May 21 – New Hampshire Chapter Program Planning Meeting
- May 22 – Energy Resources Committee Program Planning Meeting
- May 22 – Ocean and Coastal Resources Committee Program Planning Luncheon
- May 24 – Ocean and Coastal Resources Program: Briefing from State and Federal Agencies
- May 24 – Ascending Professionals Workshop – Strengthfinder
- May 30 – Connecticut Chapter Program Planning Meeting
- May 30 – Connecticut Summer Gathering at Connecticut Valley Brewing Company
- May 31 – Rhode Island Evening Workshop – Beer & PCBs – An Introduction**

### **JUNE 2018**

- June 4 – Solid Waste Management Committee Program Planning Luncheon
- June 5 – Site Visit: University of New Hampshire Stormwater Center
- June 6 – Rhode Island Brownfields Program: Success Stories and Lessons Learned**
- June 8 – Climate Adaptation Forum: Design World Views on Adaptation and Resiliency
- June 12 – Solid Waste Management Program: Organics Processing in New England
- June 14 – Site Remediation Program: Asbestos Management and Disposal
- June 15 – Review of Environmental Programs & Opportunities at the U.S. Department of Defense
- June 20 – New Hampshire Program: PCB Intermediate Program
- June 21 – Connecticut Program: Contaminants of Emerging Concern – Update on PFAS and PFOAs
- June 27 – 25<sup>th</sup> Annual EBEE Awards and 28<sup>th</sup> Annual Meeting

### **JULY 2018**

- July 10 – Rhode Island Chapter Program Planning Meeting**

### **AUGUST 2018**

- August 2018 – Rhode Island Summer Garden Party**