

# 2017 Estuary Research Workshop

Limiting Factors Beyond Nitrogen

September 13, 2017  
The Coastal Institute at URI  
Narragansett, R.I.

## Agenda

8:00    Registration Begins

8:45    Welcome and Opening Remarks

9:00    Limiting Factors Beyond Nitrogen: Sources and Processes (Part 1)

**Examples, impacts, and trends in estuarine phosphorus limitation**

James W. Ammerman, NEIWPC, Science Coordinator - Long Island Sound Study

**Mitigating eutrophication and harmful algal blooms along the freshwater to marine continuum representing estuaries: The need to control both nitrogen and phosphorus inputs**

Hans W. Paerl, Kenan Professor of Marine & Environmental Sciences, University of North Carolina

10:10    Break

10:30    Limiting Factors Beyond Nitrogen: Sources and Processes (Part 2)

**The influence of coastal oceans and seas on nutrient limitation in estuaries**

Robert Howarth, David R. Atkinson Professor of Ecology, Cornell University

**Observations and modeling of Narragansett Bay nutrient dynamics: Do we run the west coast offense?**

Chris Kincaid, Professor, University of Rhode Island - Graduate School of Oceanography; David Ullman, Boston University; Robinson Fulweiler, Boston University

11:30    Phosphorus Removal Technology

**Phosphorus removal from agricultural tile drains using novel media**

Tara Kulkarni, Associate Professor, Norwich University

**Passive wastewater phosphorus removal system - 10 years of performance achieving effluent TP 0.02 mg/L**

Pio Lombardo, President, Lombardo Associates, Inc.

12:15    Lunch

*Last updated: June 26, 2017  
Agenda is subject to change.  
[www.neiwpc.org/research/erw.asp](http://www.neiwpc.org/research/erw.asp)*

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## 1:15    Limiting Factors Beyond Nitrogen: Sources and Processes (Part 3)

### **Phosphate (P) is key affecting remineralization of labile organic matter in estuarine and coastal waters**

Zhanfei Liu, Associate Professor, University of Texas at Austin

### **Control of phytoplankton growth: Nitrogen, phosphorus, or grazers?**

David Wong, Environmental Analyst, Massachusetts Department of Environmental Protection

### **An examination of nitrogen and phosphorus values and ratios during twenty-five years of monitoring water quality in the Pettaquamscutt Estuary (Rhode Island)**

Veronica Berounsky, Marine Research Associate, University of Rhode Island

## 2:45    Break

## 3:10    The Road Ahead

### **Open discussion on nutrient inputs, balance, and limitation**

All participants

### **Pragmatic watershed assessment and decision support for comprehensive pollution Planning and Management**

Paul E. Stacey, retired watershed and estuarine ecologist and manager

## 4:00    Adjourn