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Department of Marine Sciences Presents a Seminar By

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The Pulse-Shunt: Hydrologic events and drainage basin DOM

The transfers of carbon, nutrients and pollutants from the land to streams and their changes as they move through river networks are issues that motivate environmental scientists and water resource managers. Dissolved organic matter (DOM) is a central chemical in streams and rivers that affects the forms and movements of contaminants, light penetration through the water, metabolism of life in the streams, pH, and the efficiency of water treatments by municipalities. This study aims to improve predictions of DOM formation and movement from small headwater streams and our understanding of the factors that change the amount and forms of DOM during as it moves downstream. One goal of this research is to greatly improve our understanding of DOM transport and transformation as it moves through a watershed and into the headwater streams. The study uses measurements of DOM made in several headwater streams of the Connecticut River along its length. Measurement are also being made in larger rivers of the Connecticut River downriver to help explain how DOM changes along the entire drainage network. This project challenges a long standing picture of how streams and rivers work, called the River Continuum Concept, proposing that a newer view may be required, referred to as the Pulse-Shunt Concept.

Host: Frank Bohlen

Time & Date: 11:00 am, Friday, March 10, 2017

Place: Marine Sciences Building, Seminar Room 103

Please see this <u>page</u> for cancelations and additional seminar information, email <u>marinesciencesseminars@uconn.edu</u>, or call 860-405-9152 or 860-405-9151