

# Thirteenth Annual Lamprey River Symposium

Thursday, January 16, 2020

James Hall, Room G46 - University of New Hampshire

8:00-8:30      **Registration** - James Hall G46; **Light refreshments** - James Hall G49

<b>Session 1:</b>	<b>Long-term trends and research questions</b>	<b>Moderator: Bill McDowell</b>
8:30-8:45	Introduction and long-term trends	Bill McDowell, UNH
8:45 - 9:00	Long-term DOM trends	Bianca Rodriguez-Cardona, UNH
9:00 - 9:15	Using Geospatial Analysis to Map Forest Change - Insights Regarding the Lamprey River Watershed	Heather Grybas, UNH
9:15 - 9:30	Applying a Mass Balance Approach towards Understanding the Fate of Solutes: Case Studies of the Lamprey River and Great Bay Watersheds	Anna Lowien, UNH
9:30 - 9:45	What are the Big Questions for the Estuary's Big Issues?	Kalle Matso, PREP
9:45 - 10:00	Water Quality -- We have the answers, but what are the questions?	Ted Diers, NH DES
10:00 - 10:15	Coffee Break	
10:15 - 10:45	Discussion groups	

<b>Session 2:</b>	<b>Research opportunities and greenhouse gas production in surface waters</b>	<b>Moderator:</b>
10:45 - 11:00	Environmental DNA: Examples of practice and opportunities for research	Alison Watts, UNH
11:00 - 11:15	A metabolic theory of watersheds? Cumulative aquatic metabolism increases faster than watershed size	Wil Wollheim, UNH
11:15 - 11:30	Tradeoffs between N removal and GHG gas production across flow conditions from fluvial wetland dominated surface water flow paths	Sarah Bower, UNH
11:30 - 11:45	Spatial and temporal heterogeneity in methane ebullition from headwater streams	Andrew Robison, UNH
11:45 - 12:00	Fluvial greenhouse gas dynamics	Allison Herreid, UNH
12:00 - 12:30	Discussion groups	

12:30 - 1:00 **Lunch** - James Hall G49

1:00 - 1:30 **Poster session and continued discussion – James Hall ground floor lobby**

<b>Session 3:</b>	<b>Spatial and temporal data: Temperature and nitrogen</b>	<b>Moderator: Michelle Shattuck</b>
1:30 - 1:45	New Web Apps by NHGS: Stream Temperature and Groundwater Data Discovery	Joshua Keeley, NHGS
1:45 - 2:00	Ambient dissolved organic nitrogen pool response to in situ manipulations of organic solutes	Katherine X. Pérez-Rivera, UNH
2:00 - 2:15	Variability in dissolved organic matter and nitrate fluxes from a low-head coastal reservoir revealed using high-frequency data	Chris Whitney, UNH
2:15 - 2:30	Taking nitrogen by storm: Spatial and temporal controls on nitrogen removal in a small reservoir	Eliza Balch, UNH
2:30 - 2:45	Report out from discussion groups	
2:45 - 3:15	Discussion	
3:15 - 3:30	Wrap up	
3:30 - 4:00	Informal strategizing for future research	

## Posters and Displays – James Hall ground floor lobby

<b>Title</b>	<b>Presenter</b>
Using sensors to analyze carbon and nitrogen dynamics across a stream network at multiple temporal scales	Hannah Fazekas, Adam Wymore and Bill McDowell