

The Coastal Engineering and Watershed Process and Estuary Sustainability (WPES) Research Group (<https://umaine.edu/watershedresearch/>) at the University of Maine (<https://umaine.edu/>) have **two open NSF funded PhD student positions to study exchange flow and mixing in estuaries of varying stratification conditions.**

The students will investigate and compare the Total Exchange Flow (TEF) and Eulerian Exchange Flow (EEF) in the Penobscot River Estuary in central Maine, The Gironde Estuary in southwest France and the Reloncavi Fjord in Chilean Patagonia using a combination of data analysis and numerical modeling. This project will help to better understand how spatial and temporal variations in mixing alter exchange flow regimes in estuaries. The total exchange flow (TEF) and Eulerian exchange flow (EEF) methods will be compared in the above-mentioned estuaries to identify which method provides more robust predictions given forcing mechanisms, mixing regime, and classification of the estuary based on salinity. The project will involve international travel to Chile and/or France.

Preferred start dates are January or June 2022.

Please share the position with interested candidates and contact me for more information (lauren.ross1@maine.edu)

To apply: Please send a CV and letter of motivation to lauren.ross1@maine.edu

