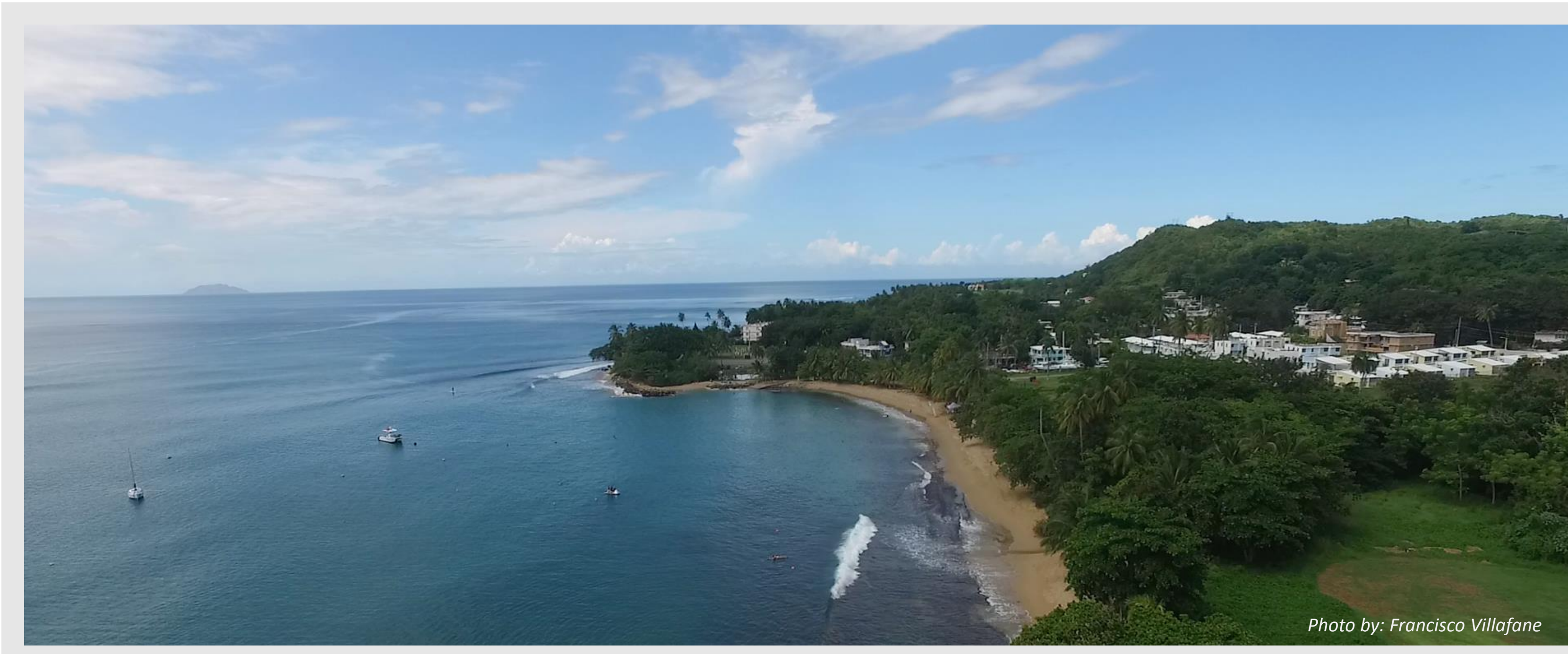


Beach Water Quality at Rincón Public Beach: A 48-hour Sampling Campaign

Priscila Vargas Babilonia^{1,2,3}, Peter Rivera Casillas^{1,2,3} and Sylvia Rodríguez-Abudo^{2,3}

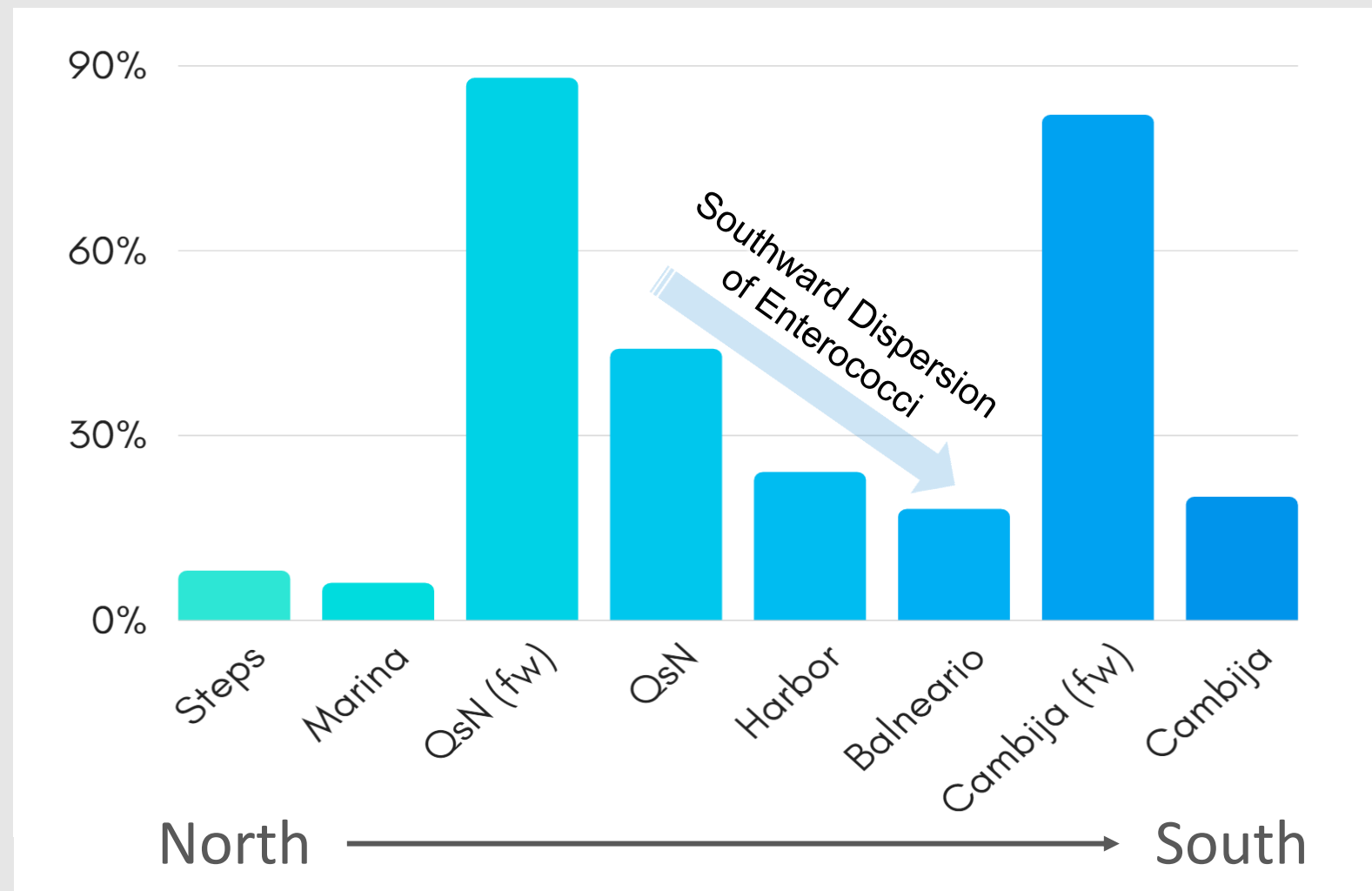


A 48-hour sampling campaign was conducted at Rincón Public Beach (RPB)

Dates: October 14 - 16, 2016

Water quality samples were taken every hour at 6 stations: 4 located at RPB, 1 at Steps Beach, and 1 at the Marina. Two **freshwater (fw)** streams with outflow into RPB were also tested every hour.

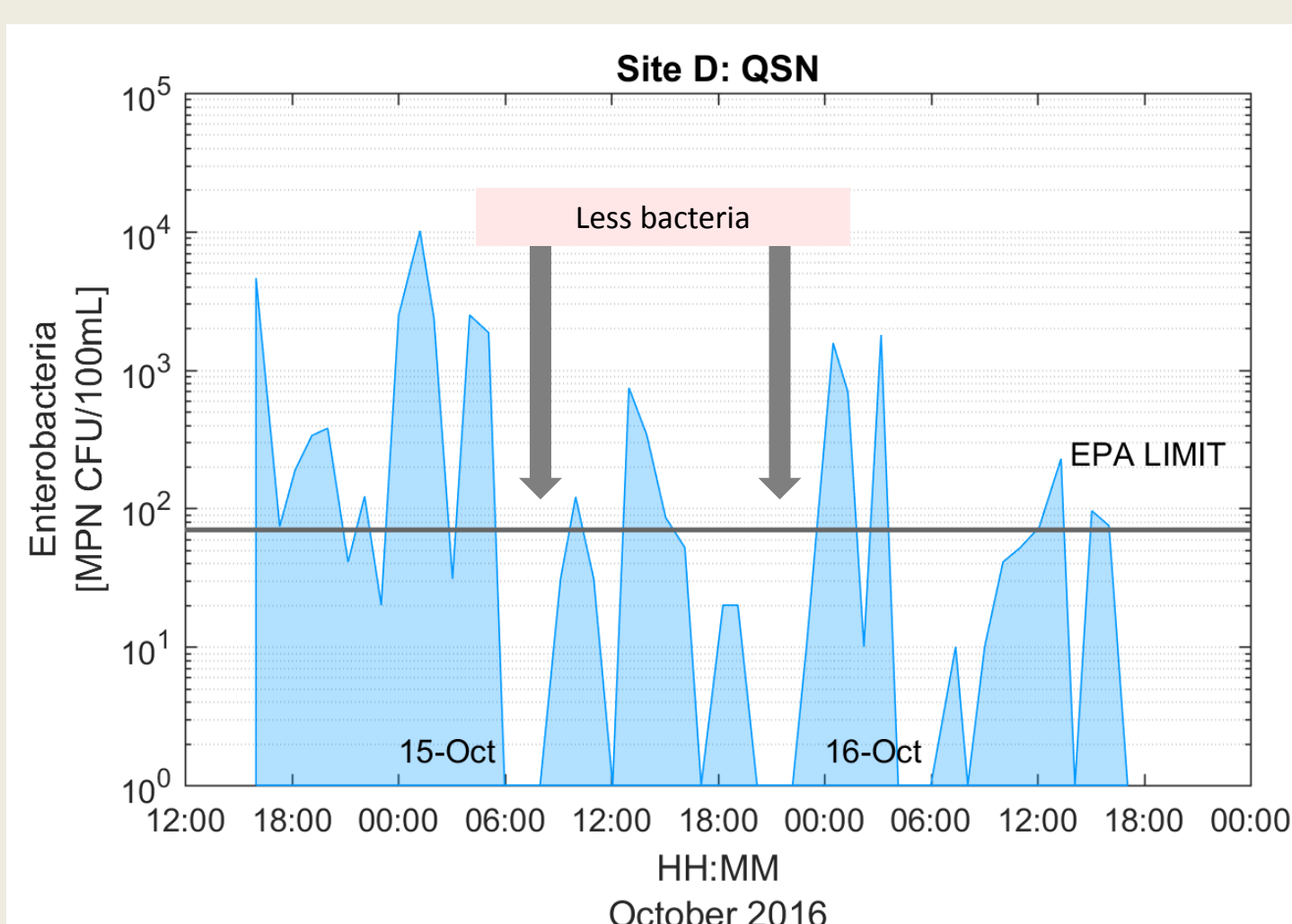
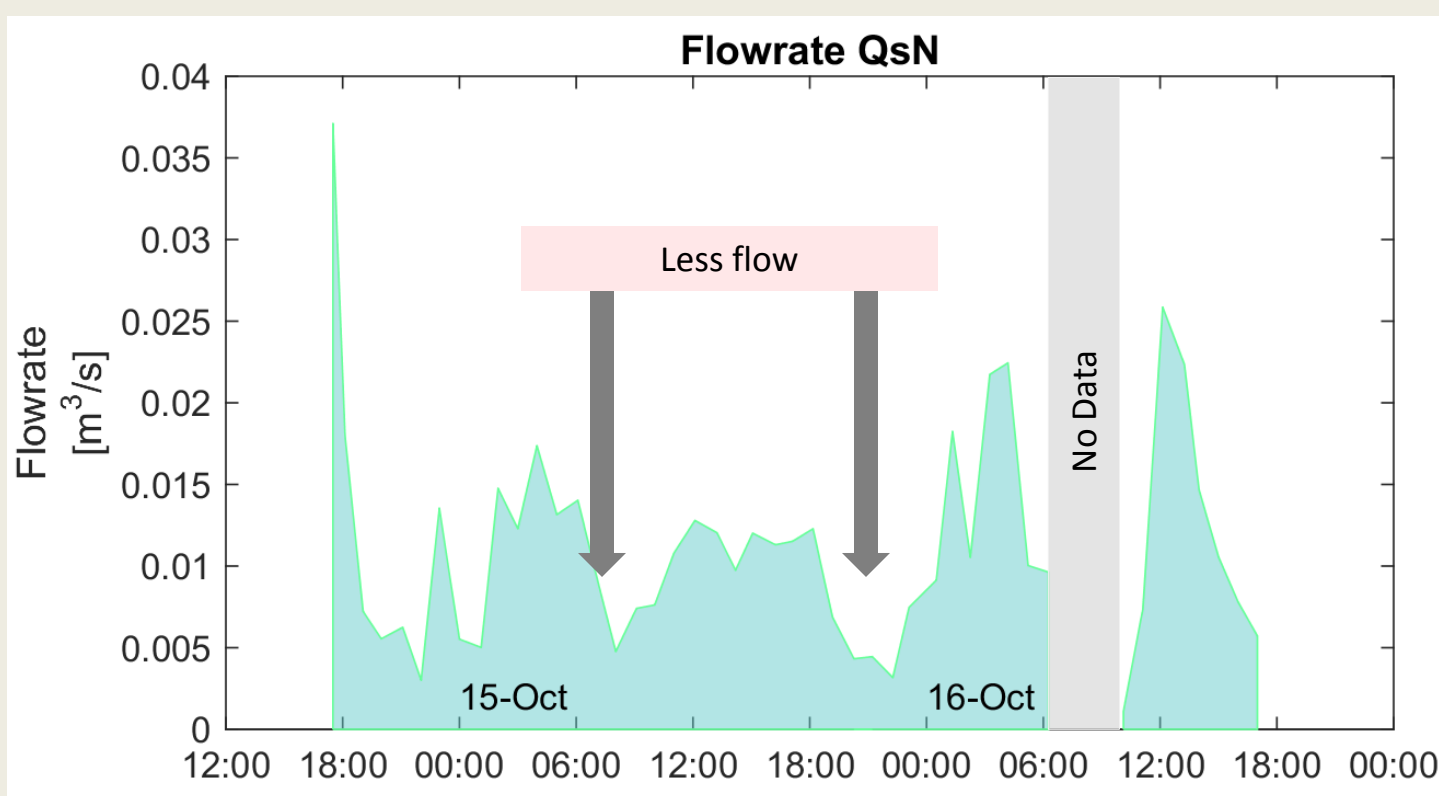
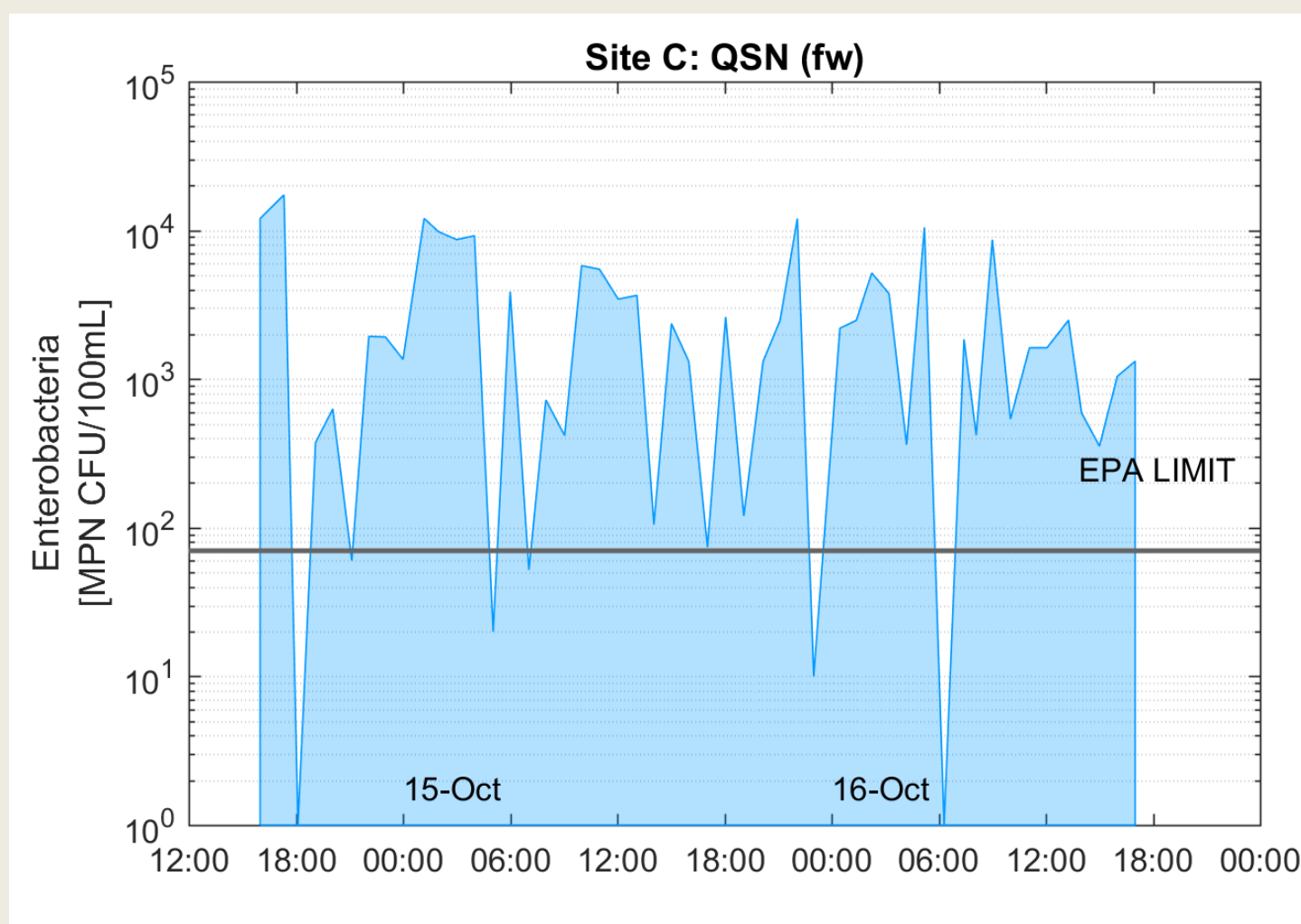
Number of Exceedances



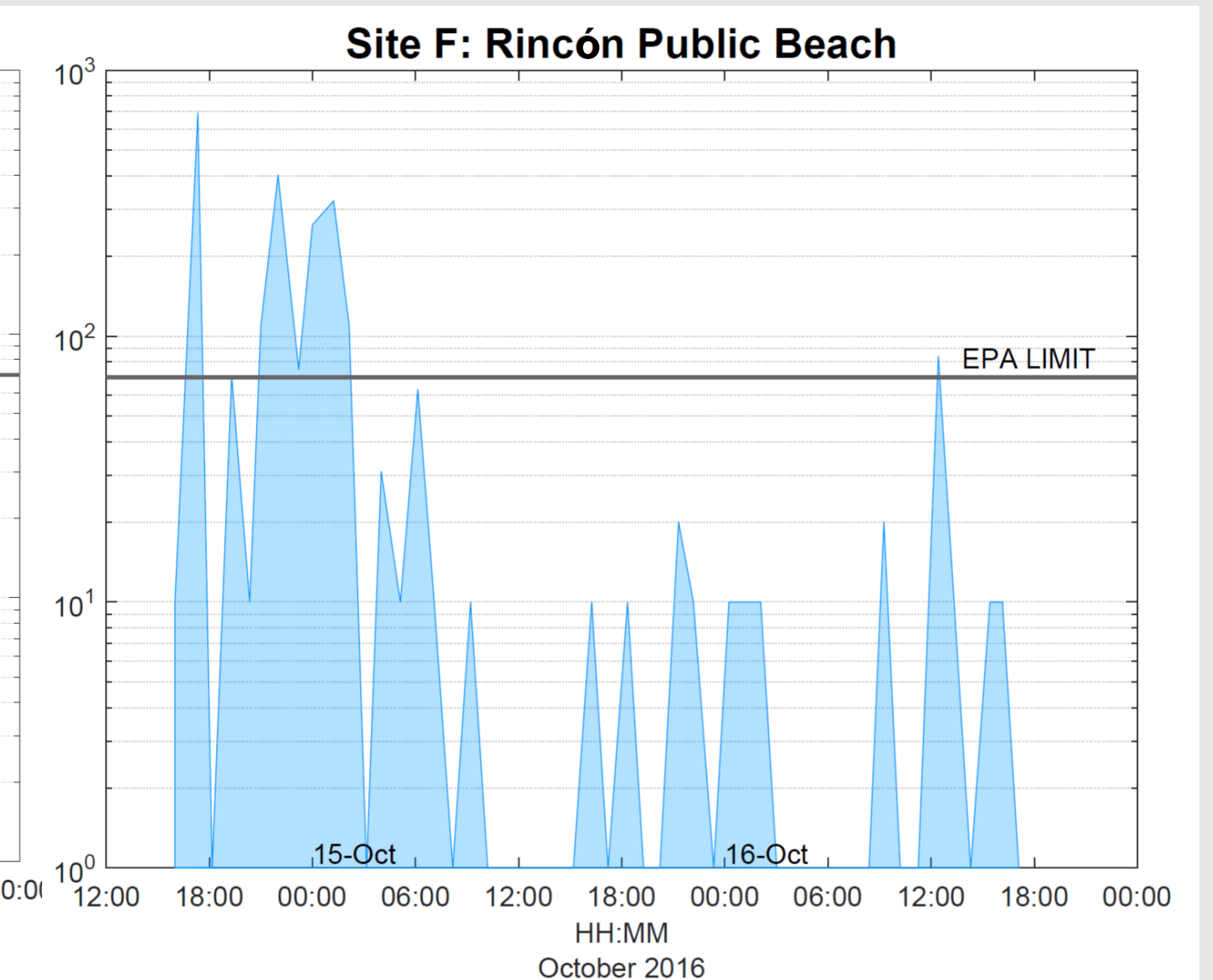
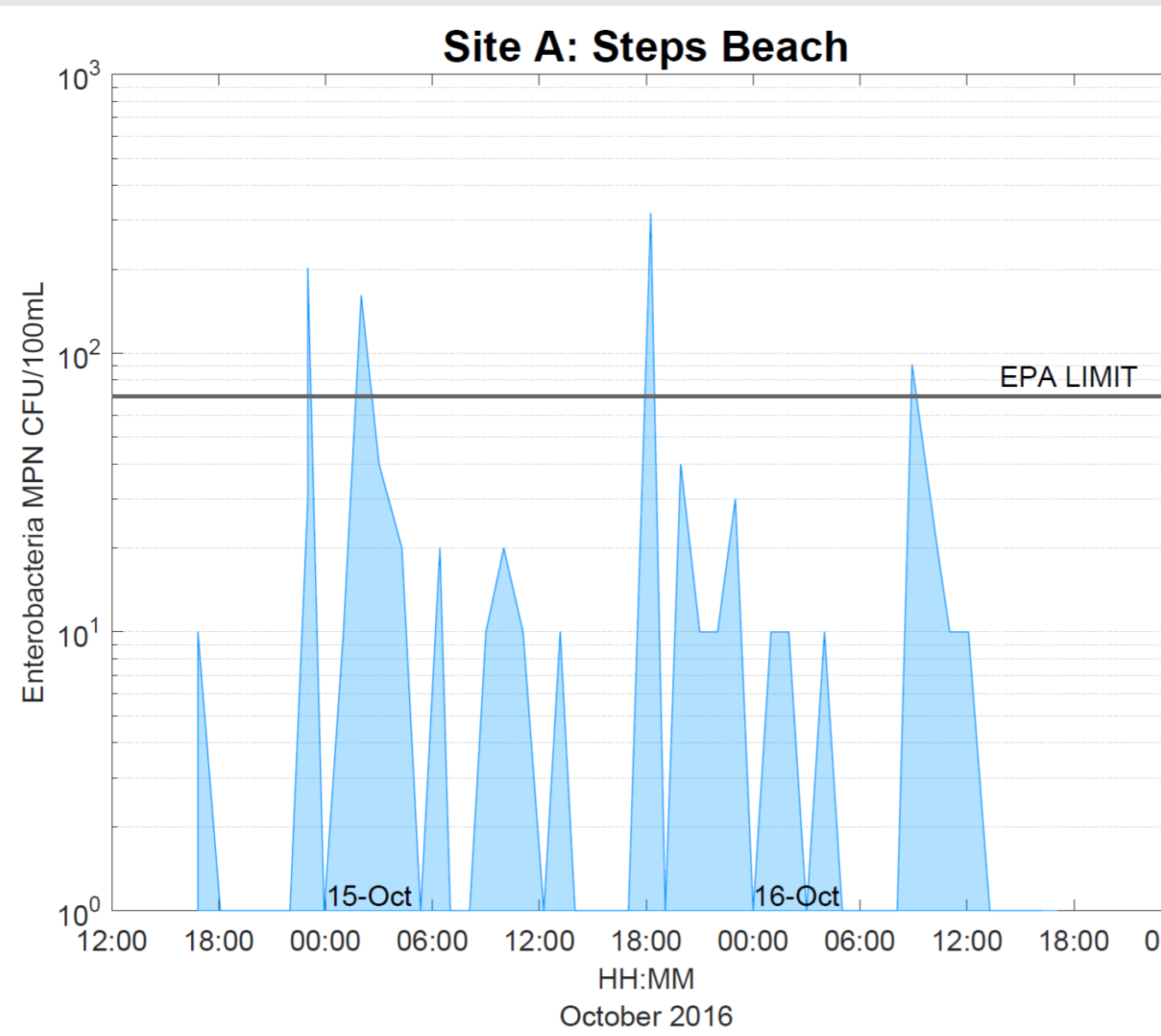
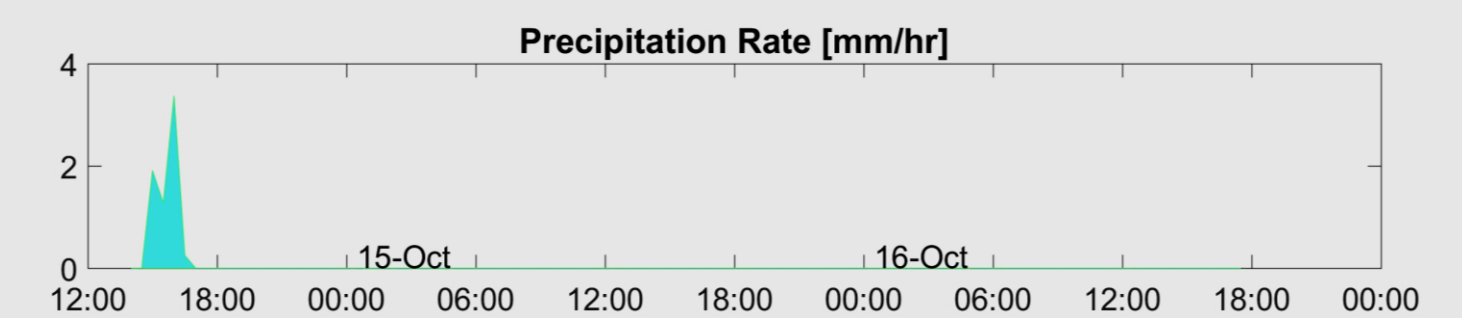
SAMPLING STATIONS



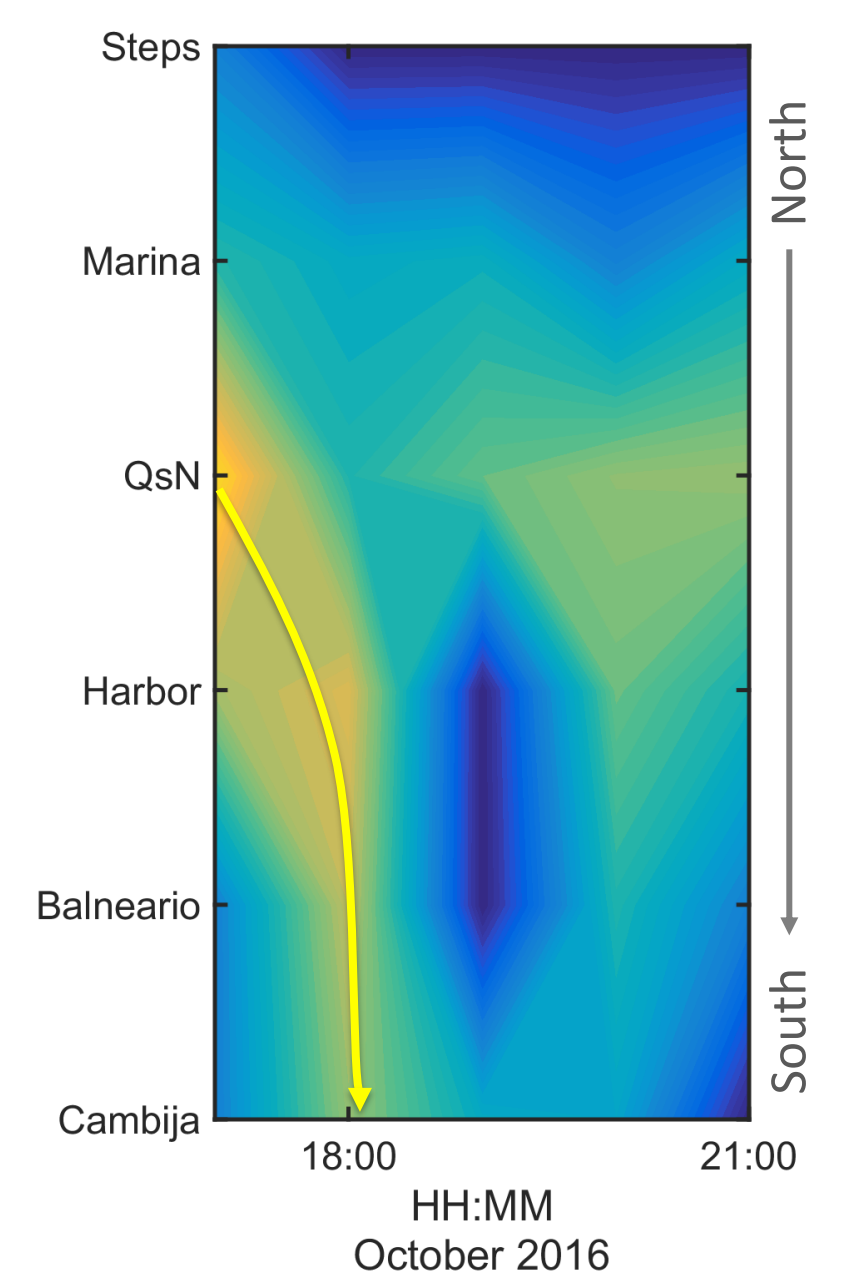
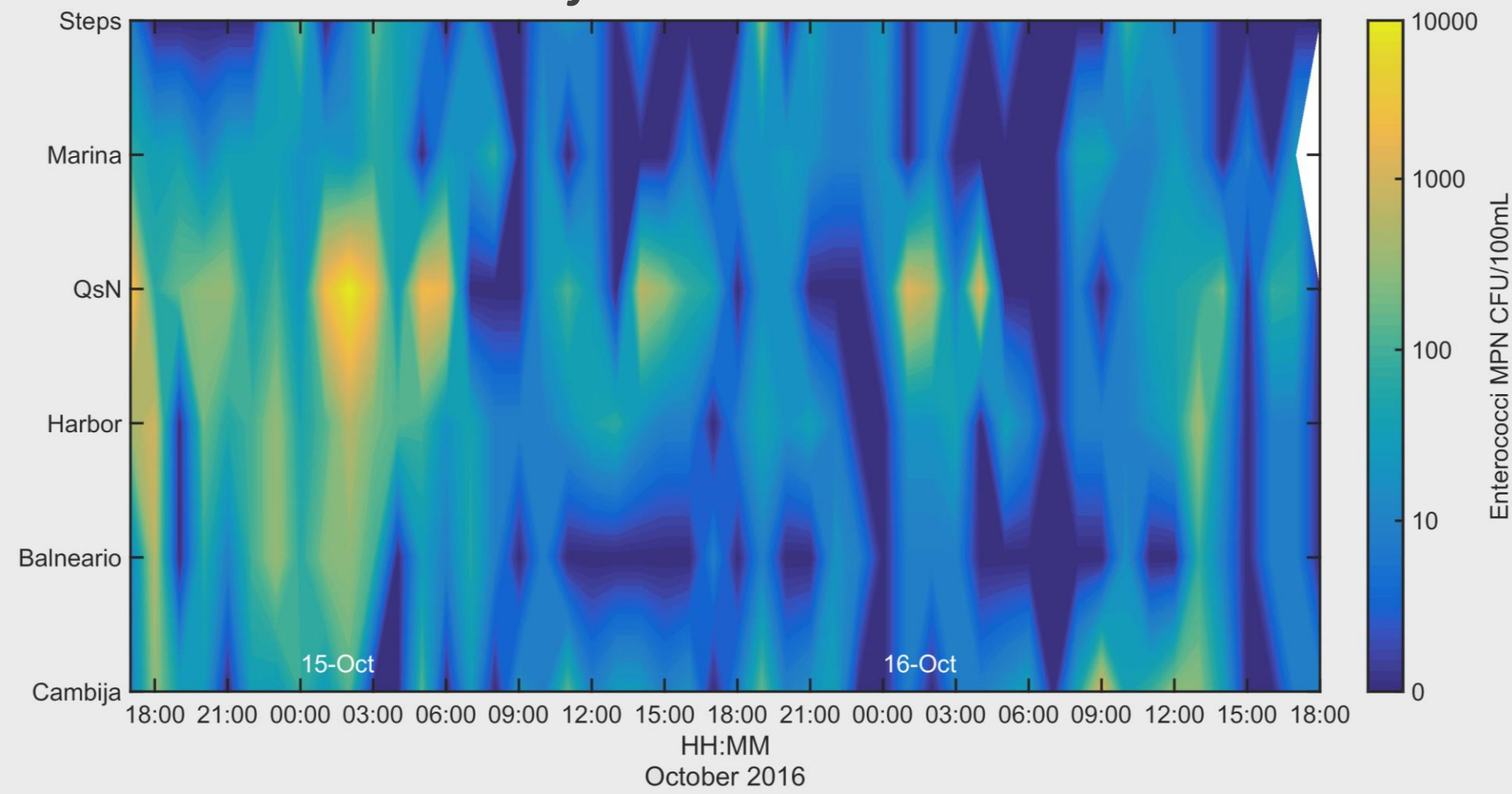
Water from two highly contaminated streams was flowing into the beach. Instances of low flowrate from QsN was consistent with low Enterococci concentration at the beach site.



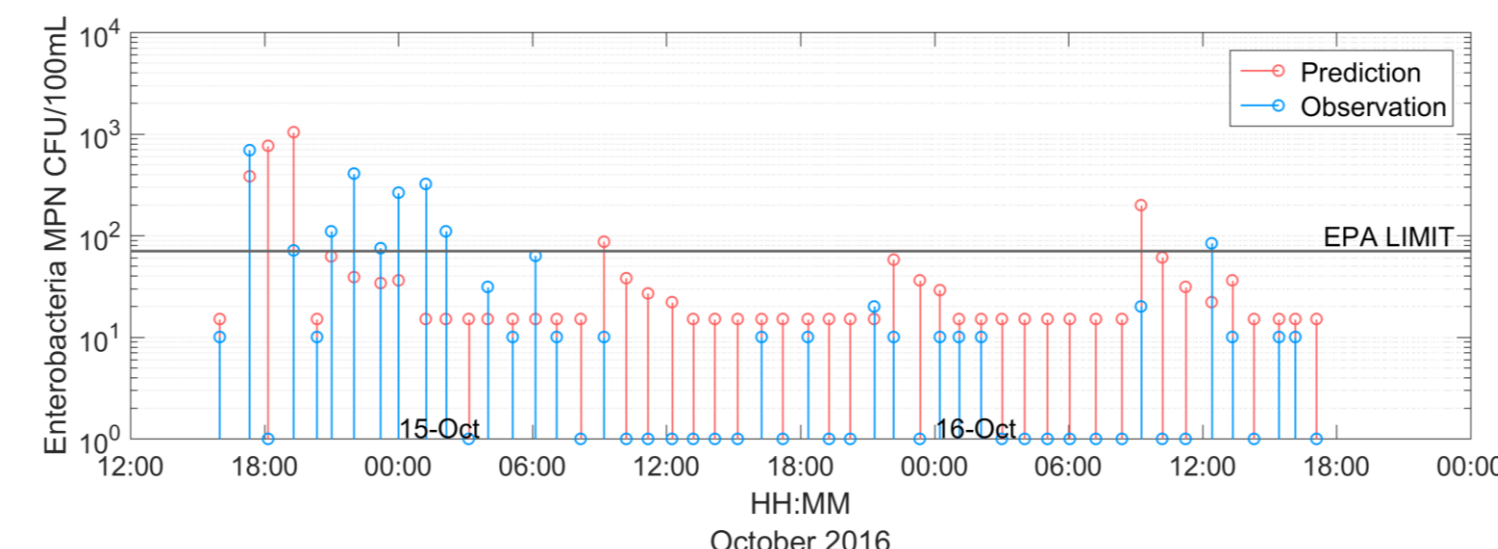
Higher counts of bacteria at RPB resulted from a significant rain event that took place on 10-14. **STEPS BEACH** did not show the same trend.



Distribution of Enterococci Concentration



Nowcast Validation
Refer to Peter Rivera's poster for more information about water quality predictions at RPB.



Zoom in of the first sampling hours. This plot suggests that bacteria was spreading south of QsN.

¹Department of Civil Engineering and Surveying, University of Puerto Rico at Mayagüez

²UPRM Center for Applied Ocean Science and Engineering, Department of Engineering Sciences and Materials, University of Puerto Rico at Mayagüez

³Caribbean Coastal Ocean Observing System, University of Puerto Rico at Mayagüez