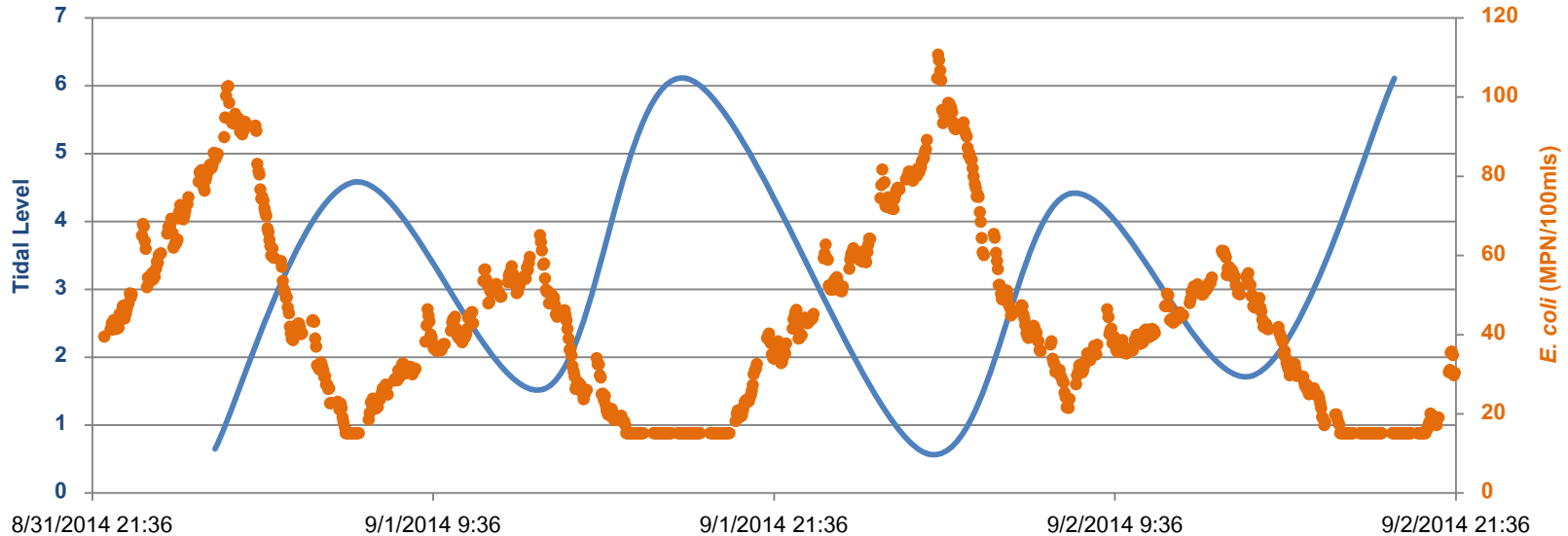


## Monitoring *E.coli* in Tidal Zones



## Low Tide *E. coli* Maxima

The left axis shows the tides for the first two days of Sept. 2014 while the right axis is a trace of *E. coli* bacteria as measured with a LiquID Station deployed on the banks of the estuary. This region is famous for its cheese production and the lower reaches of the river is lined with dairy farms. Fecal matter contamination of waterways has been an issue for this area in the past because of the shellfish fishery in the adjacent bay. Notice that the maxima in *E. coli* are closely aligned with times of low tides indicating that the River is the major source of contamination. This conclusion is supported by the fact that the size of the *E. coli* anomaly is proportion to the extent of the tide –the lower the tide, the greater percentage of fresh water at the site and the greater the anomaly. This example was formed during the dry part of the year. Things get considerably more exciting when the rains come, as we'll see in subsequent plots.