The Hawaiian Islands experienced record-high sea levels during 2017, which caused nuisance flooding in vulnerable coastal communities, especially when positive sea level anomalies coincided with high tides. The predictability and its barriers of daily-averaged sea level anomalies are investigated to build toward solutions for mitigating inundation risk. The investigation focused on leveraging observed westward propagation that sea level anomalies exhibit over a range of timescales to make subseasonal predictions. Results inform the oceanographic and modeling communities about what processes need to be resolved to provide communities with useful short-term sea level forecasts as the frequency of flooding events increases.