Center for Operational Oceanographic Products & Services (CO-OPS)

Richard Edwing, Director Center for Oceanographic Products and Services (CO-OPS)

> 2020 Hydrographic Services Review Panel Virtual April 28, 2020

COVID-19 Impacts

- Provision of real time oceanographic data is a NOAA Mission Essential Activity; PORTS and NWLON are primary systems,
- Federal, contract, and service contractors: scheduled (routine) maintenance being deferred, emergency repairs to be evaluated on a case by case basis, safety of employees and social distancing is the priority,
- Robust design and investment of observing systems expected to minimize significant outages,
- Identifying and mitigating single points of failure through cross training.

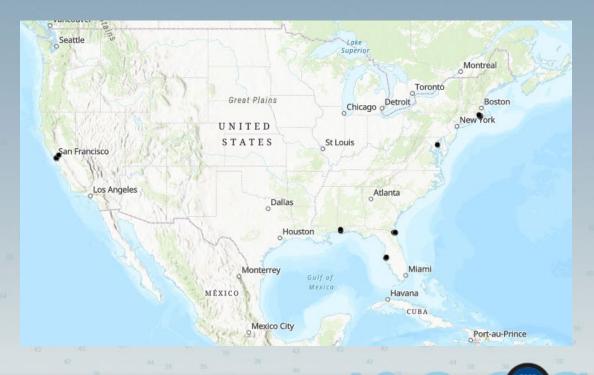
Operational Impacts

- ~50 NWLON Scheduled Maintenances missed (as of June 1)
- Columbia River Currents Survey delayed and at risk for FY20
- Ogdensburg, NY and Dauphin Island, AL NWLON station rebuilds at risk
- Kings Bay PORTS installation delayed and at risk for FY20
- IGLD 2020 GNSS campaign delayed and at risk for FY20
- VDatum surveys in USVI and PR, Great Lakes, SE Atlantic, and in Gulf of Mexico delayed or at risk for delay
- Long term: potential degradation of contract services

Visibility Observations – Status Today

CO-OPS currently operates 14 visibility stations across the US

- ŕ
- 5 FL, 2 AL, 2 RI, 1 MA, 1 MD, 3 CA
- Corpus Christi PORTS is adding 7 visibility sensors



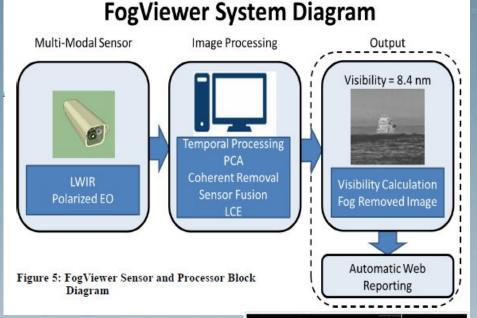
Visibility Observations - Future

NOAA Small Business Innovation Research Grant: FogViewer

Phase 1 Concept Development complete. Uses a low power, robust, easy to maintain, passive multi-spectral sensor suite and uses multi-modal processing workflow to estimate meteorological visibility from imagery.

Phase 2 – Two year development underway with integration into the CO-OPS Data Collection Platform, Communications, and Data Processing Systems. Phase 2 started in August 2019.

Potential for use with autonomous coastal monitoring, wave and current measurements, search and rescue, and other degraded visual environments being explored by manufacturer.





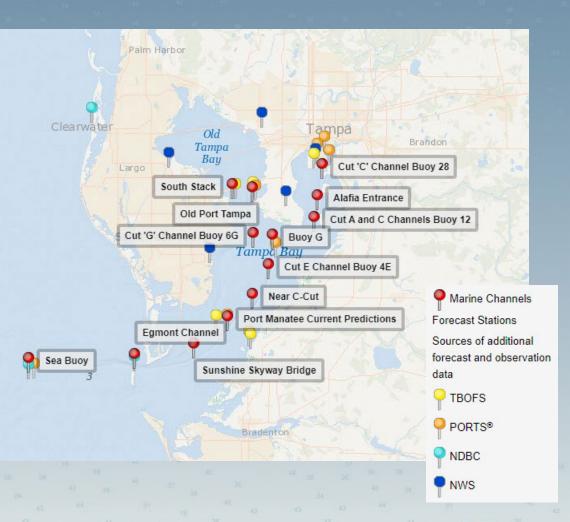
Visibility Forecast – Status Today

Tampa Bay Marine Channel Forecast

Developed by Tampa Bay NWS WFO.

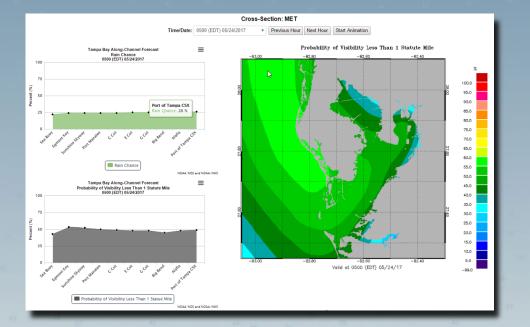
Designed to aid local pilots by providing meteorological and oceanographic forecasts at 13 stations located along the marine channels.

Incorporated into Tampa Bay OFS.



Visibility Forecast - Future

Probability of Visibility (POV)



National Blended Model v.4.0 update in Sept. 2020 will include POV

NGOFS update in Spring 2021

Investigating new locations for Marine Channel Forecast

Can test new location(s) with model updates

Tampa Bay Marine Channel Forecast

Questions?

