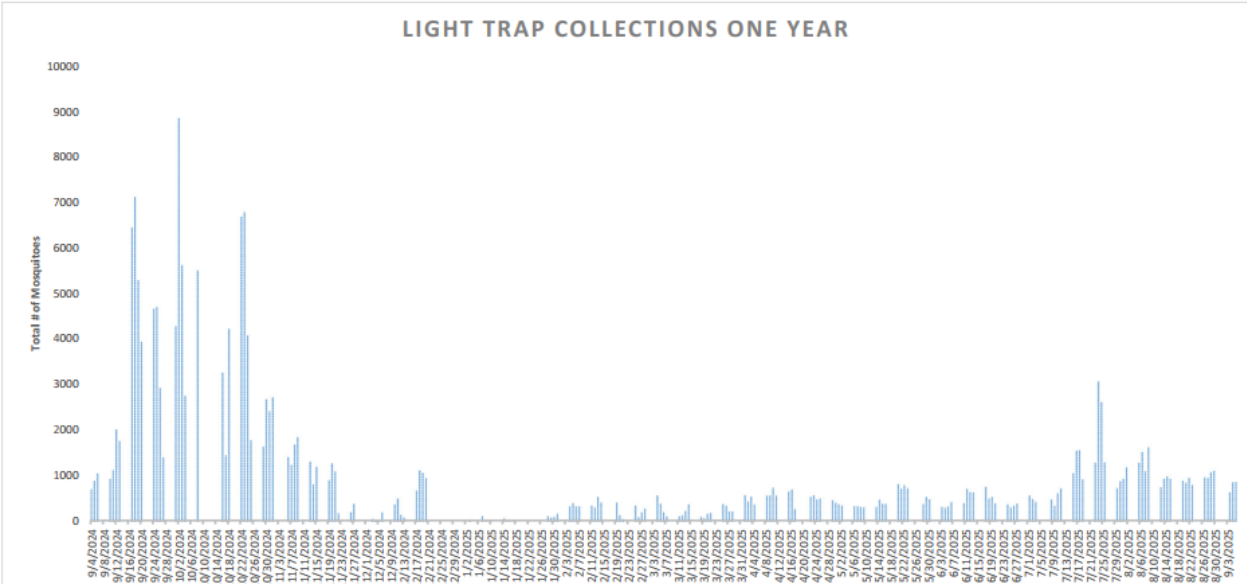
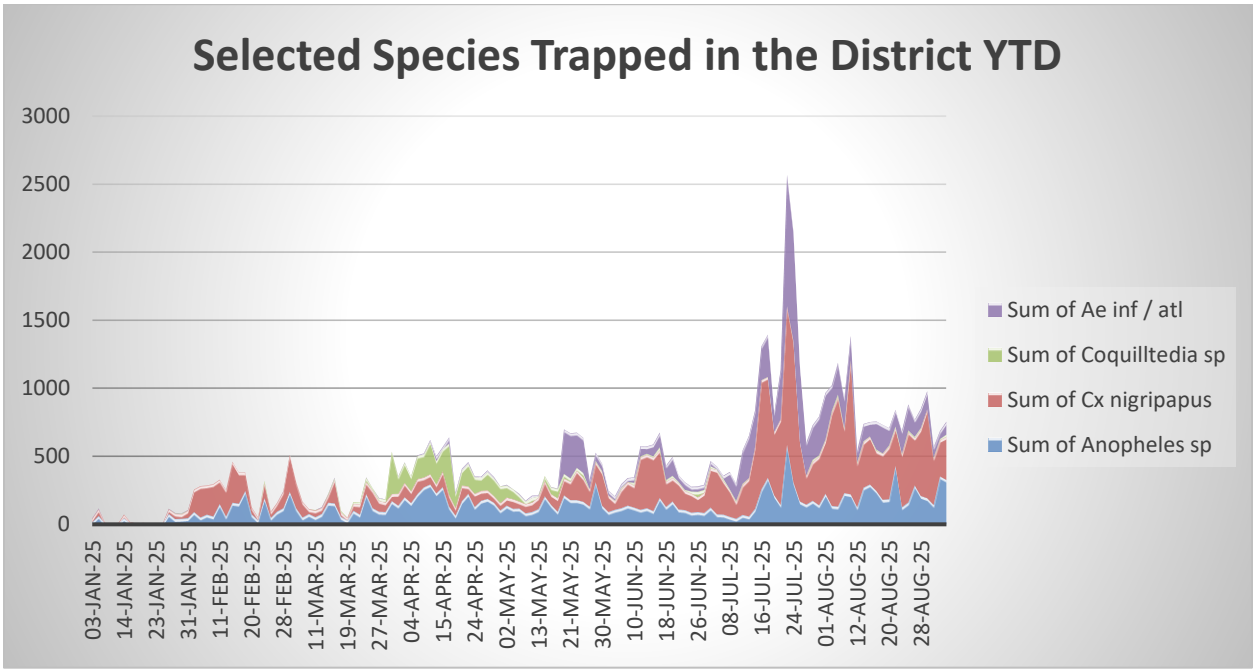
Week of 9/1/2025 Operations Update (36)

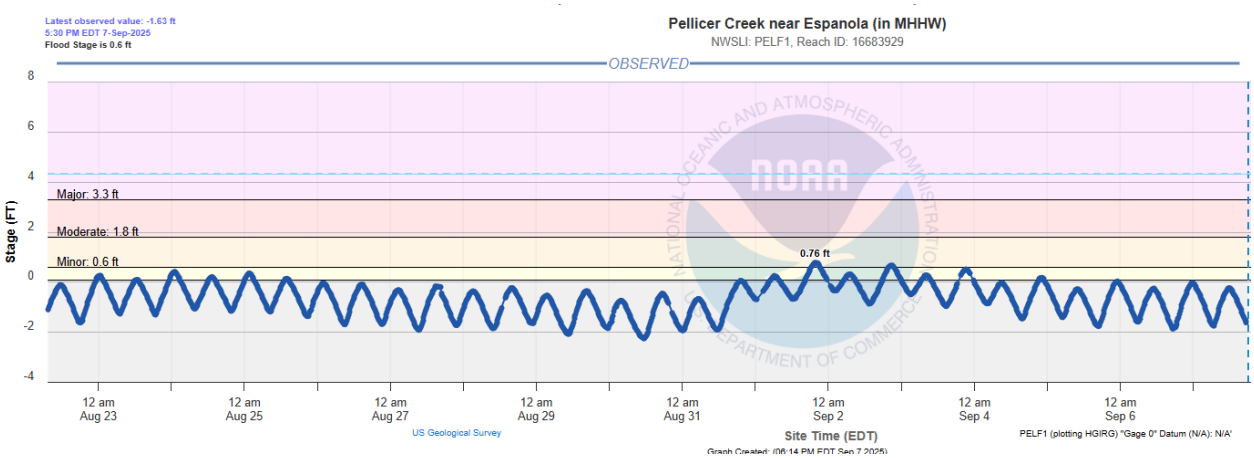
The mosquito population remained at low levels this week with no spraying for adult mosquitoes for a third week. The bar graph below shows the total number of adult mosquitoes from all traps in the District for the past year (TTM).



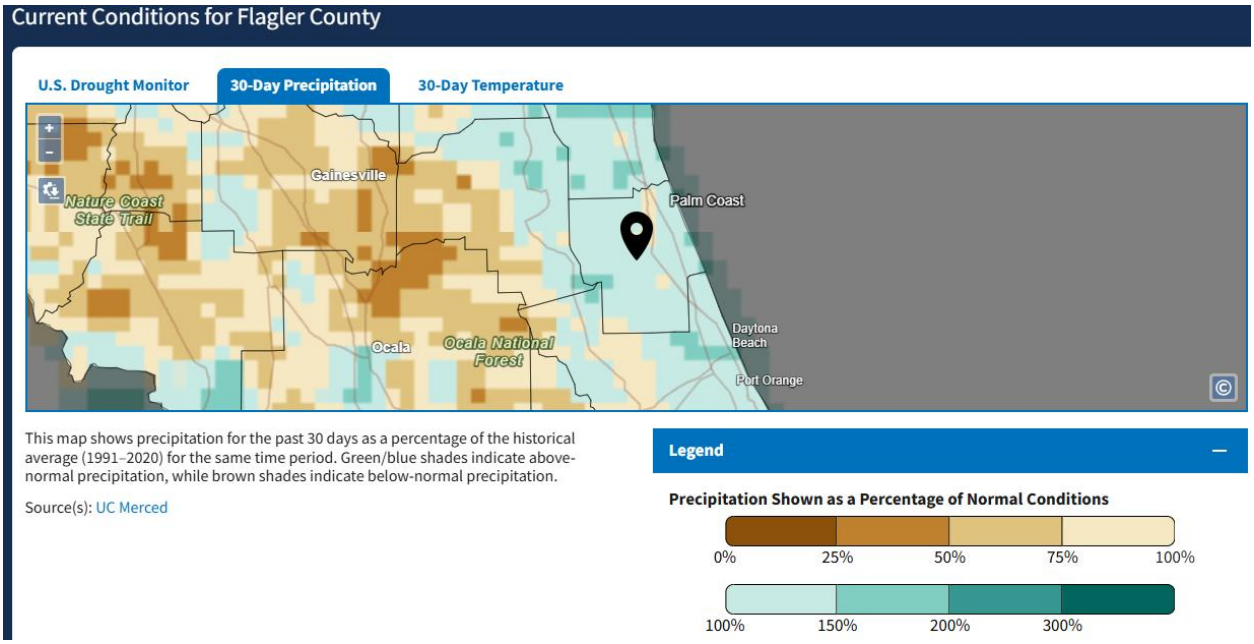
For most of 2025 the mosquito population has been at low levels. If you look at the graph above, we had about the same level of mosquitoes as we did in December. It has been five weeks of roughly flat mosquito population numbers at approximately baseline values following aerial adulticide treatments.



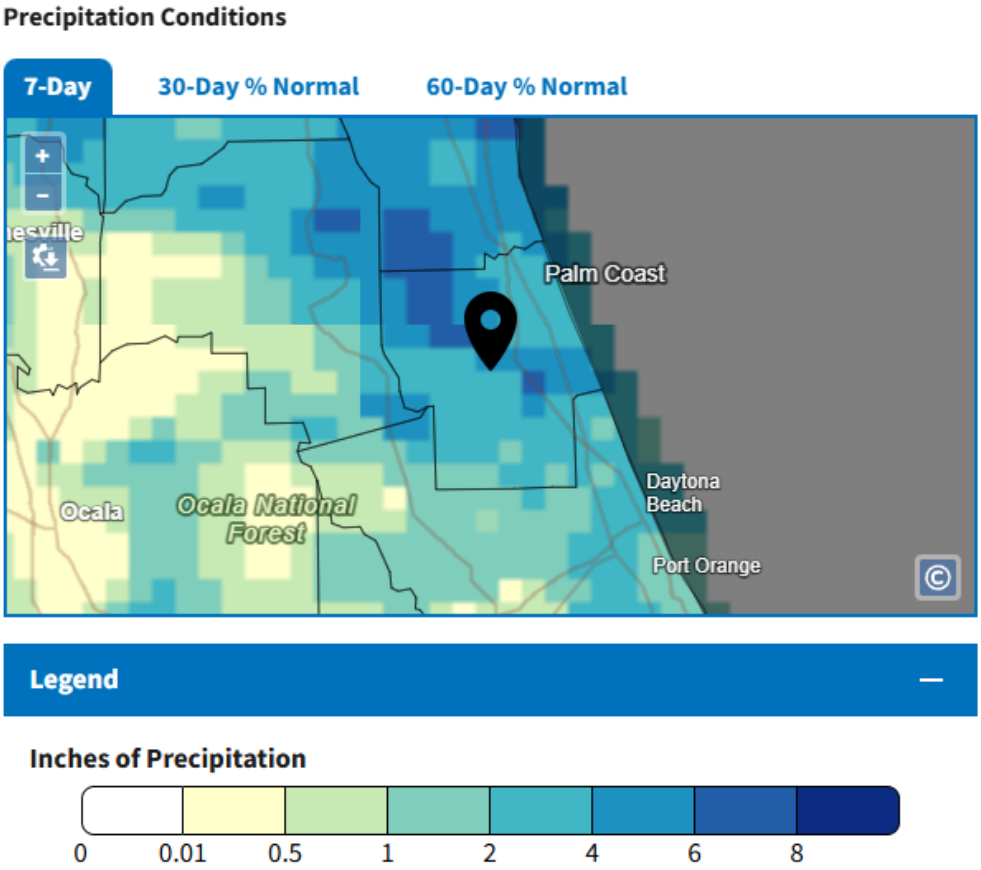
As Hurricane Erin passed by, well out in the Atlantic, it pushed up the tidal elevation, particularly on the back side of the storm with highest tides on August 24. Tides receded to normal levels, but then increased to even higher levels this week. The persistent northeast and east winds essentially acted like a dam, preventing the normal outflow of water from coastal rivers and bays, while simultaneously pushing additional ocean water onshore - a double effect that significantly worsened the tidal flooding. The flooding could have been enhanced by low pressure systems off the east coast of the U.S. that can work to 'back up' the Gulf Stream, which is the strong ocean current that moves warm water from the Gulf into the Atlantic, creating temporary water level increases. NOAA tide data from Pellicer Creek below.



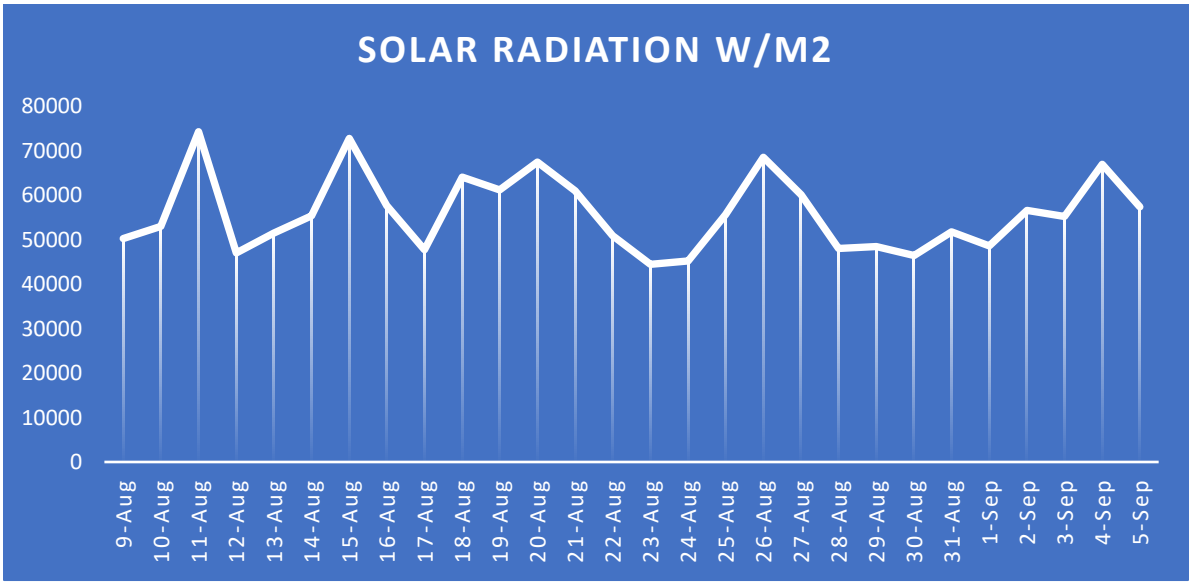
Rainfall in the District ranged from 1.0” to 3.1”. The percentage of Flagler County that is abnormally dry (D0) remained at zero. The map below from NWS https://www.drought.gov/states/florida/county/flagler Indicates all of Flagler County is above normal precipitation as of 9/3/2025.



Considerable rainfall had fallen last week (graphic below), and it is still anticipated there will be resulting mosquito floodwater activity in the coming days. This time of year, a seven-to-ten-day window until emergence is typical. However, environmental factors can delay the emergence and arrival of adult mosquitoes.

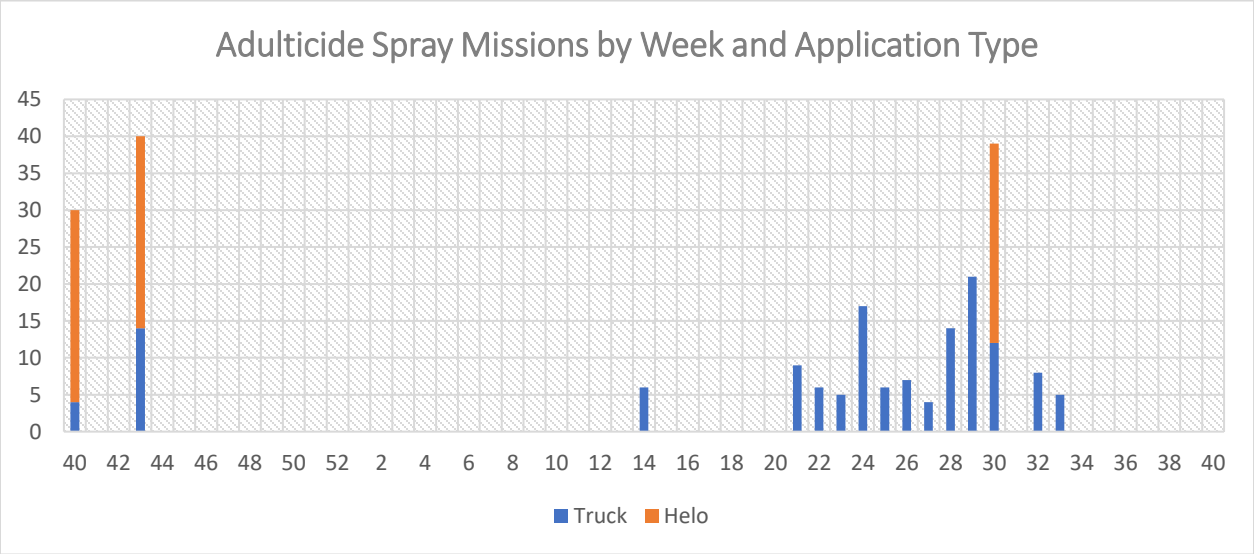


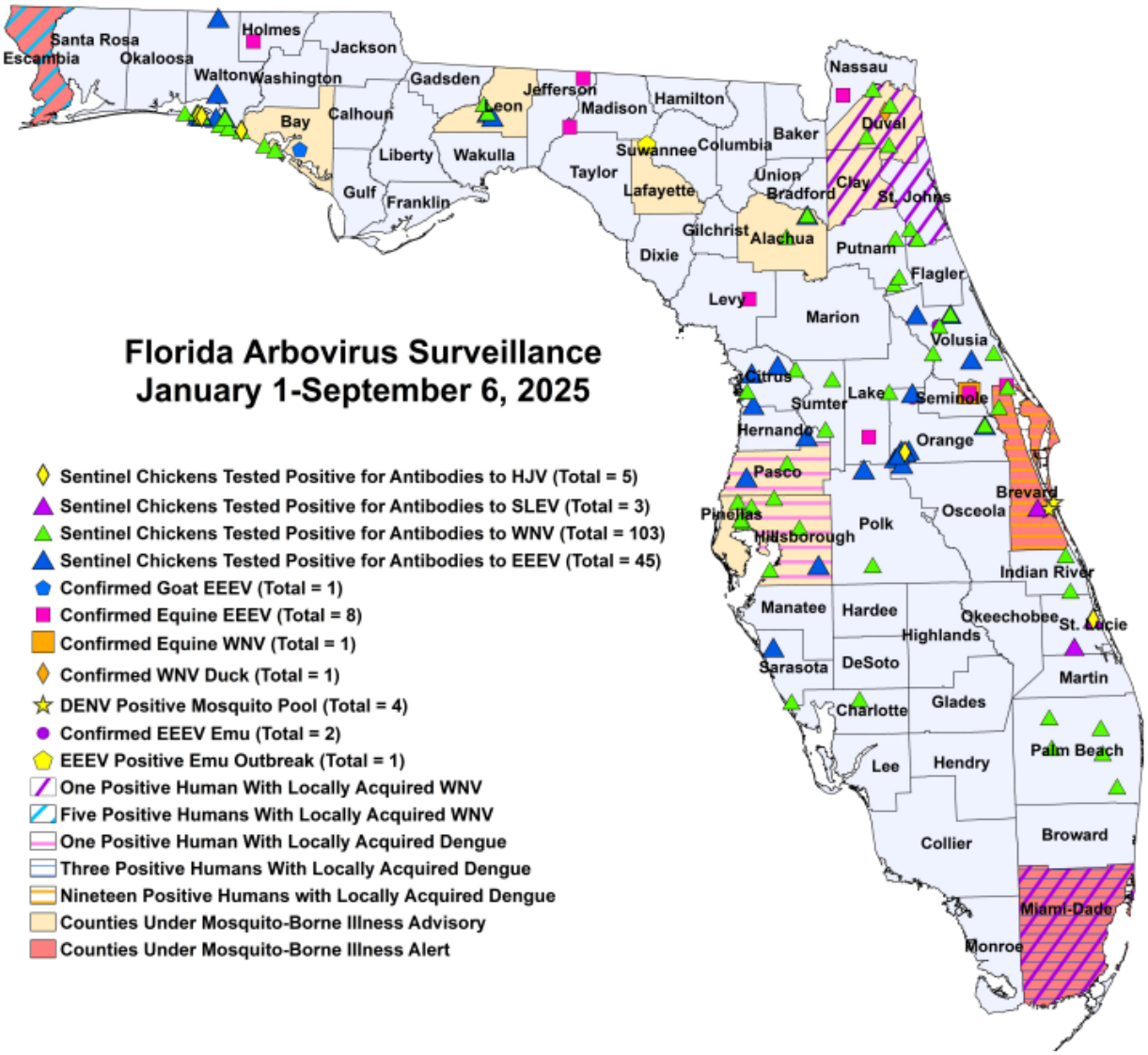
The week following the majority of the rain had low solar radiation daily totals.



Mosquito larvae in the water feed on microorganisms, some of which are photosynthetic. Reducing light availability therefore limits the food supply. As long as the areas remain flooded, the larvae can continue to grow at a slower rate than is typical and eventually emerge as flying, biting adults ready to migrate many miles in search of a blood meal.

No spraying this week (36).





Advisories/Alerts: Alachua, Bay, Clay, Duval, Hillsborough, Lafayette, Leon, Pasco, and Pinellas counties are currently under a mosquito-borne illness advisory. Brevard, Escambia, and Miami-Dade counties are currently under a mosquito-borne illness alert. See the full DOH Report

*Explainer- Mosquito-borne diseases are routinely spread by many species of mosquitoes in Florida. Mosquito control programs work to keep the population of mosquitoes at low numbers to minimize disease spread. A higher likelihood of disease transmission exists when mosquito populations are allowed to persist for a long enough time to become infected and spread diseases. The more mosquitoes there are, the greater the chances of encountering an infected mosquito. The strategy is simple: monitor the mosquito population for increases and knock them down quickly, either before they become adults or before they have a chance to spread diseases.

Rainfall totals for the week by manual rain gauge location in blue.