

# Florida Key Deer Hurricane Irma Report

## *Salinity Measurements*

Prepared for:  
National Key Deer Refuge  
South Florida Ecological Services Field Office



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# FLORIDA KEY DEER HURRICANE IRMA REPORT

## *SALINITY MEASUREMENTS*

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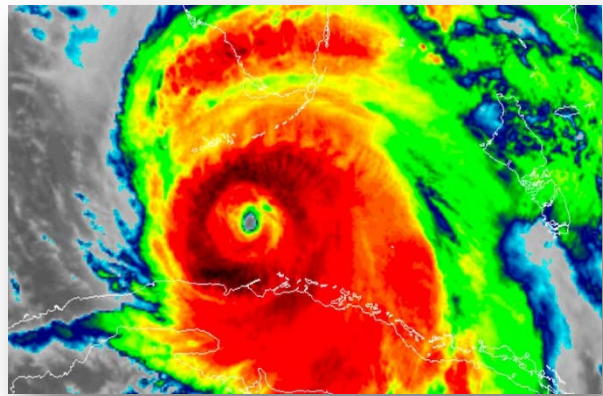
# FLORIDA KEY DEER HURRICANE IRMA REPORT SALINITY MEASUREMENTS

## OVERVIEW

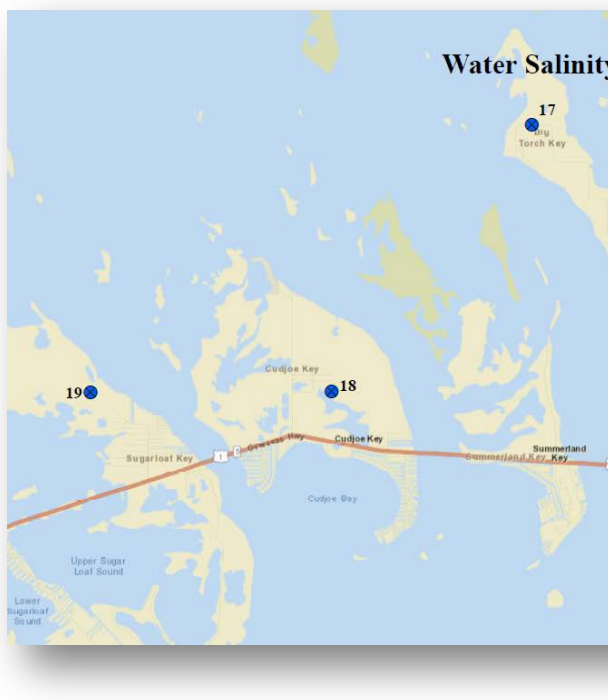
Hurricane Irma was a Category 4 storm when the eye of the storm passed through the center of the Florida Key deer range on 9 September 2017 (Fig. 1). The passage of Hurricane Irma caused significant property damage to the area as well as impacts to vegetation/water resources for the Key deer population. The focus of this report is to provide density and survival estimates post-Hurricane Irma to U.S. Fish and Wildlife Service (USFWS) managers.

## SALINITY MEASUREMENTS

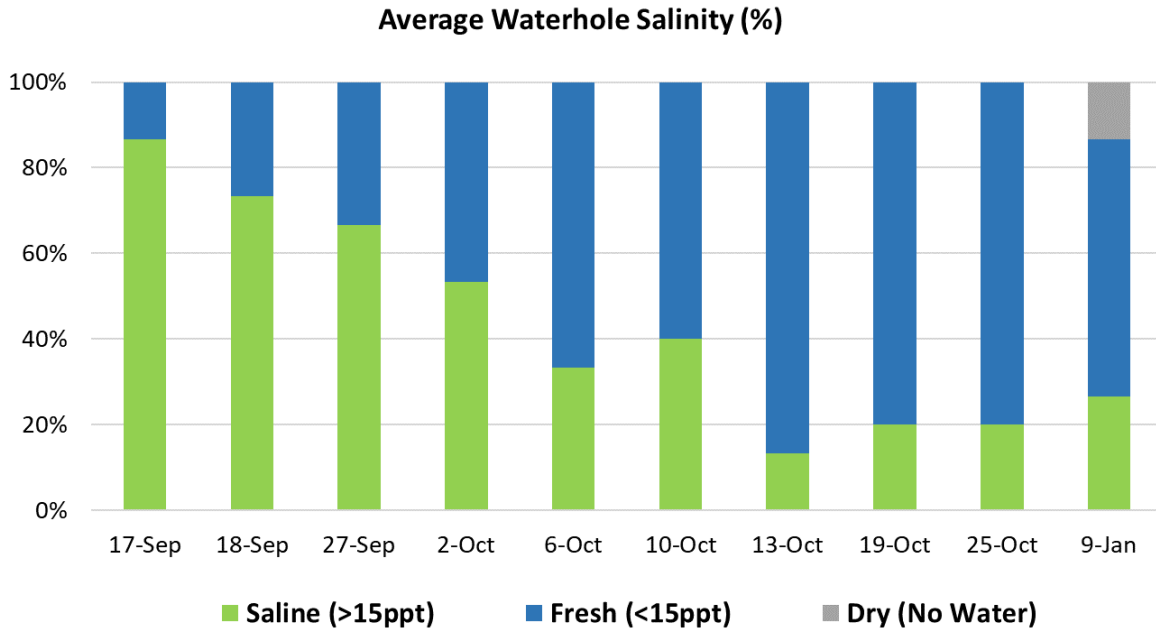
Freshwater is an important resource for Key deer. Following Hurricane Irma, salinity measurements at select waterholes were monitored to estimate recovery of freshwater solution holes (Fig. 2). The following information is a summary of those measurements.



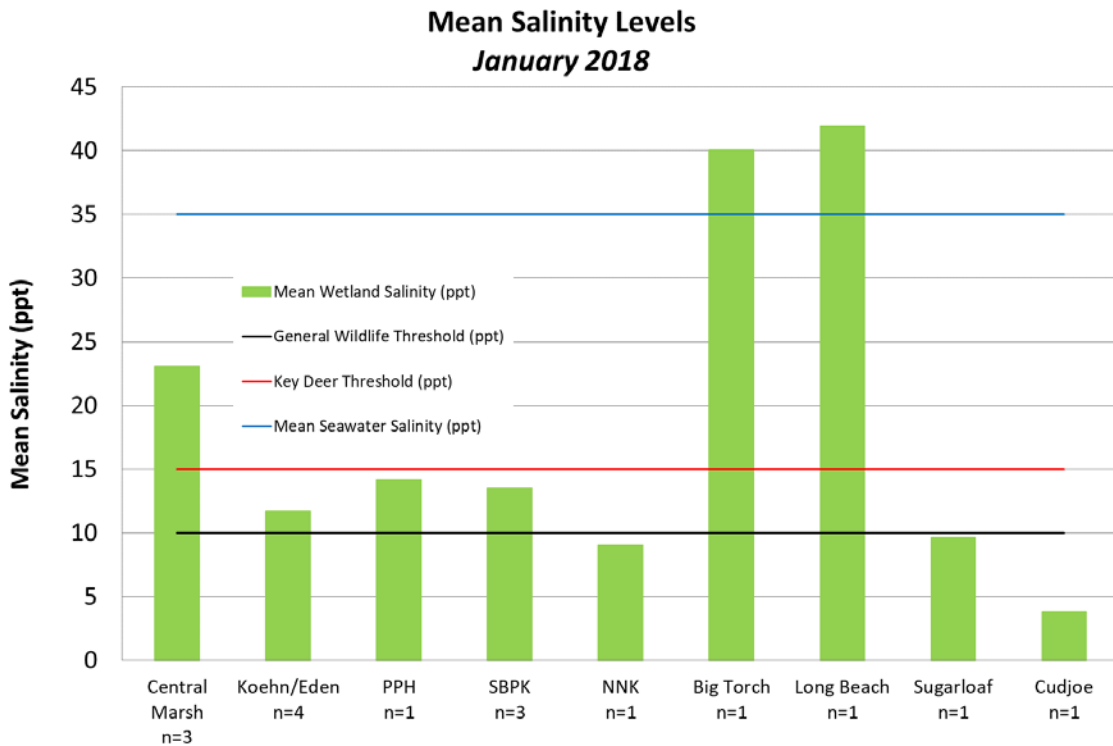
**Figure 1.** Hurricane Irma prior to the arrival in the Lower Florida Keys, 2017.



**Figure 2.** Location of freshwater holes monitored post-Hurricane Irma.



**Figure 3.** Average fresh waterhole salinity by date and status monitored post-Hurricane Irma.



**Figure 3.** Average waterhole salinity by area monitored post-Hurricane Irma, Jan 2018.