

Hurricane Michael RCW Impact and Response Update

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The best available storm centerline track from the NOAA Hurricane Center (NHC) indicates Hurricane Michael passed within ~30 miles of the approximate center of the Apalachicola-St. Marks-Tate's Hell population, ~12 miles from the Silver Lake WMA population, and ~14 miles from the Jones Ecological Center population (Figure 1). Based on available NHC windswaths, these populations or portions thereof experienced hurricane force winds. Storm centerlines, sustained winds on centerline, windfields and other parameters are still being evaluated by NHC and may change.

October 25, 2018

Silver Lake WMA-36 active clusters

As of October 16, Joe Burnam (GADNR) reported that two teams operated to open roads into Silver Lake WMA where surveys to date indicated the loss of 103 of 207 cavity trees. He anticipates a loss of up to 130 cavity trees when surveys are completed. Impacts to clusters ranged from those with a loss of all cavity trees to others that were relatively intact. Crews have been recruited with volunteers to install artificial cavities during the week of October 22.

Information from Joe Burnam.

Jones Ecological Research Center-38 active clusters

As of October 19, Brandon Rutledge and crew inspected 41 of 51 clusters including all active clusters where 24% of all cavities (213) were damaged. Installation of artificial cavities has been initiated with an anticipated date of completion in a couple of weeks.

Information from Brandon Rutledge.

Apalachicola National Forest (833 active)-St. Marks NWR (28 active)-Tate's Hell (56 active) clusters

This is the largest single demographic population range wide with ~916 active clusters pre-storm. Most clusters are on Apalachicola National Forest.

The U.S. Forest Service (USFS) completed aerial recon flights for overall Apalachicola forest and road conditions and an incident command has been established. The western and northwestern quarter of Apalachicola is the most severely affected, although the forest is not catastrophically damaged as other forest properties further west near the storm centerline. Timber in western portions of the Apalachicola is severely to moderately affected as assessed by Florida Forest Service aerial imagery, aerial surveys and ground reconnaissance. Western areas of the Apalachicola District experienced hurricane force winds (≥ 74 mph), while tropical storm winds (39 – 73 mph) occurred in eastern sections in the Wakulla District. Crews are still clearing roads and staff have begun to access RCW clusters for assessments. Initial coarse assessments are that ~530 artificial cavities may be required. USFS sources of artificial cavity inserts have been identified. Current surveys in clusters, where accessible, are being prioritized for those required to support the SRTC Apalachicola translocation donor population. The ability of the Apalachicola donor population to serve translocation recipients allocated for 2018 is still uncertain. USFS crews operating as 4 2-person teams have been identified to survey and install

artificial cavities to supplement Apalachicola staff. Crews from other forests are expected to begin work next week. The current objective is to provide at least 4 suitable cavities in all damaged clusters within 50 days.

Information from Mike Keys, John Dunlap, Joel Casto and Sandie Kilpatrick.

Florida Forest Service (FFS) personnel are mostly deployed on various interagency teams to provide emergency support services for human health, safety and recovery. Tate's Hell State Forest is currently open to the public, including all campgrounds except the Womack Creek Campground, as general forest and infrastructure damage assessments are being conducted. Forest damage is moderate as classified by the Florida Forest Service. Status of RCW clusters and need for artificial cavities will be assessed at some future time.

Information from Vince Morris.

Storm damage to cavity trees across St. Marks NWR is very minor. Cluster surveys have been completed with the identification of only 5 lost cavity trees. The St. Marks NWR population segment in the Panacea Unit is associated with the Apalachicola-St. Marks NWR-Tate's Hell State Forest demographic population. The small RCW population undergoing reintroduction in the eastern St. Marks Unit is a separate demographic population where portions were inundated by the storm surge.

Information from Terry Peacock and Joe Reinman.

River Creek WMA-2 active clusters

This WMA (GADNR) is the site of a SRTC RCW reintroduction. Storm damage is light with no losses of cavity trees.

Information from Joe Burnam.

Red Hills Private Lands

RCWs on private lands enrolled in the Georgia RCW Safe Harbor program represent at least 3 demographic populations with 97, 2 and 2 active clusters. This area experienced tropical storm force winds. Initial recon and surveys by GADNR and Tall Timbers indicate relatively light damage.

Information from Joe Burnam.

Eglin Air Force Base-533 active clusters

Very minor damage is apparent.

Information from Aliza Sager.

Other

Other populations further inland or on the flanks are either unaffected or with exceedingly minor damage to cavity trees.

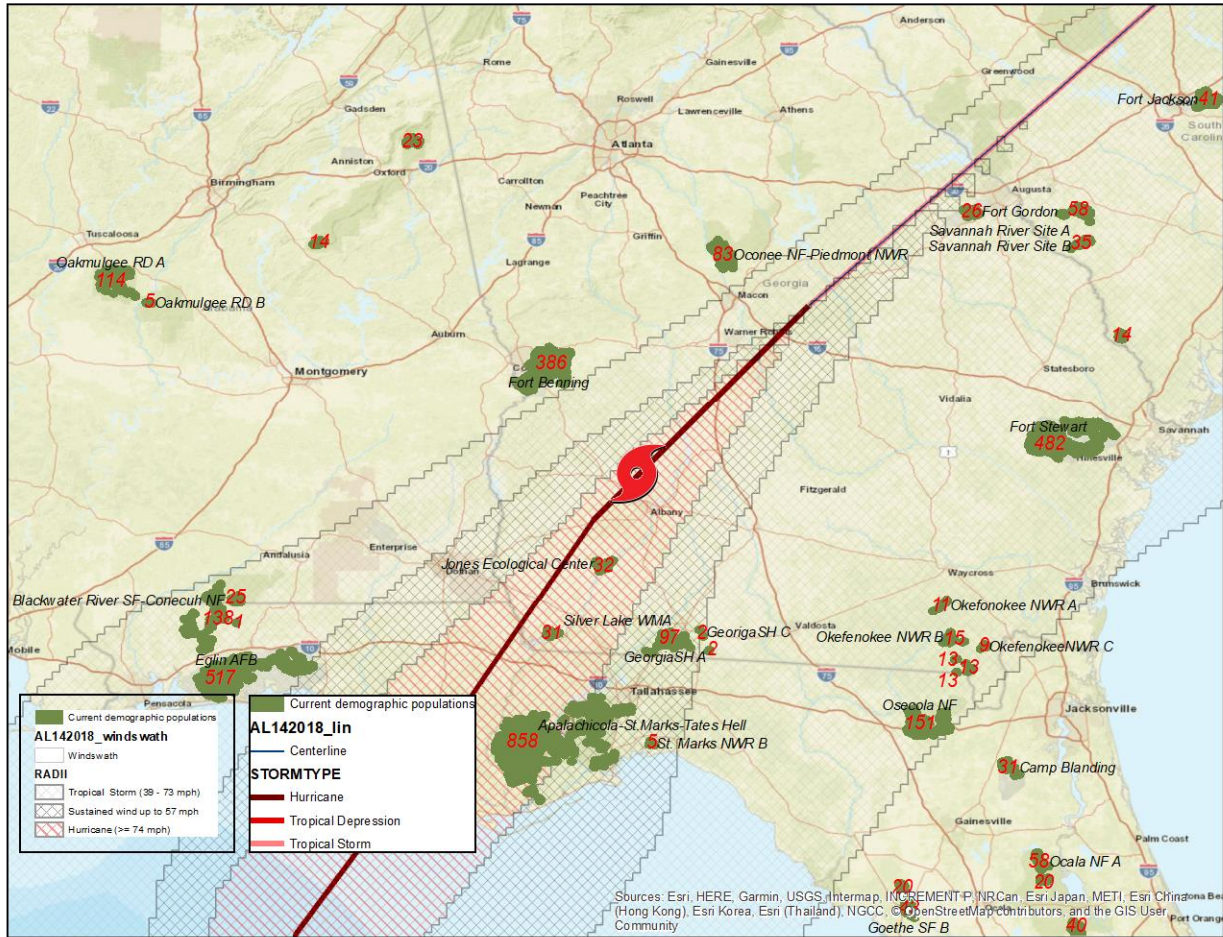


Figure 1. Hurricane Michael centerline and winds swath relative to RCW demographic populations. Hurricane GIS from National Hurricane Center.

November 6, 2018

Silver Lake WMA-36 active clusters

Cluster cavity surveys have been completed. Virtually every cluster had some sort of cavity tree damage. Artificial cavities have been installed as replacements in every cluster except two that were completely lost and without suitable remaining trees for cavities. In many instances, RCWs were observed to occupy new artificial cavities immediately after installation. Damage to habitat was heterogeneous, with some stands severely affected. Cavity installations and some supplies were provided with assistance from Tall Timbers and Fort Stewart. GADNF staff are evaluating needs for salvage and treatments to reduce hazardous fire fuels, including project proposals with funding support to other organizations. Information from Joe Burnam.

Jones Ecological Research Center-38 active clusters

Artificial cavities have been installed for all but two clusters. Overall, about 25% of cavity trees were lost. Salvage, fuel reduction and restoration treatments are being considered.

Apalachicola National Forest (833 active)-St. Marks NWR (28 active)-Tate's Hell (56 active) clusters

Interior Apalachicola roads are either now or almost completely open. Crews and personnel from other national forests are deployed to assist Apalachicola staff with surveys and installation of artificial cavities. The short-term objective is providing at least 4 suitable cavities in each cluster. Afterwards, additional cavities will be installed as needed for particular RCW groups. Storm damage to trees in clusters appears heterogeneous with relatively minor impacts to some and more extensive effects to others. Joel Casto surveyed ~100 clusters annually monitored for SRTC translocation and identified, overall, a need for about 2 artificial cavities for each cluster. Apalachicola generally anticipates installing ~600 artificial cavities in clusters in the western portions of the forest. Apalachicola expects to complete a 100% survey of all clusters on the forest within one month. ANF has declared emergency consultation with the Service's Jacksonville FL field office to salvage hazardous fire fuels from down timber and debris for human health and safety under Endangered Species Act section 7 emergency consultation provisions. ANF is preparing NEPA analyses and compliance documents for these future salvage operations. For a variety of reasons, ANF is not currently expected to provide the 15 subadult RCW pairs, allocated by the Southern Range Translocation Cooperative and funded by NFWF-Southern Company, to the DeSoto National Forest and River Creek WMA recipients. Conversations are in progress to evaluate whether the Osceola National Forest translocation donor might provide some of the RCW subadults to recipients originally scheduled for the ANF donor population. Information from Joel Casto and Sandie Kilpatrick.

At Tate's Hell State Forest, Florida Fish and Wildlife Conservation Commission (FWC) personnel completed cluster surveys and cavity installations. For 61 active clusters pre-storm, 23 of 527 cavity trees were blown down. However, only 6 clusters required artificial cavities. Information from Adrienne Doyle (FWC).

Red Hills Private Lands

Additional recon on selected properties by Joe Burnam, Jim Cox and Rob Meyer continued to confirm overall minor damage to cavity trees on properties enrolled in the GADNR safe harbor program. At Greenwood Plantation, for example, relatively few pines are down overall and mostly in wet areas. Information from Joe Burnam.

Tall Timbers

About 12-14% of all cavity trees were lost, and artificial cavities have been installed. Overall, ~10-15% of all pines were damaged or down. Information from Jim Cox.