

SECTION 8 – MAJOR STORM RESPONSE

This section is specifically intended for those persons whose permit authorizes them to **conduct nesting surveys** and provides instructions in the event of a major storm (sustained winds of 30 mph or higher). It also provides some additional information about what might happen on your beach after the storm.

1. **Your safety** --- The safety of our staff and volunteers are our top priority. Please make sure you are safe! Do not risk your safety or wellbeing in order to conduct any of the turtle--related activities outlined below. Stay off the beach during a storm event. Please comply with all mandatory evacuation orders and take time to ensure that your family and personal property are secure.
2. **Nest Protection** – If possible, get the best GPS coordinates you can on any nests that remain on the beach prior to the storm. Placing additional marking stakes further back and higher up in the dunes is also a good idea whenever possible. Note the distance between the GPS coordinates and the additional marking stake and record any detailed location notes. You may also want to take a photograph of the nest area and marking stake to give a visual reference that shows any landmarks or fixed structures in the background. While the SCDNR Guidelines do not allow you to dig up nests to move the eggs or release hatchlings before natural emergence, you can respond to any nests that are washing away by reburying the eggs on the beach if there is dry beach available. Do not place them in buckets or other containers. If you are using screens or caging material, especially plastic screens and plastic tent pegs we request that you remove these items along with any depot of supplies stored on the beach to avoid adding more plastic debris in our coastal environment should they wash out.
3. **Nest inventories/excavations** --- Conducting nest inventories early because of approaching storms is not permitted. While it may seem counterintuitive, data collected from early excavations is not useful because it provides a skewed picture of what the hatch and emergence success of that nest truly was. Yes, storms have an impact on sea turtles, but turtles have adapted their nesting strategy to accommodate for natural events such as hurricanes. Each nesting female turtle deposits several nests throughout the duration of the nesting season --- essentially hedging her bets to make sure that even if a storm hits at some point during the nesting season, there is still a high probability that at least a few of her nests will incubate successfully without being impacted by a storm. No storm season is a total loss for sea turtles.

4. **Eggs** – After a storm when people return to the beach, members of the public may bring you eggs they found on the beach. You may accept these eggs (and then promptly bury them back on the beach) but be sure to educate the folks dropping them off that these eggs are most likely not viable and not going to produce hatchlings. We do not want to encourage people to be salvaging non-viable eggs or digging up viable nests. People want to help the turtles, so encourage them to help turtles through other mechanisms that will contribute to the preservation and protection of the populations. If you are a facility or a permit holder that does not conduct nesting surveys and are brought eggs, please coordinate the reburial of the eggs with SCDNR. No one should be incubating eggs at a facility, home, or office regardless of how they obtained them --- no permit allows this activity.

5. **Post-storm recovery** – When you return to the beach, please make every effort to locate any nests that were still incubating. Do not assume the nests are lost due to the storm. Only areas with substantial sand loss (2 feet or more) are considered lost to a storm. You can locate a nest using your GPS coordinates, secondary marking stakes, photographs, or distances from a fixed structure like a house recorded in your notes. If the dune has not washed away the nest can still be viable even under large amounts of sand. Nests can be probed to locate the cavity. Remark these areas and continue to monitor them. If a substantial amount of sand accumulated over the nest, you can remove enough to keep approximately 12 inches on top.
Typically, the activities that will be authorized under an emergency order from the Governor and SCDHEC OCRM include immediate efforts to shore up homes or roads that have been damaged – replacing pilings, adding structural support, as well as sand placement (ex: sand scraping with use of bulldozer). State and federal laws protecting marine turtles are still in effect.
Loggerheads may continue to try to nest on these beaches after the storm. Nests cannot be relocated for these emergency activities, but they can and should be marked clearly to reduce the potential for negative impacts. If there is a federal action, we might be able to work with the USFWS to allow nest relocation in some areas. Again, such relocation would have to be completed by 9 am the next morning. Do not relocate anything unless approved by SCDNR. Locating nests whose stakes have been washed out are helpful to further decrease potential impacts from activities aimed at shoring up the coast, especially sand placement.

6. **Debris removal** – This activity may also be allowed under a state emergency order – heavy equipment will be everywhere. If you can access the beach, do the best you can to mark and protect nests. While we do not expect you to be involved in regulatory actions, we will support your efforts to protect the remaining nests on your beach.

7. **Armoring** --- Sea walls, rocks, and geotubes **cannot** be installed under the state emergency order. Local governments can allow installation of **TEMPORARY** armoring structures **IF** they declare an emergency and issue permits for such structures. Regulations concerning emergency orders can be found on SCDHEC OCRM’s web site.

8. **Coordination** --- We will direct anyone working on the beach to coordinate with the local Permit Holder after receiving authorization from SCDHEC OCRM. Construction equipment should not access the beach each day until a daily morning survey is completed (if you are still surveying) and an “all clear” is reported. This ensures that any sea turtle activity from the night before has been documented.

9. **Structures** --- Walkovers, decks, and other such non--essential structures cannot be installed under an emergency order. Unless SCDHEC OCRM has coordinated with SCDNR and allowed the work to proceed (usually because no additional nesting is occurring and existing nests have been lost), no such work should be ongoing on your beaches until after nesting season.