



# Seagrass & Wrack



Did you know the Central Coast seagrass beds found in Brisbane Water, Tuggerah Lakes and Lake Macquarie are home to White's Seahorse (*Hippocampus whitei*), who are now sadly endangered in NSW.

Seagrasses are marine meadows that play an important role in for our diverse coastal ecosystems this is because they prefer sheltered areas and shallow waters. They keep our marine environments healthy by oxygenating the water, providing food and shelter to marine organisms, stabilise sediments (stop erosion), recycle nutrients, act as a coastline barrier, and sequester carbon.

These beautiful medium sized seahorses with hard bony armour on their bodies use the seagrass as shelter, breeding habitat and nursery, feeding on small invertebrates that also inhabit the seagrass.

Seagrasses are not your average grass and should not be confused with seaweed. What makes them unique is they are the only flowering plants that can live underwater, using their roots to anchor themselves into the soft sediment on the seafloor absorbing and storing nutrients which is crucial to a healthy marine ecosystem.





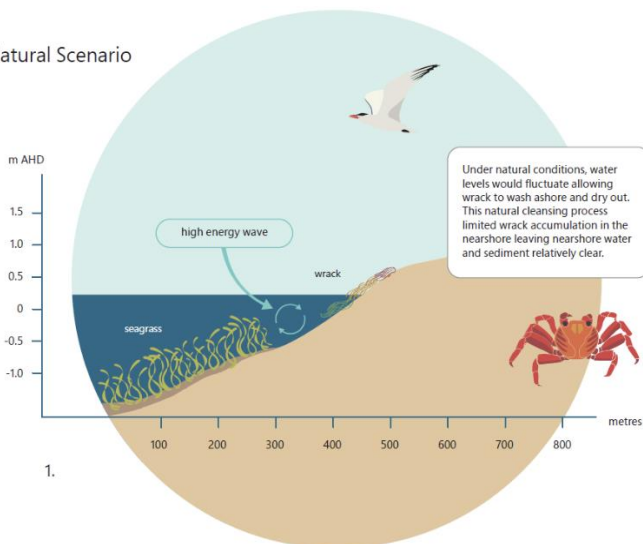
Seagrass wrack refers to detached leaves of seagrass that are naturally buoyant and float to the surface, leaves. They become dislodged by wind and tidal currents, bottom-feeding birds, boats and fishing nets. This buoyancy allows wracks to cluster together forming rafts that are carried towards the shoreline.

Wrack is a natural part of the estuary, although it can be unsightly it also serves an important service, by providing food source and habitat for the local flora and fauna.

However modified shorelines may adversely affect wrack dispersal resulting in debris accumulating in shallow water near the shore. This excess accumulation leads to the wrack decomposing anaerobically (without oxygen) and feeding on excess nutrients, creating unpleasant odours and the formation of dark sediment called “Black Ooze”.



Natural Scenario



Black Ooze is of concern because of its toxic nature to flora and fauna and can negatively impact the local community due to the smell being associated with rotten eggs (Sulfidic Smell) together with its sticky sediment.