Hurricane hazards – Marine Stats and Facts

FACTS

1. Hurricanes can cause extensive damage to boats, ships, and other maritime infrastructure. Strong winds and large waves can capsize or damage vessels,
2. Hurricanes on marine transportation and shipping can be severe. Ports may have to suspend operations, leading to delays in the movement of goods, commodities, and supplies.
3. Hurricanes generate powerful storm surges that can erode coastal areas and damage critical marine habitats such as coral reefs, seagrass beds, and mangroves.
4. Heavy rainfall associated with hurricanes can lead to runoff and flooding, carrying pollutants from land into marine ecosystems.
5. Hurricanes caused disruptions to fishing activities, damage to fishing infrastructure, and changes in the availability and distribution of fish stocks.
6. Hurricanes can damage drilling rigs, pipelines, and other infrastructure, potentially leading to oil spills or leaks, which can have severe environmental consequences.
7. The disturbance caused by hurricanes can disrupt the ecological balance of marine ecosystems.

STATS

- On average, the Atlantic Basin experiences around 12 named storms, 6 hurricanes, and 3 major hurricanes (Category 3 or higher) each year, the Pacific Basin, the Eastern Pacific, and Central Pacific regions, see a significant number of hurricanes annually.
- Hurricanes are classified based on their maximum sustained wind speeds using the Saffir-Simpson Hurricane Wind Scale. Category 1 hurricanes have wind speeds between 74 and 95 mph

(119 and 153 km/h), while Category 5 hurricanes have wind speeds exceeding 156 mph (251 km/h).

- According to the National Hurricane Center (NHC), storm surge, rainfall flooding, high surf, and deaths just offshore (within 50 nautical miles of the coast) combined for 88% of all deaths in the U.S. from hurricanes, tropical storms or tropical depressions.
- The intense eyewall winds of Category 5 Hurricane Andrew destroyed over 25,000 homes and damaged 101,000 more in Homestead and the south Miami suburbs in August 1992.
- In 2021, there were 68 fatalities due to hurricanes reported in the United States. Since the beginning of the century, the highest number of fatalities was recorded in 2005, when four major hurricanes – including Hurricane Katrina – resulted in 1,518 deaths.