

# Great Barrier Reef

April 5, 2022

**In news-** Recently, Australia has confirmed that a wide stretch of the Great Barrier Reef has been hit by a sixth mass bleaching event.

## **Key updates-**

- **It is the fourth time in six years that such severe and widespread damage** caused by warm sea temperatures has been detected.
- Only two mass bleaching events had ever been recorded until 2016.
- There are particular concerns that this **bleaching event has occurred in the same year as a La Niña weather phenomenon.**
- Typically in Australia, a La Niña brings cooler temperatures.
- Scientists are now fearful of the damage that could be caused by the next El Niño.
- The Great Barrier Reef Marine Park Authority has warned that water temperatures in parts of the reef had been up to 4 degree C above the March average.



## **What is Coral bleaching?**

- **Coral bleaching is the process when corals become white**

**due to various stressors**, such as changes in temperature, light, or nutrients.

- **Bleaching occurs when coral polyps expel the algae that live inside their tissue**, causing the coral to turn white.
- When a coral bleaches, it is not dead. Corals can survive a bleaching event, but they are under more stress and are subject to mortality.
- Warmer water temperatures can also result in coral bleaching.
- **Other environmental pressures on the reef and its ecosystem include** runoff, climate change accompanied by mass coral bleaching, dumping of dredging sludge and cyclic population outbreaks of the crown-of-thorns starfish.

### **About Great Barrier Reef (GBR)-**

- The Great Barrier Reef **is located in the Coral Sea**, off the coast of Queensland, Australia **and contains the world's largest collection of coral reefs**.
- This reef structure is composed of and built by billions of tiny organisms, **known as coral polyps**.
- It can be **seen from outer space and is the world's biggest single structure made by living organisms**.
- It also holds great scientific interest as the habitat of species such as the **dugong ('sea cow')** and the **large green turtle**, which are threatened with extinction.
- It supports a wide diversity of life and was selected as a **World Heritage Site in 1981**.
- CNN labeled it one of the seven natural wonders of the world in 1997.
- The Queensland National Trust named it a state icon of Queensland in 2006.

A large part of the reef is protected by the **Great Barrier Reef Marine Park**, which helps to limit the impact of human use, such as fishing and tourism.