

Lonar crater lake

July 31, 2021

In news- Recently the Nagpur bench of the Bombay High Court directed the Maharashtra government to establish **Lonar Crater Lake Development Authority** for the conservation of Lonar crater lake. The petitions were filed in the court to save the crater lake which is being contaminated due to passing of sewage water and other such reasons.

About the lake-

- It is in the Buldhana district of Maharashtra and is a 50000-year-old Crater Lake.
- The **water of the lake is both saline and alkaline in nature**, which makes it one-of-its-kind not only in India, but also in the world.
- This **wetland on the Deccan Plateau is an endorheic** or closed basin.
- This **blue lagoon** was created due to a meteorite.
- The crater on which the lake sits is oval in shape indicating that the comet or asteroid hit the spot at an angle of 35 to 40 degrees.
- The outer region of the lake is a neutral region that has a pH level of 7 while the inner region is the alkaline part that has a pH level of 11.
- Both the regions are unique and house diverse flora and fauna.
- The most prominent reptiles found in the Lonar Crater Lake are the monitor lizards.
- Another feature of this lake is the non-symbiotic nitrogen fixing microbes.
- The lake has been declared a **Ramsar site** since November, 2020.

The colour of the lake water **recently had turned pink**, due to the presence of **Haloarchaea or halophilic archaea**. The

absence of rain, less human interference and high temperature resulted in the evaporation of water which increased its salinity and pH that facilitated the growth of halophilic microbes. Now the lake has turned back to its original colour.

Though the lake is the most famous one for being the world's largest basaltic impact crater, the **other two India's prehistoric meteoric craters** are **Dhala in Madhya Pradesh and Ramgarh in Rajasthan.**