

First-ever Colorado River water shortage declared

August 18, 2021

In news- For the first time, the US government has declared a water shortage for the Colorado river basin.

Key updates

- As per the Bureau of Reclamation, which manages water and power deliveries, the release of water from two large reservoirs called Lake Mead and Lake Powell will be affected because of a historic drought that is impacting the entire Colorado river basin.
- Governors of ten western US states wrote to US President Joe Biden on August 15, requesting him to declare a Federal Emergency Management Agency (FEMA) drought disaster in these states.

Reasons for the shortage

- This Colorado River Basin has been experiencing a **prolonged drought since 2000**.
- The historic dry conditions have been exacerbated by recent record-setting temperatures.
- This persistent drought has led to lowering down of the water levels in the basin's reservoirs to meet the demand over the years.
- **There are two reservoirs at the centre of this water shortage**. One is **Lake Mead**, located in the state of Nevada just a few miles from Las Vegas.
- Lake Mead is the largest reservoir in the US in terms of volume and was formed in the 1930s by the Hoover Dam in Southern Nevada.
- The other is **Lake Powell**, the reservoir created by the Glen Canyon Dam in Arizona.



- Over the last two decades, a sustained drought has been lowering the water levels in these two reservoirs.
- Even with a great water storing capacity, over the years the demand for water from the basin has increased whereas supply is restricted.
- The increasing demand is one reason that the levels of water in Lake Mead and Lake Powell have fallen.

Impact

- It will have implications for residents in southwestern US and some parts of northwestern Mexico starting October 2021.
- It will also impact farmers, industries, local communities and economies.

About Colorado River-

- It **flows from the Rocky Mountains into southwestern US and into Mexico.**
- Starting in the central Rocky Mountains of Colorado in Grand Lake, Colorado, the river flows generally southwest across the Colorado Plateau and through the **Grand Canyon** before reaching Lake Mead on the Arizona–Nevada border, where it turns south toward the international border.
- **The river is fed by snowmelt from the Rocky and Wasatch mountains and flows a distance of over 2,250 km** across seven states and into Mexico.

- The **Colorado River Basin is divided into**
 - The Upper (Wyoming, Colorado, New Mexico, Utah and northern Arizona) and
 - Lower Basins (parts of Nevada, Arizona, California, southwestern Utah and western New Mexico).
- **The entire Colorado river system is managed with a series of dams and canals** to regulate flood control, water conservation and hydropower benefits.
- In the Lower Basin, the **Hoover Dam** controls floods and regulates water delivery and storage.

Apart from the Hoover dam, there is the **Davis Dam, Parker Dam and the Imperial Dam** that regulate the release of water from the Hoover Dam.