

## 5. Discovery of Ancient Buried River in U.P

**Prelims:** Geography

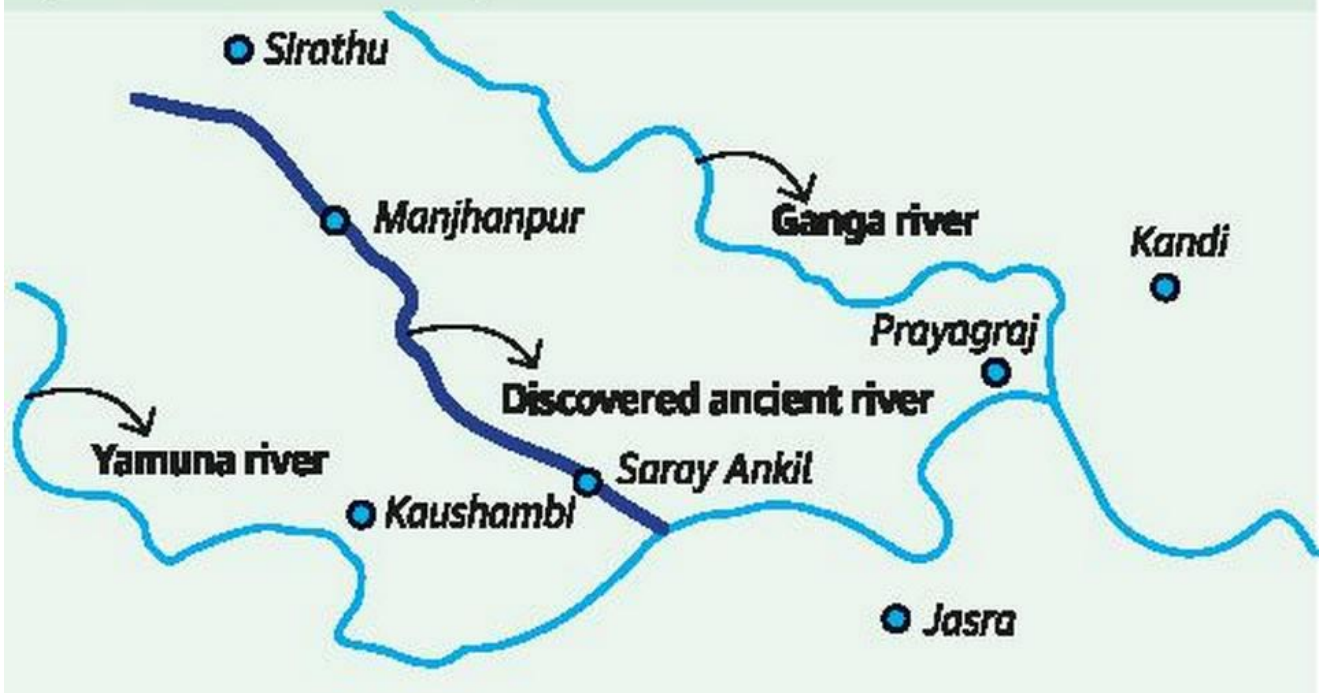
**Mains:** GS-I- Geographical Features and their Location - Changes in Critical Geographical Features (Including Waterbodies and Ice-Caps) and the effects of such changes.

### Why in News?

- ▶▶ The Union Water Ministry has excavated an old, dried-up river in Prayagraj (formerly Allahabad) that linked the Ganga and Yamuna rivers.

## River unearthed

A team of scientists have discovered an “ancient buried river” that links the Ganga and the Yamuna. The map shows the possible course of the paleochannel



### About the River:

- ▶▶ The “ancient buried river” is mapped to be around 4 km wide, 45 km long and consisted of a 15-metre-thick layer buried under soil.
- ▶▶ It was a buried paleochannel that joins the Yamuna river about 26 km south of the current Ganga-Yamuna confluence at Prayagraj.
- ▶▶ These **paleochannels** reveal the course of rivers that have ceased to exist.

### Benefits:

1. Knowledge on subsurface connectivity might play a very crucial role in planning of Ganga cleaning and protecting safe groundwater resources
2. It was also claimed that based on the conclusions on reports and maps of Paleo-channels in north India, it will be useful to map the aquifers (extremely deep stores of groundwater) by the Central Groundwater Board.
3. It also helps to develop a potential groundwater recharge source, according to officials at the National Mission for Clean Ganga (NMCG), a body under the Union Jal Shakti Ministry that coordinates the cleaning of the Ganga.

### About NMCG:

- ▶▶ National Mission for Clean Ganga (NMCG) was registered as a society under the Societies Registration Act 1860.
- ▶▶ It acted as implementation arm of National Ganga River Basin Authority (NGRBA) which was constituted under the provisions of the Environment (Protection) Act (EPA), 1986.
- ▶▶ NGRBA has since been dissolved with effect, consequent to constitution of National Council for Rejuvenation, Protection and Management of River Ganga (referred as National Ganga Council).
- ▶▶ Now, NMCG acts as the implementation wing of the National Ganga Council.
- ▶▶ It has a **two-tier management structure** that comprises of Governing Council and Executive Committee.
- ▶▶ Both of them are headed by Director General (DG), NMCG.

### About Paleochannel:

- ▶▶ A palaeochannel is a remnant of an inactive river or stream channel that has been filled or buried by younger sediment. A palaeochannel is distinct from the overbank deposits of currently-active river channels, including ephemeral water courses that do not regularly flow.
- ▶▶ Paleochannels typically act as pathways for groundwater movement and provide a potential source of groundwater. Their presence can be helpful in identifying areas suitable for recharge.