

The Danube at Low Flow: Why the River Has So Little Water

Low water is a basin-wide challenge, not a problem at one gauge

Baja, Hungary, 13 August 2026 - The Danube is facing exceptionally low water levels across large parts of its course. An assessment prepared by the International Association for Danube Research (IAD) highlights the severity of the situation. **96% of assessed Danube River sections are experiencing low flows, while 80% are approaching record-low conditions**, shown in Figure 1.

These conditions affect the Danube River system across the entire basin, from its upper reaches and tributaries to the Lower Danube and the Danube Delta. This raises a fundamental question for the future of Europe's second-largest river:

Why is so little water reaching the Danube — and how can more water be retained in the Danube River Basin when it is available?



Figure 1: How low was the Danube's discharge in July 2026?

Average July 2026 discharge compared with July flows recorded during 1981–2010. Six levels of discharge from normal (blue), to exceptional low flow (red). Courtesy: Dr. Monica Ionita, AWI Bremerhaven, Germany. More details about this figure see Fact Sheet of this press release.

From assessment to action

The IAD's focus is therefore not simply "low water at one gauge", but **how water availability varies across the Danube River Basin, when water becomes available, and how it can be managed to support people, ecosystems and economic activities.**

More than 50 scientific contributions presented at the 46th IAD Conference in Baja point to the need for action across the entire basin.

To strengthen the resilience of the Danube River Basin, the IAD proposes **10 interconnected measures**, including retaining water in the landscape, reconnecting rivers with floodplains and wetlands, restoring river processes and improving water management.

The IAD's proposed measures include:

- 1 **Retain more water in the landscape** when it is available, particularly during periods of surplus.
- 2 **Reconnect rivers with floodplains and wetlands**, while maintaining connected aquatic habitats.
- 3 **Restore river morphology and - where appropriate - re-meander rivers**, allowing natural river and sediment processes to function, while supporting wetland biodiversity and nature-based solutions to prevent the spread of invasive species.
- 4 **Improve sediment management** where river beds have become too deep and rivers increasingly act as drainage canals.
- 5 **Manage groundwater and surface water together.**
- 6 **Reduce wastewater, pollutants, heat and other pressures** entering rivers.
- 7 **Scale up successful restoration projects** and give ecosystems sufficient space to adapt.
- 8 **Coordinate water uses** across sectors and across the basin.
- 9 **Improve hydrological monitoring and forecasting.**
- 10 **Strengthen cooperation and integrated water management across the Danube Basin**, so that countries can address water scarcity before it becomes a conflict.

What can be done?

The IAD calls for a basin-wide approach that addresses both the availability of water and the way water is managed. No country can address low water alone; the Danube requires coordinated action across borders. In practical terms, this means:

1. **Keep the Danube clean:** Reduce inputs of wastewater, pollutants, heat and waste into the Danube and its tributaries wherever possible.
2. **Keep Danube water in the Danube:** Avoid using Danube water for inefficient sprinkler-type agricultural irrigation.

3. **Avoid unnecessary dredging of the Danube by navigation agencies:** Dredging sediments from rivers in summer increases water turbidity, may cause fish kills and can transform rivers into drainage canals.
4. **Improve sediment management** where the river bed of the Danube and its tributaries is too deep.
5. **Re-meander Danube River and tributaries** where appropriate in order to improve sediment supply and support higher low-flow water levels.
6. **Reconnect floodplains to the Danube River** to secure water supply to them while also creating space for expected higher river floods.
7. **Implement active, landscape-scale water retention** across the Danube Basin **during winter** months, when there is a surplus of water.
8. **Upscale local restoration projects** to cover a significant fraction of the Danube Basin.
9. **Harmonize the pace of restoration** between EU Member States and candidate countries in the Danube Basin.
10. **Promote evidence-based, integrative water management** with stakeholder involvement.
11. **Improve hydrological forecasting.**

Scientific basis

The measures draw on the scientific evidence presented at the **46th IAD Conference, “The Socio-Ecological Future of the Danube: Integrating Riverine and Terrestrial Systems for a Sustainable Danube,”** held in Baja, Hungary, from 10–13 August 2026.

The selected contributions from the 46th IAD Conference 2026 Book of Abstracts form the scientific backbone of this background document:

1. Nagavciuc, V. & Ionita, M. - *From Tree Rings to Gauging Stations: A 250-year Perspective on Lower Danube Streamflow Variability and Its Large-Scale Drivers.*
2. Kozma, Z. et al. - *Scenario Modelling of Future Water Balance in a Transboundary Basin: Potential and Limitations from the Tisza Pilot Basin within the Danube Water Balance Project.*
3. Honti, M. - *New Challenges of River and Landscape Management in the Middle Danube Basin.*
4. Nguyễn, V.Đ.T. et al. - *Hydrological Connectivity Mediates Water Quality and Deep-Water Anoxia in Tisza River Oxbow Lakes.*
5. Bürgés, J. et al. - *Lateral Hydrological Connectivity is the Main Driver of Macroinvertebrate Communities in a Natural Floodplain along the Danube River.*
6. Pöppel, R. & Recinos, S. - *Modelling Long-Term Riverscape Evolution in the Danube Floodplain National Park (Austria) – Effects of Internal and External Perturbations.*
7. Zsuffa, I. - *Revitalisation of the Danube Main Channel in the Szigetköz.*
8. Kováč, V. - *A Bitter-Sweet Story of the Old Main Channel of the Danube.*
9. Hupalo, O. et al. - *The Kilia Delta of the Danube River as a Key Transit Zone for Migratory Fish Species.*
10. Feng, K. et al. - *Hydrological Connectivity Governs Functional Trait Patterns and Metacommunity Assembly in Danube River–Floodplain Fish.*
11. Adamescu, M. et al. - *The Danube Restoration Hub: A Digital-Twin Decision-Support Environment for Wetland Reconstruction in the Danube Basin.*
12. Kovács, Á. & Missamou, R.A. - *From Early Warning to Water Diplomacy: Preventing Water Allocation Conflicts in the Danube Basin.*
13. Erős, T. - *Conservation and Restoration Planning for Freshwater Biodiversity in the Danube Basin within and beyond Protected Areas.*

Together, these contributions address **water availability and variability, river and landscape management, hydrological connectivity, floodplain and wetland restoration, sediment processes, biodiversity, forecasting and water diplomacy.**

The way forward

The current low-flow situation is a warning that water availability in the Danube Basin cannot be taken for granted. **The objective is not simply to get more water into the river channel, but to create a basin that can retain water when it is abundant and sustain rivers and ecosystems when water becomes scarce.**

Building a resilient Danube requires action across the basin: keeping water in the landscape, reconnecting rivers with their floodplains and wetlands, restoring river processes, reducing pollution, improving monitoring and forecasting, and managing water as a shared resource.

The future of the Danube depends on keeping the basin connected, retaining its water and managing it together.

About the IAD

The **International Association for Danube Research (IAD)** brings together scientists and experts working on the Danube River Basin and promotes interdisciplinary research and cooperation for the protection and sustainable management of the Danube and its connected ecosystems.

Media contact

International Association for Danube Research (IAD), <https://www.danube-iad.eu/>

General Secretary of IAD, Dr. Katrin Teubner, Katrin.teubner@univie.ac.at, phone: +43-(0)650-5965299 Austria

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