A wide-angle photograph of the Mantova cityscape, showing the Palazzo Ducale and the Cathedral of Sant'Andrea, situated along the banks of the Oglio River. The water is in the foreground, and the sky is clear.

**RIVERS IN SPRING (24th edition)
WORLD WATER DAY
IN MANTOVA 21 March, 2025
In-Person and Online**

In collaboration with GLOBE Europe-Eurasia Region Coordination Office



International Decade for Action on Water for Sustainable Development 2018-2028



Water is essential

- Access to water and sanitation is a precondition to life and a declared [human right](#) .
- Water is vitally important to sustainable development – from health and nutrition, to gender equity and economics
- Over the coming years, our water-related challenges will become more urgent.



International Decade for Action on Water for Sustainable Development 2018-2028



- The increasing demands of a growing population and rapidly developing global economy, combined with the effects of climate change, will exacerbate lack of access to water and sanitation for domestic uses.



International Decade for Action on Water for Sustainable Development 2018-2028



- In fact, many experts argue that an unpredictable supply of water could constrain socio-economic progress in the future.
- In the coming years, our water challenges will become more urgent



International Decade for Action on Water for Sustainable Development 2018-2028



- The Decade also highlights the importance of promoting efficient water usage at all levels, taking into account the **water, food, energy, environment nexus**; and stresses the importance of the participation and full involvement of all relevant stakeholders, including women, children, young people, older persons, persons with disabilities, indigenous peoples and local communities.



International Decade for Action on Water for Sustainable Development 2018-2028



- In order to accelerate efforts towards meeting water-related challenges, the United Nations General Assembly declared 2018-2028 as the International Decade for Action “Water for Sustainable Development”.

<https://sdgs.un.org/goals/goal6>



Take action



- Help inspire action to achieve the [2030 Agenda](#) by joining thousands of other people on [World Water Day](#) (22nd March) and [World Toilet Day](#) (19th November) to raise awareness of the water and sanitation crises and exert public pressure for change



Take action



- Learn about the importance of advancing sustainable development by reading the latest stories from around the world about what countries and organizations are doing to solve the global water crisis. This will help you make sense of what is happening and shape the debate.



Take action



Help energize the implementation of existing work by sharing stories and information through your social networks. Spreading knowledge and evidence will help you and others to raise awareness of progress and to hold elected representatives to account.



Facts & Figures

2.2 billion still live without safely managed drinking water, including 115 million people who drink surface water. ([WHO/UNICEF, 2023](#))

Roughly **half of the world's population** is experiencing severe water scarcity for at least part of the year)

[IPCC, 2022](#)



Facts & Figures



Water-related disasters have dominated the list of disasters over the past 50 years and account for 70 per cent of all deaths related to natural disasters.

[World Bank, 2022](#)

Transboundary waters account for **60 per cent** of the world's freshwater flows, and **153** countries have territory within at least 1 of the 310 transboundary river and lake basins and inventoried 468 transboundary aquifer systems [UN-Water, 2023](#)



Facts & Figures

Only 24 countries report that all their transboundary basins are covered by cooperation arrangements.

[UN-Water, 2021](#)



WWD 2025 Official Theme

- **Glacier Preservation**





WWD 2025 Official Theme

Glacier Preservation

Satellite observations and numerical models have shown that the Earth lost 28 Teratons of ice between 1994 and 2017.



The photographic comparison on the Forni glacier in Alta Valtellina



WWD 2025 Official Theme

Glacier Preservation

Ice loss from 1994 to 2017

| | |
|-----------------------------------|--------------------|
| Arctic sea ice | 7,6 10^{12} tons |
| The Antarctic Ice Shelves | 6,5 10^{12} tons |
| Mountain glaciers | 6,1 10^{12} tons |
| The Greenland Ice Sheet | 3,8 10^{12} tons |
| La calotta glaciale antartica | 2,5 10^{12} tons |
| The sea ice of the Southern Ocean | 0,9 10^{12} tons |



Earth's ice imbalance (di Thomas Slater e al.)

<https://tc.copernicus.org/articles/15/233/2021/>



WWD 2025 Official Theme **Glacier Preservation**

Ice loss from 1994 to 2017

| | |
|---|---|
| Northern Hemisphere | 58% |
| South Hemisphere | 42% |
| Mountain glaciers, from Antarctica, Greenland and the Antarctic ice shelves | Loss rate of the 57% |
| Mountain glaciers, from Antarctica, Greenland and the Antarctic ice shelves | Global sea level rise 34,6 ± 3,1 mm. |



Earth's ice imbalance (di Thomas Slater e al.)
<https://tc.copernicus.org/articles/15/233/2021/>



Photo comparison on the Forni glacier in Alta Valtellina (Italy)

New report by Greenpeace Italy and the Italian Glaciological Committee: «In 2023, all records of melting of our glaciers due to heat waves were exceeded» (9.0 cm/d lost) From Repubblica 10-10-2023

WWD 2025 Official Theme

Glacier Preservation



1. Cover with white tarpaulins?

2. Artificial snow?

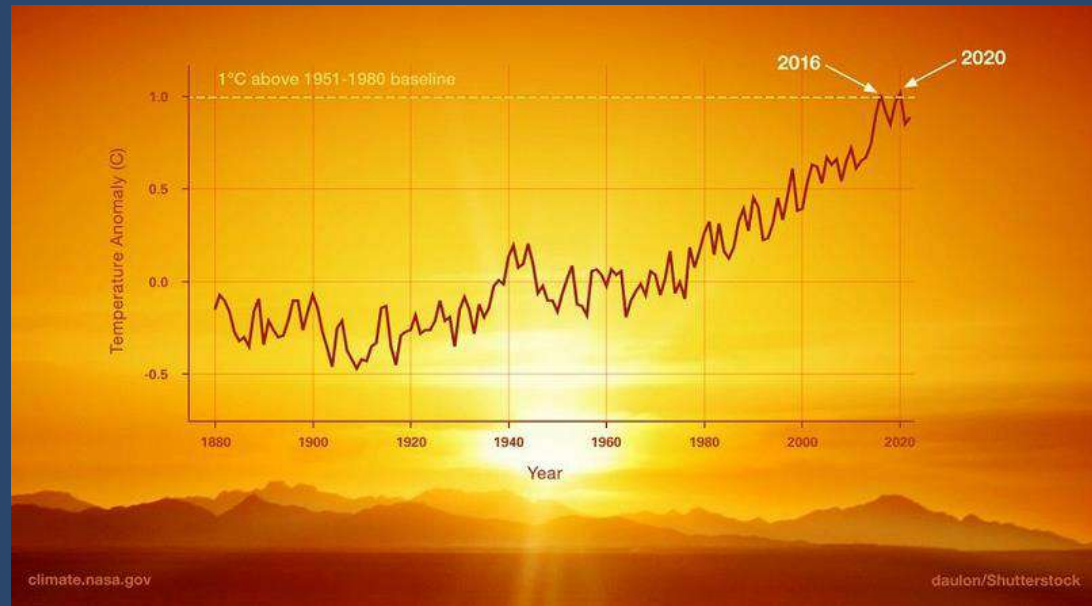
Figure 1. The Presena glacier in the Central Alps (Adamello-Presanella) is one of the most famous artificial glaciers. Here we are in September 2020 and it is possible to observe a snowcat intent on removing the tarpaulins that cover the glacier in summer, some are still visible in the upper part of the glacier. Glacier or a construction site? From «Storie Minerali»



WWD 2025 Official Theme **Glacier Preservation**

The sure solution?

Fighting climate change!!!



Source: NASA's Goddard Institute for Space Studies



WWD 2025 Official Theme **Glacier Preservation**



Participating in World Water Day 2025 means calling upon organizations and citizens to fight climate change, as the only sure way to slow down the melting of ice and further potentially dramatic environmental changes for life on the planet.



Other themes of the 2025 WWD in Mantova:

- Water-Climate Change Nexus
- Water-Microplastics Nexus
- Water-Energy Nexus
- Water-Agriculture Nexus
- River Mincio Contract
- Human Right to Water

(in view of the 2030 Agenda of the United Nations for Sustainable Development, in particular for the objectives nn. 3, 6, 7, 12, 13 14, 15)





Stages leading up to the Event

New

1. Film screening «The Blue Kiss» by the Municipality of Mantova (free for Primary and Middle School Students in the city of Mantova) (Jan 24, 2025)
2. International Conference on Microplastics (Feb 2025)
3. **Exhibition-event «THE TORMENTS OF POSEIDON. Microplastics in the Hydrosphere» (March 2025)**



RIVERS IN SPRING 2025

25th Anniversary Celebration

THREE EVENTS IN ONE

- In-Person Event (local)
- National online live (GLOBE Italian Network)
- International online live (GLOBE Network)



The article "2024 Rivers in Spring, an Outstanding Celebration of World Water Day in Italy" (GLOBE News)

[Link to the article](#)

Participants to the international online event



2024 Rivers in Spring, an Outstanding Celebration of World Water Day in Italy

May 14, 2024



Water: a natural resource that must be conserved and protected. It is a necessity for survival and a good life but it has limited availability caused by climate change. All of this came out loud and clear during the outstanding World Water Day celebration in Mantova, Italy. The event, called "Rivers in Spring," was organized by GLOBE Italy team in close collaboration with the Mantova City Council and scientists from the Deakin University in Australia. It brought together 3000 people.



While water was the unifying element of the event, the diversity of 85 activities across 46 work stations was really impressive. Educational booths, including those presenting The GLOBE Program, provided insights into the importance of river ecosystems, the impact of pollution, and strategies for sustainable water management.

Workshops led by experts in hydrology, ecology, and conservation offered participants the opportunity to delve deeper into topics such as river restoration techniques, watershed management, and the interconnectedness of water systems. These sessions not only empowered attendees with knowledge but also inspired them to take concrete actions to protect local rivers and waterways.

One of the highlights of the celebration was the involvement of youth organizations and schools in organizing interactive activities for children and teenagers. Guided by environmental educators and volunteers, young participants engaged in hands-on experiences, such as water quality testing, river clean-up, and art projects focused on depicting the beauty and importance of rivers.



THANKS!



THANKS!



GENERAL AGENDA

IN ATTENDANCE (Mantova Lower Lake)



9.00 am Start of general activities: workshops, demonstrations, games, creative activities, water excursions, land excursions

10.30 am Greetings from the authorities

1.00 pm End of general activities

3.00 pm End of activities for individual schools



GENERAL AGENDA

ONLINE NATIONAL AND INTERNATIONAL



9.30 am Start of live broadcasts with greetings from the presenters

9.35 am International live broadcast: links with researchers, teachers, students in Italy and abroad National live broadcast: links from Lungolago Gonzaga interspersed with links with Italian schools in the field

10.30 am Unified link with Lungolago Gonzaga for greetings from the authorities. Resumption of local, national and international links

1.00 pm End of broadcasts



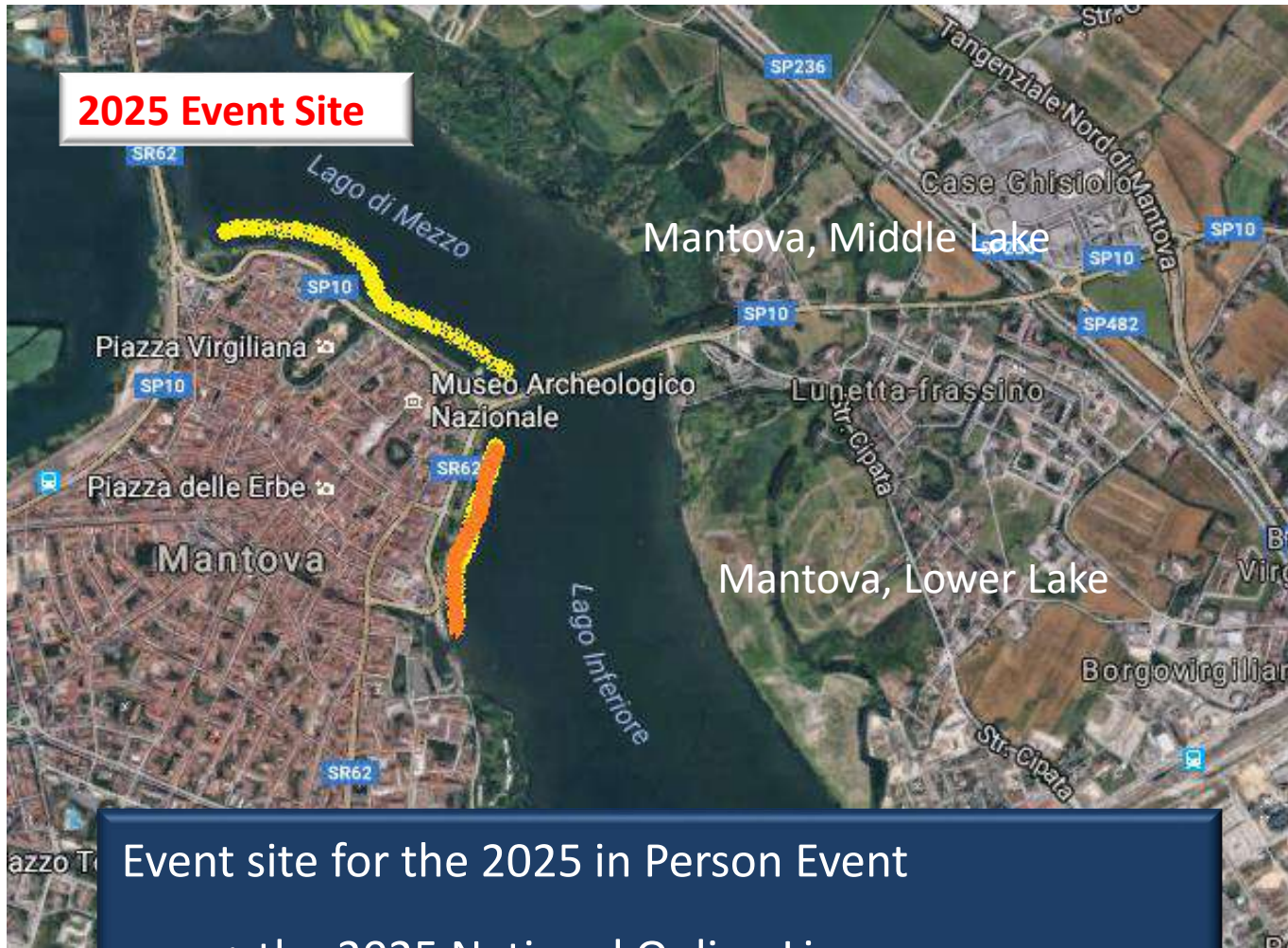
RIVERS IN SPRING 2025

25th Anniversary Celebration

AGENDA



- To be defined once we have the General Framework of the proposals



2025 Event Site

Event site for the 2025 in Person Event
... + the 2025 National Online Live
... + the 2025 International Online Live



The international circuit/context in which the event takes place is that of the GLOBE Program, thanks to the support of the GLOBE Europe-Eurasia Region Coordination Office



**GLOBE Europe and Eurasia
Region Coordination Office**



Some images of the 2024 in-person event



2024 WWD



Some images of the 2024 in-person event



2024 WWD

Photo Labter Crea



Some images of the 2024 in-person event



2024 WWD

Photo Luisa Desiderio



Some images of the 2024 in-person event



2024 WWD

Photo Luisa Desiderio



Some images of the 2024 in-person event



2024 WWD

Photo Lucia LUbrano



Some images of the 2024 in-person event



2024 WWD

Photo Adelia Pezzini



Some images of the 2024 in-person event



Photo Adelia Pezzini



Some images of the 2024 in-person event



GMA 2024

Photo Adelia Pezzini



Some images of the 2024 in-person event



Photo Gianluca Nardi

GMA 2024



Some images of the 2024 in-person event



GMA 2024

Photo Gianluca Nardi



Some images of the 2024 in-person event



GMA 2024

Photo LABTER-CREA



Some images of the 2024 in-person event



GMA 2024

Photo LABTER-CREA



Some images of the 2024 in-person event



GMA 2024

Photo Lucia Lubrano Lobianco



Some images of the 2024 in-person event



Photo Lorella Rignonat



Some images of the 2024 in-person event



GMA 2024

Photo LABTER-CREA



Some images of the 2024 in-person event



GMA 2024

Photo da video LABTER-CREA



Some images of the 2024 in-person event



GMA 2024

Photo from Friuli Audio Service video



Some images of the 2024 in-person event



GMA 2024

Foto da video Friuli Audio



Some images of the 2024 in-person event



Photo from Friuli Audio Service video



Some images of the 2024 in-person event



GMA 2024

Photo LABTER-CREA



Some images of the 2024 in-person event



GMA 2024

Photo LABTER-CREA



Some images of the 2024 in-person event



GMA 2024

Photo from Friuli Audio Service video



**Schools, Bodies, Universities, Research Centers, Associations,
Environmental Control and Protection Agencies, Companies,
Citizens who have currently given their membership**

Instituzionali

- **Comune di Mantova, Settore Istruzione, Sig.a Maria Rosa Galafassi, Dott.ssa Elisa Toti Buratti**
- **Comune d Mantova, Settore Ambiente, Dott. Roberta Marchioro**
- **Provincia di Mantova, Settore Acque, Dott.ssa Lara Massalongo**
- **Provincia di Mantova, Ufficio Protezione Civile, Dott. Lorenzo Sanfelici**
- **Parco del Mincio, Ufficio Stampa, Dott.ssa Paola Alberti**
- **Parco Oglio Sud, Educazione Ambientale, Dott.ssa Lella Rossetti**



UNIVERSITIES AND RESEARCH CENTRES

Rappresentanti del mondo della ricerca

- **Joint Research Centre, European Commission, Ispra (VA), Dott.ssa Beatrice Melone**
- **Istituto per la BioEconomia, IBE, Consiglio Nazionale delle Ricerche, Firenze, Dr. Luciano Massetti**
- **Università di Modena e Reggio Emilia, Dipartimento di Scienze della Vita, Prof. Daniela Prevedelli**
- **Centro Nazionale Biodiversità Forestale “Bosco Fontana” Carabinieri, Marmirolo (MN), Dott.ssa Laura Spada, Dott. Giuseppe Lo Giudice**



HIGH SCHOOLS

- **IS «Fermi» Mantova, ITIS Corsi di Chimica, Mantova Prof. Cristian Soncini, (Leading GLOBE School)**
- **IS «Fermi» Mantova, Liceo delle Scienze Applicate, Mantova, Prof. Anna Leggio, Monica Baldini, Elisa Merlotti (Leading GLOBE School)**
- **IS «Strozzi» Mantova, Prof. Massimiliano Ghizzi, Ass. Tec. Paolo Mazzucco (GLOBE School)**
- **IISS «Bassa Friulana», Cervignano del Friuli (UD), Proff. Lorella Rigonat, Paola Zanon, Graziella Mocellin, Maria Pia Coceano (Leading GLOBE School)**
- **ISIS «Brignoli-Einaudi-Marconi», Gradisca d'Isonzo (GO), Prof.ssa Elisabetta Sdrigotti (GLOBE School)**
- **ISIS «Europa», Pomigliano d'Arco (NA), Prof. Sabrina Nappi (GLOBE)**
- **ISII «Marconi» Piacenza, Prof.ssa Barbara Buttaboni**



COMPREHENSIVE SCHOOLS

- IC Ceresara (MN), SSPG Piubega, Ceresara, Gazzoldo plexuses, (GLOBE School), Proff. Lucia Lubrano Lobianco, Giuseppe Zuppardo
- IC «Parazzi», SSPG Viadana (MN), Prof. Franca Petocchi
- IC Castellucchio (MN), SSPG Rodigo, Proff. Luisa Desiderio
- IC «Como Lago», SSPG «Prandoni» (CO), Prof.ssa Rosa Salatino, Prof. Stefano Tassinari (GLOBE)
- IC «De Amicis», SSPG Marcallo con Casone (MI), Prof.ssa Sabrina Pelizzari - (GLOBE)
- IC «Il Trebeschi-Desenzano», SSPG Pozzolengo (BS), Prof.ssa Rosa Acunzo
- IC «Assisi 3», SSPG Assisi (PG), Prof. Angela Bolis (GLOBE) (MMPT) (online)



SCUOLE: ISTITUTI COMPRENSIVI

IC Mantova 1, SSPG «Alberti» (MN), Prof.ssa Anna Leto

IC Mantova 2, SSPG «Sacchi» (MN), Prof.ssa Cristina Vighi (GLOBE)

IC Mantova 3, SSPG «Bertazzolo» (MN), Prof.sse Anna Leone Stella, Simona Mattioli, Nicoletta Torza



Schools, Bodies, Associations, Environmental Control and Protection Agencies, Companies, Citizens who have currently given their membership

- **ARPA Lombardia, Sede di Mantova**, Dott. Alessandro Malavasi, Dott.ssa Lorenza Galassi
- **ATS Val Padana**, Dott. Marco Lanciotti, Dott. Vittorio Del Regno
- **Consorzio di Bonifica Territori del Mincio**, Geom. Davide Franceschetti
- **AqA – gruppo Tea**, Dott.ssa Eleonora Campanelli
- **CROCE VERDE Mantova**, Dott. Moreno Cavalli
- **Alkémica Coop. Soc. Onlus, Mantova**, Dott. Giovanni Boni
- **PARCOBALENO, Centro di Educazione Ambientale MN**, Dott. Andrea Fiozzi
- **FIPSAS Mantova insieme col Circolo Subacqueo Mantovano**, Dott. Franco Zaniboni, consigliere FIPSAS, sig. Fosco Tartari, Presidente del Circolo



Schools, Bodies, Associations, Environmental Control and Protection Agencies, Companies, Citizens who have currently given their membership

- **Provincia di Mantova, Azienda speciale “Ufficio d’Ambito”,** Ing. Francesco Peri, Direttore
- **Comune di San Giorgio Bigarello MN,** p.i. Beniamino Morselli, Assessore all’Ambiente (online), Dott.ssa Laura Spiritelli, Assessore all’Istruzione
- **Comune di Gonzaga (MN),** Dott.ssa Sara Manfredi, Assessore alle Politiche Ambientali (online)
- **Comune di Marmirolo (MN),** Sig.a Enrica Pietri Biasi, Consigliere comunale delegato
- **UNICEF, sezione di Mantova,** Dott.ssa Cristina Reggiani
- **White Lab Srl,** p.i. Omar Spoladori, Direttore Laboratorio di Roncoferraro



Schools, Bodies, Associations, Environmental Control and Protection Agencies, Companies, Citizens who have currently given their membership

- **Depurazioni Benacensi, Peschiera (VR)**, Dott.ssa Virginia Tortella, Presidente, Ing. Alessio Zucchi
- **Pro Loco “Amici di Rivalta”**, il Presidente, sig. Loris Bassi
- **Gruppo Canoistico Rivaltese**, Dott. Fabio Severi
- **Associazione “Amici del Mincio”**, Sig. Gino Ostini
- **FIAB MANTOVA APS**, il Presidente, Arch. Daniele Mattioli
- **Associazione «Amici della Vallazza»**, il Presidente, Sig. Luciano Reggiani
- **Gruppo Speleologico Mantovano**, Sig. Davide Bettoni
- **Tavolo del Mincio, 26 associazioni ambientaliste**, Dott. Andrea Fiozzi, Maestra Maria Grazia Coffetti
- **Associazione Parco dei Cedri nel Cuore ODV, Bologna**, Prof.ssa Vanna Ragazzini, Presidente (GLOBE Teacher)
- **Volontari LABTER-CREA**, Ing. Alberto Malacarne



**Images and documents of Rivers in Spring
editions from 2000 to 2019**

<http://www.labtercrea.it/gma-prima-pagina.htm>

**Presentations and videos of Rivers in Spring
editions 2021-2022-2023-2024**

www.globeitalia.it

Info and Updates

www.globeitalia.it

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