BIODIVERSITY IMPACT REPORT

World Rowing Under 19 Championships Trakai, Lithuania

Dec 2025

bloomUp

August, 2025

Executive Summary

In Balance With Nature: World Rowing pilot project with 2025 World Rowing U19 Championships.

World Rowing, in partnership with **bloomUp** and supported by the **Canton de Vaud,** launched a pioneering biodiversity pilot project at the **2025 World Rowing Under 19 Championships in Trakai, Lithuania**. Titled “In Balance With Nature,” the project aimed at safeguarding ecosystems while creating a replicable framework for future events.

As part of the **World Rowing–WWF Healthy Waters Alliance** and aligned with the federation’s Sports for Nature commitments, the project involved the first live deployment of the bloomUp Biodiversity Compass, an innovative tool designed to assess, protect, restore and regenerate biodiversity.

This biodiversity pilot project demonstrates how a major sport event can move beyond compliance and impact mitigation, toward becoming a catalyst for positive biodiversity outcomes. Through this collaboration, World Rowing has positioned itself at the forefront of integrating biodiversity protection into global sport governance, setting an important precedent for future championships and international events.

“This pilot reflects our dedication to protecting and restoring the ecosystems our sport relies on. It’s a tangible step toward making rowing truly nature-positive.”

Maike Betts,
World Rowing Development & Sustainability Coordinator

This pilot is about more than measurement, it’s about creating a new relationship between sport and nature.”

Anne-Cécile Turner,
bloomUp Co-Founder

Environmental Context

Hosting a major sporting event in the heart of a sensitive natural environment carries both privilege and responsibility. For the 2025 World Rowing Under 19 Championships, World Rowing and the Trakai Organising Committee recognised this responsibility and worked together to document and understand the ecological setting of the venue as part of the biodiversity pilot project.

Lake Galvė, a freshwater lake framed by Trakai Historical National Park, is not only a world-class rowing course but also part of a UNESCO-recognised heritage site. Surrounded by wetlands, forests, and cultural landmarks such as the 14th-century Trakai Island Castle, the area supports a variety of habitats and species, making it an ideal location to test the bloomUp Biodiversity Compass and ensure that sport and nature thrive together.

Trakai Historical National Park

established to protect the unique natural and cultural heritage of the region.

- Founded in 1991 by the Lithuanian Restoration Seimas
- Category II in the IUCN classification
- Landscape rich aquatic and terrestrial ecosystems: 32 lakes, vast mashlands & hills
- Large variety of flora and fauna, including European listed rare species

Lake Galvé

natural freshwater lake, approximately 361 hectares in size, has 21 islands, and one of them houses Trakai Island Castle.

- Part of the Trakai Historical National Park
- Hydrological Nature Reserve status
- Home to over 2000 different species

Project Team

This project is was delivered by World Rowing in collaboration with bloomUp and Kaunas University of Technology (KTU).

Maike Betts
World Rowing, Development & Sustainability Coordinator

Daniela Gomes
World Rowing, Head of Development

Pat Lambert
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KTU, Researcher

Objectives

Integrate biodiversity assessment and action directly into the planning and operations of a major international sporting event.

Addressing the gap: the lack of accessible, data-driven tools to help sport organisations understand and improve their impact on nature.

01

Biodiversity Mapping

Map habitats and biodiversity zones across the full venue.

02

Ecological Assessment

Conduct ecological assessments to identify ecological pressure points.

03

Stakeholder Engagement

Engage all key stakeholders (organisers, athletes' services, suppliers, accommodation) via a survey as well as workshops and individual interviews.

04

Guidelines for Regeneration

Identify opportunities for regeneration, and develop actionable guidelines for service providers and event organisers.

Methodology

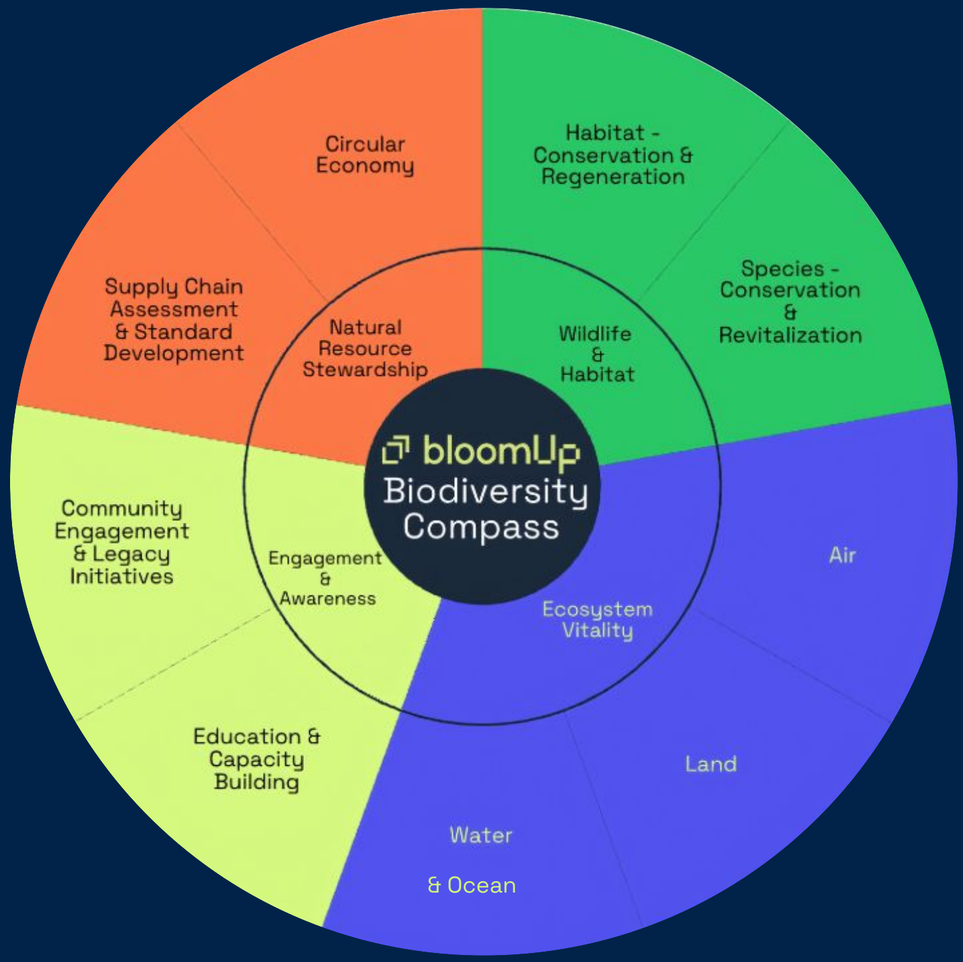
bloomUp Biodiversity Compass

Based on Qualitative & Quantitative Data Collection

The bloomUp Biodiversity Compass was used for the first time to assess biodiversity impacts at a major sporting event. It follows a structured approach—assess, protect, restore, regenerate—applied across four biodiversity pillars.

Information was collected through a survey, on-site workshops, and interviews. Using 34 indicators aligned with global biodiversity frameworks, each pillar was scored and then combined into an overall score per pillar to support future benchmarking as well as to guide biodiversity action at Trakai and future World Rowing events.

After all indicators are evaluated, a **Biodiversity Index Score** is generated to serve as a benchmark for assessing events and tracking progress over time and across venues. This index score is a preliminary indicator that will be refined as the methodology evolves and is further peer reviewed and validated by biodiversity experts.



Assess **Protect** **Restore** **Regenerate**

Disclaimer: Achieving 100% completion of each stage is highly complex, as it requires robust and accurate data, the implementation of relevant initiatives with clear measurement frameworks, and consistent follow-up through data collection before, during, and after the event.

Stakeholder Groups

01

Biodiversity Experts

- Baltic Environmental Forum Lithuania (BEF)
- State Research Institute Natural Research Center (GTC)
- Trakai Historical National Park
- Lithuanian Fund for Nature
- Foundation for Peatlands Restoration & Conservation
- WWF Latvia
- Kaunas University of Technology (KTU)

02

Event Organisers & Venue Managers

- Lithuanian Sports Center (Venue Operator)
- Trakai 2025 Organising Committee

03

Media & Communication Teams

- Trakai 2025 Organising Committee

04

Catering & Facilities Managers

- Trakai 2025 Organising Committee

Biodiversity Pillars

Wildlife & Habitats

Addresses the conservation of species and ecosystems by analysing impacts on biodiversity, protecting habitats from degradation, restoring damaged areas, and regenerating new habitats to support ecological connectivity and species vitality.

Ecosystem Vitality

Focuses on maintaining and strengthening the health of ecosystems by monitoring ecological functions, safeguarding water, soil, and air quality, and ensuring that natural systems can regenerate and develop resilience in the face of environmental pressures.

Engagement & Awareness

Emphasises the role of people in biodiversity protection by fostering education, participation, and collaboration among athletes, organisers, local communities, and stakeholders to build shared responsibility and lasting behavioural change.

Natural Resource Stewardship

Centred on the responsible management of resources such as water, energy, and materials, ensuring their sustainable use, reducing waste and pollution, and promoting practices that respect the ecological limits of the environment.

Event Venue

Trakai

Key Insights

Pillar 1: Wildlife & Habitat

Biodiversity & Species Monitoring

- ❗ Over 5,000 species identified and 55 of them are confirmed as threatened in the Vilnius County based on iNaturalist.
- ❗ Over 2000 species recorded in Trakai, and no protected species are present on site.

Habitat Protection & Government Measures

- ✅ Area is passively protected under Lithuanian law; no major disturbances reported.
- ✅ Invasive Lupin flowers are actively removed to safeguard native habitats.

Event-Related Impact & Restoration

- ✅ Rowing buoys are temporary, replaced every ~10 years.
- ✅ Minimal regeneration needed; only grass (affected by cameras) will naturally recover.

Conservation & Regeneration Projects

- ✅ Government projects reintroduced 7+ million young fish (e.g., European cisco, burbot) to restore ecosystems.
- ✅ Ongoing wetlands regeneration project is in place around the event area.

Habitat - Conservation & Regeneration

Emerging (0-33%)
Established (34-66%)
Exemplary (67-100%)

Assess

Target: Map 100% of the area.

Achieved by the OC

The data platforms, iNaturalist, IUCN Red List, WWF and BISE, were used to collect data and map out the surrounding natural habitats. The data presented was solid and diverse. To reach 100% the OC should conduct a specific onsite assessment, hence the 80% reliability score.

Protect

Target: 100% coverage of protected areas & other effective area-based conservation measures are in place (ie. bird nesting season to be addressed).

Land was protected through the use of modular infrastructure to allow for natural process to take place and restore the area. Refer to the World Rowing Environmental Management System prior to the event.

Restore

Target: 30% of disturbed habitats restored, aligned with the global 30x30 standard.

The land that was affected by the infrastructure was then restored naturally once the event ended.

Regenerate

Target: 10% of disturbed habitats regenerated.

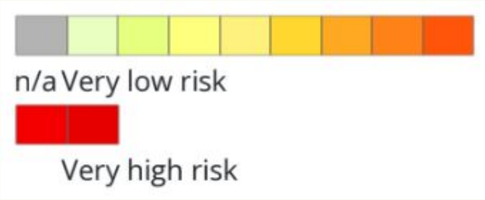
Wetlands regeneration project with Pelkiu fondas and the “Forest of Nations” tree planting ceremony along with the 225 trees to be planted, mark regeneration undertaken. An detailed Impact report would be needed to measure the impact of these interventions.

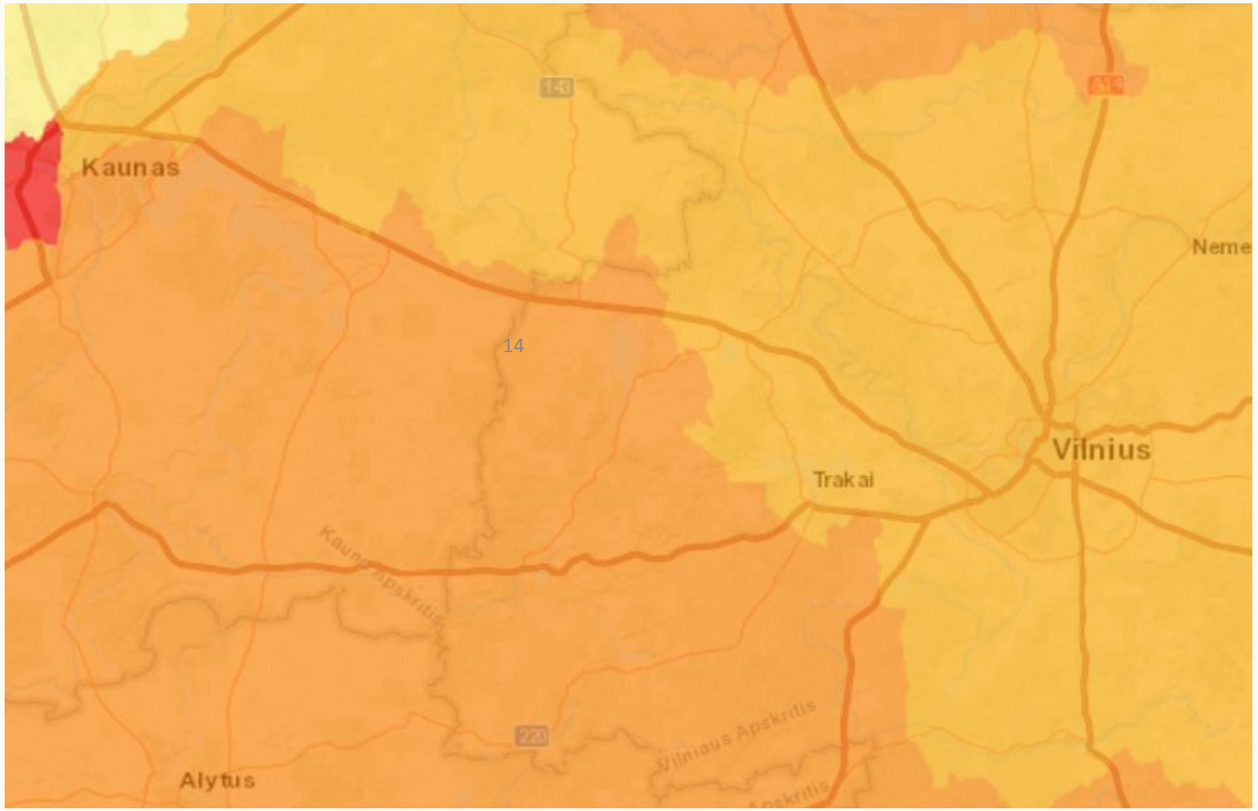
Habitat - Event Ecosystems

Lake Glavé, and it's surrounding ecosystems.

Ecosystem Condition - Existing Data

This data indicates whether the natural environment is intact and connected. It should be taken into account that poor ecosystem conditions can limit access to the natural resources and services essential for local communities. Preserving and restoring terrestrial, freshwater, and marine habitats is therefore crucial to reducing biodiversity risks.



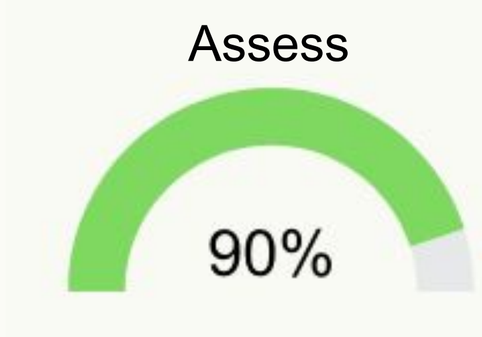


Source: WWF Risk Filter Suite

Species - Conservation & Revitalisation

Emerging (0-33%)
Established (34-66%)
Exemplary (67-100%)

Assess



Mean Species Abundance Assessment

Objective

Assess on-site species abundance and identify presence of threatened species.

Target: Mean Species Abundance assessment completed.

Species assessment was done through data hubs. Data reliability is to be further assessed with more recent & area specific data. Vilnius, which includes Trakai, has over 5000 species, 55 are listed as threatened (iNaturalist). Experts identified +2000 species in Trakai area and no protected species on site.

Protect

% of actions completed

Objective

Protect the abundance and diversity of native species.

Target: 100% of checklist completed. (ie. bird nesting season to be addressed).

As there are no major disturbances, event outside of nesting season, and the area is passively protected in regards to governmental laws. The Lithuanian government has requested that Lupin flowers be removed (invasive species) while birds are temporarily disturbed however no measures of protection are enforced.

Restore

Change in Mean Species Abundance

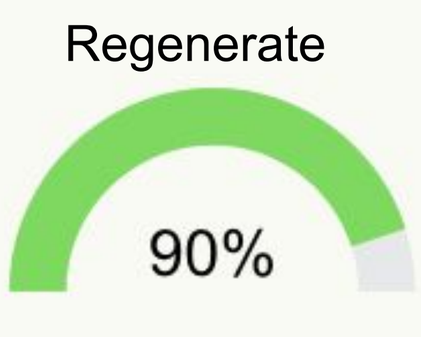
Objective

Restore natural ecosystems to aid in the recovery of endangered and native species.

Target: 30% improvement in Mean Species Abundance.

Plastic buoys are installed to define the lanes, they are used for the training center and the event. As the impact on biodiversity is minimal in the lake and the buoys are periodically replaced, there is no need for a specific ecological restoration.

Regenerate



% of identified species with specific regeneration measures

Objective

Engage in species regeneration through targeted actions.

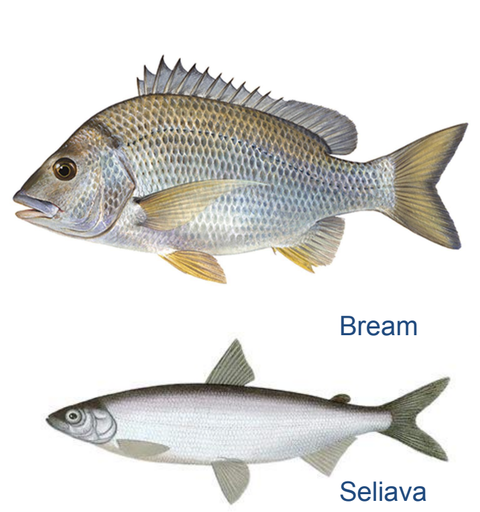
Target: 10% of species with specific regeneration measures.

Local tree planting can contribute to regeneration targets for some species, if it is made with endemic habitats.
Note: A project led by the government reintroduced several species of fish (European Cisco, Bream) in March through a project that ensures restoration of fish in Lithuanian water bodies. Restoration introduced over 7 million young fish.

Achieved by the OC

Species - Data & Statistics

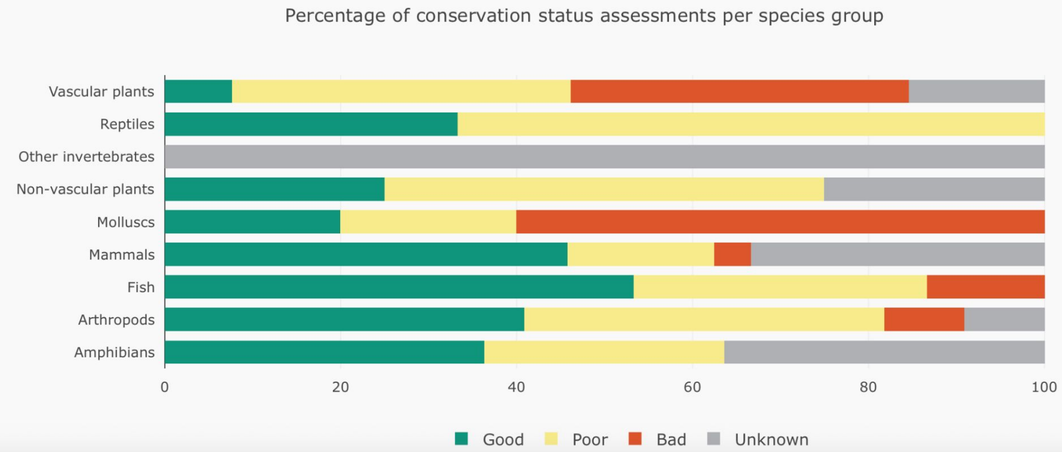
The following data is based on national level information.



List of Species in Vilnius area: [Vilnius Species]

Conservation Status by Taxa

In Lithuania, the assessment of species groups reveals that fish have the highest proportion of species with a good conservation status, standing at 53.3%. Following closely behind are mammals, with 45.8%, and arthropods with 40.9% of species in good conservation status. On the other hand, molluscs exhibit the highest percentage of species with a bad conservation status, reaching 60%. All other invertebrates have unknown conservation status.



330

species protected under EU law

98

species under the Habitats Directive

232

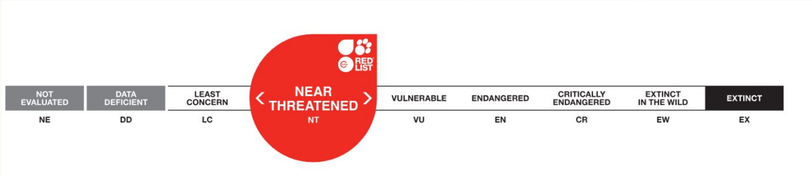
species under the Birds Directive

Source: [Biodiversity Information Systems for Europe]

Species - Data & Statistics

The following data is based on national level information.

This data highlights the different species present in the Trakai area, their conservation status, and the major threats they face. For example, the Scharlachkäfer is currently classified as “Near Threatened,” yet its population is increasing — an important point to consider when assessing which species require closer monitoring and protection. The data also shows that chemical use represents a significant threat to species in the region.

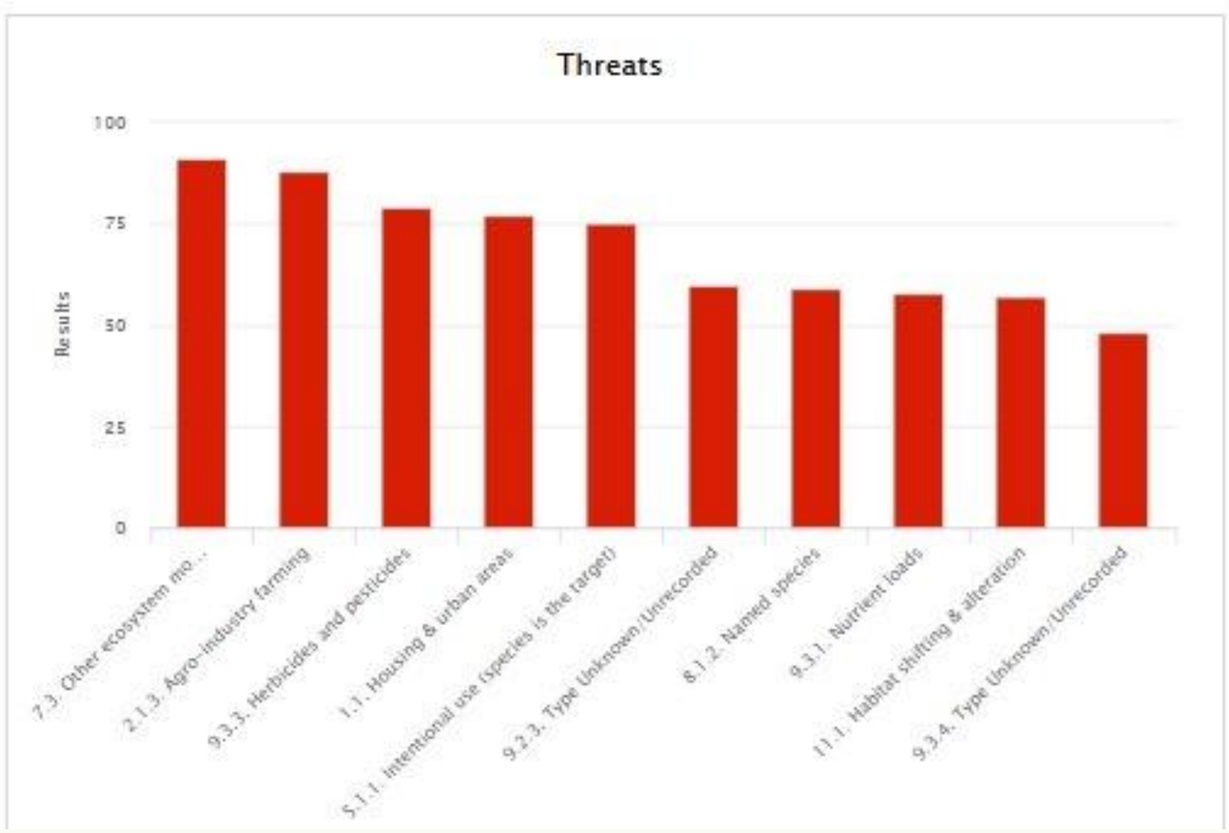


PLANTAE — LILIOPSIDA	**Orange Foxtail**	*Alopecurus aequalis*	Unknown	Global	LC
PLANTAE — LILIOPSIDA		*Eleocharis acicularis*	Unknown	Global	LC
ANIMALIA — INSECTA	**Scharlachkäfer**	*Cucujus cinnaberinus*	↑ Increasing	Global, Europe	NT
PLANTAE — MAGNOLIOPSIDA	**Lesser Bladderwort**	*Utricularia minor*	Unknown	Global	LC
ANIMALIA — REPTILIA	**Grass Snake**	*Natrix natrix*	— Stable	Global	LC
ANIMALIA — REPTILIA	**Adder**	*Vipera berus*	↓ Decreasing	Global	LC

More results

Species

PLANTAE — LILIOPSIDA	**Reed Canary-grass**	*Phalaris arundinacea*	Unknown	Global	LC
PLANTAE — LILIOPSIDA	**Whorl-grass**	*Catabrosa aquatica*	Unknown	Global	LC
ANIMALIA — GASTROPODA		*Malacolimax tenellus*	— Stable	Global, Europe	LC
PLANTAE — LILIOPSIDA	**White Sedge**	*Carex canescens*	— Stable	Global	LC
PLANTAE — LILIOPSIDA	**Water-soldier**	*Stratiotes aloides*	— Stable	Global	LC
ANIMALIA — MAMMALIA	**Soprano Pipistrelle**	*Pipistrellus pygmaeus*	Unknown	Global	LC
ANIMALIA — MAMMALIA	**Leisler's Bat**	*Nyctalus leisleri*	Unknown	Global	LC
ANIMALIA — MAMMALIA	**Barbastelle Bat**	*Barbastella barbastellus*	↓ Decreasing	Global	NT



Source: IUCN Red List

Pillar 2: Ecosystem Vitality

Vegetation & Habitat Restoration

- ❗ Plants affected by media lines will naturally recover once lines are removed.
- ✅ Wetlands regeneration project is active in the event area.

Water Quality & Aquatic Life

- ✅ Water quality tests confirmed excellent conditions, though monitoring of boat cleaning chemicals is recommended.
- ✅ Buoys and anchoring were assessed for their impact on soil and water, with minimal long-term effects.

Soil & Land Management

- ✅ Lake was widened with soil displacement, approved by Lithuanian agencies, but happened in 2016, outside of the scope of the event.
- ✅ Soil used for stands was replaced after the event, restoring the area.

Biodiversity & Monitoring

- ✅ Use of citizen science tools (iNaturalist) for habitat monitoring before and after events is suggested.
- ❗ Lack of biodiversity guidelines highlights the need for service provider requirements to avoid risks.

Air

- Emerging (0-33%)
- Established (34-66%)
- Exemplary (67-100%)

Assess

3 assessments undertaken (air, noise, light)

Objective

Assess air quality, noise and light pollution to identify sources and target areas.

Target: 3/3 pollution assessments completed (air, noise, light..).

Air pollution as assessed through online datasets. Noise pollution as assessed throughout the event. Light pollution assessment was marked as NA. (see Annex. p.49, 50)

Protect

Air, noise and light pollution action plan and targets.

Objective

Protect against pollution from air, noise, and light sources to maintain a health environment.

Target: 3/3 air, noise and light pollution action plan and targets achieved.

Encouraged soft mobility as to protect from air pollution. Further initiatives could be undertaken such as renewable energy powered catamarans for the event organisation team, instead of diesel engines.

Restore

Addition of restoration initiatives to pollution action plans.

Objective

Restore the natural balance of ecosystems to create clean air, quiet, and naturally dark environments.

Target: Addition of restoration initiatives to pollution action plans (3/3).

Plants that had been affected by media lines were able to recover once the lines were removed. Trees were planted to partially offset CO_2 from the transport, supporting air quality restoration. Measurement of the impact should be undertaken.

Regenerate

Ecosystem Area with regeneration initiatives

Objective

Regenerate ecosystems through nature-based solutions to enhance natural buffers to pollution and improve air quality.

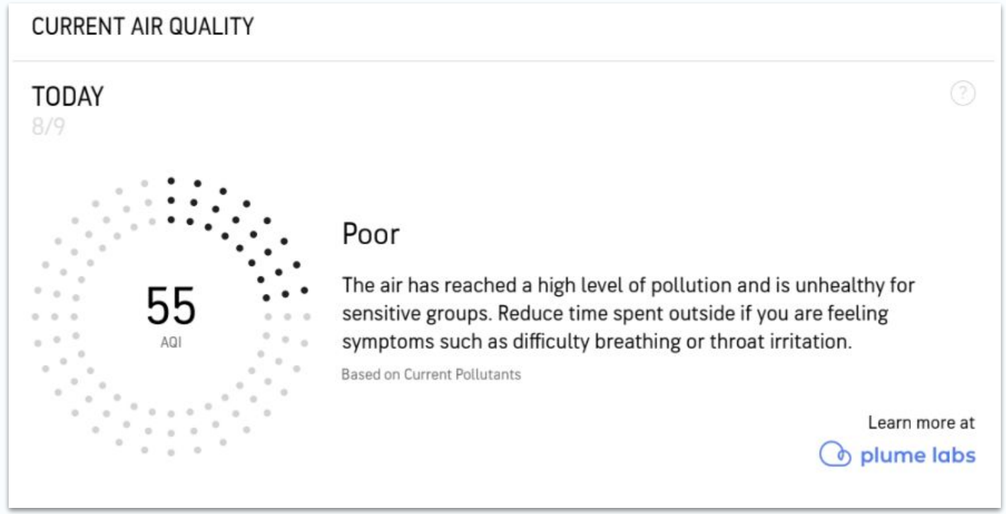
Target: 10% of ecosystems regenerated.

A tree-planting ceremony was held, with the remainder of trees scheduled to be planted in autumn; these were intended to partially contribute to offsetting CO_2 pollution from transportation, among other benefits.

Achieved by the OC

Air - Trakai Vilnius Air Quality Index

NO_2 **Poor**	Breathing in high levels of **Nitrogen Dioxide** increases the risk of respiratory problems. Coughing and difficulty breathing are common and more serious health issues such as respiratory... **more**	55 41 µg/m³
$PM_{2.5}$ **Fair**	**Fine Particulate Matter** are inhalable pollutant particles with a diameter less than 2.5 micrometers that can enter the lungs and bloodstream, resulting in serious health issues. The most severe... **more**	43 13 µg/m³
PM_{10} **Fair**	**Particulate Matter** are inhalable pollutant particles with a diameter less than 10 micrometers. Particles that are larger than 2.5 micrometers can be deposited in airways, resulting in health... **more**	26 21 µg/m³
O_3 **Excellent**	Ground-level **Ozone** can aggravate existing respiratory diseases and also lead to throat irritation, headaches, and chest pain.	10 30 µg/m³

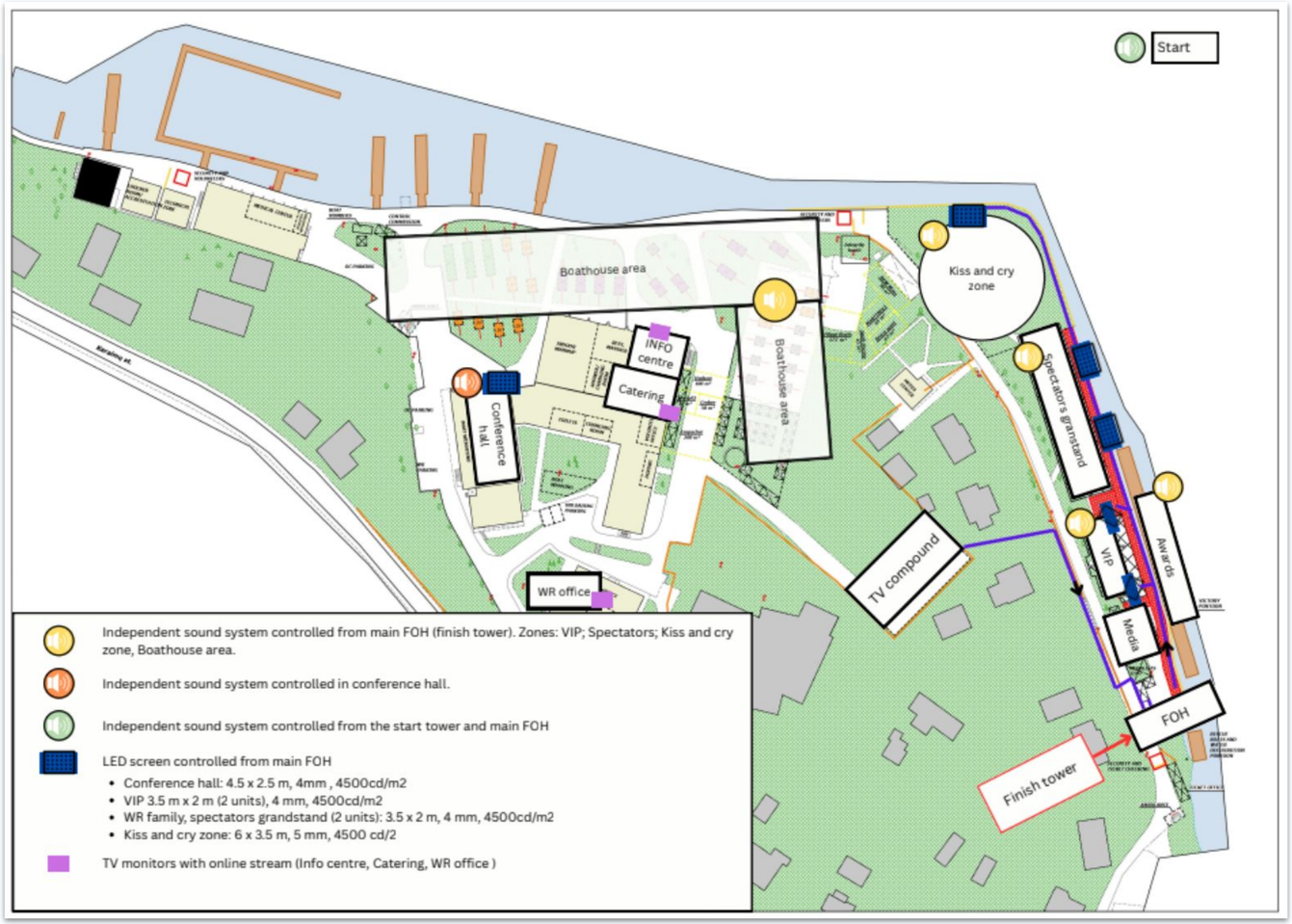


Source: Accuweather

Air - Audio & Video Media Zones

Sound Measurements

Sound levels were monitored throughout the event, including during race breaks, official announcements, and moments of audience applause. All measurements indicated that noise remained within safe and acceptable limits.



Audio & Video Equipment Site Layout

Land

Emerging (0-33%)
Established (34-66%)
Exemplary (67-100%)

Assess

Soil health assessment (physical & chemical health)

Objective

Assess local soil health and identify activities negatively affecting soil ecosystems.

Target: Soil health assessment (physical & chemical health).

A physical assessment was partially undertaken, chemical assessments not applicable in that case.

Protect

Soil Health Action Plan and Targets

Objective

Protect soil health by implementing measures to reduce pollution and depleting soil fertility.

Target: Soil Health Action Plan and Targets set.

Soil was previously moved but with the approval of lithuanian agencies. The buoy's physical properties were assessed to understand their impact on soil and water bodies through anchoring and microplastics. Regular lakeside cleanings were undertaken by volunteers.

Restore

% of soil ecosystems with restoration measures

Objective

Restore degraded soil ecosystems to improve composition, structure and overall health.

Target: 30% of land ecosystems with restoration measures.

The land that was affected by the infrastructure was then restored naturally once the event ended. The lakeside area will be returned to its original condition post-event.

Regenerate

Number of collaboration or funded regeneration projects

Objective

Regenerate soil ecosystems by promoting sustainable land management practices for enhanced ecosystem resilience.

Target: Number of collaboration or funded regeneration projects (up to 5+ projects for 100%).

A wetland regeneration project was deployed with Pelkiu Fondas around the event area as well as the tree planting project. Further initiatives with concrete measurements pre and post event would support the regeneration across the venue area.

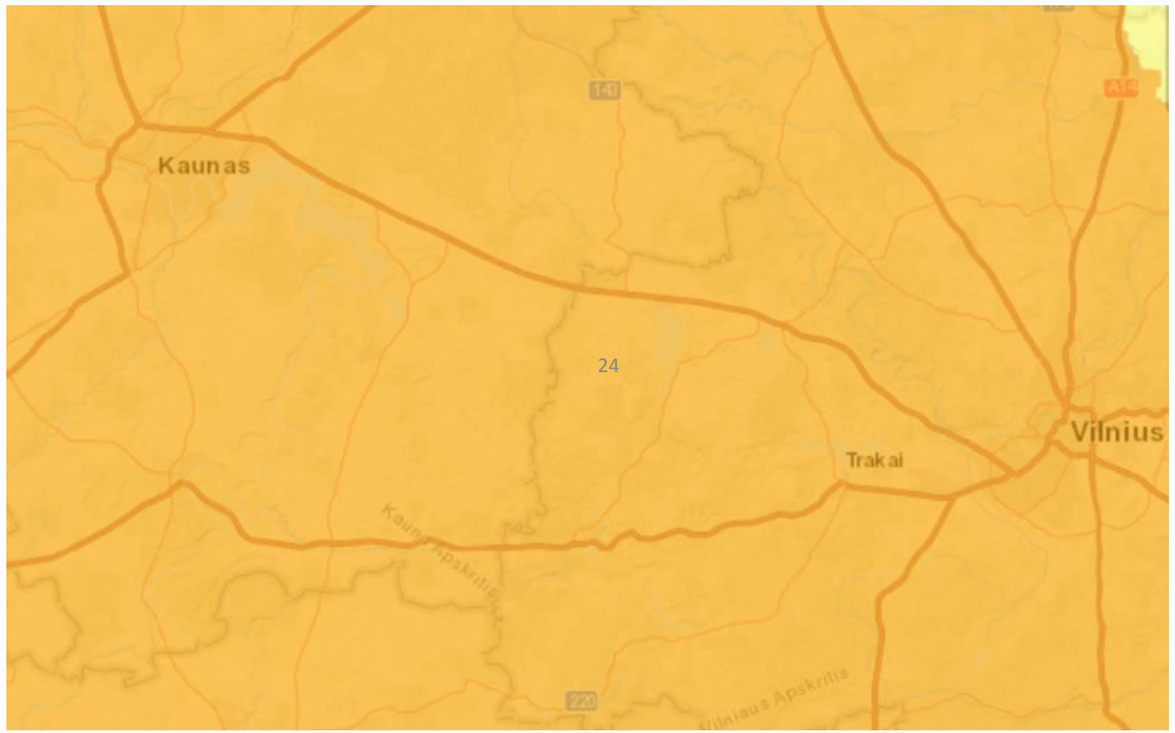
Achieved by the OC

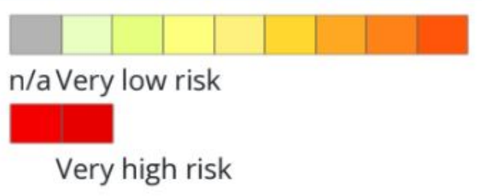
Land

Spectator Grandstands & Boat Storing Infrastructure

Land - Soil Condition

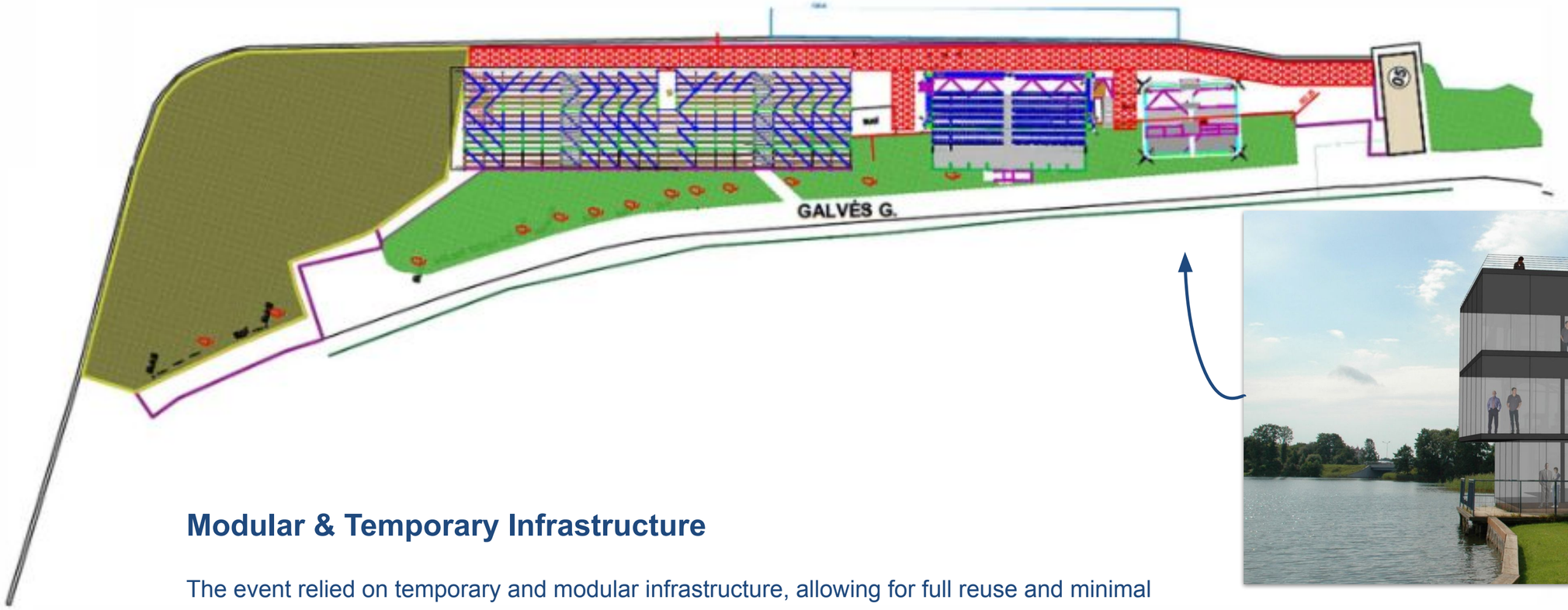
Existing Data: Soil Condition





Source: WWF Risk Filter Suite

Land - Spectator Grandstand



Modular & Temporary Infrastructure

The event relied on temporary and modular infrastructure, allowing for full reuse and minimal impact on the natural environment. This approach reduced material waste, avoided permanent alterations to the venue, and ensured that structures could be efficiently repurposed for future events.

More information on the Trakai Sports infrastructure here.

Water/Ocean

Emerging (0-33%)
Established (34-66%)
Exemplary (67-100%)

Assess

On-site water quality and consumption assessment

Objective

Assess local water quality and consumption to identify activities negatively affecting aquatic and oceanic ecosystems.

Target: On-site water quality and consumption assessment.

Water quality tests have shown that water is of excellent quality and meets all regulations.
Water was tested on factors such pH, Cl, NH4, NO3, NO2, BOD5, Conductivity, optical density, E.coli and E.feacalis, however the data shows that the last information collected was in 2022.

Protect

% of water ecosystems protected by the Water Action Plan and Targets

Objective

Protect water resources, and aquatic and ocean ecosystems from pollution and degradation.

Target: 30% aquatic or marine ecosystems as protected areas or other area-based conservation measures.

Assessments were done to define potential threats and protect the water accordingly. The chemicals used for boat washing and polishing raised concerns as to their toxic properties in regards to the chemicals that could affect water.

Restore

% of aquatic and marine ecosystems with restoration practices

Objective

Restore degraded aquatic and oceanic ecosystems.

Target: 30% of aquatic or marine ecosystem with restoration practices.

Cleaning stations are compulsory by World Rowing rules and were installed by the organiser. But there would be a need for filtering systems to avoid water contamination by polishing and cleaning products.

Regenerate

Number of collaboration or funded regeneration projects

Objective

Regenerate natural buffers to improve water quality and enhance ecosystem resilience.

Target: Number of collaboration or funded regeneration projects (5+ for 100%).

Based on the Water Stewardship in Sports by IUCN, water purification and water cleanliness could have been more advertised. Further initiatives could be implemented to regenerate the water quality as well as data to measure the impact of the projects to create a net positive event.

Achieved by the OC

Water / Ocean - Chemical Analysis

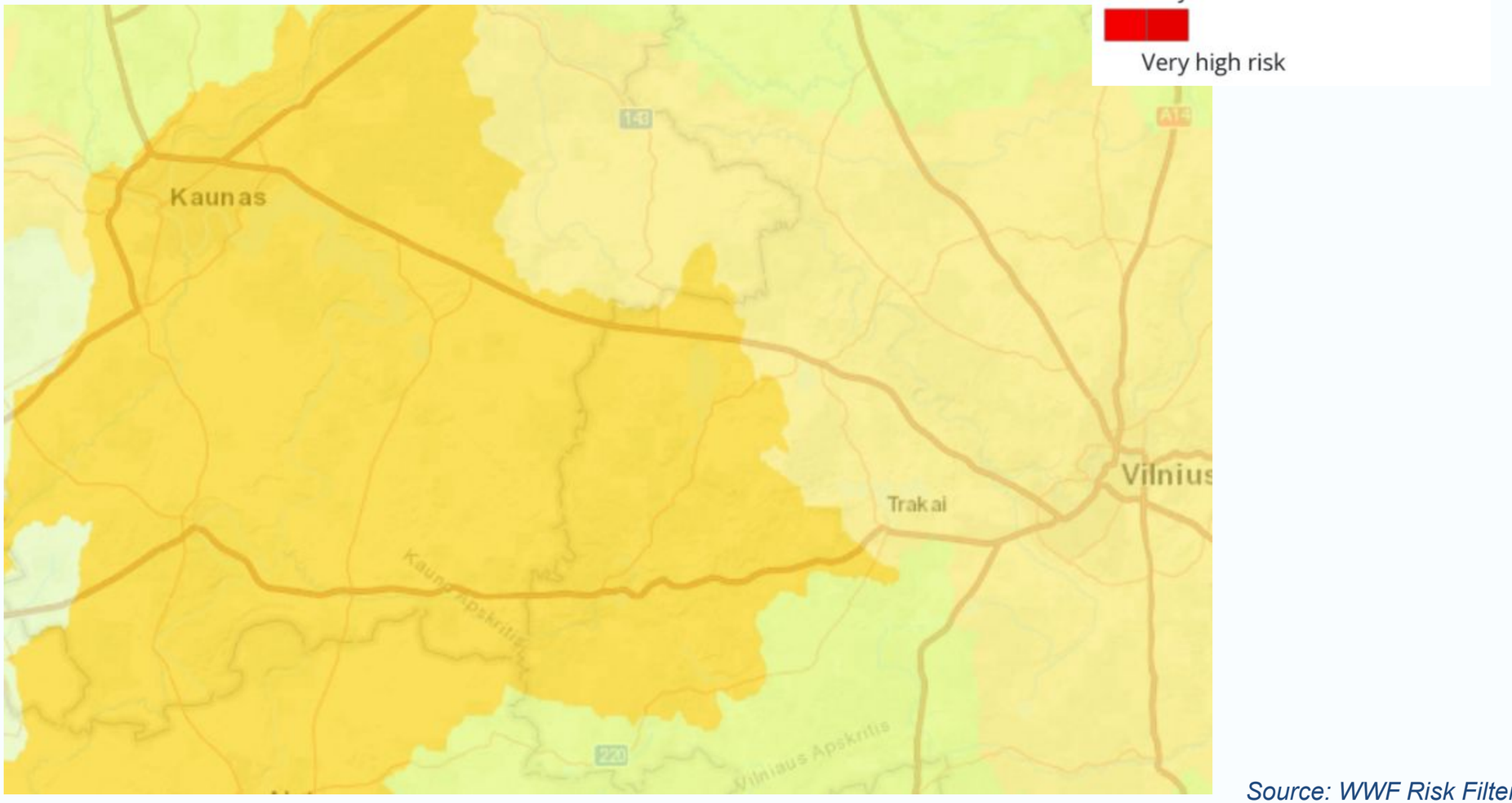
Chemical Analysis of the Lake

Water quality was monitored during the event, with samples collected to analyse chemical levels and ensure the lake's ecological health was maintained, however the tests stopped in 2022. More recent analysis should be conducted, as well as pre and post event.

World Rowing Water Quality Microbial and Chemical Testing Template												
Report 1: Chemical Analysis												
Sample Number	**Sampling site**			**Conditions**	**pH**	**Cl**	**NH4**	**NO3**	**NO2**	**Biochemical Oxygen Demand - BOD**	**Conductivity**	**Optical Density**
n	**DATE**	**TIME**	**Location**	**Weather**		**mg/l**	**mg/l**	**mg/l**	**mg/l**	**mg_O2/l in 5 days**	**µS**	
1	20-Jan-00	11:46	*Site 1*	sunny								
2	21-Jan-00	11:01	*Site 1*	cloudy								
**right click the row number to insert additional rows*				rainfall, heavy rainfall, etc								
1	2015 05 25	13:15	Lake Galve	sunny	8.82	64	<0,025	0.15	<0,01	2.6 (in 7 days)	323	1.5
2	2016 07 26	12:00	Lake Galve	heavy rainfall	8.64	55	<0,017	0.1	<0,02	2.4 (in 7 days)	325	1.5
3	2017 08 29	14:30	Lake Galve	sunny	8.8	36	<0,018	0.23	<0,01	1,9 (in 7 days)	320	1.5
4	2018 10 11	12:15	Lake Galve	sunny	8.28	40	<0,016	0.19	<0,01	1,7 (in 7 days)	328	1.5
5	2019 06 19	14:25	Lake Galve	sunny	8.4	60	<0,020	0.29	<0,01	1.1 (in 7 days)	321	1.5
6	2020 03 10	13:10	Lake Galve	cloudy, rainfall	8.13	36	<0,010	0.159	<0,02	2,2 (in 7 days)	350	1.5
7	2021 11 15	18:00	Lake Galve	sunny	7.8	42	<0,016	0.15	<0,03	1,6 (in 7 days)	366	1.8
8	2022 03 15	12:30	Lake Galve	sunny	7.7	56	<0,017	0.22	<0,028	2,1 (in 7 days)	345	1.6

Water / Ocean - Water Condition

Existing Data: Water Condition



Source: WWF Risk Filter Suite

Water / Ocean

Buoys, Floating Infrastructure & Boat Polish

Pillar 3: Engagement & Awareness

Stakeholder Engagement

❗ Stakeholders attended the virtual workshop but the questionnaire showed limited proactive contributions and low response rates.

✅ Workshop was effective, more interactive sessions could enhance engagement.

Publicity & Communication

✅ Multiple initiatives promoted the event, project, and collaborations.

✅ A complete stakeholder list was assessed and documented.

Restoration & Offsetting Initiatives

✅ Tree planting ceremony held (3 trees); remaining 222 trees will be planted by November 2025.

✅ Wetlands restoration project with Pelkių fondas scheduled for October 2025.

Partnerships & Compliance

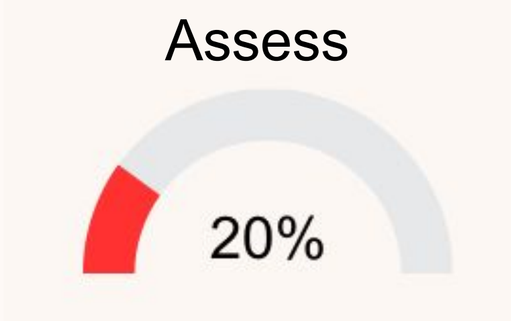
✅ Collaboration between World Rowing, KTU, bloomUp, Trakai Organising Committee and city.

✅ Event complies with all relevant sustainability and biodiversity regulations and frameworks.

Education & Capacity Building

Emerging (0-33%)
Established (34-66%)
Exemplary (67-100%)

Assess



Biodiversity survey on awareness and understanding distributed to 100% of stakeholders

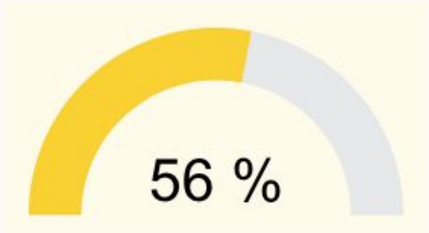
Objective

Assess stakeholder awareness and understanding of biodiversity.

Target: 100% of stakeholders completed survey.

The stakeholders attended both the virtual presentation and workshop. However, there was a lack of response rates to certain requirements including the survey. This is also due to the lack of time related to short notice.

Restore



% of stakeholders engaging with biodiveristy

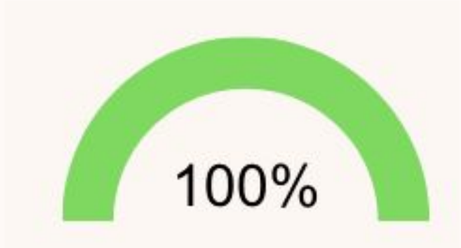
Objective

Develop a Biodiversity Engagement Plan to build internal skills and knowledge on biodiversity assessment, protection, restoration and regeneration.

Target: 100% of stakeholder map engaging with biodiversity.

The workshops achieved strong participation and generated positive momentum in building biodiversity allies among stakeholders. However, engagement and practical application across all stakeholders remained uneven.

Protect



Number of initiatives enhancing public knowledge of biodiversity

Objective

Engage in initiatives to enhance public knowledge of biodiversity assessment, protection, restoration and regeneration.

Target: 5 initiatives enhancing public knowledge of biodiversity.

The event had multiple initiatives to publicise the event, project and collaborations: live announcements, live interviews, social media relay and post event videos production.

Achieved by the OC

Education & Capacity Building

Value Creation Workshop

A value creation workshop centered on biodiversity was organised with major stakeholders to raise awareness and build knowledge on key biodiversity topics. Participants engaged in an interactive session where they contributed data and learned how to use the **bloomUp Biodiversity Compass**. This workshop not only fostered collaboration but also laid the groundwork for stronger legacy outcomes, equipping stakeholders with practical skills to integrate biodiversity considerations into future rowing events and beyond.

Community Engagement & Legacy

Emerging (0-33%)
Established (34-66%)
Exemplary (67-100%)

Assess

Engagement mapping

Objective

Assess relevant stakeholders for engagement and empowerment on biodiversity action.

Target: Map all stakeholders.

Protect

Number of biodiversity initiatives or funding programs led by local or indigenous communities

Objective

Support and empower community-led projects to inspire local and indigenous leadership in biodiversity restoration and regeneration.

Target: Number of biodiversity initiatives or funding programs led by local or indigenous communities.

Restore

% compliance with biodiversity regulations and frameworks

Objective

Align biodiversity strategies and policies with global frameworks at multiple levels of governance.

Target: 100% compliance.

Regenerate

Number of collaborations or partnerships for biodiversity / total number of collaborations or pa...

Objective

Build collaboration to create legacy biodiversity restoration and regeneration projects.

Target: 10% of organisations' collaborations for biodiversity.

Achieved by the OC

All stakeholders were assessed and a list was created to set tailored engagement approaches for different stakeholder groups.

A tree planting ceremony was held (for 3 trees), all trees (rest of 222) will be planted in autumn until November 2025, wetlands restoration project with the help of Pelkiu fondas will be implemented in October.

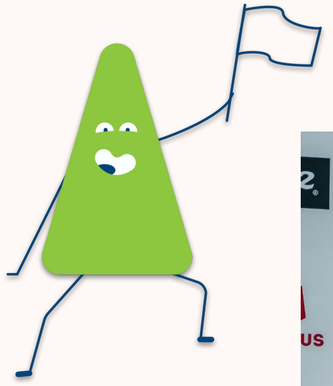
The event complied with the relevant regulations and frameworks.

Partnerships were established with World Rowing, bloomUp, and KTU to address biodiversity, alongside the involvement of local governing bodies and the Trakai OC. A QR code could be displayed to call for lake cleanup participation and animal spotting across the venue.

Community Engagement

Splash - The U19 Trakai Championships Mascot

As part of the community engagement activities, a mascot named **Splash** was introduced at the Championships. Mascots play a key role in connecting with audiences, particularly young people, by creating a friendly and approachable symbol for the event. Although Splash wasn't used for this specific purpose, the mascot has strong potential to be connected to biodiversity themes. In the future, it could be effectively linked to topics such as nature, ecosystems, and local wildlife to make these themes more relatable and engaging for participants, families, and the community.



Legacy Initiatives

Video produced live at the event by World Rowing.

A dedicated video was created to capture the sustainability journey of the 2025 World Rowing Under 19 Championships. The film highlights how sustainability was woven into every aspect of the event. Beyond documenting these actions, the video serves as part of the event's **legacy initiatives**, ensuring that the learnings and inspiration generated in Trakai continue to support nature-positive rowing and future international sport events.

"In Balance With Nature: World Rowing Pilot of the bloomUp Biodiversity Compass" is shortlisted for the Sport Positive Award.

Read more about the award here: Sport Positive Award

Pillar 4: Natural Resource Stewardship

Sustainability in Tendering

- ❗ Indicators exist but lack clear definitions and measurable actions.
- ❗ Unclear if requirements were implemented or only listed as potential actions.

Supplier Practices & Gaps

- ✅ Food supplier met requirements with recyclable tableware; some suppliers lacked adequate sourcing codes.
- ❗ Plastic bottles, coffee pods, and limited recycling infrastructure highlight weak circularity practices.

Waste & Circular Economy

- ✅ Water bottles Akvile water partnership and “Grazinti verta” bottle return initiative.
- ❗ Future improvements: clear cleanup codes for teams and more recycling/collection stations.

Challenges & Awareness

- ❗ Circular economy limited by costs.
- ❗ Lack of education/awareness among suppliers.
- ❗ Address the presence of a single-use plastic water bottles sponsor.

Supply Chain Assessment & Standard Development

Emerging (0-33%)
Established (34-66%)
Exemplary (67-100%)

Assess

Number of supply chain categories assessed / Total number of supply chain categories

Objective

Assess supply chain impact on biodiversity and define highest priority categories.

Target: 100% of supply chain categories ranked.

Protect

Biodiversity Engagement Grade for each supplier

Objective

Evaluate supplier action and commitments regarding biodiversity.

Target: 100% of suppliers with Biodiversity Engagement Grade.

Restore

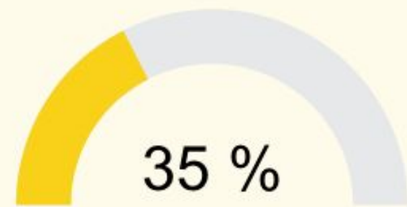
Code of Conduct created + number of compliant suppliers

Objective

Develop a sustainable sourcing code to provide clarity for suppliers, partners and internal decision-making.

Target: Creation of biodiversity code of conduct (1/5) + 100% compliant suppliers (5/5).

Regenerate



% of suppliers engaging in 1+ biodiversity restoration or regeneration action

Objective

Share best-practice biodiversity practices to encourage supplier initiatives for biodiversity gain.

Target: 100% of suppliers engaging in 1 + net biodiversity restoration or regeneration action.

Achieved by the OC

Tenders have indicators on sustainability but no definition, or clear specifications regarding biodiversity.

Lack of concrete set engagements and some initiatives were loosely in place during the event. Scale of the event and lack of time for implementation made this difficult.

Only food suppliers for the event were adequate while other suppliers and the athletes were not provided with adequate sourcing code.

Akvile water was provided for free but agency "Grazinti verta" picked bottles for recycling, people were provided with info about where to and how to recycle bottle on the site.

Supply Chain Assessment - Catering

Tableware & Waste

- **Reusable tableware** was required to reduce single-use items.
- Single-use items permitted only if certified biodegradable/compostable/recyclable (e.g., EN 13432).
- **Waste sorting** required.

Food Standards

- At least **30% of ingredients certified** organic, locally protected (PGI/PDO/TSG), or part of a recognised national/EU quality scheme.
- Avoiding GMOs, palm oil and artificial enhancers.
- No mention of local produce.

Meal Composition

- **Vegetarian options** offered at every meal (lunch and dinner required at least one vegetarian hot dish).
- **Portion sizes** clearly defined to avoid food waste while meeting nutritional standards.

Operational Sustainability

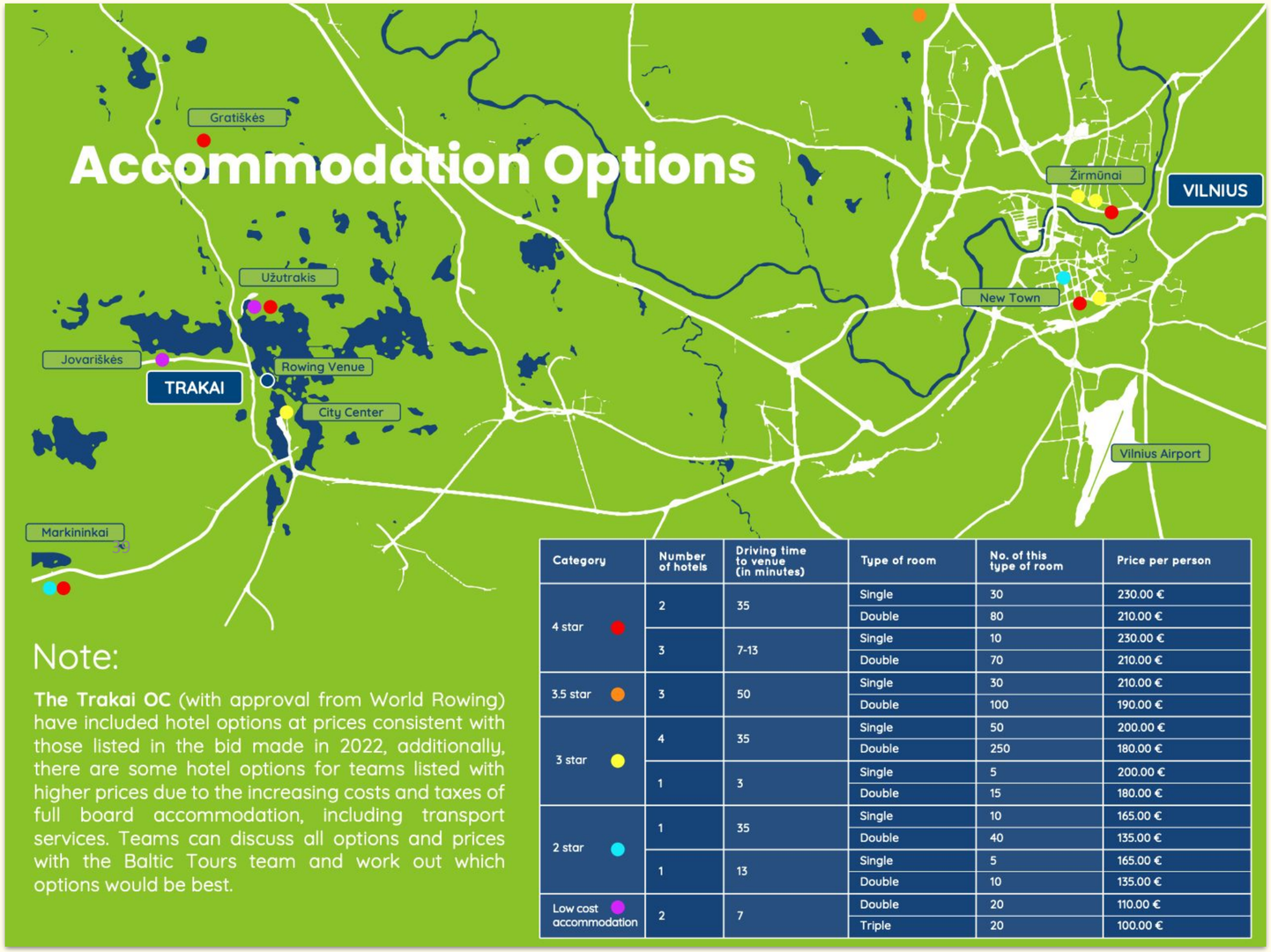
- All food prepared **on-site** to reduce transport and packaging waste from pre-prepared meals.
- Daily reporting of meal quantities ensured **transparency** and monitoring.

Supply Chain Assessment - Accommodation

The documentation of the event gives a good overview of the different hotels in the area, specifying the distances from the venue.

Longer travel distances, particularly when using high-emission modes of transport, can increase carbon emissions and air pollution, posing harmful effects on local habitats and wildlife. By carefully considering accommodation locations, event organisers can reduce environmental pressures and help protect surrounding ecosystems.

The accommodation should also provide information about their own supply chain assessment linked to biodiversity topics (waste, food, cleaning products, etc).



Note:

The Trakai OC (with approval from World Rowing) have included hotel options at prices consistent with those listed in the bid made in 2022, additionally, there are some hotel options for teams listed with higher prices due to the increasing costs and taxes of full board accommodation, including transport services. Teams can discuss all options and prices with the Baltic Tours team and work out which options would be best.

Category	Number of hotels	Driving time to venue (in minutes)	Type of room	No. of this type of room	Price per person
4 star	2	35	Single	30	230.00 €
			Double	80	210.00 €
	3	7-13	Single	10	230.00 €
			Double	70	210.00 €
3.5 star	3	50	Single	30	210.00 €
			Double	100	190.00 €
3 star	4	35	Single	50	200.00 €
			Double	250	180.00 €
	1	3	Single	5	200.00 €
			Double	15	180.00 €
2 star	1	35	Single	10	165.00 €
			Double	40	135.00 €
	1	13	Single	5	165.00 €
			Double	10	135.00 €
Low cost accommodation	2	7	Double	20	110.00 €
			Triple	20	100.00 €

Source: 2025_U19_Trakai_World_Rowing_Championship_V1.5.1.F

Circular Economy

Emerging (0-33%)
Established (34-66%)
Exemplary (67-100%)

Assess

Circular Economy Concept implementation assessment

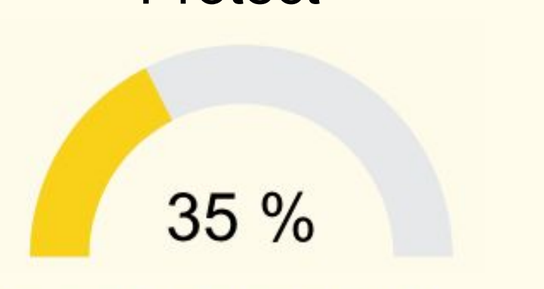
Objective

Assess the implementation of the circular economy concepts by suppliers, partners and internal decision-makers.

Target: 100% identified categories/functions assessed.

Some initiatives for circularity were in place for food and infrastructure however plastic bottles and coffee pods could be addressed and recycling bins should be provided.

Protect



Development of Circular Economy Guidelines

Objective

Develop circular economy implementation guidelines for suppliers, partners and internal decision-makers.

Target: Development of Circular Economy Guidelines for internal and external use + consultation with stakeholders to develop reporting + monitoring framework of these guidelines.

Tenders included requirements, however, a document could be elaborated to give more defined guidelines with sustainable options such as cleanup stations.

Regenerate

% of organization aligns with Circular Economy Guidelines

Objective

Integrate the regenerative principles of the circular economy concept across all levels of governance.

Target: 100% of organisation aligns with Circular Economy Guidelines.

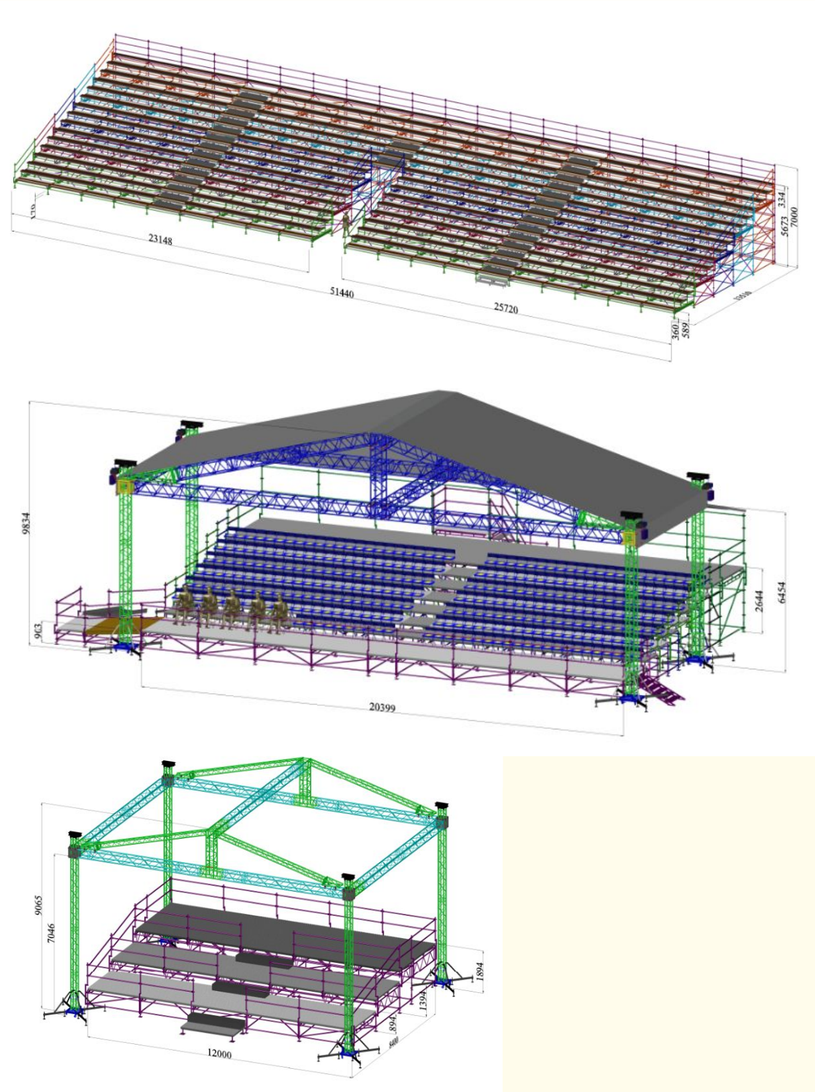
The event event reached around 50% of its goals. Some initiatives were in place to encourage and highlight the event sustainability initiatives and collaborations.

Achieved by the OC

Circular Economy - Infrastructure

Design

- All grandstands were **modular** and **temporary**, ensuring no permanent alteration or damage to the venue.
- Structures complied with EU safety and load standards, allowing **reuse** for future events.



Efficient Operations

- Full installation, maintenance, and dismantling included in service, minimising unnecessary resource use.
- Advertising banner mounting zones to avoid additional infrastructure

Environmental Protection Measures

- A minimum 4-meter buffer zone was maintained between the main grandstand and the shoreline to protect the lake ecosystem.

Key Recommendations I

1 Increase Stakeholder Engagement & Accountability

- Start engaging with all important stakeholders as early as possible, prior to the event.
- Implement a Biodiversity management system to help with planning , engagement and ressources attribution
- Introduce interactive workshops, trainings, and targeted surveys for all stakeholders.
- Include Specific Biodiversity indicators in tendering process as well as monitoring and reporting requirements.
- Create a QR code to engage with different stakeholders for the relevant initiatives.

Key Recommendations II

2 Enhance Biodiversity & Habitat Protection

- Implement long-term monitoring systems, including a prior event and post event measurements
- Support ongoing preservation programs such as wetlands regeneration, invasive species (Lupin) removal, and tree planting, ensuring they are monitored for long-term impact.
- Assess Greenhouse gas emissions of the event and define a climate plan to reduce, offset and provide a net positive impact linked to GHG emissions.
- Prioritise infrastructure without flooring to facilitate regeneration processes post events.

Key Recommendations III

3 Water Management

- Avoid using chemicals for boat cleaning and polishing, if necessary use eco-friendly product lines.
- Collect data for robust assessments of potential pollutants - know which chemicals are used.
- Assess water drainage systems at the venue to ensure no chemical leakage in the water bodies.
- Implement a filtration system at cleaning stations.
- Investigate into alternative products for boat maintenance.
- Further assess and monitor impact of buoys & digging of water bodies.

Key Recommendations IV

4 Strengthen Circular Economy & Supplier Standards

- Create a Circular Economy Index that evaluates how efficiently resources are used, reused, and recycled.
- Include Biodiversity as a key pillar to address in the Tender process - defined and structured targets for suppliers, partners and sponsors
- Sustainability code for suppliers & OC
- Waste disposal stations
- Ban single use plastic bottles
- Share waste disposal codes with athletes and spectators

Challenges & Opportunities

The project faced challenges in ensuring consistent implementation of sustainability requirements, particularly with suppliers, waste management, and reducing transport-related air pollution. The access to robust and accurate data was limited, leading to challenges in data reliability. Stakeholder engagement was also limited, with low contribution to the survey mainly due to lack of time.

This project highlighted key opportunities for future World Rowing events: expanding the Biodiversity Compass to lead biodiversity integration in sport, strengthening community engagement through initiatives like Splash and workshops, developing a Sustainable Events Guide with clear and measurable KPIs across event operations, and leveraging partnerships with bloomUp, WWF, and local organisers to build lasting, replicable frameworks.

Challenges

1. Stakeholder Engagement in the Survey
2. Data Reliability
3. Ensuring consistent implementation of sustainability requirements across diverse suppliers.
4. Lack of biodiversity knowledge stakeholders

Opportunities

1. Champion Biodiversity Leadership at future Rowing Events
2. Community & Youth Engagement
3. Sustainable Event Operations
4. Partnerships & Knowledge Sharing

Supporting Literature

Biodiversity & Protected Areas
Data Platforms & Tools

Global Biodiversity Standards/Concepts (bloomUp Biodiversity Compass):

1. Kunming-Montreal Global Biodiversity Framework (GBF)
2. UN Sustainable Development Goals (SDGs)
3. EU Corporate Sustainability Reporting Directive (CSRD)
4. IUCN Sports for Nature
5. Circular Economy Concept
6. Nature Based Solutions (NbS)

SportsForNature:

1. UN Biodiversity Lab
2. The World Database on Protected Areas (WDPA)
3. Key Biodiversity Areas (KBA)
4. The International Union for Conservation of Nature’s (IUCN) Red List of Threatened Species

Others:

1. Google earth - defining the scope of the venue
2. Biodiversity Information Systems For Europe (BISE) Biodiversity Knowledge Hub (BKH)
3. EUNIS Habitat Maps
4. Global Biodiversity Information Facility (GBIF)
5. WWF Biodiversity Risk Filter
6. Lithuanian Natura2000 map system
7. Citizen Science Platforms
8. iNaturalist

Acknowledgements

This project was conducted in partnership between World Rowing, The Organising Committee in Trakai, the Canton de Vaud and Kaunas University of Technology (KTU), coordinated by bloomUp sustainability agency.

World Rowing would like to extend its appreciation to the Trakai Organising Committee for their leadership, engagement, and collaboration throughout the project, and to all the partners and people involved in the project.

Jurgita Čestauskaitė, researcher from Kaunas University of Technology (KTU), supported the project by assisting in data collection and analysis. Her expertise helped transforming technical findings into clear, accessible insights, making complex biodiversity information easier for a wider audience to understand.

world rowing

2025 world rowing under 19 championships Trakai Lithuania

ktu kaunas university of technology 1922

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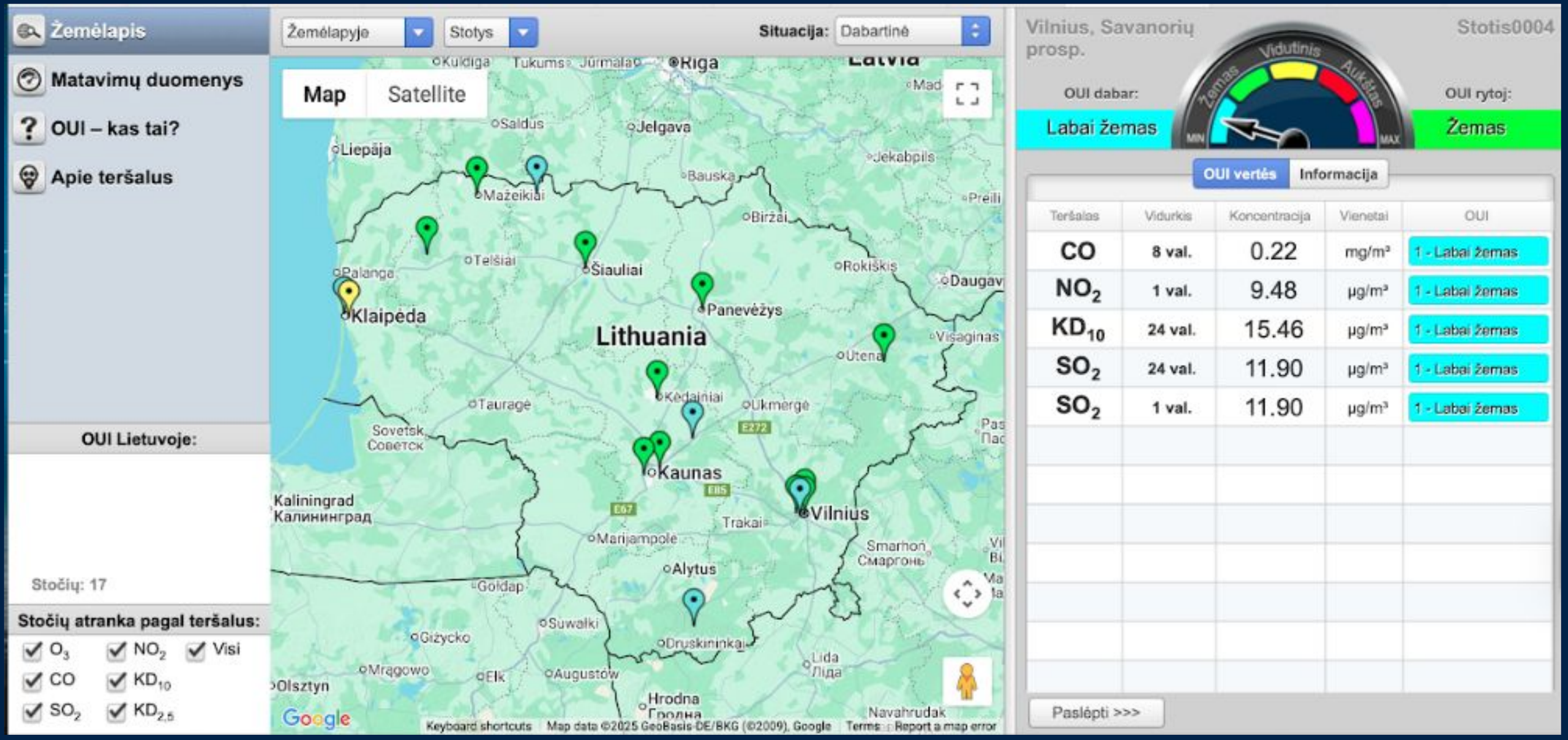
Sustainability. Innovation. Impact.

Annexe 1 - Air quality



Annexe 2 - Noise Pollution

Announcements - Stands - Applause - Microphone - Music playing during breaks

announcements.csv External

	A	B	C	D	E
	Date	Time	Current (dB-A)	Max (dB-A)	Average (dB-A)
	9 Aug 2025	12:53:32	65	0	65
	9 Aug 2025	12:53:33	65	0	65
	9 Aug 2025	12:53:33	69	69	66
	9 Aug 2025	12:53:34	67	69	66
	9 Aug 2025	12:53:35	74	74	68
	9 Aug 2025	12:53:35	73	74	69
	9 Aug 2025	12:53:36	64	74	68
	9 Aug 2025	12:53:36	66	74	68
	9 Aug 2025	12:53:37	67	74	68
	9 Aug 2025	12:53:37	66	74	68
	9 Aug 2025	12:53:38	72	74	68
	9 Aug 2025	12:53:38	66	74	68
	9 Aug 2025	12:53:39	71	74	68
	9 Aug 2025	12:53:39	66	74	68
	9 Aug 2025	12:53:40	72	74	68
	9 Aug 2025	12:53:40	70	74	68
	9 Aug 2025	12:53:41	69	74	68
	9 Aug 2025	12:53:41	69	74	68
	9 Aug 2025	12:53:42	70	74	68
	9 Aug 2025	12:53:42	79	79	69
	9 Aug 2025	12:53:43	69	79	69
	9 Aug 2025	12:53:43	71	79	69
	9 Aug 2025	12:53:44	66	79	69
	9 Aug 2025	12:53:44	69	79	69
	9 Aug 2025	12:53:45	69	79	69
	9 Aug 2025	12:53:45	64	79	69
	9 Aug 2025	12:53:46	69	79	69
	9 Aug 2025	12:53:46	70	79	69
	9 Aug 2025	12:53:47	70	79	69
	9 Aug 2025	12:53:47	62	79	69

stands.csv External

	A	B	C	D	E
1	Date	Time	Current (dB-A)	Max (dB-A)	Average (dB-A)
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3	9 Aug 2025	13:14:15	79	0	79
4	9 Aug 2025	13:14:16	73	73	77
5	9 Aug 2025	13:14:16	79	79	78
6	9 Aug 2025	13:14:17	74	79	77
7	9 Aug 2025	13:14:17	75	79	77
8	9 Aug 2025	13:14:18	79	79	77
9	9 Aug 2025	13:14:18	75	79	77
10	9 Aug 2025	13:14:19	68	79	76
11	9 Aug 2025	13:14:19	67	79	75
12	9 Aug 2025	13:14:20	69	79	74
13	9 Aug 2025	13:14:20	67	79	74
14	9 Aug 2025	13:14:21	70	79	73
15	9 Aug 2025	13:14:21	67	79	73
16	9 Aug 2025	13:14:22	74	79	73
17	9 Aug 2025	13:14:22	78	79	73
18	9 Aug 2025	13:14:23	79	79	74
19	9 Aug 2025	13:14:23	78	79	74
20	9 Aug 2025	13:14:24	78	79	74
21	9 Aug 2025	13:14:24	78	79	74
22	9 Aug 2025	13:14:25	79	79	75
23	9 Aug 2025	13:14:25	78	79	75
24	9 Aug 2025	13:14:26	76	79	75
25	9 Aug 2025	13:14:26	74	79	75
26	9 Aug 2025	13:14:27	78	79	75
27	9 Aug 2025	13:14:27	77	79	75

during break with music playing.csv External

	A	B	C	D	E
1	Date	Time	Current (dB-A)	Max (dB-A)	Average (dB-A)
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4	9 Aug 2025	12:34:00	55	55	57
5	9 Aug 2025	12:34:01	57	57	57
6	9 Aug 2025	12:34:02	58	58	57
7	9 Aug 2025	12:34:02	59	59	57
8	9 Aug 2025	12:34:03	60	60	58
9	9 Aug 2025	12:34:03	59	60	58
10	9 Aug 2025	12:34:04	58	60	58
11	9 Aug 2025	12:34:04	57	60	58
12	9 Aug 2025	12:34:05	56	60	58
13	9 Aug 2025	12:34:05	58	60	58
14	9 Aug 2025	12:34:06	56	60	57
15	9 Aug 2025	12:34:06	58	60	58
16	9 Aug 2025	12:34:07	57	60	58
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18	9 Aug 2025	12:34:08	56	60	57
19	9 Aug 2025	12:34:08	61	61	58
20	9 Aug 2025	12:34:09	59	61	58
21	9 Aug 2025	12:34:09	57	61	58
22	9 Aug 2025	12:34:10	60	61	58
23	9 Aug 2025	12:34:10	58	61	58
24	9 Aug 2025	12:34:11	57	61	58
25	9 Aug 2025	12:34:11	56	61	58
26	9 Aug 2025	12:34:12	57	61	58
27	9 Aug 2025	12:34:12	59	61	58
28	9 Aug 2025	12:34:13	57	61	58
29	9 Aug 2025	12:34:13	60	61	58
30	9 Aug 2025	12:34:14	57	61	58

Annexe 3 - Supply Chain

Support - sources: IUCN Report, Sports for Nature Procurement Factsheets, IOC guidelines

- https://iucn.org/resources/publication/mitigating-biodiversity-impacts-sports-events
- https://sportsfornature.org/resource/sustainable-sourcing-factsheets/

Annexe 4 - Useful links

CONSERVATION & BIODIVERSITY

- https://www.biodiversity-metrics.org/understanding-biodiversity-metrics.html
- Main text of Convention of Biological Diversity: https://www.cbd.int/convention/text
- Relevant CBD toolkit: https://www.cbd.int/invasive/cbdtoolkit

SPORT & BIODIVERSITY

- https://iucn.org/resources/publication/mitigating-biodiversity-impacts-sports-events
- https://sportsfornature.org/resource/sustainable-sourcing-factsheets/
- https://sportsfornature.org/resources/

BEST PRACTICES

- **https://sportsfornature.org/case-study/**
- Establishment of guidelines UCI example: https://www.uci.org/article/earth-day-the-commitment-of-cycling-and-other-sports-to-protect-and-help/6r8TaNDiPKI7x1aTGJf02J -
- World Sailing's policy document: https://d7qh6ksdplczd.cloudfront.net/sailing/wp-content/uploads/2023/09/29111958/WST_Invasive-Species_2021.pdf

Support - sources: Conversion for Biological Diversity, IUCN Report, Sports for Nature, IOC guidelines

Annexe 5 - Lake Digging

In the case of lake digging the following points should be addressed.

Lake digging can significantly affect biodiversity, impacting multiple of the Biodiversity Pillars, it should therefore be avoided. However, if digging is undertaken, the following key considerations must be addressed:

01

Assessment

Ensure that the biodiversity surrounding the area is properly assessed before, during and after the digging. Assess potential risk areas and threatened species.

02

Machinery

Ensure that the machinery used for digging is modern, well-maintained, and compliant with environmental standards to minimise all forms of pollution..

03

Water Quality

Monitor water quality before, during, and after the digging to prevent sediment release, chemical contamination, or oxygen depletion that could harm aquatic life.

04

Restoration Plan & Monitoring

Develop and commit to a clear restoration plan, including replanting of native vegetation and rehabilitation of disturbed areas immediately after the event.

Lake digging machinery

world rowing®

Contact: explore@bloomup.world