



Policy messages from projects around the Baltic Sea Region

Coordinators of Policy Area Nutri and Secure working under the EU Strategy for the Baltic Sea Region have gathered policy messages from several ongoing and past projects relevant to the climate resilience and risk management topic. The topics of the projects reflect on issues that relevant to the Baltic Sea Region.

Contributing projects are:

[ClimaResponse](#) - Responsive Local Action for Climate Change Adaptation and Disaster Risk Reduction (contributions included to consultation questions)

[CityBlues](#) - Bluegreen nature-based solutions for climate change adaptation and citizen wellbeing

[Nursecoast II](#) - Model nutrients reduction solutions in near-coast touristic areas

[ReNutriWater](#) - Closing local water circuits by recirculating nutrients and water and using them in nature

Additional contribution from municipality of Söderhamn, Sweden.

Policy Area Nutri coordinators:

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Summary

This opinion is submitted on behalf of the EU Strategy for the Baltic Sea Region (EUSBSR), Policy Areas Nutri and Secure. It consolidates key policy messages emerging from projects funded under the Interreg Baltic Sea Region Programme. Detailed project contributions are attached. This statement does not necessarily reflect the views of the hosting organisations.

Climate change risk management at EU level must better account for macro-regional specificities. The Baltic Sea Region faces distinct environmental vulnerabilities, including an increased risk of eutrophication and pollution of the Baltic Sea due to climate change. EU policies and funding instruments should therefore enable the prioritisation of region-specific risks and allow for targeted allocation of resources where impacts are more severe or structurally different from other parts of the Union. In the Baltic Sea Region, small wastewater treatment plants in tourist areas have been identified as a significant and growing source of eutrophication risk. Additional evidence from the NurseCoast II project is provided in the attachment. Addressing such pressures requires flexible funding mechanisms and regulatory frameworks that support both preventive measures and adaptive infrastructure upgrades. Ensuring a clean, safe and healthy environment requires a systemic and cross-sectoral approach.

Experiences from the ongoing CityBlues project indicate that local authorities – particularly in smaller and less-resourced municipalities – face significant technical, financial and administrative constraints. EU and national policies are often insufficiently operationalised to address major climate risks effectively. Furthermore, unclear allocation of roles and responsibilities across governance levels leads to implementation gaps and places disproportionate pressure on local authorities. Strengthening multi-level governance mechanisms and clarifying responsibilities would significantly improve policy delivery.

Cooperation across sectors and governance levels remains insufficient. However, increased exchange of information and practical experience has consistently proven valuable and well-received among stakeholders. The European Commission is encouraged to further support macro-regional cooperation platforms that facilitate peer learning, especially for actors with limited access to established networks.

Joint statement of Interreg BSR project City Blues partners to EU's climate resilience and risk management consultation

Stressing the need for strengthening European climate resilience through nature-based solutions

On behalf of Interreg BSR City Blues consortium:

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Interreg
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SUSTAINABLE WATERS 
City Blues

In the Interreg Baltic Sea Region project City Blues, cities develop plans for their urban waters and green areas to better respond to the negative effects of climate change, like floods and pollution, and create liveable areas for people at the same time.

<https://interreg-baltic.eu/project/city-blues>

Introduction

Devastating floods – while often less severe than those that triggered the European Parliament [resolution of 19 September 2024](#) – are nevertheless **a familiar and recurring reality for cities across the Baltic Sea Region**. In recent years, intense pluvial flood events, river flooding and coastal storm surges have repeatedly affected urban areas in Denmark, Sweden, Finland, Estonia and Latvia, causing significant damage to housing, critical infrastructure, public space and local economies. Cities such as Aarhus, Malmö, Tartu, Tampere and coastal municipalities along the Baltic Sea have all experienced extreme rainfall events where a substantial share of monthly or even seasonal precipitation has fallen within hours, overwhelming drainage systems and exposing long-standing vulnerabilities in land use, infrastructure and governance.

While the human toll of these events has generally been lower than in the most catastrophic floods in Central and Eastern Europe, their **frequency, cumulative impacts and rising economic costs** stress the same underlying message: climate risks are no longer exceptional, and urban infrastructures across Europe are increasingly operating beyond their historical design limits. These experiences closely mirror the conclusions of the European Climate Risk Assessment, which identifies flooding as one of the most urgent and systemic climate risks Europe is facing.

The European Climate Law requires the EU and its Member States to ensure continuous progress on climate adaptation. Yet Member States currently apply very different policy frameworks for climate risk assessments and adaptation strategies, plans and therefore also instruments and practices for their implementation. This diversity limits the development of a shared understanding of climate risks and hinders coordinated climate resilience action across the Union. At the same time, **cities and municipalities are increasingly expected to translate these overarching frameworks into concrete, place-based actions**, as they are responsible for spatial planning, infrastructure development, service provision and local risk management. However, **local authorities often operate with limited technical, financial and administrative capacity, particularly in smaller and less-resourced municipalities**. Policies are frequently insufficiently specific to address major climate risks in operational terms, and the allocation of roles and responsibilities across sectors and governance levels remains unclear, creating implementation gaps and placing a disproportionate burden on local authorities.

As a result, progress in strengthening climate resilience in the EU remains slow and uneven and is not keeping pace with accelerating climate change. EU-level and national resilience policies and measures are increasingly recognized as too generic to be fit for purpose, particularly when assessed against the scale and speed of observed climate impacts.

Interreg BSR City Blues community strongly welcomes the Commission's intention to prepare a legislative proposal for a more comprehensive, robust and ambitious EU approach to climate resilience and preparedness, while fully respecting the principles of subsidiarity and proportionality, avoiding unnecessary administrative burdens, and ensuring coherence with sectoral policies. We also support the Commission's objective to ensure that future climatic conditions are systematically integrated into all relevant EU policies and frameworks and embedded in decision-making by public authorities and private stakeholders alike, enabling coordinated action across society.

Building on practical experience from cities across the Baltic Sea Region, the City Blues partnership contributes to this consultation by highlighting how **nature-based solutions and integrated risk**

management can translate these objectives into operational practice at local and regional level. Drawing on the City Blues [Joint Operational Model](#), this statement illustrates how climate risks can be systematically assessed, treated and monitored across the full NBS lifecycle, strengthening long-term resilience while reducing future disaster losses.

1. Climate risk management must be integrated, systemic, and operational

City Blues experience confirms the findings of the European Climate Risk Assessment and the European Court of Auditors: climate risks are interconnected, cascading, and cannot be addressed through isolated sectoral responses.

We therefore recommend that the future EU framework:

- Considers adopting the **comprehensive risk management approach**, aligned with **ISO 31000**, covering risk identification, analysis, evaluation, treatment, monitoring, and communication across the full policy-to-implementation cycle. While disaster risk management must be grounded in high-quality data, robust modelling, and forward-looking climate risk projections, City Blues experience shows that risk mitigation only materialises when these inputs are embedded within an integrated risk management framework. Risk assessments and hazard maps alone do not reduce vulnerability unless they are systematically linked to planning decisions, investment priorities, design standards, operational practices, and long-term maintenance regimes.
- Treats climate risks not only as hazards to be responded to, but as **structuring conditions for spatial planning, infrastructure investment, and land-use decisions**. Many of the most severe impacts arise when risks are exacerbated by inadequate land-use planning, under-designed or ageing infrastructure, fragmented governance, and failures in design, construction and maintenance that leave assets, communities and ecosystems unnecessarily vulnerable.
- [Requires regular, science-based, and spatially explicit risk assessments, integrated into municipal GIS systems and planning routines](#), rather than static reports. City Blues cities demonstrate that risk assessments become effective tools only when they are embedded in everyday decision-making and linked to concrete implementation mechanisms.

2. Nature-based solutions must be mainstreamed to perform as core risk-reduction infrastructure

In line with the European Parliament resolution, City Blues strongly emphasizes that **nature-based solutions (NBS) are not optional add-ons or aesthetic enhancements, but essential components of Europe's climate resilience infrastructure**. To fulfil this role, however, NBS must be planned, designed and governed as functional systems, rather than as isolated interventions implemented wherever residual space is available.

City Blues experience across Baltic Sea Region cities demonstrates that the risk-reduction performance of NBS depends fundamentally on catchment-scale thinking. Pluvial and fluvial flood risks, heat stress, water pollution and biodiversity loss are all shaped by cumulative processes operating across entire urban and peri-urban catchments. Individual NBS elements implemented in isolation, particularly in highly constrained urban environments, cannot absorb or manage the magnitude of cascading climate risks on their own. By contrast, networks of coordinated NBS, strategically distributed across a catchment and integrated with existing grey infrastructure, can significantly reduce peak flows, delay runoff, moderate urban microclimates, and improve ecological connectivity.

Our joint evidence shows that well-planned NBS systems:

- Effectively reduce pluvial and fluvial flood risks, mitigate urban heat stress, improve water quality and prevent biodiversity loss **when designed for catchment-level performance rather than purely site-specific optimization.**
- Are often more cost-effective and adaptive over time than purely grey infrastructure, particularly when existing green and blue areas are preserved and enhanced as part of the solution.

City Blues cities also stress that **resource constraints are a critical reality** for local authorities. Municipalities do not have the capacity to plan separate NBS interventions for floods, heat, biodiversity and water quality in parallel silos. Instead, **greater investment is needed in early planning, integrated design and cross-sectoral coordination**, so that individual NBS elements can be designed from the outset to deliver multiple functions. [This front-loaded effort reduces long-term costs, avoids maladaptation and minimizes the risk of underperforming or conflicting interventions.](#)

We recommend that the EU framework:

- Places **catchment-based planning at the core of urban flood risk management**, ensuring that NBS placement, sizing and sequencing are informed by hydrological and climatic processes rather than administrative boundaries.
- Strengthens integration between climate adaptation, flood risk management, biodiversity restoration, and soil and water policies, enabling multi-functional solutions and avoiding fragmented or competing objectives.
- Promotes the protection and restoration of floodplains, wetlands, urban green-blue networks and the “sponge function” of landscapes as strategic resilience assets, recognizing that preserving existing natural capacity is often the most effective and affordable form of risk reduction.
- Stresses that preserving existing green areas emerge consistently as the most cost-effective risk-reduction measure, while we still see that this yet remains insufficiently protected in many planning systems.

3. Climate risk management must extend across the full NBS lifecycle

City Blues cities highlight that many failures in NBS implementation do not stem from design flaws alone, but from **governance, financing, operational, and stakeholder risks** that accumulate across project stages.

Based on our Joint Operational Model, we stress that the EU framework should address **risk management across all stages**: governance and political commitment, financing, planning, design, construction, operation and maintenance, monitoring, and adaptation over the lifecycle of NBS.

We recognize that **early-stage investment in risk analysis and project preparation** is the most effective way to prevent cost overruns, implementation delays, and performance failures and recommend that the **EU integrated climate risk framework should encourage feedback loops where monitoring and maintenance experience informs future planning and design, enabling continuous learning**.

4. Local and regional authorities must be empowered as key risk managers

City Blues strongly supports the Parliament's emphasis on a **place-based approach** and the central role of local and regional authorities. Our experience shows that municipalities are the primary actors translating EU and national risk policies into concrete land-use decisions and investments. Cities and municipalities are best positioned to integrate climate risks with local socio-economic conditions and vulnerabilities. However, we also see that cities are often constrained by limited technical, financial, and administrative capacity, particularly in smaller and less-resourced municipalities.

We therefore recommend that the EU framework:

- Provides **targeted technical assistance (including financial resources)** for risk assessment, NBS planning, and project preparation.
- Strengthens capacity-building for **cross-departmental coordination**, breaking down silos between water, planning, environment, health, and infrastructure operators and authorities.
- Supports catchment-scale and transboundary planning, recognizing that **climate risks do not follow administrative boundaries**.

5. Stakeholder and community risks must be explicitly addressed

City Blues cities underline that **stakeholder and community engagement is a risk domain** that requires structured management. Common risks include misaligned expectations, low trust due to past experiences, resistance to land-use change, and unrealistic perceptions of maintenance responsibilities. If unmanaged, these **risks can undermine otherwise technically sound climate adaptation solutions**.

We recommend that the EU framework:

- Explicitly recognises **stakeholder risks as part of climate risk management**, not merely as communication challenges.

- Encourages transparent risk communication, local engagement processes, and the use of visible, explanatory tools (e.g. on-site information, participatory mapping) to prevent exacerbation of climate risks due to misaligned expectations or even counteractions of specific interest groups
- Supports municipalities in developing long-term stewardship and co-ownership models for NBS as the multi-benefit risk management solutions targeted for also biodiversity and recreational goals are more demanding in the sense of maintenance regimes and aesthetic expectations.

Closing: From emergency response to resilience-by-design

Finally, City Blues echoes the Parliament's call to shift from reactive disaster response towards proactive **resilience-by-design approach**. Emergency mechanisms remain essential, but without systematic prevention and preparedness, costs and losses will continue to rise.

City Blues cities stand ready to contribute further evidence, practical tools, and pilot experiences to support the development and implementation of the EU's integrated climate resilience framework. Our joint work demonstrates that **nature-based solutions, when embedded in comprehensive risk management and supported by strong local governance, can significantly enhance Europe's capacity to withstand and adapt to climate change.**

11 February 2026

Comments from NurseCoast II project on the Commission's European Climate Resilience and Risk Management – Integrated Framework

by Virpi Vorne/Luke, Anu Reinikainen/Luke, Ksawery Kuligowski/The Institute of Fluid-Flow Machinery, Polish Academy of Sciences, Marcin Zuchowski/Euroregion Baltic

Based on Nursecoast-II evidence from Baltic Sea coastal tourist regions, we recommend that the new framework explicitly address seasonally increasing tourism-related wastewater loads and the structural vulnerability of small wastewater treatment plants (WWTPs) as part of EU climate-risk management and critical-infrastructure resilience. The framework should be tightly linked to EU water-resilience policies and recent wastewater legislation to reduce environmental and health risks and to steer investments where they are most needed.

1) Include seasonal variation in EU climate-risk assessments

Coastal WWTPs experience seasonal load peaks during tourism high season. Many small plants are designed for low-season conditions, which undermines treatment efficiency and increases the risk of nutrient discharges and nuisance during summer. The framework should require Member States to explicitly model seasonal variation as part of climate and critical-infrastructure risk assessments, particularly in coastal municipalities.

2) Give small WWTPs a distinct place in resilience policy

Small plants, often <2,000 PE, form a substantial share of coastal treatment capacity, yet their seasonal vulnerability is masked by national averages. The framework should recognise small WWTPs as a distinct risk category and guide Member States to set minimum preparedness/resilience criteria (e.g., storage, bypass and incident protocols, backup power, flood protection).

3) Scale up innovative and nature-based solutions

Nursecoast-II pilots demonstrate practical options for peak-load management, constructed wetlands, nano-bubble aeration, beneficial effluent reuse, and nature-based buffer systems, suited to small or decentralised systems and offering cost-effective resilience gains. Given that climate change is increasing the frequency and intensity of extreme weather events (heavy rainfall, stormwater influxes, heat-induced microbial variations), the framework should promote the adoption of hybrid, multi-stage treatment configurations for small WWTPs. These systems combine conventional mechanical-biological treatment with post-treatment nature-based solutions (NBS), such as constructed wetlands and filtration fields, to buffer hydraulic shocks and maintain high treatment performance before discharging into coastal waters. The framework should prioritise investment support for such solutions in tourist hotspots and integrate them with EU water-resilience actions.

4) Harmonised seasonal data collection and reporting

The project has compiled extensive datasets, GIS mapping of WWTPs in tourist regions, and operator surveys. We propose that the framework require harmonised EU-wide seasonal load and capacity reporting (e.g., BOD/COD, N, P, flows, bypass events, overload hours) to enable risk-based planning and targeted funding.

5) Stronger linkage to EU water policies and recent legislation

We ask the Commission to align the framework with the European Water Resilience Strategy (modernisation, water reuse, contaminant control) and with the revised Urban Wastewater Treatment Directive (e.g., fourth

treatment stage for micropollutants, extended producer responsibility, nutrient recycling), ensuring coherent goals and funding tools for the wastewater sector.

6) Target investments to seasonal hotspots

Introduce an investment prioritisation criterion based on seasonal overload risk to steer EU funds to small-plant upgrades and additional capacity in tourist areas.

7) Integrating the 5R principle (reduce, recycle, reuse, restore, recover)

The framework should incorporate the 5R approach (reduce, recycle, reuse, restore, recover) to promote a full value-chain water management strategy, especially in tourist regions subject to significant seasonal pressure. The 5R approach aligns with EU water-resilience, circular-economy and climate-adaptation policies, helps reduce load peaks, increase reuse, support nature-based solutions and enhance the resilience of small WWTPs.

Conclusion:

Seasonally increasing tourism-related wastewater loads are a tangible climate-risk multiplier along Europe's coasts. We urge the Commission to ensure that the new framework recognises this risk and directs Member States to strengthen small WWTP resilience according to the 5R principle (reduce, recycle, reuse, restore, recover), supported by robust data, appropriate combined technologies, nature-based solutions and targeted finance, in full synergy with EU water-resilience policy.



05 February 2026

ReNutriWater Joint statement to EU's climate resilience and risk management consultation

by Klara Ramm, ReNutriWater Project Manager, Chamber of Economy “Polish Waterworks”

We welcome the development of a comprehensive European Climate Resilience Framework that strengthens the EU’s capacity to adapt to climate change impacts across sectors, regions, and communities. Increasing environmental variability, including more frequent droughts, floods, and water scarcity, requires coordinated action and evidence-based adaptation strategies at EU, national and local levels.

Climate change poses direct threats to water availability, quality, and the reliability of infrastructure. Water scarcity is increasing due to hotter summers, changing precipitation patterns, and higher demand. Resilient water systems must be central to the EU strategy because they underpin health, food production, ecosystems, and economic activity.

The results of the ReNutriWater project show that treated wastewater is not a waste but a resource. Important nutrients such as nitrogen and phosphorus can be recovered and reused, mitigating eutrophication and lowering dependence on artificial fertilisers — a key climate and environmental benefit. This practical evidence confirms that circular water management enhances resilience to dry periods and supports sustainable resource cycles.

We support the EU Climate Resilience Framework in incorporating water reuse and nutrient recovery as strategic priorities within adaptation planning.

- Providing legal and financial incentives that accelerate the adoption of resilient water practices across urban, rural, and agricultural systems.
- Enhancing cross-sectoral integration: linking water resilience with climate adaptation, biodiversity, agriculture, and rural development strategies.
- Strengthening stakeholder engagement, knowledge sharing, and capacity building across Member States.

Experience from ReNutriWater shows that public perception and institutional readiness are key factors in successful implementation of resilient solutions. The EU framework should promote education and stakeholder dialogues on adaptive water strategies; a resilient Europe must treat water systems as central infrastructure for climate adaptation. Grounded in real project outcomes such as those from ReNutriWater, we urge the EU Climate Resilience Framework to adopt a proactive, circular and inclusive approach to water resource management — amplifying resilience of communities, economies and ecosystems across the Union.

Open Public Consultation for the new European climate resilience framework

Short contribution from Söderhamn Municipality

Söderhamn is a small coastal municipality facing increasing climate-related risks such as heavy rainfall, high water flows and challenges linked to an aging water- and sewage infrastructure. With limited organisational resources, it is essential that the new EU framework is designed so that smaller municipalities can realistically implement it.

Clearer connection between EU, national and local levels

The EU should:

- ensure that guidance and requirements are **feasible for small municipalities**
- promote **national support functions** that translate EU requirements into practical local guidance
- enable **effective data flows** between EU platforms and local systems

Suggested measures to include in the framework

- Mandatory climate risk assessments
- Minimum requirements for using future climate projections in planning
- EU-wide guidelines for climate-resilient construction
- Standardised methods for assessing resilience in cost–benefit analyses
- Strengthened support for Local Adaptation Plans (LAP)
- An expanded European data platform with high-resolution climate and risk data

Key message

The EU framework should provide conditions that allow small municipalities like Söderhamn to achieve:

- long-term planning stability
- predictable governance
- cross-sector cooperation

- reduced future costs from climate impacts
- a fair transition where all municipalities have the capacity to act

Climate adaptation is a central part of spatial planning and essential for Söderhamn's long-term resilience.

Josefin Flink,

Municipality of Söderhamn

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