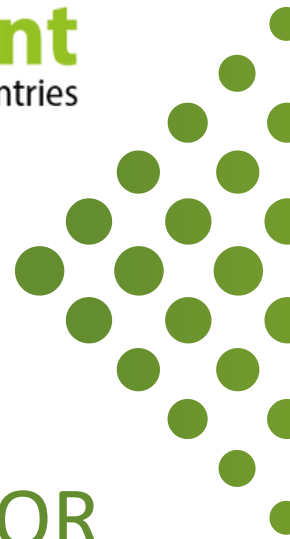


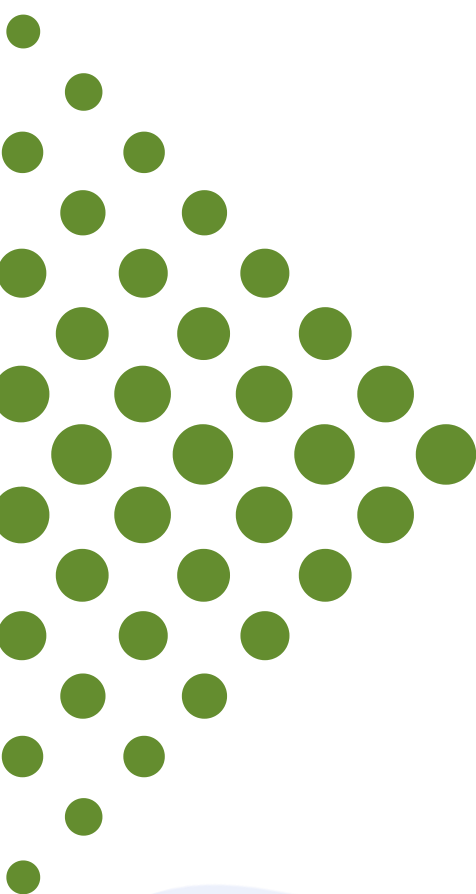


Funded by  
the European Union

**EU<sup>4</sup>Environment**  
Green Economy in Eastern Partner Countries



# ROADMAP RECOMMENDATIONS FOR ENSURING EFFICIENT MANAGEMENT AND PROTECTION OF EMERALD NETWORK SITES IN THE REPUBLIC OF MOLDOVA



Action implemented by:



© 2024, International Bank for Reconstruction and Development / The World Bank  
1818 H Street NW  
Washington DC 20433  
Telephone: +202-473-1000  
Internet: [www.worldbank.org](http://www.worldbank.org)

## Disclaimer

This work is a product of the staff of the World Bank. The findings, interpretations, and conclusions expressed in this work do not necessarily reflect the views of its Board of Executive Directors, or the governments they represent.

This roadmap was developed with financial support from the European Union under the European Union for Environment Action (EU4Environment). The views expressed herein can in no way be taken to reflect the official opinion of the European Union.

Funded by the European Union and implemented by the OECD (Organisation for Economic Co-operation and Development), UNECE (United Nations Economic Commission for Europe), UNEP (United Nations Environment Programme), UNIDO (United Nations Industrial Development Organization), and the World Bank, EU4Environment helps the Eastern Partnership countries preserve their natural capital and increase people's environmental wellbeing by supporting environment-related action, demonstrating and unlocking opportunities for greener growth, and setting mechanisms to better manage environmental risks and impacts.

The World Bank does not guarantee the accuracy, completeness, or currency of the data included in this work and does not assume responsibility for any errors, omissions, or discrepancies in the information, nor liability with respect to the use of or failure to use the information, methods, processes, or conclusions set forth. The boundaries, colors, denominations, and other information shown on any map in this work do not imply any judgment on the part of the World Bank concerning the legal status of any territory or the endorsement or acceptance of such boundaries.

**Please cite this publication as follows:** EU4Environment. 2024. *Roadmap Recommendations for Ensuring Efficient Management and Protection of Emerald Network Sites in the Republic of Moldova*. Washington DC: World Bank.

# Table of Contents

Abbreviations and acronyms .....4

Introduction .....5

Timeframe and interim progress measurement dates .....6

Objectives, priorities, and expected results.....7

Action plan.....8

Conclusions and recommendations ..... 13

# Abbreviations and acronyms

EEA	European Environment Agency
EU	European Union
EU4Environment	The “European Union for Environment” (EU4Environment) Action
OECD	Organisation for Economic Co-operation and Development
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme
UNIDO	United Nations Industrial Development Organization

# Introduction

This document was developed within the action “Advancing the establishment of the Emerald Network in the Republic of Moldova”. The activity is part of the EU4Environment Program sub-component 4.1, led by the World Bank, to support the protection of biodiversity and ecosystems through advancing the establishment and management of the Emerald Network in the Eastern Partner countries.

In the Republic of Moldova, the activities of this sub-component **aim to enhance national capacities to ensure the long-term survival of species and habitats listed in the Bern Convention’s Resolution No. 4 and Resolution No. 6 by improving the national legal framework and promoting effective communication in line with European standards and best international practices.**

The Emerald Network conceptualized under the Bern Convention<sup>1</sup> is an ecological network of national-level conservation areas within each signatory country. The European Union, a contracting party to the Convention, established the Habitat Directives<sup>2</sup> in 1992 and consequently set up the Natura 2000 network,<sup>3</sup> which contributes to the Emerald Network on behalf of European Union (EU) Member States.

The GIS-based inventory and mapping of species of flora and fauna included in Resolutions No. 4 and No. 6 of the Convention were carried out with the support of previous projects by the Council of Europe and EU. The databases of the Emerald Network from the Republic of Moldova are available in the European information system.<sup>4</sup> Between 2018 and 2019, the Standing Committee of the Bern Convention adopted 61 Emerald sites in the Republic of Moldova, which collectively constitute 277,157 hectares (8 percent) of the country’s territory and encompass 32 habitats harboring 167 species of plants and animals.

Law no. 225/2022 of the Republic of Moldova complements Law no. 94/2007 regarding the ecological network with a new chapter, “Chapter III: The Emerald Network”, dedicated to the Emerald Network. According to Article 122, specialists in the fields of biology, ecology, and geography- in coordination with the Environment Agency- can carry out the evaluation of the types of natural habitats and species of wild flora and fauna. The Environment Agency of the Republic of Moldova developed a proposal for designating Emerald Network sites based on an evaluation report approved by the Ministry of the Environment, in accordance with the standard technical sheet defined by the Bern Convention.

This roadmap emerges from commitments undertaken by the Republic of Moldova to ensure the conservation of biological diversity and focuses on a six-year period from 2024 to 2030. The activities in this document are divided into phases, with indicators for each. One key focus is network sufficiency, which needs to increase from 24 percent (as of 2023) up to 80 percent by 2030. To achieve this goal, the current roadmap includes a range of recommendations, including a proposal for expanding the Emerald Network. A primary assessment of the conclusions of bio-geographical seminars was conducted by a team of national experts who were involved in similar previous evaluations. Further scientific work is required to gain more detailed information regarding the status of the Emerald species and habitats in the Republic of Moldova.

In the long run, these roadmap recommendations will guide activities that may be undertaken at the national level to achieve the targets of the Kunming-Montreal Global Biodiversity Framework<sup>5</sup> and the Bern Convention, while helping to implement the National Development Strategy “European Moldova 2030”.<sup>6</sup>

---

<sup>1</sup> For more information about the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) go to: <https://www.eea.europa.eu/policy-documents/convention-on-the-conservation-of>.

<sup>2</sup> For more information about the European Commission’s Habitat Directive, go to: [https://environment.ec.europa.eu/topics/nature-and-biodiversity/habitats-directive\\_en](https://environment.ec.europa.eu/topics/nature-and-biodiversity/habitats-directive_en).

<sup>3</sup> For more information about the Natura 2000 network, go to: [https://environment.ec.europa.eu/topics/nature-and-biodiversity/natura-2000\\_en](https://environment.ec.europa.eu/topics/nature-and-biodiversity/natura-2000_en).

<sup>4</sup> For more information about the EIONET Central Data Repository, go to: <https://cdr.eionet.europa.eu/>

<sup>5</sup> CBD (Convention on Biological Diversity). 2022. “COP15: Final Text of the Kunming-Montreal Global Biodiversity Framework.” Available at: <https://www.cbd.int/article/cop15-final-text-kunming-montreal-gbf-221222>.

<sup>6</sup> For more information about the National Development Strategy “European Moldova 2030” go to: <https://gov.md/ro/moldova2030>.

# Timeframe and interim progress measurement dates

This roadmap covers the six-year period from 2024 to 2030. The proposed actions consider establishing a midterm target for 2028 and an end target for 2030, with progress to be assessed at each point. If necessary, the central environmental authorities can opt for more frequent interval measurement periods, but no more than every two years. Measurements should be taken after the Bern Convention Standing Committee convenes, using the published Emerald Network Barometer. The barometer is calculated using official data and information transmitted by Bern Convention Contracting Parties or Observer States (in this case, the Republic of Moldova's Ministry of Environment) to the Convention.

Even though the current roadmap proposes actions for a six-year period, a longer implementation timeframe is advisable to enable the country to conduct baseline measurements for each indicator, which will require extensive fieldwork to obtain an understanding of the status of species and habitats and to identify potential sites that could be included in the national Emerald Network.

# Objectives, priorities, and expected results

The roadmap's recommendations focus on bridging gaps in the current legal framework (related to the creation, management, and protection of Emerald sites) and on strengthening institutional capacities to establish the Emerald Network in the Republic of Moldova. Ultimately, the roadmap aims to restore and maintain Emerald Network sites to a favorable conservation status, despite facing pressures and threats, by 2030.

Specific objectives within the roadmap are:

- **Maintain and prevent further loss and deterioration of designated Emerald sites** by appropriately managing protected species and habitats
- **Establish conservation objectives at the national and local site levels** in line with the requirements of the Bern Convention
- **Implement necessary conservation measures**, including restoration and reconstruction where necessary, to achieve established conservation objectives
- **Ensure ecological connectivity across all habitats**, including restoring areas outside the Emerald Network, in line with defined biogeographical and national conservation interests
- **Improve knowledge, assess conservation status, and develop monitoring systems** for Emerald sites
- **Disseminate and share experiences** to foster replication
- **Monitor progress** and results over time.

The roadmap's recommendations act as a steering document (action plan) intended to enhance the effective management and protection of the Emerald Network.

Many experts and researchers have consulted on this document including the beneficiary—the Department of Nature Conservation and Biosecurity within the Ministry of Environment of the Republic of Moldova.

# Action plan

Activities			
Phase I	Phase II	Phase III	Other (non-phase related)
<b>2023</b> <b>Baseline measurements in 2023</b> <ul style="list-style-type: none"> <li>Phase I: 8% coverage</li> <li>Phase II: 24.1% sufficiency index</li> <li>Phase III: 41% of sites with a management plan<sup>7</sup></li> </ul>			
Review the last biogeographical seminar conclusions and propose additional species and habitats		Develop the methodological guidelines for developing the management plans of the Emerald sites in the Republic of Moldova	Amendment <sup>8</sup> of Law No. 1515/1993 on protecting the environment and other relevant secondary legislation  Raise awareness activities (on the Emerald Network, site management, key species, and habitats)
<b>2024</b>			
Present the preliminary assessment results of the last biogeographical seminars for official implementation in the Emerald Network database, followed by an official delivery of a new database	Consider adopting the two identified sites in the Emerald Network to the Bern Convention Standing Committee	Approve the methodological guidelines for developing management plans for Emerald sites in the Republic of Moldova	Propose amendments to the law on the protected areas system in the Republic of Moldova
Collect information on the current ecological status and distribution of Emerald species and habitats of European interest for the identification of new Emerald sites  Identify additional sites for inclusion in the Emerald	Suggest that the Bern Convention Standing Committee organize a biogeographical seminar in 2025	Develop draft management plans for three Emerald sites identified in the EU4 Environment and World Bank action  Approve and start implementing the management plan for three selected Emerald sites  Elaborate on the regulations regarding	Involve the local community in activities aimed at protecting and managing Emerald sites  Train and educate officials within authorities tasked with managing and protecting the Emerald Network

<sup>7</sup> During the discussions with the central environmental authority, it was specified that 41 percent represents not only Emerald sites that have a management plan but also counts forest enterprises covering part of or a full Emerald site with an action plan in place. Thus, the percentage indicated does not accurately reflect the current and real available management plans for the Emerald sites in the Republic of Moldova.

<sup>8</sup> Proposal for modifications of the legal acts to properly reflect the Emerald Network and its management in the national legal framework.

<b>Network. These sites will be selected based on their significance for species conservation and habitats of European importance</b>		keeping a register of Emerald Network sites in the Republic of Moldova	
<b>2025</b>			
<b>Targets for 2025:</b> <ul style="list-style-type: none"> <li>• <b>Phase I: 9% coverage</b></li> <li>• <b>Phase II: 30% sufficiency index</b></li> <li>• <b>Phase III: 50% of sites with a management plan</b></li> </ul>			
<b>Prepare and submit the Emerald database, containing newly identified sites</b>	Hold a biogeographical seminar targeting feature groups with substantial new data, addressing IN MINs and SRs, and also IN MODs that will lead to identifying the new sites	Develop three other Emerald site management plans  Implement the approved and finalized management plans	Finalize the revision and update of methodologies to calculate the environmental damaged caused by violating the legislation protecting and managing wild flora and fauna, as well as of the protected habitats within the Emerald Network  Organize training for officials from authorities with duties regarding Emerald Network management and protection  Organize a conference or seminar for civil servants at local, national, or international levels in the field of Emerald Network management and protection  Foster collaboration between businesses, civil society organizations, and academia to drive the transition to a green economy. Form partnerships to share knowledge, resources, and best practices and to collectively address environmental challenges
<b>2026</b>			
<b>Continuously collect and update data on species and habitats within the Emerald Network</b>	Engage in a bilateral discussion with the Bern Convention regarding inquiries about sufficiency	Develop and publish the Register of Emerald Network sites on the official website of the Environment Agency	Organize training courses for officials employed within the authorities with duties in managing and protecting the Emerald Network
<b>Organize field trips to potential new Emerald sites</b>		Develop monitoring guidelines and reporting tools according to Bern Convention provisions	Organize one conference, seminar. or training for civil servants at local, national, or international levels in the

to support identifying additional sites		Develop management plans for three other Emerald Sites.	field of Emerald Network management and protection
In-depth assessment of the existing Emerald sites		Implement the finished management plans	Form partnerships with non-governmental organizations, research institutions, and other stakeholders to leverage expertise and resources for conservation
<b>2027</b>			
Develop a system that will provide regular data flow in the Republic of Moldova, resulting in regular reporting to the Bern Convention on conservation progress, including species updates and habitat data	Recommend to the Standing Committee of the Bern Convention that they consider adopting other Emerald candidate sites	Develop management plans for five Emerald sites  Implement the finished management plans	Organize one training course for officials employed within the authorities with duties in managing and protecting the Emerald Network  Organize one conference, seminar, or training for civil servants at local, national, or international levels in the field of Emerald Network management and protection  Encourage responsible tourism that does no harm to the environment within Emerald Network sites  Develop mechanisms for addressing conflicts between conservation objectives and local communities or other stakeholders' needs and interests
<b>2028 Targets for 2028:</b> <ul style="list-style-type: none"> <li>• Phase I: 10% coverage</li> <li>• Phase II: 60% sufficiency index</li> <li>• Phase III: 65% of sites with a management plan<sup>9</sup></li> </ul>			
Collect data on species and habitats and display their distribution on maps	Engage in a bilateral discussion with the Bern Convention regarding particular inquiries about sufficiency	Develop management plans for five Emerald sites  Implement finished management plans	Organize one training course for officials employed within the authorities with duties in managing and protecting the Emerald Network  Organize one conference, seminar, or training for civil servants at local, national, or international levels in the field of Emerald Network management and protection
<b>2029</b>			
Integrate the Emerald Network database with other relevant	Engage in a bilateral discussion with the Bern Convention regarding particular inquiries about	Develop management plans for three other Emerald sites	Organize one training course for officials employed within the authorities with duties in managing and protecting the

<sup>9</sup> 65 percent represents 39 Emerald sites with management plans.

<p><b>data sources, such as environmental databases, satellite imagery, and climate data to enhance its utility</b></p> <p><b>Coordinate the Emerald Network database revision</b></p>	sufficiency	Implement the finished management plans	<p><b>Emerald Network</b></p> <p>Organize one conference, seminar, or training for civil servants at local, national, or international levels in the field of Emerald Network management and protection</p> <p>Strengthen collaboration with neighboring countries and international organizations to ensure a coordinated approach to biodiversity conservation, as many species and habitats may cross national borders</p> <p>Maintain regular communication and reporting on the status and progress of the protected areas, fostering transparency and accountability</p>
<p><b>2030<sup>10</sup></b></p> <p><b>Targets for 2023:</b></p> <ul style="list-style-type: none"> <li>• <b>Phase I: 11% coverage</b></li> <li>• <b>Phase II: 80% sufficiency index</b></li> <li>• <b>Phase III: 80% of sites with a management plan<sup>11</sup></b></li> </ul>			
<p><b>Identify the remaining potential sites and the site's data collection</b></p> <p><b>Coordinate the Emerald Network database revision</b></p>	Propose to the Standing Committee of the Bern Convention that they evaluate the possibility of approving all the remaining Emerald Candidate sites for adoption	<p>Develop management plan for five Emerald sites</p> <p>Implement the finished management plans</p> <p>Continuously monitor, review, and adapt management plans, conservation strategies, and regulations based on the results of monitoring and changing conservation needs</p> <p>Use adaptive management principles to respond to new challenges and knowledge</p>	<p>Periodically review and revise management plans and strategies to reflect changes in conservation priorities, threats, and best practices</p> <p>Develop strategies for long-term funding sustainability, including exploring diversified funding sources, public-private partnerships, and endowment funds</p> <p>Continue building the capacity of relevant stakeholders, including local communities and conservation organizations, to enhance their conservation skills and knowledge</p> <p>Share data with relevant regional and international databases, promoting data</p>

<sup>10</sup> These activities can be seen as 2030 and post-2030 for a qualitative achievement of the results.

<sup>11</sup> 80 percent represents 47 Emerald sites with management plans.

			exchange and transparency
<b>2040</b>			
<b>Targets for 2040:</b> <ul style="list-style-type: none"> <li>• <b>Phase I: 15% coverage</b></li> <li>• <b>Phase II: 80% sufficiency index</b></li> <li>• <b>Phase III: 100% of sites with a management plan</b></li> </ul>			
<b>Carrying on with work that remains incomplete</b>	Persist in addressing tasks that have not yet been completed	Sustain the process of monitoring, evaluation, and adaptive management	

# Conclusions and recommendations

The Republic of Moldova should follow a list of legal, institutional, management, and conservation actions and modifications to achieve an Emerald Network with adequate protection while allowing human social and economic activities and encouraging sustainable human-nature interaction. The current roadmap foresees key actions that the responsible authority (the Ministry of Environment) could update if necessary.

The current EU law on nature restoration aims to restore degraded ecosystems in all member states, help achieve the EU's climate and biodiversity objectives, and enhance food security. The Republic of Moldova, as a candidate country, intends to gradually implement EU policy and legal recommendations to align with EU implementation by the time it becomes a full EU member state. The EU Parliament's position is that priority should be given to the Natura 2000 network (Emerald Network in the Republic of Moldova). The current roadmap constitutes a reasonable basis for creating the needed infrastructure to achieve the indicators set out by the EU.

Following the structure of the roadmap and the conclusions of the gap analysis (a document that contains a comprehensive analysis that led to the current document), the recommendations can be divided as follows:

- Legal
- Institutional and capacity building
- Management and conservation.

Recommendations	Key actions to follow
<b>Legal</b>	<p>The national legal framework needs to become more consistent, with the Emerald Network reflected in primary and secondary legislation. The importance of protecting the Emerald Network in the Republic of Moldova should be highlighted.</p> <p>Based on the fact that Emerald site designations impose special measures to conserve natural habitats and wild species of community interest, if they overlap with already protected areas, the site can be managed in accordance with the provisions of Law No. 1538/1998 (with the condition that the more restrictive protective functions are respected). This condition needs to be included in the current legislation and would create a situation where a site of European importance will be managed under the same conditions as a site of national importance.</p> <p>The liability for destruction and damage of wild flora and fauna species within natural areas protected by the state, as well as protected habitats within the Emerald Network, should be regulated. Emerald Network provisions could supplement Article 235 of the Criminal Code to prevent new crimes against wildlife and protected habitats within the Emerald Network.</p> <p>At the national level, there is a need to develop regulations on how to maintain the Emerald Network site register to ensure efficient and transparent management of these sites, including associated information and data. The lack of such regulations makes it difficult to define the criteria and procedures for registering and managing sites and the type of information to be collected and recorded in this register.</p>
<b>Institutional and</b>	The Government of the Republic of Moldova would benefit from focusing on research

<b>capacity building</b>	<p>and education to increase the number of well-qualified researchers and attract future employees to the field of conservation.</p> <p>Likewise, regular meetings and events would create a stronger connection between the research institutions, education, authorities, and protected area administrators. Networking with regional and international experts and specialists in the field is strongly recommended to continuously exchange information related conservation measures, species, habitats, and other natural resources.</p> <p>There is a particular need to promote research on the abundance, population dynamics, and productivity of the species and habitats as specified by the Bern Convention and to develop the respective methodologies.</p>
<b>Management and conservation</b>	<p>Unfortunately, the lack of site-oriented conservation measures persists for a significant number of Emerald Network sites in the Republic of Moldova. Emerald site-specific conservation objectives, which should be specific and measurable, need to be established and made available to the public for all Emerald sites without delay. Conservation objectives should specify targets for each indicator that determines conservation status.</p>



Funded by  
the European Union

## Roadmap Recommendations for Ensuring Efficient Management and Protection of Emerald Network Sites in the Republic of Moldova

---

“Roadmap Recommendations for Ensuring Efficient Management and Protection of Emerald Network Sites in the Republic of Moldova” aim to assist the Moldovan authorities in enhancing national capacities to ensure the long-term survival of species and habitats listed in the Bern Convention by improving the national legal framework and promoting effective communication in line with European standards and best international practices.

Emerging from international commitments undertaken by the Republic of Moldova to conserve biological diversity, this roadmap covers a period of six years from 2024 to 2030. The activities within the document were divided into phases with indicators. One key focus is network sufficiency, which needs to be increased from 24 percent in 2023 to up to 80 percent by 2030.

By implementing these recommendations, the Republic of Moldova can enhance its conservation efforts and protect its valuable species and natural habitats.

---

**Programme website:**

[www.eu4environment.org](http://www.eu4environment.org)

Action implemented by:



IBRD • IDA | WORLD BANK GROUP

