

## Update of the Secretariat on the implementation of Resolution XIV.20

### Actions requested:

The Standing Committee is invited to take note of the update of the Secretariat on the implementation of Resolution XIV.20 on *The Ramsar Convention's response to environmental emergency in Ukraine relating to the damage of its Wetlands of International Importance (Ramsar Sites) stemming from the Russian Federation's aggression*.

### Background

1. This report provides an update on actions up to the end of May 2023 by the Secretariat pursuant to Resolution XIV.20 on *The Ramsar Convention's response to environmental emergency in Ukraine relating to the damage of its Wetlands of International Importance (Ramsar Sites) stemming from the Russian Federation's aggression*, paragraph 18, which:

*REQUESTS the Secretariat of the Convention on Wetlands to coordinate actions with the Contracting Parties and relevant national and international organizations to conduct assessments of the Ramsar Sites in Ukraine affected by aggression of the Russian Federation, and advise on appropriate mitigation and restoration measures; and FURTHER REQUESTS the Secretariat to provide a report on the assessed damage and mitigation measures to the 15th meeting of the Conference of the Contracting Parties, in addition to providing an update on the implementation of this Resolution to all intervening meetings of the Standing Committee.*

### Coordination and consultation

2. The Secretariat has held bilateral discussions with a range of entities engaged in assessment of the environmental impacts of the war in Ukraine, including the United Nations Environment Programme (UNEP) through the Regional Office for Europe and the Post-Conflict and Disaster Management Branch, and IUCN.
3. On 10 March 2023, Ukraine submitted to the Secretariat a notification of changes in ecological character of 16 Wetlands of International Importance ("Ramsar Sites"), and of potential changes in ecological character of a further 15. The Sites are listed in Annex 1. The Secretariat met with the Permanent Mission of Ukraine to the United Nations Office and other Intergovernmental Organizations in Geneva on 4 April to discuss the notification.
4. Pursuant to paragraph 19 of Resolution XIV.20, the United Kingdom has provided a voluntary contribution towards the Secretariat's work in implementing the actions requested in Resolution XIV.20.

5. As of April 2023, the Secretariat is a member of the Inter-Agency Coordination Group on Environmental Assessments for Ukraine. Membership of this informal group is limited to international organizations, and currently includes the UN Economic Commission for Europe (UNECE), UNEP, the Organisation for Economic Cooperation and Development (OECD), the UN Industrial Development Organization (UNIDO), the UN Development Programme (UNDP), the World Bank and the Organization for Security and Co-operation in Europe (OSCE). The Group directly and continuously engages with the Ministry of Environmental Protection and Natural Resources of Ukraine. Organization of the work of the Group is facilitated by the UN Regional Office for Europe.
6. The Group aims to enhance coherence between assessments, with a focus on the substantive results and methodological approaches applied in carrying them out, and to advise on how to use them to inform the post-war green reconstruction and recovery of Ukraine. Recent meetings of the Group have, for example, addressed draft methodologies on air and soil pollution, and legal issues.
7. Through engagement in the Group and with individual members, the Secretariat is sharing information on work under the Convention and Resolution XIV.20, and pursuing discussions on how consideration of Wetlands of International Importance may be best addressed in the context of current or planned environmental assessments.
8. A seminar organized by the Group with a focus on Earth observations and remote sensing was held on 24 May 2023. The Secretariat has proposed to organize a seminar on ecosystem impacts through the Group, in the second half of 2023.

#### **Assessments of environmental damage**

9. The Secretariat has compiled and analysed assessments carried out to date, including by engaging in the Inter-Agency Coordination Group and drawing on the “Inventory of assessments of the environmental damage resulting from the Russian invasion of Ukraine” compiled by the Group. A list of assessments with brief information on the methods used and topics covered is provided in Annex 2.
10. Impacts on the environment, ecosystems and biodiversity are important considerations, in the near term as well as in relation to reconstruction and recovery. Assessments of the impact of other conflicts have shown, for example, habitat alteration, pollution and other disturbances, with both short- and long-term effects contributing to population declines and biodiversity losses in terrestrial and aquatic environments.
11. Assessments of the impacts of the war in Ukraine conducted to date have predominantly focused on immediate urgent priorities, such as humanitarian aspects, critical infrastructure and pollution. UNEP is currently initiating work to conduct a deeper analysis of assessments undertaken, underway or planned, which will contribute to identifying gaps and help direct efforts and further support of the international community towards assessment and remediation.
12. Documented environmental impacts of the war in Ukraine have included, for example, wildfires in forest, steppe and peatland ecosystems caused by shelling, including in nature reserves, as well as pollution of the environment caused by the destruction of fuel depots, industrial plants and other infrastructure, including air pollution arising from fires. Debris from damaged or

destroyed infrastructure poses considerable management challenges. It is assumed that there are hydrological changes to some water bodies. It is recognized that there are significant data and information gaps relating to impacts on ecosystems, including long-term consequences for climate change and biodiversity.

13. Potential impacts on wetlands in Ukraine may include direct physical damage, for example from vehicle movements as well as from shelling, which destroys vegetation and can lead to degradation of soil and soil structure. Pollution, including from bullets and shell casings which may be made of or contain substances such as lead and depleted uranium which are harmful to ecosystems and species, as well as from hydrocarbon and other chemical spills, may have immediate impacts on biota as well as long-term effects through persistence of these compounds in the ecosystem. Potential impacts to wildlife include elevated mortality rates from direct impacts, destruction of natural habitat, risk of ingestion of shells, shell casings or fragments thereof especially by bird species, as well as noise pollution. The abrupt removal of dams or other significant alterations of water flows may also have significant impacts for sediment dynamics, species and habitats. These likely or potential impacts may have significant short- and long-term consequences for ecosystem functions and provision of ecosystem services. Furthermore, where wetlands span international boundaries there are also potential transboundary impacts, including as a result of altered water and sediment flow and pollution.

#### **Methodological considerations**

14. There are significant challenges associated with conducting assessments in areas with active conflict, which have implications for methodology:
  - a. In-situ assessments may be conducted at some Wetlands of International Importance, whereas others are inaccessible due to security concerns, including extensive use of mines and active conflict. Where possible to implement, in-situ assessments may be constrained by availability of human capacity, including limited technical capacity and/or limited time available to conduct studies locally, with some implications, for example in terms of the extent to which different components of ecological character status can be assessed.
  - b. Remote sensing may be used for greater spatial coverage, but there are limitations in the use of remote sensing to assess ecological character status of some wetland types and for some components (such as animal communities, species present, soil biology) and ecological processes. The availability and accessibility of remote sensing imagery appropriate for assessment of Wetlands of International Importance in Ukraine requires further investigation.
  - c. Results and experiences from other areas may be possible to draw on; for example impacts to wetland ecosystems that have been observed and measured in other conflict zones may be used to inform estimates of impacts on Wetlands of International Importance in Ukraine. However, this is likely to be limited by the availability of studies of conflict-related environmental damage in other situations similar to that in Ukraine, in terms of scale and type of the conflict, and the types of wetland ecosystems affected.
  - d. An important consideration is baseline conditions. It is likely that, at least for some areas, there will be limited knowledge, and while a baseline can potentially be estimated for some components of ecological character status, and partially defined using available in-situ and remote sensing data, defining a consistent baseline across sites poses a considerable challenge. However, data from Ramsar Information Sheets (RIS) may provide

information that contributes to defining a baseline for a number of variables, including in particular in relation to the “Ramsar Sites Criteria” based on which sites were designated as Wetlands of International Importance.

15. Collaboration with other entities and integration of assessments into other, broader efforts will likely help overcome or mitigate some of the aforementioned constraints. It would also ensure that findings, including recommended mitigation and restoration measures, are embedded in and contribute to the international response.
16. The Secretariat will continue working in the Inter-Agency Coordination Group on Environmental Assessments for Ukraine as well as with relevant individual organizations to prepare a methodology for the assessment requested in Resolution XIV.20, and to seek implementation of the assessment in the context of other ongoing or planned environmental assessments. An update of progress will be provided to the Standing Committee at its 63rd meeting (SC63).

## Annex 1

### Wetlands of International Importance in Ukraine affected or potentially affected by the war

Ukraine has a total of 50 Wetlands of International Importance (Ramsar Sites); the table includes Sites for which Ukraine has notified the Secretariat of change or potential change in ecological character, with information on designation date and the regions of Ukraine in which Sites are located provided by the Contracting Party. Information provided in fields marked with an asterisk is drawn from the Ramsar Sites Information Service (RSIS) and Ramsar Information Sheets (RIS).

Site Name	Designation date	Region of Ukraine	Area (hectares)	Site number*	Ramsar Sites Criteria*	Other international designation*	Part of a Transboundary Ramsar Site*	RIS*	Last RIS update*	RAM*
<b>Sites whose ecological character has changed</b>										
<b>Sites occupied in 2014</b>										
Aquatic-cliff complex of Cape Kazantyp	17/11/2003	Autonomous Republic of Crimea	251	1393	1, 2, 4, 6, 7, 8		N	<a href="https://rsis.ramsar.org/ris/1393">https://rsis.ramsar.org/ris/1393</a>	17/11/2003	
Aquatic-cliff complex of Karadae	17/11/2003	Autonomous Republic of Crimea	224	1394	1, 2, 4, 7, 8		N	<a href="https://rsis.ramsar.org/ris/1394">https://rsis.ramsar.org/ris/1394</a>	17/11/2003	
Aquatic-coastal complex of Cape Opuk	17/11/2003	Autonomous Republic of Crimea	775	1395	1, 2, 4, 6, 7, 8		N	<a href="https://rsis.ramsar.org/ris/1395">https://rsis.ramsar.org/ris/1395</a>	17/11/2003	
Kryva Bay and Kryva Spit	23/11/1995	Donetsk	11,861	774	2, 3, 4, 5, 6, 7, 8	Emerald network, National Park 'Meotida'	N	<a href="https://rsis.ramsar.org/ris/774">https://rsis.ramsar.org/ris/774</a>	08/06/2022	
<b>Sites partly occupied in 2014</b>										
Central Syvash	11/10/1976	Kherson, Autonomous Republic of Crimea	104,513	115	1, 2, 3		N	<a href="https://rsis.ramsar.org/ris/115">https://rsis.ramsar.org/ris/115</a>	01/01/1998	
Eastern Syvash	23/11/1995	Kherson, Autonomous Republic of Crimea	165,000	769	1, 2, 3		N	<a href="https://rsis.ramsar.org/ris/769">https://rsis.ramsar.org/ris/769</a>	01/01/1998	
Karkinitska and Dzharylgatska Bays	11/10/1976	Kherson, Autonomous Republic of Crimea	147,557	114	1, 2, 3, 4, 5, 6, 7, 8	Emerald network	N	<a href="https://rsis.ramsar.org/ris/114">https://rsis.ramsar.org/ris/114</a>	09/08/2022	

Site Name	Designation date	Region of Ukraine	Area (hectares)	Site number*	Ramsar Sites Criteria*	Other international designation*	Part of a Transboundary Ramsar Site*	RIS*	Last RIS update*	RAM*
<b>Sites occupied during February-March in 2022</b>										
Berda River Mouth & Berdianska Spit & Berdianska Bay	23/11/1995	Zaporizhia	8,420	772	1, 2, 3, 4, 5, 6, 7, 8	Emerald network	N	<a href="https://rsis Ramsar.org/ris/772">https://rsis Ramsar.org/ris/772</a>	08/06/2022	
Big Chapelsk Depression	17/11/2003	Kherson	2,359	1397	1, 2, 3, 4, 5, 6	UNESCO Biosphere Reserve	N	<a href="https://rsis Ramsar.org/ris/1397">https://rsis Ramsar.org/ris/1397</a>	02/08/2021	
Bilosaraiska Bay and Bilosaraiska Spit	23/11/1995	Donetsk	11,281	773	2, 3, 4, 5, 6, 7, 8	Emerald network	N	<a href="https://rsis Ramsar.org/ris/773">https://rsis Ramsar.org/ris/773</a>	08/06/2022	
Dnipro River Delta	23/11/1995	Kherson	34,426	767	1, 2, 3, 4, 5, 7, 8	Emerald network	N	<a href="https://rsis Ramsar.org/ris/767">https://rsis Ramsar.org/ris/767</a>	19/05/2022	
Molochnyi Liman	23/11/1995	Zaporizhia	29,152	770	1, 2, 3, 4, 5, 6, 8	Emerald network	N	<a href="https://rsis Ramsar.org/ris/770">https://rsis Ramsar.org/ris/770</a>	27/04/2022	
Obytochna Spit and Obytochna Bay	23/11/1995	Zaporizhia	6,917	771	2, 3, 4, 5, 6	Emerald network	N	<a href="https://rsis Ramsar.org/ris/771">https://rsis Ramsar.org/ris/771</a>	08/06/2022	
Sim Maiakiv Floodplain	24/12/2013	Zaporizhia	2,140	2273	1, 2, 3, 4		N	<a href="https://rsis Ramsar.org/ris/2273">https://rsis Ramsar.org/ris/2273</a>	23/11/2016	
Tendrivska Bay	23/11/1995	Kherson	55,022	768	2, 3, 4, 5, 6	UNESCO Biosphere Reserve, Emerald Network	N	<a href="https://rsis Ramsar.org/ris/768">https://rsis Ramsar.org/ris/768</a>	09/08/2022	RAM No. 20, 1990; <a href="https://rsis Ramsar.org/RISapp/files/ram/ram_020_UA_en.pdf">https://rsis Ramsar.org/RISapp/files/ram/ram_020_UA_en.pdf</a>
Yagorlytska Bay	23/11/1995	Kherson, Mykolaiv	39,693	116	2, 3, 4, 5, 6	UNESCO Biosphere Reserve, Emerald Network	N	<a href="https://rsis Ramsar.org/ris/116">https://rsis Ramsar.org/ris/116</a>	09/08/2022	RAM No. 20, 1990; <a href="https://rsis Ramsar.org/RISapp/files/ram/ram_020_UA_en.pdf">https://rsis Ramsar.org/RISapp/files/ram/ram_020_UA_en.pdf</a>

Site Name	Designation date	Region of Ukraine	Area (hectares)	Site number*	Ramsar Sites Criteria*	Other international designation*	Part of a Transboundary Ramsar Site*	RIS*	Last RIS update*	RAM*
<b>Potential change in the ecological status</b>										
<b>Sites under threats of extension of military activities and occupation</b>										
Bile Lake and Koza Berezyna Mire	24/12/2013	Rivne	8,036	2281	1, 2, 3, 4		N	<a href="https://rsis Ramsar.org/ris/2281">https://rsis Ramsar.org/ris/2281</a>	25/01/2017	
Desna River Floodplains	17/11/2003	Sumy	4,270	1398	1, 2, 3, 4, 5, 6, 7, 8	UNESCO Biosphere Reserve	N	<a href="https://rsis Ramsar.org/ris/1398">https://rsis Ramsar.org/ris/1398</a>	02/08/2021	
Dniester-Turunchuk Crossrivers Area	23/11/1995	Odesa	10,903	764	1, 2, 3, 4, 5, 6, 7, 8	Emerald network	N	<a href="https://rsis Ramsar.org/ris/764">https://rsis Ramsar.org/ris/764</a>	27/04/2022	
Kiliiske Mouth	11/10/1976	Odesa	44,904	113	1, 2, 3, 4, 5, 6, 7, 8	UNESCO Biosphere Reserve, Emerald Network	N	<a href="https://rsis Ramsar.org/ris/113">https://rsis Ramsar.org/ris/113</a>	09/08/2022	
Northern Part of the Dniester Liman	23/11/1995	Odesa	25,929	765	1, 2, 3, 4, 5, 6, 7, 8	Emerald network	N	<a href="https://rsis Ramsar.org/ris/765">https://rsis Ramsar.org/ris/765</a>	09/08/2022	
Perebrody Peatlands	17/11/2003	Rivne	12,718	1402	1, 2, 3, 4		Yes (with Olmany Mires Zakaznik in Belarus)	<a href="https://rsis Ramsar.org/ris/1402">https://rsis Ramsar.org/ris/1402</a>	08/11/2016	
Polissia Mires	17/11/2003	Zhytomyr	2,145	1403	1, 2, 3, 4	Emerald network	N	<a href="https://rsis Ramsar.org/ris/1403">https://rsis Ramsar.org/ris/1403</a>	27/07/2021	
Prypiat River Floodplains	23/11/1995	Volyn, Rivne	37,568	776	1, 2, 3, 4, 5, 6, 8	Emerald network	Yes (with Stokhid River Floodplains in Ukraine and Prostyr in Belarus)	<a href="https://rsis Ramsar.org/ris/776">https://rsis Ramsar.org/ris/776</a>	24/11/2021	
Sasyk Lake	23/11/1995	Odesa	23,488	762	2, 3, 4, 5, 6, 7, 8	UNESCO Biosphere Reserve	N	<a href="https://rsis Ramsar.org/ris/762">https://rsis Ramsar.org/ris/762</a>	09/08/2022	
Shagany-Alibei-Burnas Lakes System	23/11/1995	Odesa	27,600	763	1, 2, 3, 4, 5, 6, 7, 8	Emerald network	N	<a href="https://rsis Ramsar.org/ris/763">https://rsis Ramsar.org/ris/763</a>	27/04/2022	
Somyne Swamps	24/12/2013	Rivne	10,852	2275	1, 2, 3, 4		N	<a href="https://rsis Ramsar.org/ris/2275">https://rsis Ramsar.org/ris/2275</a>	13/12/2016	

Site Name	Designation date	Region of Ukraine	Area (hectares)	Site number*	Ramsar Sites Criteria*	Other international designation*	Part of a Transboundary Ramsar Site*	RIS*	Last RIS update*	RAM*
Stokhid River Floodplains	23/11/1995	Volyn	10,000	777	1, 2, 3, 4, 5, 6, 8	Emerald network	Yes (with Prypiat River Floodplains in Ukraine and Prostyl in Belarus)	<a href="https://rsis Ramsar.org/ris/777">https://rsis Ramsar.org/ris/777</a>	04/08/2021	
Syra Pogonia Bog	24/12/2013	Rivne	9,926	2274	1, 2, 3, 4		N	<a href="https://rsis Ramsar.org/ris/2274">https://rsis Ramsar.org/ris/2274</a>	13/12/2016	
Tyligulskyi Liman	23/11/1995	Odesa, Mykolaiv	22,450	766	1, 2, 3		N	<a href="https://rsis Ramsar.org/ris/766">https://rsis Ramsar.org/ris/766</a>	01/01/1998	
Archipelago Velyki and Mali Kuchueury	24/12/2013	Zaporizhia	7,740	2282	1, 2, 3, 4, 5, 6, 8		N	<a href="https://rsis Ramsar.org/ris/2282">https://rsis Ramsar.org/ris/2282</a>	25/01/2017	



## Annex 2

### Synthesis of findings relevant to wetlands in assessments covering environmental aspects of the war in Ukraine

(drawing on the Inventory of assessments of the environmental damage compiled by the Inter-Agency Coordination Group on Environmental Assessments for Ukraine)

Title	Lead Entity/ies	Publication date	Geographic Scope	Main focus of assessment	Method of assessment	Relevance to wetlands	Link
Environmental Assessment and recovery priorities for Eastern Ukraine	Organization for Security and Co-operation in Europe (OSCE)	2017	Regional (Eastern Ukraine)	Pollution, water supply, land resources,	Materials taken from desk and field studies performed under the project	Section on Impact on land resources, ecosystems, flora, and fauna (not specific to wetlands, but mention of wetland ecosystems)	<a href="#">Link</a>
Kryvyi Rih, Ad hoc flood risk assessment after incident on 14 Sep 2022	USAID, JICA	Sep-22	Local (Kryvyi)	Flood assessment	Remote sensing	River ecosystem affected	<a href="#">Link</a>
The Use of Remote Sensing Data for Investigation of Environmental Consequences of Russia-Ukraine War	Independent (Journal of Landscape Ecology)	Sep-22	National	Fires, pollution	Remote sensing	Wetland ecosystems affected	<a href="#">Link</a>
The Environmental Impact of the Conflict in Ukraine: A Preliminary Review	UNEP	Feb-22	National	Pollution, waste, fuel, urban centres, food security and natural environment	Government of Ukraine, literature review, limited remote sensing and non-verified media reports	Section on Biodiversity and natural resources (not specific to wetlands, but mention of wetland ecosystems)	<a href="#">Link</a>
Rapid Damage and Needs Assessment February 2022 – February 2023	World Bank	Feb-23	National	Economic impact	Remote sensing validated through ground-based information provided by the Government of Ukraine, local agencies, the UN and other partners	Environmental, natural resources and forestry damage. Specific mention of wetlands	<a href="#">Link</a>

<b>Title</b>	<b>Lead Entity/ies</b>	<b>Publication date</b>	<b>Geographic Scope</b>	<b>Main focus of assessment</b>	<b>Method of assessment</b>	<b>Relevance to wetlands</b>	<b>Link</b>
Rapid Damage and Needs Assessment August 2022	World Bank	Aug-22	National	Economic impact	Remote sensing validated through ground-based information provided by the Government of Ukraine, local agencies, the UN and other partners	Environmental, natural resources and forestry damage. Specific mention of wetlands	<a href="#">Link</a>
Environmental impacts of the war in Ukraine and prospects for a green reconstruction	OECD	Jul-22	National	Environment and policy	Literature review	General mention of damage to the natural environment	<a href="#">Link</a>
Impact of war on natural environment of the Carpathians in Ukraine	Ministry of Climate and Environment of Poland (Department of Nature Conservation)	Oct-22	Regional (Carpathian)	Natural environment	Information from Ministry of Environmental Protection and Natural Resources of Ukraine and survey of protected area administrations	Mentioning some impacts on Ramsar Sites	<a href="#">Link</a>
Damaged cultural sites in Ukraine verified by UNESCO	UNESCO	Mar-23	National	Cultural sites	Cross-checking the reported incidents with multiple credible sources. A satellite image analysis is being developed	Damaged cultural sites in Ukraine verified by UNESCO, some could be within Ramsar Sites	<a href="#">Link</a>
Impact of the Russia – Ukraine armed conflict on water resources and water infrastructure	Nature Sustainability	Mar-23	National	Freshwater resources and water infrastructure	Literature review	Freshwater ecosystems	<a href="#">Link</a>