



17th February 2023

To whom it may concern,

Natural Capital Ireland (NCI) welcomes the opportunity to input into the Public Consultation on the *National Risk Assessment Draft List of Strategic Risks 2023*.

NCI is a not-for-profit organisation leading the national conversation on natural capital (view our website [here](#)). We are a group of organisations and individuals from academia and the public, private and NGO sectors. We are committed to the development and application of the natural capital approach to policy and decision making. This approach reveals the full range of values the natural environment provides to our society.

NCI's mission is to help build an Ireland in which natural capital and ecosystem services are valued, protected and restored. We do this by supporting the adoption of natural capital concepts in public policy and corporate strategy, promoting informed public and private sector decision-making and assisting in the establishment of a national natural capital accounting standard as required by the EU.

Natural capital is an economic metaphor for nature; a concept that frames the world's resources like plants, animals, water, and minerals as assets or stocks that yield a flow of benefits to people. The Natural Capital Approach involves measuring and valuing natural capital assets and requires consideration of evidence across a very broad range of scientific disciplines. This approach helps to reveal the often hidden social and economic costs of environmental damage and the benefits related to the conservation and wise use of natural assets, and thereby provides critical information for a wide spectrum of national and local policies across all sectors in Ireland. (See Appendix 1 for definitions relating to natural capital.)

The public consultation document states that the National Risk Assessment 2023 compliments the efforts of all government departments and agencies, which carry out their own risk assessment processes, by providing a high-level overview of strategic risks and facilitates public and stakeholder engagement about them. The natural capital approach would enhance both the high-level National Risk Assessments and those of the individual department and agencies.

We are ultimately entirely dependent on healthy biodiverse ecosystems (our natural capital) for functional societies and economies, and for our very survival (see Image 1 below). The natural capital approach is a framework in which the National Risk Assessment could be embedded, and which can reveal values and relationships within it that would otherwise remain invisible, and identify risks that may not have otherwise been identified.

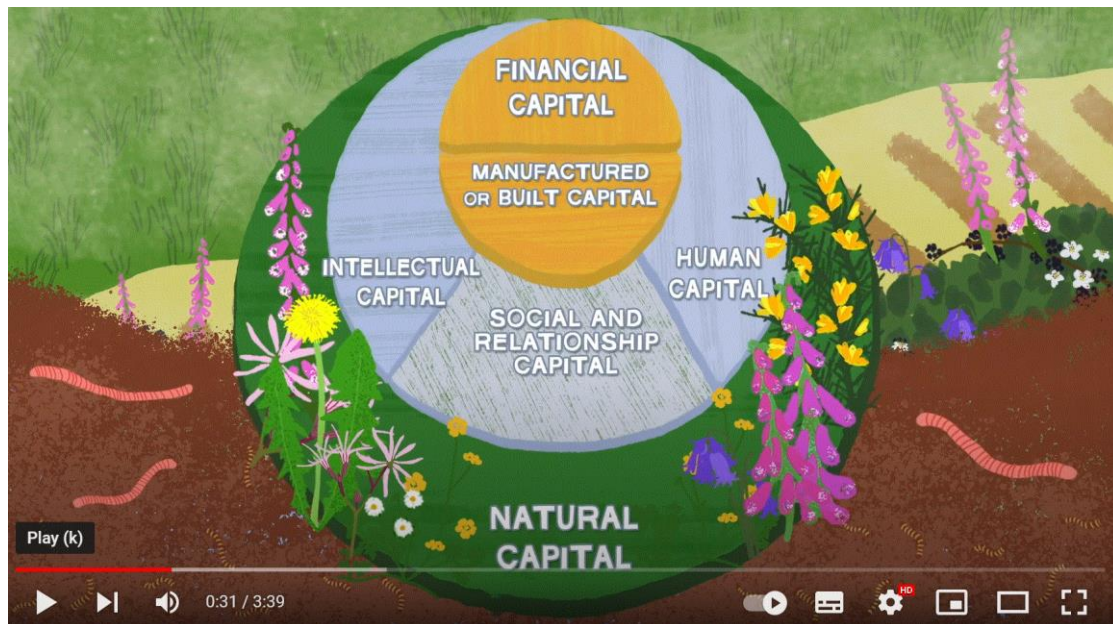


Image 1. Image from [video on Natural Capital on Farmland](#) (produced by Natural Capital Ireland)

Natural capital approaches, and natural capital accounting specifically, present a means to support policy and decision-making with a much wider range of analysis/data than that offered by conventional approaches, because it builds in the fullest possible range of environmental – and cultural – costs, benefits and risks in the assessment of any policy. It is also valuable because it can be used continuously to monitor the full cost-benefit performance of any policy into the future.

We note that the National Risk Assessment is based on the approach used by the World Economic Forum in their Global Risks Report, using the categories: *Geopolitical; Economic; Societal; Environmental* and *Technological*. We refer you to the latest Global Risks Report ([WEF, 2023](#)) which states that the next decade will be characterised by environmental and societal crises, with biodiversity loss and ecosystem collapse considered to be the fastest deteriorating global risks over the next ten years (this is outlined further in the next section). NCI suggests that the National Risk Assessment 2023 be considered and assessed through the lens of natural capital and employing natural capital accounting for policy development and decision-making relating to the full range of risk categories set out in this public consultation.

Why natural capital?

The topic of natural capital is growing in importance at the European level and nationally:

- In late 2019, the European Green Deal stated that “*all EU policies should contribute to preserving and restoring Europe’s natural capital*”. In June 2020, the EU published its new Biodiversity Strategy, which states that by 2050, “*the EU’s natural capital will be protected, valued and appropriately restored*”. Further, the Strategy sets a target to bring at least 10% of agricultural land under management for biodiversity, which could be easily achieved, with community support.
- Nevertheless, the economic benefits delivered by natural capital still remain very undervalued and underrepresented in government policy. Properly accounting for natural capital can help make these values visible, revealing both Ireland’s hidden wealth which enriches us, and the

hitherto invisible factors that, by degrading natural capital, impoverish us. Natural capital concepts are already found in a range of flagship national policies, including the National Planning Framework, the National Biodiversity Action Plan 2017-2021, the National Adaptation Framework, and Heritage Ireland 2030 – but much more can be done to embed natural capital thinking in decision making.

- The 4th National Biodiversity Action Plan 2023-2027 is due to be finalised in 2023 and NCI advocates that the natural capital approach and natural capital accounting should inform the Plan, in line with EU-wide adoption of the UN System of Environmental Economic Accounting ([SEEA](#)), and proposed changes to the EU Regulation on Environmental Economic Accounts. As part of natural capital accounting, Ecosystem Accounting ([SEEA-EA](#)) aims to reorient policies to deliver sustainable development and improved human well-being by measuring and valuing the extent, condition and services of Irish ecosystems as part of the System of National Accounts under the Central Statistics Office's [Irish ecosystem accounting](#).
- The World Economic Forum's Global Risks Report ([WEF, 2023](#)) considers biodiversity loss and ecosystem collapse as one of the fastest accelerating global risks over the next decade and is ranked in the top 4 risks over the next 10 years. All six environmental risks are ranked in the top 10 over the next decade (*Failure to mitigate climate change; Failure of climate change adaptation; Natural disasters and extreme weather events, Biodiversity loss and ecosystem collapse; Natural resource crises; Large-scale environmental damage incidents*). Each of these risks are inter-related risks that compound each other. These risks are a direct threat to our natural capital, and also stem largely from our failure to conserve and restore it.
- The establishment of the Citizens' Assembly on Biodiversity Loss in 2022 and its completion in early 2023 provided an opportunity to understand the relationship between biodiversity and natural capital in that biodiversity is a key element of our natural capital. Reversing biodiversity loss will benefit our natural capital which we rely on to adapt to and mitigate against the impacts of climate change. We welcome the Citizens' Assembly's recommendation for a constitutional amendment to protect biodiversity.
- The National Biodiversity Conference 2022 brought together government departments and multiple sectors of society to highlight the significant challenges we face due to biodiversity loss and the impact that inaction has on all of society. It provided an opportunity to inform the public and policy makers on how to protect and restore our biodiversity, which is part of our natural capital and which includes the need to implement Nature-based Solutions (NbS) to mitigate against the impacts of climate change. Successful NbS rely on healthy biodiverse ecosystems in order to achieve the desired outcomes.

How can the natural capital approach support the Department's Public Consultation on the National Risk Assessment 2023?

In order to protect, restore and enhance our natural capital, we must first understand the extent and condition of existing natural assets. In other words, we must establish a baseline upon which targets for improvement can be set.

NCI is a partner on the pioneering EPA-funded [INCASE project](#), which is the first project to apply Natural Capital Accounting principles to river catchments in Ireland using the [UN SEEA-EA](#). The [SEEA](#) is a guide to integrating economic, environmental and social data into a single, coherent framework

for holistic decision-making. Natural Capital Accounting reports across four main sets of ecosystem accounts – extent, condition, services and benefits - and presents a standardised platform to collate information and regularly report on progress in relation to climate actions, biodiversity conservation and restoration, protection of waterbodies, and general good environmental practices (as identified in cross-sectoral areas such as agriculture, energy, environment, forestry, nature, marine, planning and water supply/use policies). The INCASE report, due to be published shortly, will recommend support for better understanding of biodiversity to inform creation of accounts, and focused research on ecosystem service assessment. Overall, there is a need to develop an aligned approach to data generation and management to fill the gaps and discrepancies that currently hamper integrated decision-making. One of the outputs of the INCASE project was the development of a risk register for peatlands and informed restoration targets at catchment scale (See Appendix 2). Appendix 2 lists a number of recent publications relating to natural capital accounting in the Irish and European context.

The [INCASE project](#) pilot can be built upon to develop a national strategy for the management and enhancement of Ireland’s natural capital. This would closely align with current government initiatives such as the National Land Use Review, the development of a National Soil Strategy, revision of the National Biodiversity Action Plan, and expansion of Ireland's Marine Protected Areas network; and Department priorities such as sustainable, balanced development and sustainable management of water resources from source to sea under the EU Water Framework Directive.

Natural capital is highly relevant across many areas of policy in many departments, including planning and sustainable development, the National Parks and Wildlife Service, water management, emergency planning, the gathering of weather and climate information, and, indeed, health and well-being, and finance. Given the wide range of policy areas covered by the Department, a natural capital framing could provide the holistic, whole-of-government approach that would strengthen policies and avoid duplication across policy areas.

The NCI calls on the Department of the Taoiseach to embed the natural capital approach as a core decision-making tool across the government, and as part of broader cross-departmental coordination on the conservation and sustainable use of biodiversity. This could include the establishment of an Irish equivalent to the UK’s [Natural Capital Committee](#) (NCC), or include natural capital approaches in the remit of the existing cross-departmental working group on biodiversity. This cross-departmental working group could operate in the same way as the Senior Officials Group on SDGs, to deliver a national register of natural capital assets, and of the risks they face.

The UK government established their Natural Capital Committee in 2012. The Committee of experts provides advice to all government departments on the sustainable use of natural capital. The NCC has provided advice to the UK government on a range of policy areas including:

- Advice on how to use natural capital to appraise and evaluate policies, projects and programmes (HM Treasury’s “Green Book”);
- Advice on establishing an environmental baseline census of natural capital stocks;
- Advice on marine management;
- Advice on improving cost benefit analysis of projects that affect the natural environment.

The NCI believes that the establishment of a similar Natural Capital advisory group would support all government departments in balancing environmental, social and economic considerations, both risks and benefits, in its decision-making.

The past number of years have been challenging in terms of the global pandemic, political unrest, and humanitarian crises. Climate change and biodiversity loss, which are expressions of the critical erosion of our natural capital, pose further challenges to our societies and exacerbate the political and economic challenges we are also facing. Protecting, restoring and ultimately augmenting our natural capital is key to achieving these objectives.

We hope you find the points above offer opportunities to expand, deepen and co-ordinate policies across the whole range of economic, environmental, social and cultural values, and we would welcome the opportunity to work closely with the Department to deliver on the *National Risk Assessment 2023* over the coming years. Please contact us for clarifications, and further information at researchteam@naturalcapitalireland.com.

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APPENDIX 1 – Natural capital concepts and definitions

We outline below what the natural capital concept is about and why we consider that viewing our biodiversity and ecosystem services through the lens of natural capital enables us to understand much better its importance to our lives, health and economies. We include a definition of *biodiversity*, *ecosystem* and *ecosystem services*, as these are central to understanding our natural capital.

What is natural capital and the natural capital approach?

What is natural capital?	What is the natural capital approach?	What is natural capital accounting?
It is an economic metaphor for nature. A way of framing the world’s ecosystems including biodiversity, water and minerals as stocks of assets that yield flows of benefits to biodiversity and people. Biodiversity is one element of our natural capital, the other being ecosystem services.	This approach involves measuring our natural capital to reveal how it is delivering important benefits to society and the economy. The concept of natural capital provides a way to understand the value nature provides and our dependence on it, and enables the public and policy makers to avoid unintended losses.	This is a system for organising information about natural capital stocks and ecosystem service flows. Natural Capital Accounts (NCA) detail the <i>extent</i> and <i>condition</i> of natural capital stocks (including biodiversity) and the flow of <i>services</i> and <i>benefits</i> , and enable tracking of each over time. NCAs can be linked to national accounts, making visible the previously hidden value of nature and its impact on the costs and benefits of policies in every area.

Biodiversity	Ecosystem	Ecosystem services
Biodiversity refers to the variety of all life forms on earth, including humans. In most cases, the more biodiverse ecosystems have higher rates of ecological functioning, and more resilience to environmental change.	An ecosystem is a biological community of interacting organisms and their physical environment, e.g. woodlands, peatlands, dune systems, oceans, rivers, hedgerows, soils, etc. Healthy ecosystems are vital to our survival, well-being and prosperity.	Ecosystem services are the result of processes that ecosystems perform, resulting in benefits such as air purification, which make human life both possible and more enjoyable.

Appendix 2

See the INCASE project website for additional relevant publications ([here](#)). Four recent publications relating to natural capital accounting in an Irish and European context are listed below:

- 1.1. Vardon M, Lucas P, Bass S, Agarwala M, Bassi AM, Coyle D, Dvarskas A, Farrell CA, Greenfield O, King S, Lok M, Obst C, O'Callaghan B, Portela R, Siikamäki J. (2023) From COVID-19 to Green Recovery with natural capital accounting. *Ambio*. 52(1):15-2 <https://link.springer.com/article/10.1007/s13280-022-01757-5> [accessed 10th February 2023]

This article relates to the economic recovery following Covid-19 and the opportunity to rebuild natural capital alongside financial, physical, social and human capital, for long-term societal benefit.

- 1.2. Farrell CA, Coleman L, Norton D, Kelly-Quinn M, Kinsella S, Obst C, Eigenraam M, O'Donoghue C, Sheehy I, Smith S, Stout JC (2022) Applying ecosystem accounting to develop a risk register for peatlands and inform restoration targets at catchment scale: a case study from the European region. *Restoration Ecology* <https://onlinelibrary.wiley.com/doi/10.1111/rec.13632> [accessed 10th February 2023].

This article relates to the combining of natural accounting tools and ecosystem restoration approaches to build on existing frameworks to track changes in ecosystem stocks and flows of services and benefits as a result of restoration. This approach highlights policy-relevant benefits that arise due to restoration efforts and helps to maximize opportunities for return on investment.

- 1.3. Farrell C, Aronson J, Daily G, Hein L, Obst C, Woodworth P, Stout J (2021) Natural capital approaches: shifting the UN Decade on Ecosystem Restoration from aspiration to reality. *Restoration Ecology* <https://doi.org/10.1111/rec.13613> [accessed 10th February 2023].

This article highlights a number of initiatives globally that are applying natural capital approaches for national accounting, land use, business support and health and wellbeing.

- 1.4. Farrell CA, Coleman L, Kelly-Quinn M, Obst CG, Eigenraam M, Norton D, O'Donoghue C, Kinsella S, Delargy O, Stout JC (2021) Applying the System of Environmental Economic Accounting-Ecosystem Accounting (SEEA-EA) framework at catchment scale to develop ecosystem extent and condition accounts. *One Ecosystem* 6: e65582. <https://doi.org/10.3897/oneeco.6.e65582> [accessed 10th February 2023].

This article outlines the approach to gathering data to develop extent (developing an asset register) and ecosystem condition accounts at catchment scale.