Engaging with the Nature-Based Solutions coalition for the Climate Action Summit 3 May 2019

- i. Title/Heading: Living European Rivers (LER) Initiative
- ii. Context and rationale:

How Europe faces climate change will, to a greater extent, depend on how it manages its water resources and habitats. Freshwater ecosystems in Europe have been modified for centuries. They are zones of the most intense human activity and Europe's location of highest biodiversity, but also where the biggest decline of species has been detected. Freshwater species are declining at a faster rate than species in any other ecosystems: on average the abundance of populations monitored in the freshwater system declined by 83% in the last decades.

European rivers are threatened by a combination of pressures to cover increasing short-term socioeconomic demands. Main ones are linked to the alteration of the shape and flow of the rivers –hydromorphology-, affecting 40% of the water bodies. Dams, channels, dykes, drainage and dredging... alter the shape and flow of our streams and block water, sediments and species from moving. Other challenges include diffuse pollution, eutrophication and algal and invasive species blooms, point source pollution and water over abstraction.

While pressures are, of course, not even across Europe, solutions imply common approaches. The mission to recover our European water ecosystems as sources of life is a broad challenge that will need coordinated efforts from all WWF European offices and their partners, that is why Living European Rivers is shaped as a long term Initiative and not a single project, in which WWF offices will play varying roles.

iii. An overview of the contribution.

WWF's ambition with the Living European Rivers Initiative is to shift the current water management paradigm in order to halt the degradation of European freshwater ecosystems and bend the curve of their biodiversity loss trend, so they deliver benefits for nature and people. Only by valuing and protecting the last remaining healthy rivers and wetlands, restoring the freshwater ecosystems damaged through centuries in old Europe, and fully implementing integrated river basin management, will we be able to recover the functions of nature that ensure it continues hosting its biodiversity and providing the services from which we benefit, and the adaptation capacity we need in the face of climate change. Living European Rivers, thus, shall contribute to achieving Paris, Aichi and Sustainable Development Goals.

The main tools to reach the aim of this initiative will be a strong regulatory framework, investments redirected towards conservation and an increased awareness and engagement of European citizens towards water ecosystems.

- iv. How the contribution leverages living natural systems as a solution to avert climate change? The following major work lines in the LER initiative all have strong links in leveraging natural systems as a solution to avert climate change.
 - Protect identify, show and advocate for the protection of the last high value rivers and wetlands in Europe; push back hydropower development and other threats by changing incentives and public perception. This will increase natural ecosystem resilience to climate impacts, strengthening our ability to adapt to climate change.
 - Restore mainstream the uptake of nature based solutions for climate change adaptation and mitigation; create a new trend in Europe's rivers to demolish dams. This will result in more free-flowing and "free-pulsing", and therefore healthy, river systems, able to adapt to climate pressures.

- Strengthen policy ensure Water Framework Directive's ambition is maintained and it is properly implemented with support from citizens and businesses. This includes ensuring good ecosystem quality so that the systems are resilient against climate pressures, and integrated river basin management to mitigate the impacts of floods and droughts, among other issues.
- Shift investment influence financial flows towards NBS and away from hard impacting infrastructures, through the development of bankable projects that provide them with alternative lines of investment and the cost-benefit analysis of the more traditional and impacting ones. This is not only likely to be more carbon efficient, but also support in climate adaptation measures that use the natural ecosystem functions in resilience building.
- Raise awareness change the perception of European citizens regarding rivers and wetlands, so they
 become allies in making other stakeholders shift the water paradigm. The proper implementation of
 the Water Framework Directive and the up-take of Nature-based Solutions as an option to increase
 climate resilience cannot be fought by WWF alone. A large number of allies are required through
 awareness raising and recruitment to the common cause.
 - v. How might the contribution support both climate, mitigation and adaptation as well as other important co-benefits and social, economic and environmental outcomes in coming years. They may include:
 - a. Reduction in carbon emission and carbon capture (GTonnes) not directly applicable, although indirectly, healthy freshwater ecosystems become sinks (and not sources) of GHG
 - b. Increasing climate resilience healthy river systems across Europe will result in increased climate resilience against impacts and will act as strategic corridors for many species that will be displaced by climate change.
 - c. Social impact (job increase; poverty reduction; Just transition, etc.) Nature-based Solutions have proven to be more labour intensive than grey solutions, where concrete and other materials are the biggest expense, and over a longer period. The development of less dams, for which the initiative works, will imply less forced flooding and land loss for locals, and in some cases, after dam removal, even the recovery. In addition, the involvement of local stakeholders and citizens is key for the development of NBS, developing a dialogue where their needs are better considered. Where possible, WWF is searching for the development of Bankable Water Solutions, projects that will increase the resilience of the systems while generating income, adapting not only the physical environment but the economic activity to the new challenges imposed by Climate Change.
 - d. Net economic impact (total in US\$; how was it achieved?)
 - a. Impact on realization of the 2030 Agenda for Sustainable Development (in particular SDGs 1,2,6,12,13,14,15,16) The LER initiative will contribute to achieving the Agenda 2030 goals around water, oceans and wildlife, to name a few, especially to SDG 6 "Ensure availability and sustainable management of water and sanitation for all"; by protecting and conserving freshwater ecosystems (target 6.6), LER will contribute to the achievement of most of the other SDG water targets in Europe including: ensuring access to drinking water, reducing pollution and increasing wastewater treatment, addressing water scarcity through sustainable withdrawal, implementing IWRM including transboundary cooperation and support and strengthen the participation of local communities in improving water and sanitation management.
 - b. Food security Improved management of water resources, achieved by the proper implementation of the WFD, and the restoration of freshwater ecosystems with NBS will result in the mitigation of the impacts of climate change, mainly floods and droughts, on farming, thus contributing to increase food security in Europe.

- c. Minimising species extinction and ecological losses and fostering an increase of biodiversity this is assured through 1) saving the last remaining free-flowing rivers in Europe and removing dams where applicable so that natural flow regimes may return, in turn bringing back the lost biodiversity to these river systems.
- vi. Which countries and organisations are involved in the contribution?

 WWF NL, WWF DCP, WWF CH, WWF ADRIA, WWF EPO, and others with interest (FIN, ES, CAUPO, PT, etc.)

How have stakeholders (for example local communities, youth and indigenous peoples, where applicable) been consulted in developing the contribution? LER initiative works through a network of WWF offices across Europe that have been working on freshwater for many years and already count with different networks of collaborators; they have therefore gathered the knowledge from their national experts, administrations and stakeholders in the ground. The work has been especially intense in the last months with the #ProtectWater campaign, to defend the Water Framework Directive, where more than 130 organisations –including NGOs of different types, CSOs, workers unions, etc- have been consulted and involved in the campaign.

- vii. Where can the contribution be put into action? Scope is across all of Europe
- viii. How the contribution will be delivered? How will different stakeholders be engaged in its implementation? What are the potential transformational impacts?

WWF has not worked alone with its European initiatives in the past, and will not do so in the LER. WWF counts on an extensive network of allies at national, regional and international level: other NGO and CSO – with its main exponent in the Living Rivers Europe NGO coalition or the Dam Removal Europe movement-, research institutions, governments, international institutions and private sector are among them.

What is then new and transformational about this initiative? First, the scale. The "traditional" basin perspective is now the base for a Europe-broad effort, in which synergies will arise by bringing local knowledge and partners together. And second, the use of the finance sector as a new leverage point. The LER initiative will work to provide tangible examples of bankable solutions for conservation and present them to attract public and private investments towards nature based solutions and dam removal, and away from harmful grey infrastructure projects. Investment is in many cases at the core of decision making, and will be a key tool to shift the current water paradigm in Europe.

- ix. Is this initiative contributing to other Climate Action Summit workstreams (industry transition; energy transition; climate finance and carbon pricing; infrastructure, cities and local action; resilience and adaptation; youth and citizen mobilization; social and political drivers; mitigation strategy)?
 - Yes including energy transition (hydropower removal), climate finance, infrastructure (dam removal), cities and citizen mobilisation.
- x. How does this contribution build upon examples of experience to date? How does the contribution link with different ongoing initiatives?

For each work stream, there are different leading partners according to their experience.

- Work line 1: WWF offices in Switzerland, Adria, Netherlands and EPO. Building on work already developed by WWF at a global scale to identify "free-flowing rivers" by means of GIS methodology, will overlap with high volumes of information produced by implementation of the Water Framework

Directive and with data gathered by WWF offices and projects to produce a map of Europe's freshwater jewels.

- Work line 2: WWF Netherlands is already supporting the Dam Removal Europe movement through the World Fish Migration Foundation. This will be expanded to the Europe scale.
- Work line 3: The Danube Carpathian Program Office has a long history on river and floodplain restoration, and with the support of other offices is leading this European expansion of scope.
- Work line 4: Under the lead of the European Policy Office, the support to the Water Framework Directive and its proper implementation will be implemented.
 - xi. What are the mechanisms for funding (with specific emphasis on potential for partnerships)? Freshwater is already a key issue in Europe, which is the reason that large amounts of funding are potentially available from public and private sector sources. WWF will use this opportunity to ensure these investments are made with highest benefits for freshwater biodiversity and local communities. This will require close cooperation of WWF's fundraisers, finance experts and thematic conservation experts.
 - LER requires 25 million EUR with 2.5 million EUR sourced to date.
- xii. What are the means of stewardship, metrics for monitoring?



xiii. What is the communication strategy?

For each component there are relevant communication strategies according to the work stream. For example in work line 1: Start by developing advocacy and communication actions to make clear that "hydropower is not green" and in work line 4: #ProtectWater campaign is under development throughout Europe. The campaign to secure WFD ambitions will continue until 2021 to maintain the pressure on both Commission and Member states until final decisions are taken. On a longer term, the initiative aims at intensifying the communication around the values of rivers and wetlands for our security and quality of life.

