

Supporting Information

Q6 Scottish National Marine Plan Alignment

Policy	Proposal Alignment
GEN 1 General planning principle: There is a presumption in favour of sustainable development and use of the marine environment when consistent with the policies and objectives of this Plan.	The proposal is inherently sustainable as it pertains to the restoration of a river channel, and is also consistent with SNMP policies as set out below
GEN 2 Economic benefit: Sustainable development and use which provides economic benefit to Scottish communities is encouraged when consistent with the objectives and policies of this Plan.	The proposed works are required under regulatory obligation (SEPA), and will support the sustainable development of the Applecross hatchery on the right bank of the river, which itself will provide significant economic benefit locally and nationally.
GEN 3 Social benefit: Sustainable development and use which provides social benefits is encouraged when consistent with the objectives and policies of this Plan.	The proposed works pertain to naturalisation of a river, which will provide social benefit by way of restoration of a natural asset, which is a principle considered to be valued by society.
GEN 4 Co-existence: Proposals which enable coexistence with other development sectors and activities within the Scottish marine area are encouraged in planning and decision making processes, when consistent with policies and objectives of this Plan	The proposed works will exist within the footprint of Kishorn which holds a variety of commercial uses, thereby demonstrating the co-existence of functioning, natural landscapes with other development sectors.
GEN 5 Climate change: Marine planners and decision makers must act in the way best calculated to mitigate, and adapt to, climate change.	The proposed works will support localized resilience to climate change by restoration the river's functioning and natural processes upstream of the marine licenced works.
GEN 7 Landscape/seascape: Marine planners and decision makers should ensure that development and use of the marine environment take seascape, landscape and visual impacts into account.	The proposed works inherently support improving the landscape through naturalisation of the river corridor.
GEN 8 Coastal process and flooding: Developments and activities in the marine environment should be resilient to coastal change and flooding, and not have	The proposed works will support localized resilience to climate change by restoration the river's functioning and natural processes

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unacceptable adverse impact on coastal processes or contribute to coastal flooding.	upstream of the marine licenced works.
GEN 12 Water quality and resource: Developments and activities should not result in a deterioration of the quality of waters to which the Water Framework Directive, Marine Strategy Framework Directive or other related Directives apply.	The restorative nature of the proposed works will serve only to enhance the quality of the river through naturalisation.

Q7a Activity Description

CBEC eco-engineering UK Ltd was commissioned by Bakkafrost Scotland Ltd. to develop detailed designs for remedial works to the Russel Burn, Kishorn. The aim of the project is to remediate the existing river engineering works to comply with conditions set out by SEPA in March 2024, under the Controlled Activities Regulations (CAR).

The design is based on cbec's evaluation of hydraulic and geomorphic performance, whilst ensuring that there is no increased erosion or flood risk to the development on the river right (west) floodplain and the existing infrastructure that interacts with the channel and the immediate vicinity (i.e. pipe crossing, concrete bed protection, inspection chamber and bridges).

The design site is situated along the lower course of the Russel Burn, where the bedrock channel transitions to a naturally unconfined alluvial fan environment before discharging into Loch Kishorn. Prior to modification, this unconfined ~300 m long alluvial fan would have been dominated by sediment deposition and a dynamic channel that adjusted continuously. Historic engineering practices have since altered the character and function of the design site, including:

- The dam installed in Loch Coire nan Arr, controlling the flow through the Russel Burn and impacting sediment supply;
- A history of channel straightening, embankment construction and bank/ bed reinforcements along the design site, responsible for channel instability due to the steepened gradient and erodible bank material.

The final remedial designs involve:

- Realignment of the upper Russel Burn reach toward the river left (east), creating a more sinuous channel.
- Construction of a 'step-pool' channel within the downstream section of the Russel Burn channel which will include removal of the existing bed level control boulder 'weir' structure and construction of steps using boulder and cobble material with the addition of cobble/gravel substrate in the pools between the steps. The addition of sediment will extend upstream of the step-pool channel in order to raise the riverbed elevation to bury critical effluent pipes and their concrete bed casing.
- The removal of a number of sections existing rock armour bank protection
- Construction of several sections of green bank protection on both the active river bank and set back within the floodplain, adjacent to the realigned channel.

- Planting of the riverbank areas with seeds suitable for upland and coastal areas.
- The construction of a bund along the right bank of the river to reduce flood risk to adjacent infrastructure.