Heriot-Watt University

Proposed deposit of Native Oysters, Firth of Forth two sites.

NATIONAL MARINE PLAN POLICY CONSIDERATIONS V1.1 – December 2023

This document has been prepared by

Jim Bromham Lochside Associates for Heriot – Watt University 4 December 2023

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This document has been prepared to set out the consideration that has been given to the National Marine Plan and the policies therein. It relates to both proposed Native Oyster deposit plots near Inchmickery and Inchkeith in the Firth of Forth. Within the table below columns 1 and 2 provide reference number and summary policy text from the national marine plan. We then go on to provide information summarising how the developer has considered these polices in progressing these marine licence applications.

Within the consideration of policies we refer to three additional documents submitted in support of these applications. These are the Biosecurity Measures Plan, The Translocation/species restoration Licence issued by NatureScot in August 2023 including the Habitats Regulation Appraisals and the Navigational Risk Assessment. These documents are provided under separate cover.

Ref & Policy No.	Heading & Policy Text	Consideration by the Developer
	General	
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.	This document demonstrates the consideration that has been given to the policies and objectives of Scotland's National Marine Plan in bringing forward the proposed deposit of native oysters within the Firth of Forth. This document has been prepared recognising that advice from MD-LOT is that the proposals are considered to be construction in terms of Marine Licensing legislation in Scotland.
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 deposits are part of an overall project "Restoration Forth" which seeks to re-establish sea grass and native oysters within the Firth of Forth, an area where such species are locally extinct. This application relates specifically to the
GEN 3	Social benefit: Sustainable development and use which provides social benefits is encouraged when consistent with the objectives and policies of this Plan.	Native Oyster element of the project. There will be a small, short tereconomic benefit through commerce workboat charter associated with the deposit of oysters as well as direct incomposit of oysters and project support a monitoring staff. In the long term the presence of National Oysters may yield self sustain populations which will bring Social and Economic benefit through ecosystes services eg. water quality, carbon captal
		and improved habitat for juvenile fish and shellfish species.

Ref & Policy No.	Heading & Policy Text	Consideration by the Developer
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.	In identifying the plots the applicant has sought to identify sites where there is a balance between suitable sea bed habitat and other ongoing activities. It has not identified any areas of conflict with its proposals. Areas considered include, but are not limited to, the presence and frequency of fishing activity, recreational navigation and commercial navigation. This is detailed further in the Navigational Risk Assessment.
GEN 5	Climate change: Marine planners and decision makers must act in the way best calculated to mitigate, and adapt to, climate change.	Native Oysters, absorb significant quantities of CO_2 in shell growth. Shell material does not readily decompose once the animal dies and is retained on the seabed eroding to form shell sand. Shellfish are recognised as an important Carbon sink.
GEN 6	Historic environment: Development and use of the marine environment should protect and, where appropriate, enhance heritage assets in a manner proportionate to their significance.	The proposed deposit will not impact on marine heritage assets as set out in the National Marine Plan.
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 deposit is entirely sub-tidal, with no surface equipment and will therefore have no visual impact.
GEN 8	Coastal process and flooding: Developments and activities in the marine environment should be resilient to coastal change and flooding, and not have unacceptable adverse impact on coastal processes or contribute to coastal flooding.	The proposed deposit area is small at 1Ha per site when compared to the overall area of the Firth of Forth and are distant from the shore. The proposals will not have an adverse impact on coastal change and flooding.

Ref & Policy No.	Heading & Policy Text	Consideration by the Developer
GEN 9	Natural heritage: Development and use of the marine environment must: (a) Comply with legal requirements for protected areas and protected species. (b) Not result in significant impact on the national status of Priority Marine Features. (c) Protect and, where appropriate, enhance the health of the marine area.	In bringing forward the proposed development consideration has been given to the presence, in the wider area, of protected species. There is no specific conservation protection of the sea-bed at the locations proposed. The intended plot at Inchmickery is within the Inchmickery element of the Forth Islands SPA and the Outer Firth of Forth and St Andrews Bay complex SPA — both SPAs for bird interests The intended plot at Inchkeith is within the Outer Firth of Forth and St Andrews Bay complex SPA — Bird interests HRA/AA has been undertaken for the project by NatureScot in determining the application for Non-Native Species
GEN 10	Invasive non-native species: Opportunities to reduce the introduction of invasive non-native species to a minimum or proactively improve the practice of existing activity should be taken when decisions are being made.	Translocation Licence. A comprehensive biosecurity plan has been prepared and is submitted in support of the Marine Licence Application. The document identifies possible INNS, possible vectors for transfer and sets out mitigation by which the risk of introduction of INNS can be reduced as far as practicable.
GEN 11	Marine litter: Developers, users and those accessing the marine environment must take measures to address marine litter where appropriate. Reduction of litter must be taken into account by decision makers.	Sea bed equipment associated with the deposit is limited to 4no bio-degradable line 15m in length per site, to which individual oyster have been glued. These lines will be weighted to the seabed with rocks in-situ or pinned to the seabed with steel pins. The intention of the lines is to allow certain oysters within the deposit to be identified as the subject of ongoing monitoring. Any packaging used to transfer oysters to the site, eg oyster trays, will be removed from site, cleaned in accordance with the biosecurity plan and reused.

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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.	It is anticipated that the project will have a localised positive impact water quality but that this is likely to be insignificant as a far field effect due to the small footprint of the proposal within the overall extent of the Firth of Forth.
GEN 13	Noise: Development and use in the marine environment should avoid significant adverse effects of manmade noise and vibration, especially on species sensitive to such effects.	The only noise associated with the project is the movement of vessels during the deployment and monitoring of oysters. This impact will be infrequent and short lived so will not contribute significantly to the overall level of noise associated with regular vessel movements within the Firth of Forth.
GEN 14	Air quality: Development and use of the marine environment should not result in the deterioration of air quality and should not breach any statutory air quality limits.	There will not be any significant impact on air quality resulting from the proposed deposit.
GEN 15	Planning alignment A: Marine and terrestrial plans should align to support marine and land-based components required by development and seek to facilitate appropriate access to the shore and sea.	We consider that this policy is directed at marine planners and decision makers and is not directly applicable to the proposed deposit. This policy has not been considered further.
GEN 16	Planning alignment B: Marine plans should align and comply where possible with other statutory plans and should consider objectives and policies of relevant non-statutory plans where appropriate to do so.	We consider that this policy is directed at marine planners and decision makers and is not directly applicable to the proposed deposit. This policy has not been considered further.
GEN 17	Fairness: All marine interests will be treated with fairness and in a transparent manner when decisions are being made in the marine environment.	We consider that this policy is directed at marine planners and decision makers and is not directly applicable to the proposed deposit. This policy has not been considered further.

Ref & Policy No.	Heading & Policy Text	Consideration by the Developer
GEN 18	Engagement: Early and effective engagement should be undertaken with the general public and all interested stakeholders to facilitate planning and consenting processes.	MD-LOT has provided advice that "No formal Pre-Application Consultation process under the Marine Licensing (Preapplication Consultation)(Scotland) Regulations 2013 ("PAC Regulations") is required for the deposit activity." The overarching project, Restoration Forth, has run a series of public engagement events prior to and during the submission of applications.
GEN 19	Sound evidence: Decision making in the marine environment will be based on sound scientific and socioeconomic evidence.	We consider that this policy is directed at marine planners and decision makers. This policy has not been considered further.
GEN 20	Adaptive management: Adaptive management practices should take account of new data and information in decision making, informing future decisions and future iterations of policy.	We consider that this policy is directed at marine planners and decision makers and is not directly applicable to the proposed deposit. This policy has not been considered further.
Ref & Policy No.	Heading & Policy Text	Consideration by the Developer
GEN 21	Cumulative impacts: Cumulative impacts affecting the ecosystem of the marine plan area should be addressed in decision making and plan implementation.	We consider that this policy is directed at marine planners and decision makers and is not directly applicable to the proposed deposit. This policy has not been considered further.
	Sea Fisheries	
FISHERIES 1	Taking account of the EU's Common Fisheries Policy, Habitats Directive, Birds Directive and Marine Strategy Framework Directive, marine planners and decision makers should aim to ensure	We consider that this policy is directed at marine planners and decision makers and is not directly applicable to the proposed deposit. This policy has not been considered further.
FISHERIES 2	The following key factors should be taken into account when deciding on uses of the marine environment and the potential impact on fishing.	We consider that this policy is directed at marine planners and decision makers and is not directly applicable to the proposed deposit. This policy has not been considered further.

Ref & Policy No.	Heading & Policy Text	Consideration by the Developer
FISHERIES 3	Where existing fishing opportunities or activity cannot be safeguarded, a Fisheries Management and Mitigation Strategy should be prepared by the proposer of development or use, involving full engagement with local fishing interests (and other interests as appropriate) in the development of the Strategy. All efforts should be made to agree the Strategy with those interests. Those interests should also undertake to engage with the proposer and provide transparent and accurate information and data to help complete the Strategy. The Strategy should be drawn up as part of the discharge of conditions of permissions granted. [Further policy detail removed for brevity]	Fishing activity in the area was assessed during site selection and conflict with fishing opportunities or activity is not anticipated. Further information in relation to fishing activity is presented in the enclosed Navigation Risk Assessment.
FISHERIES 4	Ports and harbours should seek to engage with fishing and other relevant stakeholders at an early stage to discuss any changes in infrastructure that may affect them. Any port or harbour developments should take account of the needs of the dependent fishing fleets with a view to avoiding commercial harm where possible. Where a port or harbour has reached a minimum level of infrastructure required to support a viable fishing fleet, there should be a presumption in favour of maintaining this infrastructure, provided there is an ongoing requirement for it to remain in place and that it continues to be fit for purpose.	This policy is directed at the operators of ports and harbours and is not relevant to the proposals. This policy has not been considered further.
FISHERIES 5	Inshore Fisheries Groups (IFGs) should work with all local stakeholders with an interest to agree joint fisheries management measures.	Policy relates to the actions of IFGs and is not relevant to the proposals. This policy has not been considered further.

Ref & Policy No.	Heading & Policy Text	Consideration by the Developer
	Aquaculture	
AQUACULTURE 1	Marine planners and decision makers should seek to identify appropriate locations for future aquaculture development and use,	We consider that this policy is directed at marine planners and decision makers and is not directly applicable to the proposed deposit. The proposed deposit is considered to be construction not aquaculture.
AQUACULTURE 2	Marine and terrestrial development plans should jointly identify areas which are potentially suitable and sensitive areas which are unlikely to be appropriate for such development,	We consider that this policy is directed at marine planners and decision makers and is not directly applicable to the proposed deposit. The proposed deposit is considered to be construction not aquaculture.
AQUACULTURE 3	In relation to nutrient enhancement and benthic impacts, as set out under Locational Guidelines for the Authorisation of Marine Fish Farms in Scottish Waters, fish farm development is likely to be acceptable in Category 3 areas, subject to other criteria being satisfied. A degree of precaution should be applied to consideration of further fish farming development in Category 2 areas and there will be a presumption against further fish farm development in Category 1 areas.	The proposal is not a fin fish farm development therefore Locational Guidelines for the Authorisation of Marine Fish Farms in Scottish Waters do not apply. This policy has not been considered further.
AQUACULTURE 4	There is a presumption that further sustainable expansion of shellfish farms should be located in designated shellfish waters	Not applicable, the deposit is not considered to be a shellfish farm. Oysters are to be deployed to the site for habitat restoration purposes.
AQUACULTURE 5	Aquaculture developments should avoid and/or mitigate adverse impacts upon the seascape, landscape and visual amenity of an area, following SNH guidance75 on the siting and design of aquaculture.	Considered at National Marine Plan Policy GEN 7 above.
AQUACULTURE 6	New aquaculture sites should not bridge Disease Management Areas although boundaries may be revised by Marine Scotland to take account of any changes in fish farm location, subject to the continued management of risk.	Not applicable, the proposed deposit is outwith a disease management area.

Ref & Policy No.	Heading & Policy Text	Consideration by the Developer
AQUACULTURE 7	Operators and regulators should continue to utilise a risk based approach to the location of fish farms and potential impacts on wild fish.	Not applicable, the proposed deposit is not considered to be a fish farm. Native oysters and wild salmonids co-exist successfully throughout their natural distributions.
AQUACULTURE 8	Guidance on harassment at designated seal haul out sites should be taken into account and seal conservation areas should also be taken into account in site selection and operation. Seal licences will only be granted where other management options are precluded or have proven unsuccessful in deterrence.	The proposed sites are in the vicinity of East Coast seal conservation area, EC-002, Inchmickery and Cow & Calves Islands. This conservation area covers the rocky coastline and around Inchmickery and the entire islands of the Cow and Calves and Oxcars Islands. In addition, Grey Seal Breeding Colony BC-04 Inchkeith covers the entire coast of Inchkeith. The developer acknowledges that that it an offence to harass seals at a designated seal haul out site. The deployment plots are over 1km distant from the nearest designated seal haul out boat movements from the shore to the deposit sites will be limited in number, of short duration and will not approach the seal haul outs. It is not considered that the proposed deposit of native oysters is incompatible
		with the presence of the designated seal haul out sites.
AQUACULTURE 9	Consenting and licensing authorities should be satisfied that appropriate emergency response plans are in place.	Recent determinations on Marine Licence Applications have included a requirement for emergency response plans to be submitted to MCA. It is anticipated that MD-LOT will choose to add licence condition to this effect.
AQUACULTURE 10	Operators should carry out pre- application discussion and consultation, and engage with local communities and others who may be affected, to identify and, where possible, address any concerns in advance of submitting an application.	Please refer to information provided above in response to GEN 18.

Ref & Policy No.	Heading & Policy Text	Consideration by the Developer
AQUACULTURE 11	Aquaculture equipment, including but not limited to installations, facilities, moorings, pens and nets must be fit for purpose for the site conditions, subject to future climate change. Any statutory technical standard must be adhered to. Equipment and activities should be optimised in order to reduce greenhouse gas emissions.	Not applicable to this project. This policy has not been considered further.
AQUACULTURE 12	Applications which promote the use of sustainable biological controls for sea lice (such as farmed wrasse) will be encouraged.	Not applicable to this project. This policy has not been considered further.
AQUACULTURE 13	Proposals that contribute to the diversification of farmed species will be supported, subject to other objectives and policies being satisfied.	Not applicable to this project. This policy has not been considered further.
AQUACULTURE 14	The Scottish Government, aquaculture companies and Local Authorities should work together to maximise benefit to communities from aquaculture development.	This policy duplicates the provisions of policies GEN 2 and 3. Please refer to response above.
	Wild Salmon and Diadromous Fish	
WILD FISH 1	The impact of development and use of the marine environment on diadromous fish species should be considered in marine planning and decision making processes. Where evidence of impacts on salmon and other diadromous species is inconclusive, mitigation should be adopted where possible and information on impacts on diadromous species from monitoring of developments should be used to inform subsequent marine decision making.	Not applicable to this project, native oysters and wild salmonids co-habit successfully throughout their natural distributions.
	Oil and Gas	
OIL & GAS 1-6		Policies not relevant to proposed deposit of native oysters

Ref & Policy No.	Heading & Policy Text	Consideration by the Developer
	Carbon Capture and Storage	
CCS 1-2		Policies not relevant to proposed deposit of native oysters
	Offshore Wind and Marine Renewable Energy	
RENEWABLES 1-10		Policies not relevant to proposed deposit of native oysters
	Recreation and Tourism	
REC & TOURISM 1	Opportunities to promote sustainable development of marine recreation and tourism should be supported.	Through the project outreach of Restoration Forth there are opportunities for members of the public to become involved in aspects of the project.
REC & TOURISM 2	The following key factors should be taken into account when deciding on uses of the marine environment and the potential impact on recreation and tourism: • The extent to which the proposal is likely to adversely affect the qualities important to recreational users, including the extent to which proposals may interfere with the physical infrastructure that underpins a recreational activity. • The extent to which any proposal interferes with access to and along the shore, to the water, use of the resource for recreation or tourism purposes and existing navigational routes or navigational safety. • Where significant impacts are likely, whether reasonable alternatives can be identified for the proposed activity or development. • Where significant impacts are likely and there are no reasonable alternatives, whether mitigation, through recognised and effective measures, can be achieved at no significant cost to the marine recreation or tourism sector interests.	The proposed deposit will not have any adverse impact on recreation and tourism.

Ref & Policy No.	Heading & Policy Text	Consideration by the Developer
REC & TOURISM 3	Regional marine plans should identify areas that are of recreational and tourism value and identify where prospects for significant development exist, including opportunities to link to the National Long Distance Walking and Cycle Routes, and more localised and/or bespoke recreational opportunities and visitor attractions.	This policy is aimed at regional marine plans. This policy has not been considered further.
REC & TOURISM 4	Marine and terrestrial planners, marine decision makers and developers should give consideration to the facility requirements of marine recreation and tourism activities	The only reasonably foreseeable interaction with recreation and tourism interests would be the ability of pleasure craft and tour vessels to see project vessels when they are operating on the sites. This is likely to be a positive interaction given the nature of the conservation project. This said, on site activities by the project are low in number and of short duration and navigation close to the sites by tourist vessels and recreational vessels also appears to be low and of short duration making the opportunities for interaction limited. Navigation close to the proposed sites by recreation and tourism vessels is discussed in the Navigational Risk Assessment.
REC & TOURISM 5	Marine planners and decision makers should support enhancement	Policy aimed at marine planners and decision makers. This policy has not been considered further.
REC & TOURISM 6	Codes of practice for invasive non- native species and Marine Wildlife Watching should be complied with.	Although the proposed deposit is not a recreation and tourism activity boat movements associated with the project will be undertaken in accordance with the agreed biosecurity measures plan and NatureScot Marine Wildlife Watching Code of Practice. Adherence to both of these documents are conditions of the NatureScot Conservation Translocation Licence agreed for these deposits.

Ref & Policy No.	Heading & Policy Text	Consideration by the Developer
	Shipping, Ports, Harbours and Ferries	
TRANSPORT 1	Navigational safety in relevant areas used by shipping now and in the future will be protected, adhering to the rights of innocent passage and freedom of navigation contained in UN Convention on the Law of the Sea (UNCLOS). The following factors will be taken into account when reaching decisions regarding development and use: The extent to which the locational decision interferes with existing or planned routes used by shipping, access to ports and harbours and navigational safety. This includes commercial anchorages and defined approaches to ports. Where interference is likely,	There will be no significant adverse impact on navigation. Please refer to the attached navigation risk assessment.
	 whether reasonable alternatives can be identified. Where there are no reasonable alternatives, whether mitigation through measures adopted in accordance with the principles and procedures established by the International Maritime Organization can be achieved at no significant cost to the shipping or ports sector. 	
TRANSPORT 2- 7		Policies not relevant to these proposals. These policies have not been considered further.
	Submarine Cables	
CABLES 1-4		The proposed deposit locations are both over 300m from the closest charted locations of any marine cables. These policies are not relevant to the proposed deposit and are not considered further.

Ref & Policy No.	Heading & Policy Text	Consideration by the Developer
	Defence	
effectiveness by the armed and use will b areas: Naval areas in of navigation ports will be in a development or safety of in reasonable al be taken into Proposals for be discussed in the process Firing Danger permanent in compatible w Areas by the l have tempora Proposals for be discussed in the process Within Exercis subject to ten Development or cumulative prevents the an exercise ar Proposals for be discussed in the process Communicati surveillance in and use which interference of necessary for prohibited if in determined. I use should be	To maintain operational effectiveness in Scottish waters used by the armed services, development and use will be managed in these areas:	The proposed Inchmickery deposit site is outwith any Military Exercise Area or Danger Feature as depicted on Scotlands Marine Plan Interactive mapping.
	Naval areas including bases and ports: Safety of navigation and access to naval bases and ports will be maintained. The extent to which a development or use interferes with access or safety of navigation, and whether reasonable alternatives can be identified, will be taken into account by consenting bodies. Proposals for development and use should be discussed with the MOD at an early stage in the process.	The proposed deposit at Inchkeith is on the northern edge of the Military Exercise Area X5613S (Aberlady). This area is depicted on Scotlands Marine Plan Interactive mapping as an exercise area for Submarines and Surface Fleet.
	Firing Danger Areas: Development of new permanent infrastructure is unlikely to be compatible with the use of Firing Danger Areas by the MOD. Permitted activities may have temporal restrictions imposed. Proposals for development and use should be discussed with the MOD at an early stage in the process.	The deposit of native oysters will have no impact on the use of the exercise area. Prior to boat movements in the Firth of Forth the boat operator will ensure that they are aware of any PEXA broadcasts associated with the activities of the Practice and Exercise Area.
	Within Exercise Areas, activities may be subject to temporal restrictions. Development and use that either individually or cumulatively obstructs or otherwise prevents the defence activities supported by an exercise area may not be permitted. Proposals for development and use should be discussed with the MOD at an early stage in the process.	
	Communications: Navigations and surveillance including radar: Development and use which causes unacceptable interference with radar and other systems necessary for national defence may be prohibited if mitigation cannot be determined. Proposals for development and use should be discussed with the MOD at an early stage in the process.	
DEFENCE 2-3		Policies not applicable to the proposed deposit of Native Oysters. These policies have not been considered further.
	Aggregates	
AGGREGATES 1-2		Policies not applicable to the proposed deposit of Native Oysters. These policies have not been considered further.