Coastal Processes workshop		
#	Task	Comments
1	Familiarize yourself with the webmap	Please circle how easy you find it:  ……..  ……  ……. Improvements:
2	Find a range of locations where coastal changes (and/or flood risk) are an issue	Where:
3	Use the maps to help draft policies for a RMP that would support delivery of the national policies. In doing this: a) discuss the types of developments / activities that could impact upon coastal processes b) discuss different sorts of measures that could be adopted in policy - e.g. zoning Vs technical solutions	Developments: Measures:
4	As well identifying risky or resilient areas for developments, how might the NCCA info be used to identify potential positive synergies (win-wins) between economic development and coastal processes?	Win-wins:
5	Think about marine developments/activities that would alter physical forces with potential benefits to other interests	
6	What sort of policies could this lead to?	

National Marine Plan

GEN 5 Climate change: Marine planners and decision makers must act in the way best calculated to mitigate, and adapt to, climate change.

4.18 Developers and users of the marine environment should seek to address climate change through:

• Mitigation: Marine planners and decision makers should seek to facilitate a transition to a low carbon economy. They should consider ways to reduce emissions of carbon and other greenhouse gasses. This will be of particular relevance in cases of large-scale development and infrastructure projects.

• Adaptation: Marine planners and decision makers should be satisfied that developers and users have sufficient regard to the impacts of a changing climate and, where appropriate, provide effective adaptation to its predicted effects. Offshore and coastal developments should be appropriately sited and designed, and use technologies and equipment appropriate for local conditions, now and in the future giving particular consideration to vulnerability, scale and longevity of operation. The Scottish Climate Change Adaption Programme should be complied with. Where appropriate, marine planning authorities should be satisfied that adequate risk management and contingency plans are in place, particularly in relation to potential changes in sea temperatures, sea level rise, storminess and extreme water levels, using the best scientific evidence available at the time.

4.19 Reducing human pressure and safeguarding ecosystem services such as natural coastal protection and natural carbon sinks (e.g. seagrass beds, kelp and saltmarsh) should be considered. In some cases, compensatory habitat creation or enhancement may be possible and should be considered as a last resort if significant harm cannot be avoided. Appropriate proactive opportunities for enhancing natural carbon sinks and allowing natural coastal change where possible should also be considered.

General direction for regional planning
3.21 In relation to this chapter, regional planners should consider the need for:
• Better understanding of the current position and the vision for their area.
• Local strategic and sectoral objectives.
• Understanding local opportunities and challenges in terms of sustainable development and use and the need to manage conflict.
• Deriving general and specific policies which align with those in this Plan and the Marine Policy Statement, but are sensitive to local circumstances.
• Further research to understand the local ecosystem and the impacts and pressures upon it.
• Consistency with local and strategic development plans and other relevant local plans.

Regional Policy: regional marine plans should:
• Identify significant natural carbon sinks and seek to avoid colocation with potentially damaging activity; then
• Assess the acceptability of any proposed partial loss or damage to natural carbon sinks (including any compensatory measures) through licensing or management of

marine activities, balanced with priorities presented in this Plan and respective regional marine plans.
• Explain how they have taken into account future climate change in terms of climate change adaptation. <applies to inshore waters only>

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.

Regional policy: Regional marine plans should be aligned with terrestrial development plans and reflect coastal areas likely to be suitable for development, taking into account the most recent flood risk and flood hazard maps, and forthcoming coastal erosion vulnerability mapping. Where relevant, regional marine plans should also reflect areas where managed realignment of coast may be appropriate, setting out the potential benefits such as habitat creation and new recreation opportunities. <applies to inshore waters only>

Scottish Planning Policy

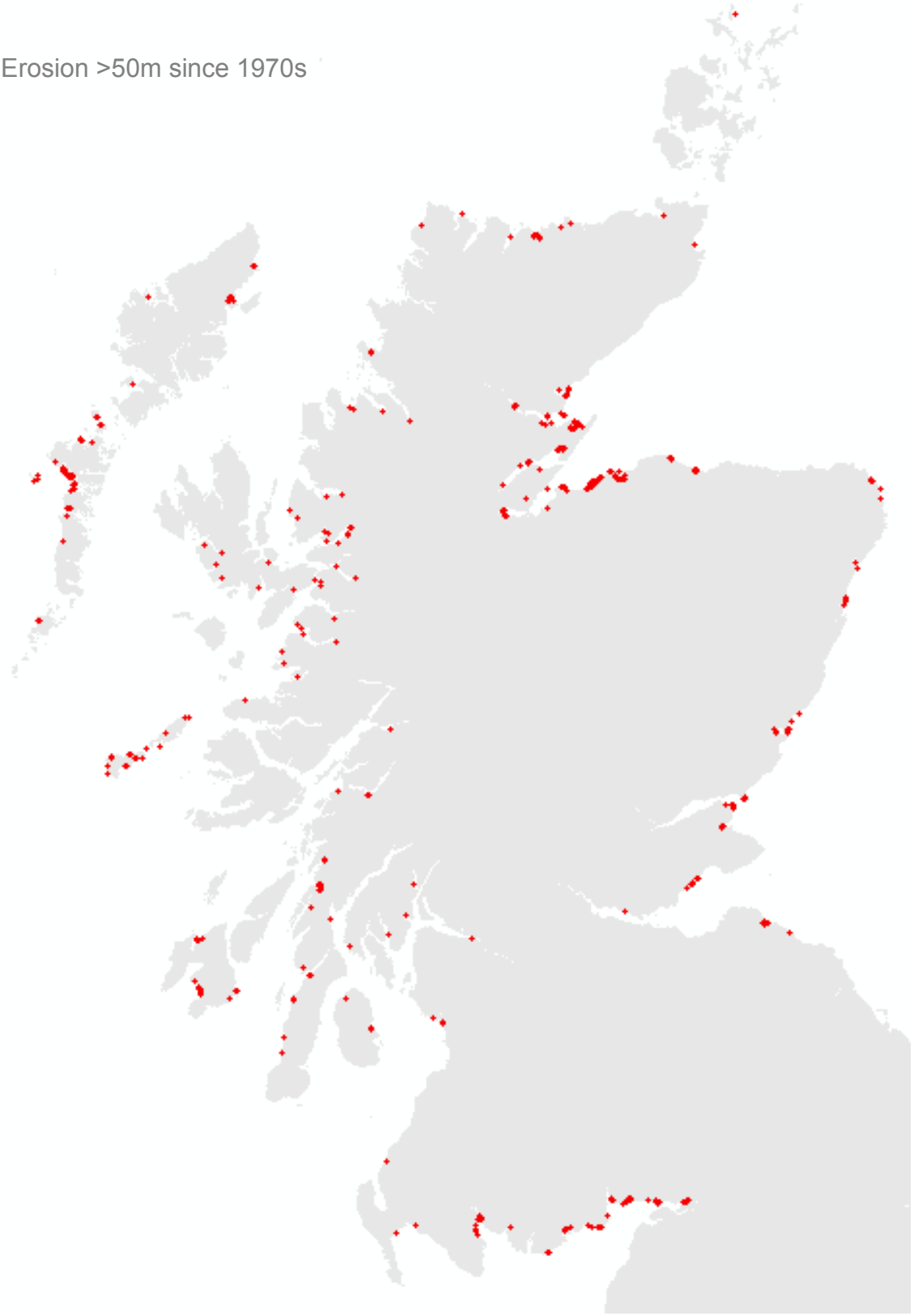
88. Development Plans should recognise rising sea level and extreme weather will potentially have a significant impact and a precautionary approach to flood risk should be taken.

… New development should avoid areas of coastal erosion or coastal flooding

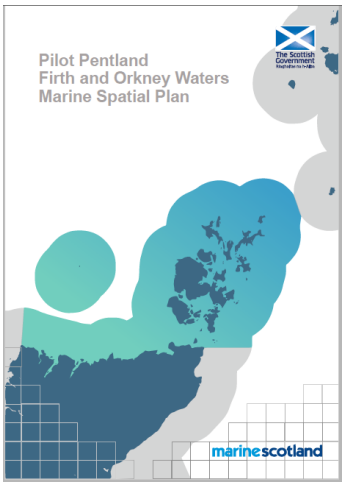
… Development plans should identify areas at risk and areas where a managed realignment of the coast would be beneficial.

89. Plans should identify .. areas with significant constraints

Erosion >50m since 1970s



Coastal Processes workshop		
#	Task	Comments
1	Familiarize yourself with the webmap	Please circle:  ……..  ……  ……. Improvements:
2	Find a range of locations where coastal changes (and/or flood risk) are an issue	Where: See map
3	Use the maps to help draft policies for a RMP that would support delivery of the national policies. In doing this: a) discuss the types of developments / activities that could impact upon coastal processes b) discuss different sorts of measures that could be adopted in policy - e.g. zoning Vs technical solutions	Developments: Pier or harbor construction (Land claim @ Nigg) Jetty or sailing club expansion (Kirkwall) Renewables – wave energy extraction (+) (Bay of Skaill) Renewables – cable landfalls and associated defences (-) (Dunnet Links) Electricity – cable landfalls and associated defences (-)
		Measures: - Zoned maps - Generic policy refers to live map - Action plan identifying opportunities … these areas are preferred situations for wave energy reducing activities (wave devices, kelp farming)…
4	As well identifying risky or resilient areas for developments, how might the NCCA info be used to identify potential positive synergies (win-wins) between economic development and coastal processes?	Win-wins: - Wave devices off-shore of erosion - floating kelp farming off-shore of erosion
5	Think about marine developments/activities that would alter physical forces with potential benefits to other interests	Pier or harbor construction (Land claim @ Nigg ↑ adjacent intertidal area) Renewables – wave energy extraction (+) (Bay of Skaill) Renewables – cable landfalls and associated defences (-) (Dunnet Links) Electricity – cable landfalls and associated defences (-)
6	What sort of policies could this lead to?	Linking of renewables and coastal management policies



General Policy 3: Climate change

Development(s) and/or activities will be supported by the Plan where the proposal can demonstrate appropriate:

- measures to mitigate the effects of climate change
- measures taken to adapt to climate change
- resilience has been built into the project over its lifetime

All proposals for development(s) and/or activities must minimise, as far as practicable, emissions of greenhouse gases and clearly demonstrate mitigation measures taken.

239 Whilst acknowledging the link to erosion-induced flooding, areas which experienced coastal erosion in the past, and are expected to be susceptible to future erosion, are being investigated within the National Coastal Change Assessment (NCCA) (see below). The NCCA uses a similar approach as Shoreline Management Plans which will support this Plan and linked terrestrial plans (e.g. Local Development Plans) to consider management policies and approaches to encourage adaptation and enhance resilience.

General Policy 5B: Coastal processes and flooding

The Plan will support proposals for development and/or activities, including any linked shore-base requirements, that demonstrate, potentially by way of a flood risk assessment:

- compliance with Scottish Planning Policy
- that they will not exacerbate present or future risks of flooding or erosion
- that sensitive uses, such as accommodation, should generally not be located in areas shown to be at risk of flooding unless appropriate measures are in place
- how resilience and adaptation strategies have been incorporated within proposed developments over their lifetime to adapt to the effects of climate change, coastal erosion and coastal flooding

Any development must not compromise the objectives of the Flood Risk Management Act.