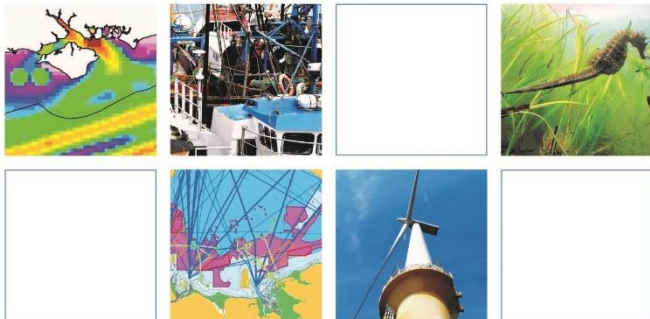


# Celtic Seas 2050: SIMCelt Scenarios workshop

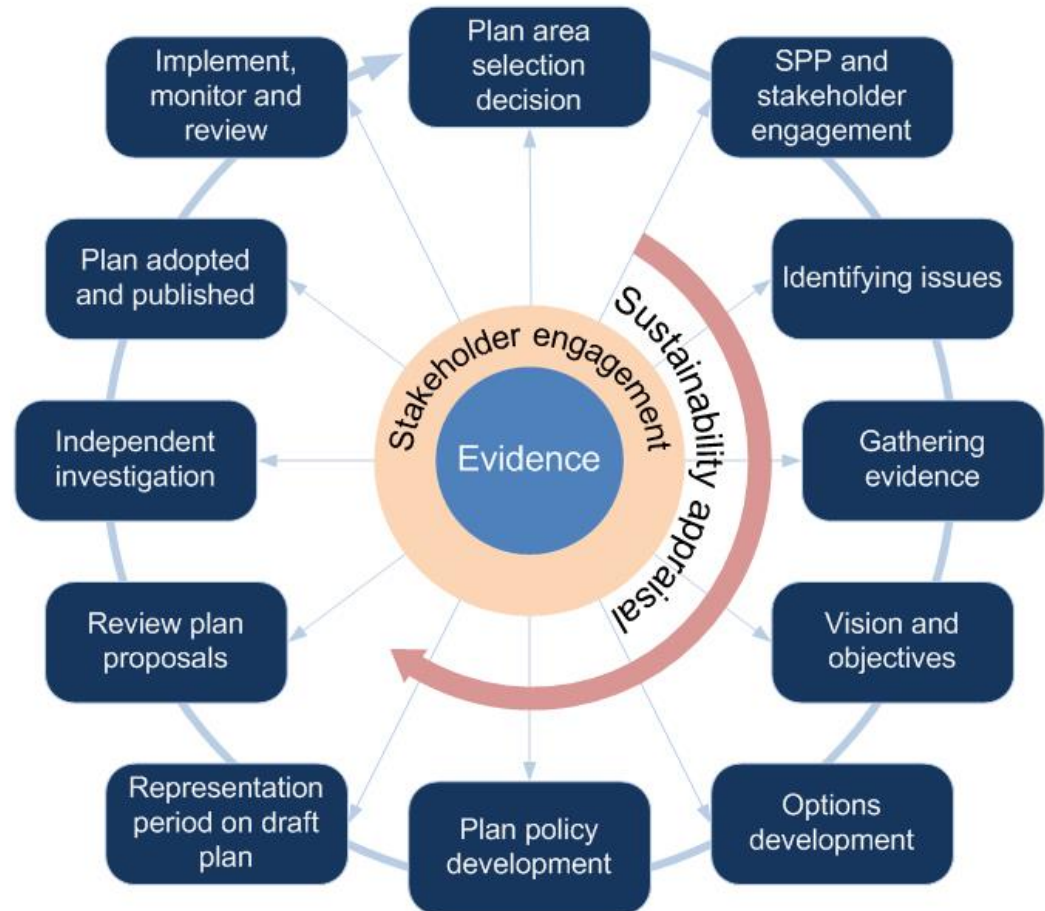
## Thinking about the Future: Examples from the Celtic Seas Partnership and Marine Planning in England

Stephen Hull, Director ABPmer



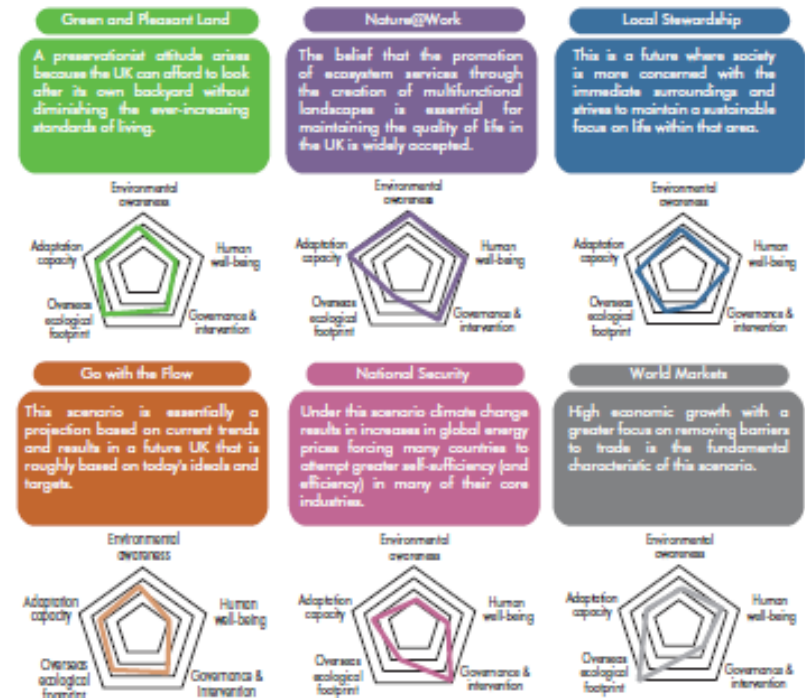
# Why might scenarios be helpful?

- ❑ MSP is a future-oriented activity but the future is uncertain
- ❑ Scenarios - 'coherent stories about how key drivers might play out over time'
- ❑ Use of scenarios can help decision makers to take account of future uncertainty in developing policies (identify policies robust against alternative



# Use of Scenarios in the UK

- ❑ UK Government Foresight Programme (from early 2000's)
- ❑ UKCIP scenarios (UKCIP, 2001)
- ❑ Alternative Futures for the Marine Environment (Pinnegar et al 2006)
- ❑ UK National Ecosystem Assessment (2011 and 2013)



UK NEA Scenarios from Haines-Young et al, 2011

# WWF Celtic Seas project

- ❑ Developed and applied three UK NEA scenarios to 10 human activity sectors within Celtic Seas Region
- ❑ Looked forward 20 years
- ❑ Provided initial assessment of economic, social and environmental impacts



<http://futuretrends.celticseaspartnership.eu/>



## Baseline

- Summarise historical baseline
- Describe current environmental quality and ecosystem services
- Describe current marine activities, drivers and associated pressures
- Review by stakeholders

## Scenario Definition and Analysis

- Develop overarching scenario narratives, and associated drivers
- Describe potential changes in sectoral activity (10 sectors)
- Map spatial representation of future location and intensity of activities

## Stakeholder Engagement

- One-to-one interviews with sector representatives across the Celtic Seas to validate and discuss consequences of scenarios
- Analysis of stakeholder feedback
- Update scenarios and assessment in light of stakeholder comments

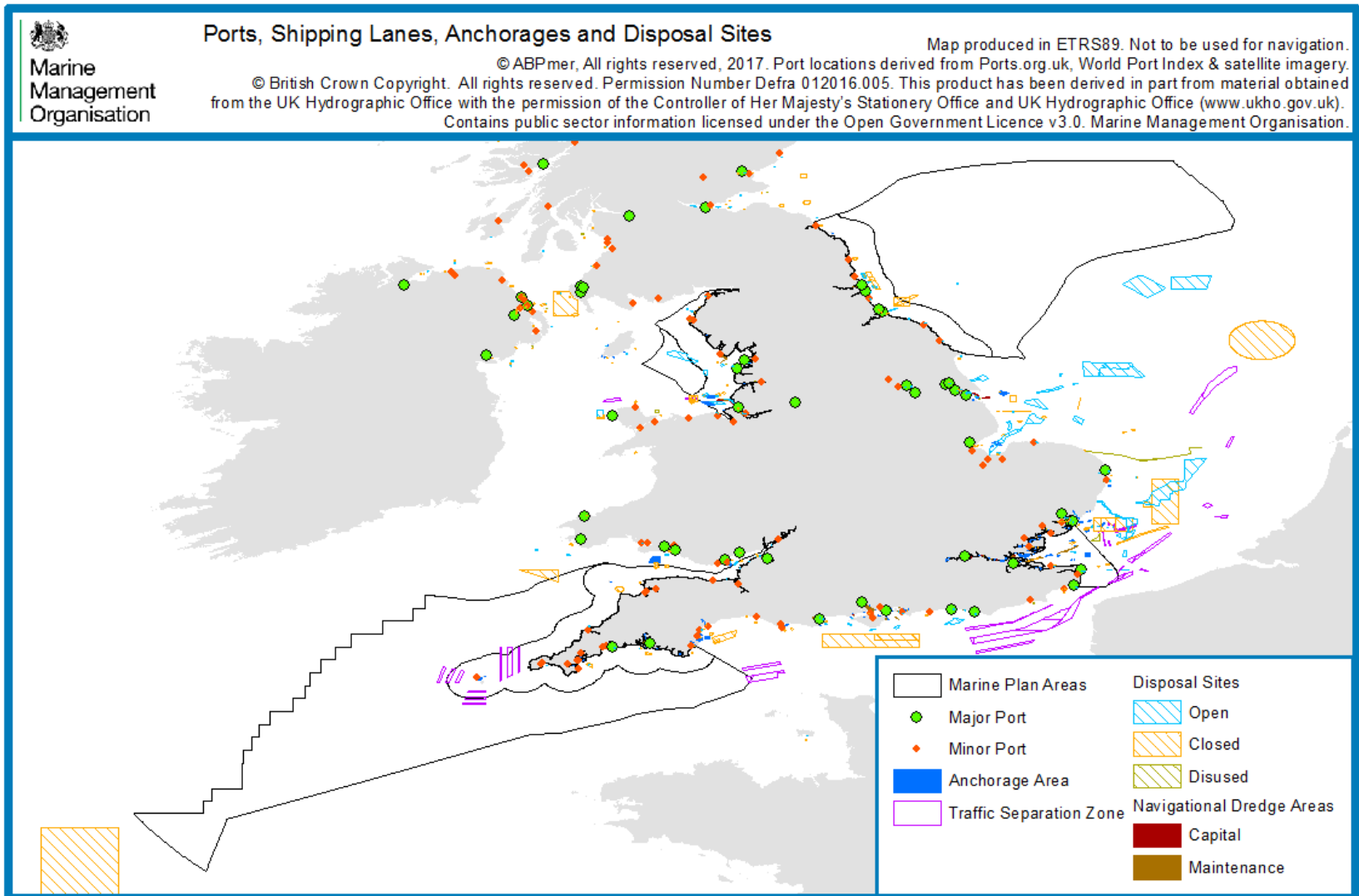
## Cross-cutting Analysis

- Interactions analysis (sector-sector interactions and hot-spot analysis)
- Assess key environmental, social and economic impacts of scenarios on sectors (quantitative and qualitative costs and benefits)
- Assess potential contribution to GES

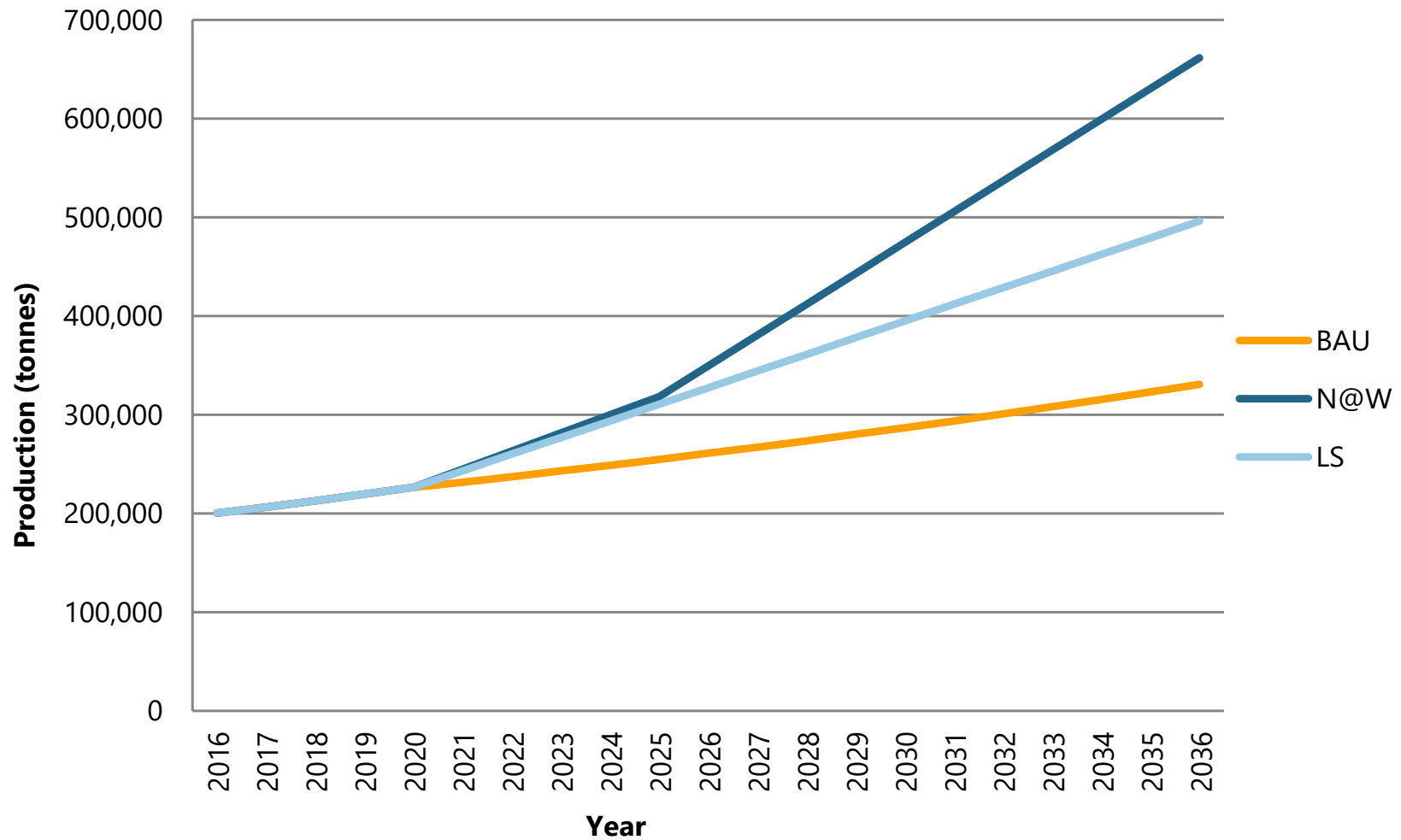
## Conclusions

- Compare and contrast outcomes of different scenarios, and their implications for future management of marine activities
- Conclusions arising from the study

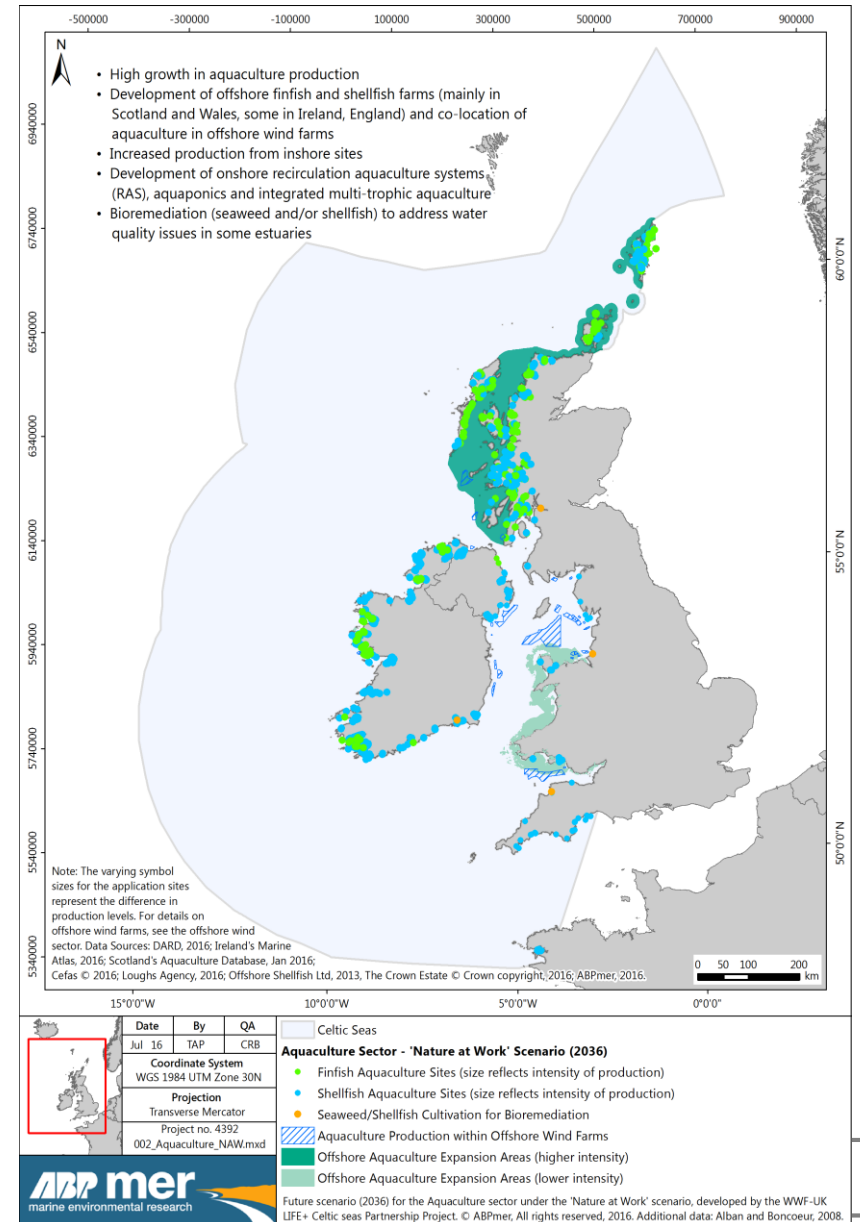
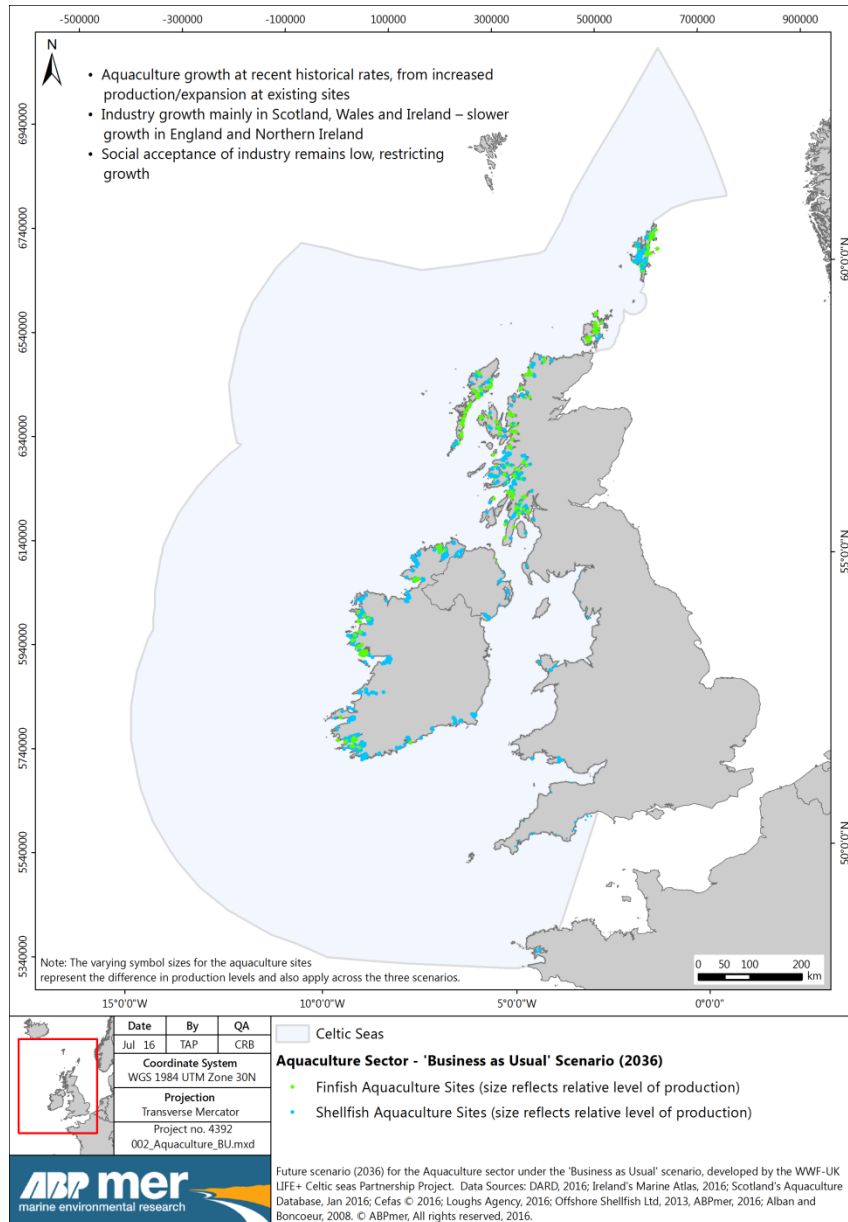
# MMO Future Trends Project - Four Marine Plan Areas



# Aquaculture – Atlantic Salmon



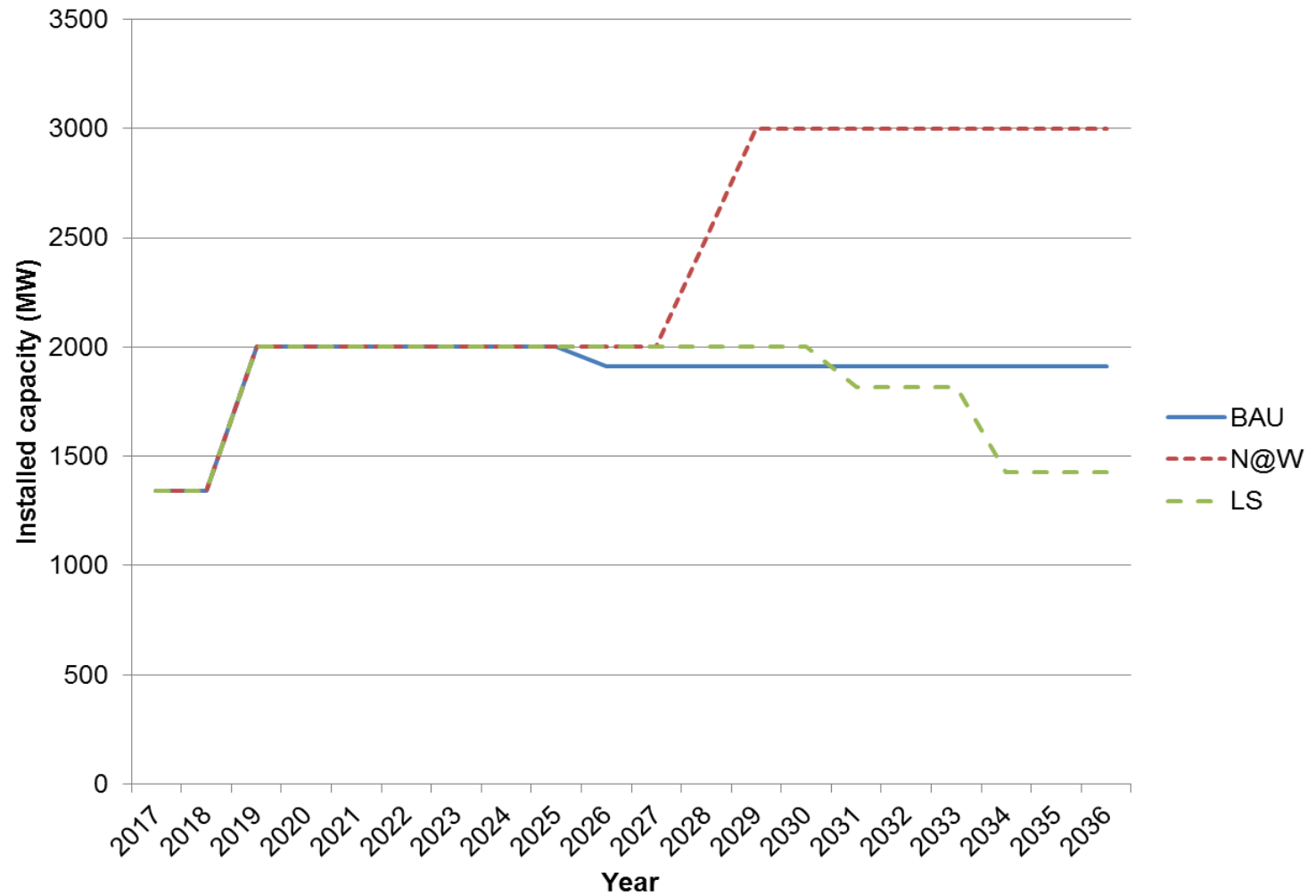
# Aquaculture – BAU and Nature@Work



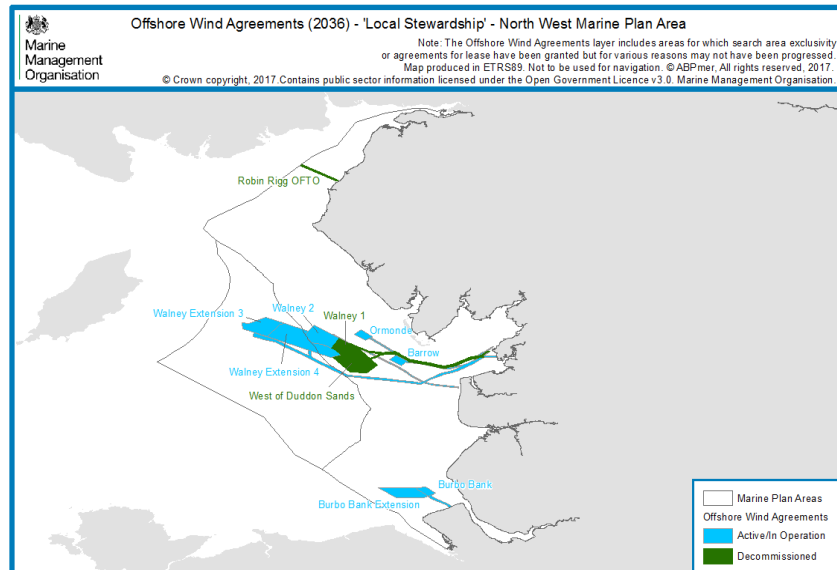
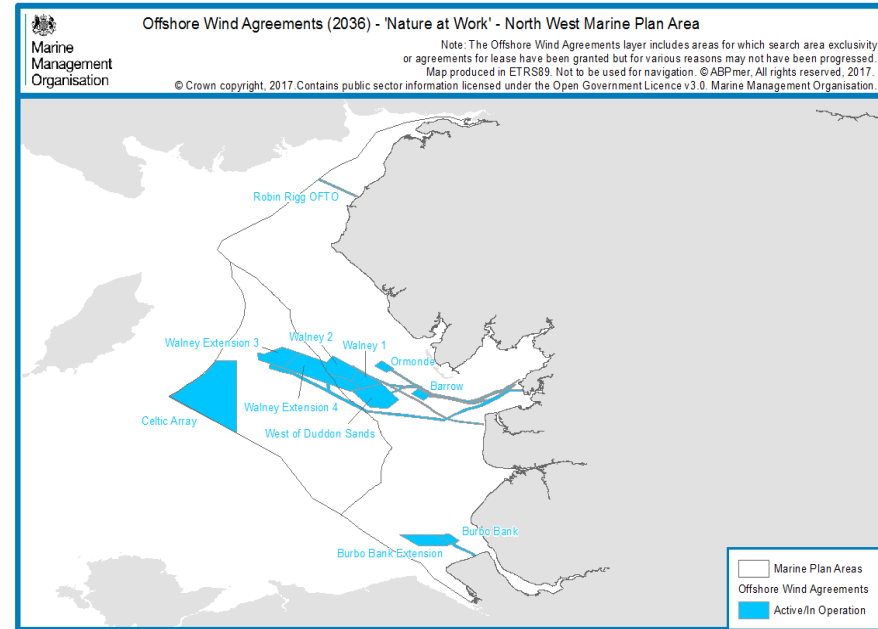
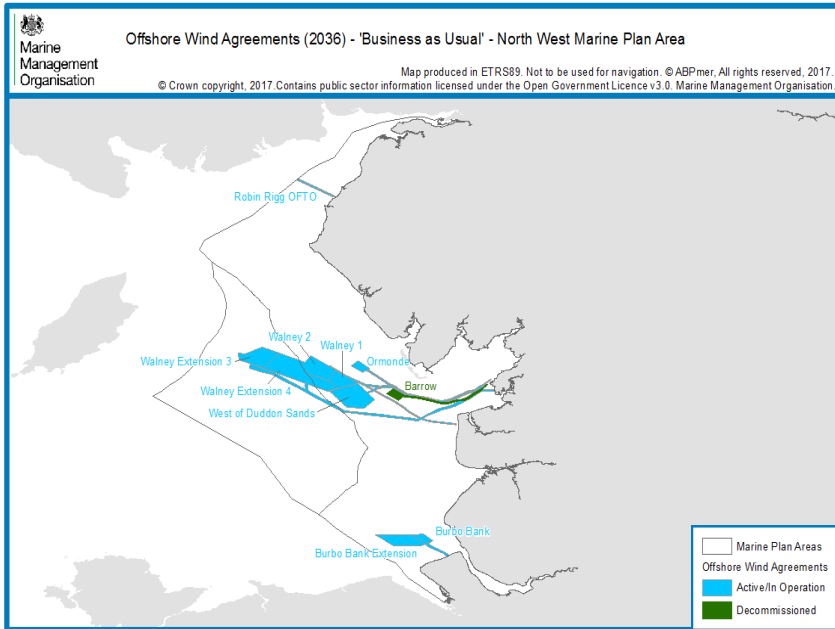
# Key Trade-offs identified – aquaculture expansion

	BAU		N@W		LS	
	Costs	Benefits	Costs	Benefits	Costs	Benefits
<b>Economic</b>	Low level interaction with other uses	GVA £7.7bn	Low level interaction with other uses	GVA £10.7bn	Low level interaction with other uses	GVA £9.5bn
<b>Social</b>	Recreation Visual	Employment Income	Recreation Visual	Employment Income	Recreation Visual	Employment Income
<b>Env</b>	Feed Escapes Pathogens Waste	Food provision	Feed Escapes Pathogens Waste	Food provision	Feed Escapes Pathogens Waste	Food provision

# OWF Installed Capacity NW England



# Offshore Wind Farms NW England



- ❑ Time and resources
- ❑ Stakeholder capacity – familiarity/resonance of scenarios
- ❑ Assessment of impacts:
  - ❑ Integration within wider marine planning process (SEA/IA)
  - ❑ Baseline information (spatial data), particularly cross-border
  - ❑ Defining counterfactuals
  - ❑ Quantification/monetisation of impacts
  - ❑ Understanding environmental limits
- ❑ Mandate of marine planning bodies

- ❑ Benefits:
  - ❑ Useful tool for engaging stakeholders
  - ❑ Helps decision makers to be aware of issues/uncertainties
  - ❑ Quantification/monetisation makes trade-offs more explicit

# Thank you for your attention

Stephen Hull

shull@abpmer

+44(0) 2380 711849

