

Dorset and East Devon National Park Proposal

The Marine Component

1. Background

In their submission to the Glover Review of Designated Landscapes, the Dorset and East Devon National Park CIC (D&ED) noted the potential to “*link for the first time significant off-shore and on-shore designations*” (D&ED, 2018). In suggesting that Dorset and East Devon could offer such a unique contribution to the development of national parks in England, the prospectus noted the importance of the “Jurassic Coast” UNESCO World Heritage site whose extent matches well with the southern terrestrial margin of the proposed Park. Essentially this internationally significant coast would form an iconic east-west spine through the National Park connecting terrestrial and marine environments of equally important ecological significance.

This paper follows a meeting convened at the Southern Inshore Fisheries and Conservation Authority (SIFCA) on behalf of the Dorset & East Devon National Park CIC and attended by Natural England (NE), the Marine Management Organisation (MMO) and SIFCA. The paper aims to provide a basis for further discussion by briefly outlining aspects of marine ecological and economic importance, terrestrial-marine linkages, current arrangements for marine management and the benefits of such an integrated terrestrial-marine park. It incorporates inputs from a range of organisations (see the Credits section at the end).

2. Natural features

The east and west limits of the world heritage site and existing AONBs coincide approximately with the two estuaries marked red on Figure 1

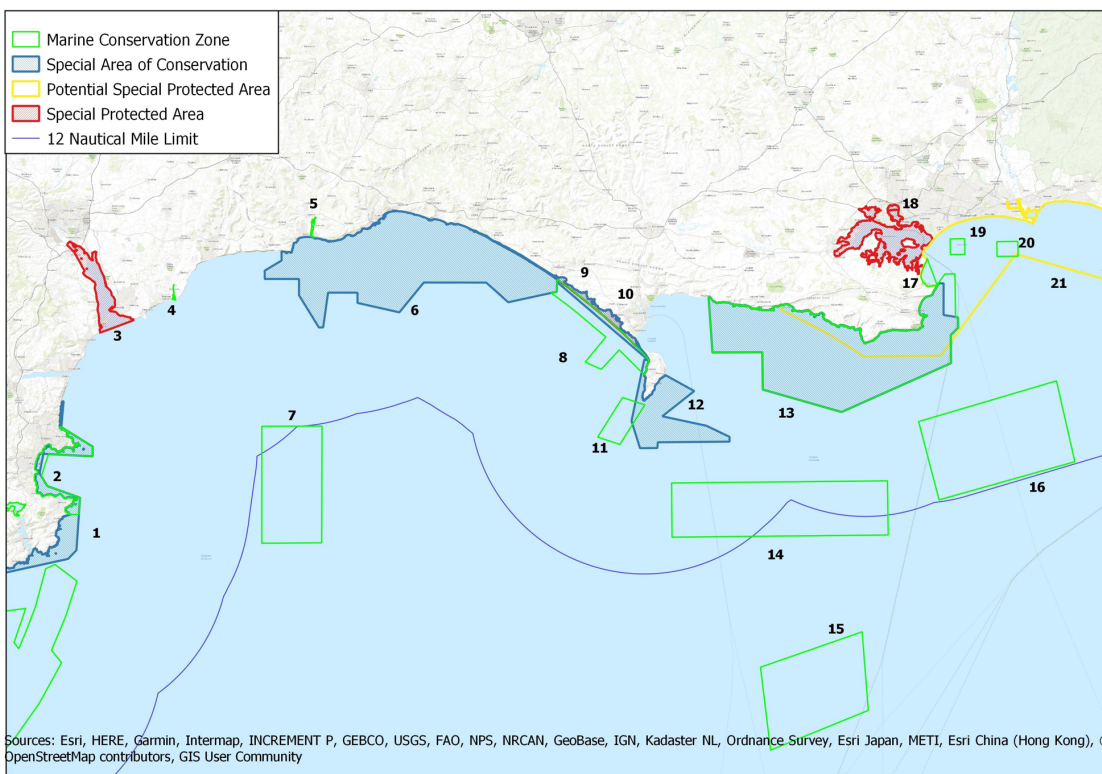


Figure 1 Map showing marine protected areas (MPAs) in the vicinity of the proposed national park. Table 1 (below) provides a key to the MPAs by number.

Courtesy of Patrick Cooper and the Southern Inshore Fisheries & Conservation Authority

For reasons relating largely to marine planning processes, the designation of marine protected areas (MPAs) and the world heritage site itself, in recent years valuable work has been conducted on the natural features of the area relating to this proposal. Consequently, a better understanding of the marine ecology now exists.

The geology of the area along the Jurassic Coast, along with the dynamics of the physical environment, have created a sub-tidal geomorphology varying from extensive rocky reefs to a wide range of sediment types. This varied seabed in turn provides a range of benthic habitats including internationally important features. MMO (2014) provides broad scale maps of these habitats including those of conservation importance in the proposed marine park, such as reef areas including rare sub-tidal chalk and extensive sands and gravels. The associated benthic communities are all intimately connected to their overlying water masses (for example through nutrient cycles, food webs and life cycles), which together form the marine ecosystem.

The character and value of this marine area is indicated by the number and nature of Marine Protected Areas (MPAs). Figure 1 shows the various types of MPA in the vicinity of the proposed park. Table 2 provides a list of these with a key to the map numbering and links to further information on each MPA. These links detail the many specific protected features in the area. However valuable natural features also exist outside the boundaries of MPAs. For more general descriptions, and routes into the available literature, see eg: Defra 2018a; C-SCOPE, 2012; May, 2019; DORIS; JNCC, 2011. The announcement in May 2019¹ that the 41 Marine Conservation Zones (MCZs) have been designated under the MACAA (2009) includes an additional 6 sites in Dorset (Albert Field; Purbeck Coast; South of Portland; Southbourne Rough; Studland Bay and West of Wight-Barfleur) (Defra, 2019).

3. The marine economy

Economic activity conducted within or reliant upon the sea area adjacent to the proposed national park involves a number of sectors each providing significant socio-economic benefits. Activities most relevant to the area are listed in Table 2. Of these, on the south coast of England, the three largest in terms of GVA are coastal tourism, ports and shipping. Within the South Marine Plan area 57% of employment is generated by coastal tourism (MMO, 2013). The coastal economy in the largely rural proposed national park area is likewise heavily dependent on coastal tourism. For example, the Jurassic coast site was estimated to be visited by 22 million people in 2005 ((BBC, 2005). The report for Dorset County Council on Dorset's Environmental Economy (Ash Futures 2016) suggested an annual value of some £1-4 billion with a central estimate of £1.5 billion and noted that the environment is Dorset's greatest economic asset. Equally the Dorset Local Nature Partnership analysis on the value and state of Dorset's environment (DLNP 2014) showed the continuing degradation of Dorset's environment, biodiversity and natural capital.

In contrast to the 57% of employment dependent on coastal tourism which tends to be defined in terms of visits, the marine recreation sector creates only 5% of employment (MMO, 2013), a figure which suggests there is an opportunity for increased value through an integrated marine-terrestrial park. There appears to be no settled definitions which clarify the distinctions and overlaps between the coastal tourism and marine recreation sectors, with different reports including different activities under the marine recreation heading. For our purposes, since beach leisure can be delivered by a coastal park without a marine component, a defining attribute for

¹ <https://www.gov.uk/government/collections/marine-conservation-zone-designations-in-england#2019-mcz-designations-and-factsheets>

marine recreation is whether the activity is performed on or in the sea below the mean low water mark. On this basis marine recreation includes angling, sailing, paddle sports, power boating, sub-aqua diving, site-seeing tours, surfing and water skiing among others.

Table 1 List of the marine protected areas shown in Figure 1 with key to map numbering and links to further information.

Label	MPA Name	Designation	Further information
1	Lyme Bay and Torbay (Torbay Section)	Special Area of Conservation	https://designatedsites.naturalengland.org.uk/Marine/MarineSiteDetail.aspx?SiteCode=UK0030372&SiteName=lyme%20bay&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=
2	Torbay	Marine Conservation Zone	https://designatedsites.naturalengland.org.uk/Marine/MarineSiteDetail.aspx?SiteCode=UKMCZ0019&SiteNameDisplay=Torbay+MCZ
3	Exe Estuary	Special Protection Area	https://designatedsites.naturalengland.org.uk/Marine/MarineSiteDetail.aspx?SiteCode=UKMCZ0016
4	Otter Estuary	Marine Conservation Zone	https://www.gov.uk/government/publications/marine-conservation-zones-otter-estuary
5	Axe Estuary	Marine Conservation Zone	https://www.gov.uk/government/publications/marine-conservation-zones-axe-estuary
6	Lyme Bay and Torbay (Lyme Bay Section)	Special Area of Conservation	https://designatedsites.naturalengland.org.uk/Marine/MarineSiteDetail.aspx?SiteCode=UK0030372&SiteName=lyme%20bay&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=
7	East of Start Point	Marine Conservation Zone	https://www.gov.uk/government/publications/marine-conservation-zones-east-of-start-point
8	Chesil Beach and Stennis Ledges	Marine Conservation Zone	https://designatedsites.naturalengland.org.uk/Marine/MarineSiteDetail.aspx?SiteCode=UKMCZ0004&SiteName=chesil%20beach&countyCode=&responsiblePerson=
9	Chesil and the Fleet	Special Area of Conservation	https://designatedsites.naturalengland.org.uk/Marine/MarineSiteDetail.aspx?SiteCode=UK0017076&SiteName=chesil&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=
10	Chesil and the Fleet	Special Protection Area	https://designatedsites.naturalengland.org.uk/Marine/MarineSiteDetail.aspx?SiteCode=UK9010091
11	South of Portland	Special Area of Conservation	https://www.gov.uk/government/publications/marine-conservation-zones-south-of-portland
12	Studland to Portland	Special Area of Conservation	https://designatedsites.naturalengland.org.uk/Marine/MarineSiteDetail.aspx?SiteCode=UK0030382
13	Purbeck Coast	Marine Conservation Zone	https://www.gov.uk/government/publications/marine-conservation-zones-purbeck-coast
14	South Dorset	Marine Conservation Zone	https://www.gov.uk/government/publications/marine-conservation-zone-2013-designation-south-dorset
15	West of Wight Barfleur	Marine Conservation Zone	https://www.gov.uk/government/publications/marine-conservation-zones-west-of-wight-barfleur
16	Albert Field	Marine Conservation Zone	https://www.gov.uk/government/publications/marine-conservation-zones-albert-field
17	Studland Bay	Marine Conservation Zone	https://www.gov.uk/government/publications/marine-conservation-zones-studland-bay
18	Poole Harbour	Special Protection Area	https://www.gov.uk/government/publications/eastern-channel-marine-area-index-map-and-site-packages
19	Poole Rocks	Marine Conservation Zone	https://designatedsites.naturalengland.org.uk/Marine/MarineSiteDetail.aspx?SiteCode=UKMCZ0014&SiteName=poole%20rocks&countyCode=&responsiblePerson=

The scale of interaction between the various economic sectors and a marine national park component will not be a simple function of the relative economic sizes of the sectors in the general area. Most likely to interact on a regular basis with, and potentially benefit from a marine national park component, are inshore commercial fishing and marine recreation.

Although only a small component of marine GDP, the commercial fishing sector is disproportionately culturally significant for the proposed national park and has a number of fishing ports. These include Poole which lies adjacent to the eastern end of the proposed area and is the home port of England's second largest concentration of fisher numbers in England (MMO, 2011). In Poole, small scale coastal fisheries, aquaculture and the recreational charter boat fleet generate over £12.5 million between them. Despite this significant contribution to the economy of Poole, there are both threats and opportunities that decision-makers must consider, to ensure that these sectors maintain this contribution, without jeopardising the health of the marine environment (Williams and Davies, 2018a). Weymouth is of similar size to Poole in terms of landed tonnage with Lyme Bay being a particularly important shellfish area (MMO, 2014). In the case of Weymouth, there are opportunities to improve commercial and recreational fishing sectors without compromising the health of the marine environment that supports them. Looking in detail at the commercial crab and bass fishery as examples of the wider fishery, their local added value, as well as the recreational charter boat fleet, these fisheries together generate an annual total economic activity of nearly £4million (Williams and Davies, 2018b).

Underpinning the inshore fishery and the charter fishery is the need for good management and adequate resourcing for regulators to enforce regulations, collect data, build trust and develop co-management plans for Marine Protected Areas, to ensure the resource can benefit fishers the local economy without harming the ecosystems that all depend on. Smaller fishing ports include West Bay and Swanage among others. These fishing ports are dominated by under-10m inshore vessels typically using static gear. Properly regulated inshore fishing of this sort is considered to be the most sustainable form of commercial fishing and has received support from environmental NGOs such as the New Economics Foundation (NEF) who identified the loss of jobs and revenues from fishing communities across the UK (NEF, 2016) and Greenpeace, who have identified "hollowed-out" coastal inshore fishing communities as in need of support (Greenpeace, 2018).

Table 2 Marine sectors of most relevance to the park proposal

Sector	Note
Coastal tourism and marine recreation	In the south coast marine plan area as a whole coastal tourism provides the largest share of marine derived GNP. This is distinguished from marine recreation including sea angling and boating etc.
Commercial Fishing	A largely small vessel inshore fishing fleet works across the area out of various ports along the coast, with Poole and Weymouth most significant in terms of vessels and landings. The waters off Portland include a European designated shellfish area. Lyme Bay is particularly important for shellfish including offshore aquaculture. Similarly, at either end of the area the Exe estuary and Poole Harbour are important in terms of shellfishing and aquaculture.
Shipping & Ports	Poole and Portland are notable commercial shipping ports with some shipping transit routes across the relevant sea area but with low traffic intensity. Poole is a Ro-Ro channel ferry port. Licensed navigational dredging and dredge disposal areas lie east of Purbeck
Energy	Oil and gas production in Dorset includes terrestrial well heads but with extraction extending 10km under Poole Bay. Exploration licences exist for other areas within the relevant area. Technical opportunities exist for potential future wind and tidal stream generation
Aggregate Extraction	A Crown Estate leased aggregate extraction area lies off the Purbeck coast. Marine aggregates are used in concrete and therefore are an important component of civil engineering projects.

Agriculture and water industries	Water companies release sewage effluent into the marine environment both directly from many outfalls and indirectly via rivers. Similarly, agricultural run-off and ground waters containing fertilisers are released into the marine environment from river catchments. These industries constitute the main sources of nitrogen and phosphorus pollution in coastal waters.
Defence	A part of the area around the Lulworth ranges is designated as an “MoD Danger and Exercise Area”

4. Land-Sea Interactions

Scientifically the Jurassic Coast spine of the proposed park is a manifestation of the underlying geology which has ultimately determined the high conservation value of the areas either side of it; terrestrial to the north and marine to the south. While this underlying geology profoundly links the terrestrial and marine systems, in fact an intimate linkage is manifest in many interactions, both natural and anthropogenic.

Land-Sea Interactions (LSIs) operate in both directions. For example, land-based sources of chemical pollution can degrade marine habitats and impact “good environmental status” goals, as well as the value of sustainable inshore shellfisheries. Conversely coastal erosion and salt water intrusion into fresh water systems are increasingly problematic (Section 6). Moreover water-based tourism and recreational activities require the support of facilities on land to an extent that makes coastal tourism and marine access for coastal communities a key LSI issue.

Consequently, there is growing recognition that the best approach to addressing both the opportunities and risks relating to Europe’s maritime regions is by understanding land-sea interactions as parts of an integrated whole (EC, 2017). However, there are significant obstacles to such an approach including institutional and legislative barriers. Not only does the management of both marine and terrestrial environments involve various statutory agencies (Section 5), but for the most part those managing the land and sea are different organisations. The potential significance of a terrestrial–marine park in addressing these issues is considered below (Section 8).

A further form of LSI is recognised by the European Landscape Convention which explicitly includes marine areas. The UK Marine Policy Statement similarly emphasises “existing character” as a factor in planning decisions and the concept of “seascape” has been developed to capture this idea. Seascape is regarded as more than just views of the sea surface or coast as shaped by natural processes. Cultural processes including economic activity also contribute to seascape and can be the basis for the distinctiveness of a place and peoples “personal connectivity” with marine areas (English Heritage, 2014). On the Dorset and East Devon coast seascape is considered a “key aspect” underpinning both land and sea based recreational and tourist activity and it is recognised that inshore small-scale commercial fishing activity can be central in establishing the distinctiveness and character of coastal places (MMO, 2012).

MMO has conducted seascape assessments in the South Plan area including those which would fall within the national park boundary (MMO, 2013a, b and c). These assessments determine seascape fields of view visible from the coast. In the context of a marine park proposal it is noteworthy that much of the spectacular dramatic scenery of the Jurassic Coast World Heritage Site consists of steep cliffs that can only be properly appreciated from the sea. In these cases, the most beautiful seascapes are provided by marine recreational activities. This point, when combined with the very limited employment in coastal communities generated by marine recreation suggests a significant but underdeveloped opportunity for coastal communities.

As a country, much of our leisure time is enjoyed by the sea. The seaside offers an inclusive destination for everyone and provides a stepping stone into the wider natural environment. The Natural England MENE survey notes, for example, that many more young people visit the coast than upland areas.

In Dorset and East Devon there is a wide range of coastal, cliff and in-shore water sport recreational activities available to people of all ages and backgrounds (see for example <https://www.icoast.co.uk/> and the database compiled for Portland at <https://www.dorsetnationalpark.com/evidence-2018>). The National Sailing Academy in Portland Harbour enables residents and visitors to participate in and celebrate successes in water-sports events, including the Olympics Games. The local fishing industry, the marine economy and maritime history help to shape the area's collective identity and provide a rich and dynamic cultural heritage.

But visitors and local people could be better informed, including on the need to balance and manage the interests of tourism, the fisheries sector and the environment.

5. Current regulation, management and plans

There are a number of international agreements that apply including The Convention for the Protection of the North-East Atlantic (OSPAR) which establishes various obligations for the protection of the seas around Britain. The British Government in 2018 published its 25 year plan for improving the environment: References to marine biodiversity and well managed seas are set in the context of overarching goals which are relevant to a national park proposal, such as encouraging more people to spend time in accessible high quality natural spaces “to benefit their health and wellbeing” (Defra, 2018b and see also the Environment Bill and Fisheries Bill).

Relevant EU Directives and policies include; The Marine Strategy Framework Directive (which aims to protect biodiversity and the resource base for the marine economy); the Water Framework Directive; the Habitats Directive; the Birds Directive; and the Common Fisheries Policy. Others of importance particularly in terms of land-sea interaction are those concerning agriculture including The Nitrate Directive and the Common Agricultural Policy.

Numerous UK Governmental organisations are involved in the planning, management and regulation of English coastal seas, not least the Marine Management Organisation (MMO) is the major licencing, regulatory and planning authority for marine activities in the seas around England (though the Crown Estate also issue licenses eg for seaweed harvesting). Some of the key roles of the various organisations are listed in Table 2. Currently the various organisations all have their own plans, each addressing their own particular roles and responsibilities. Equally all planning authorities have a duty to cooperate and so coordinate functions in cross-boundary areas. The duty to cooperate places a legal duty on local planning authorities, county councils and prescribed public bodies (the MMO falls into this category) to engage constructively, actively and on an ongoing basis to maximise the effectiveness of local plan and marine plan preparation in the context of strategic cross boundary matters. The Coastal Concordat provides a framework within which the separate processes for the consenting of coastal developments in England can be better coordinated. It offers benefits to applicants, regulators and advisors alike by reducing unnecessary regulatory duplication, providing better sign-posting, streamlining assessments and increasing transparency and consistency of advice. There is also an aim in the Governments 25 year environmental plan that “all local authorities with a coastal interest will be signed up to the Coastal Concordat by 2021”.

In Dorset some notable efforts have been made to create overarching local plans, such as by the Dorset Coast Forum (DCF), an independent strategic coastal partnership (www.dorsetcoast.com) which has been effective in securing funding for, and managing, coastal projects. One noteworthy DCF managed project is the Dorset & East Devon Fisheries Local Action Group (FLAG) which has secured substantial European funding and is delivering community led local development in the areas of fisheries, aquaculture and seafood for eight fishing communities between Swanage and Beer. (DCF, 2016).

In considering the various legislative frameworks and regulatory organisations involved, two aspects of their functioning are of particular relevance to a combined marine-terrestrial park proposition. In the first place and despite the duty to cooperate and the development of Coastal Concordats, the number of statutory organisations involved in the marine sphere is not in itself always conducive to co-ordination of policies and plans at local and regional levels. Secondly, when considered in terms of Land-Sea Interactions this challenge of co-ordination is manifest to the extent that there is relatively little integrated governance (EC, 2017). There are however some notable exceptions to this, for example the river “Catchment Partnership” reported by Bowles (2019) in which strategies for reduction in nitrogen pollution have been developed through a broad cooperation between statutory agencies, authorities, a water utility company and landowners to the benefit of the downstream Poole Harbour estuarine Special Protection Area.

While such initiatives show some promising results, the view of Wessex Water (which has taken the lead with partners to develop catchment initiatives) is that a National Park offers clear potential for improved coordination and coherence and benefits for all stakeholders as well as the environment and biodiversity through what it terms “stackable benefits”.

Such examples of good practice suggest what could be achieved through improved communication and co-ordination between agencies based on a properly developed conception of LSI in Dorset and East Devon. If combined with an effective overarching strategy this could represent an improvement in terms of effective rural-coastal governance. Moreover, these LSI planning and management challenges are ubiquitous in England (and Europe generally), making the innovation of a combined terrestrial-marine park potentially of wider interest (see Section 8)

6. Note on climate change and marine biodiversity.

The theoretical and evidence bases for climate change and its impacts have long been strong enough to require decisive policy responses (IPCC, 2014). In the marine environment climate change generally results in warming seas, increased seawater acidity and more violent and frequent storm events. In temperate seas, such as off English coasts, numerous benthic and pelagic species are shifting their distributions with the result that colder water species “retreat” to higher latitudes while warmer water species also move northwards and replace them. This and other anthropogenic effects result in reports of “non-native” species arrivals especially on the south coast. Marine non-native species are conventionally seen as problematic with the potential to replace native species through competitive exclusion and to affect ecosystem function. However, in the context of climate change they can be beneficial in maintaining otherwise depleted ecosystems (Caldow et al 2007). Coastal communities are at the frontline of climate change from flooding to ocean acidification to increased storminess and therefore building resilience and adapting to change is an urgent priority (NEF, 2016).

In the intertidal zone sea level rise and storm surges are an issue in terms of the inundation of shore areas. This is a particular problem where intertidal sand and mudflats provide habitat and

biodiversity for at-risk over-wintering and resident bird populations (see for example Humphreys and May, 2005).

Table 3 Management and regulation of the inshore area: UK governmental organisations and agencies

Organisation	Role	Relevant Powers	Notes
Central			
Department of Agriculture, Environment & Rural Affairs (Defra)	Government ministry Broad remit for safeguarding the environment while supporting fisheries etc	National legislation, policy, strategic consents etc	
Department of Business, Energy & Industrial Strategy	Government ministry Broad remit for business and climate change	Licences for oil and gas exploitation in the English inshore and offshore areas	
Crown Estate Commissioners	Effectively owns much of the foreshore and seabed out to 12 nm	Leases the seabed for ports, harbours, infrastructure, marinas pipelines, outfalls and aquaculture etc	
Marine Management Organisation (MMO)	Regulation and planning of marine activities in England for sustainable development	Licences of fishing vessels; coastal & marine developments; wind, wave and tidal power; removal & disposal of dredged material	Defra agency
Environment Agency (EA)	Protecting the environment though ensuring sustainable development (“growth duty”), including the seas out to 3miles	Regulatory and licensing authority issuing various consents and licenses. Law enforcement and sanctions including prosecutions	Defra agency
Natural England (NE)	Statutory advisor for the natural environment in England	Statutory adviser to government and non-departmental public bodies on marine biodiversity, national nature reserves etc.	Defra agency
Joint Nature Conservation Committee (JNCC)	Advisor for the natural environment to UK government and devolved administrations	UK wide advice to central and devolved governments	Defra agency
Centre for Environment, Fisheries & Aquaculture Science (CEFAS)	Applied scientific research on the marine environment and fisheries	Inspection, monitoring and advice,	Defra agency. Major fisheries laboratory in Weymouth.
Regional			
Inshore Fisheries & Conservation Authorities (IFCAs)	Monitoring (stock assessments etc), regulation and management of inshore fisheries including MPAs	Legislation, enforcement, sanctions (including prosecutions)	Southern (SIFCA) and Devon & Severn IFCA
Local			
Local Authorities (LAs)	Administrative control and jurisdiction normally to the “low water mark” but often extending lower locally. Represented on, and fund, IFCAs. Involved in Harbour Management Plans etc	Public health, water sampling in estuaries etc. Extended jurisdiction includes some acting as harbour authorities and port operators.	Dorset and Devon and various town councils etc
Port Authorities, Harbour Commissioners, Conservancies and similar public bodies	Managing ports and harbours	Various, often including bye-law legislation and enforcement for navigation, safe and clean harbours	

Current mitigation investment includes projects aiming to expedite the formation of replacement habitat, for example at increased elevations higher up estuaries (the Arne Moors project with EA, NE and the RSPB being a current example). In contrast in some areas (usually developed) the priority is often to “hold the line” by improving sea defences as is currently being done in various places on this coast by the Environment Agency.

Although the causes of climate change are not conducive to correction through the management of spatial protection, such areas can make a wider contribution through public education and the adoption of sustainable policies and practices within the park including its marine area. Although the shore down to MLW would most likely fall within the jurisdiction of a terrestrial national park, there would be advantages of a marine park component in that near shore shallow “infralittoral” areas below MLW can be as much ecologically connected to the inter-tidal zone as they are to deeper offshore areas.

The South Downs National Park places sustainability at the heart of its plans and actions. It has, for example, a climate change strategy, strategies for sustainable transport and tourism and a Local Plan in which the environment, biodiversity and natural capital are an integral part.

In summary a national park with a marine component could promote marine biodiversity; inform the public of the risks and conservation measures necessary as a consequence of climate change and other threats; and encourage sustainable behaviours amongst marine recreational visitors and users.

7. Possible extent of the national park marine area

Although the exact boundaries of the park are not yet determined, the proposed terrestrial southern limit broadly corresponds to the existing World Heritage Site. This suggests a potential marine coastal stretch lying somewhere between lines running due south from Orcombe Rocks in the west and Old Harry Rocks in the east. While it need not occupy all of this area there is a strong argument that it should at least include the rocky reef seabed areas.

The Mean Low Water mark (MLW) as defined by the UK Ordnance Survey is the legal limit of the statutory responsibilities of local planning authorities (LPAs). It is also the seaward boundary of the Jurassic Coast World Heritage Site (JCWHS, 2014). Conversely the jurisdiction of the Marine Management Organisation (MMO) extends up to Mean High Water of Spring tides (MHWS). This means that for planning purposes there is a technical overlap on the shore between the planning responsibilities of LPAs and the MMO.

In terms of marine planning the adjacent sea falls under the South Marine Plan (Defra, 2018) and is divided into an “inshore” area from MHWS to 12nm (nautical miles), and an “offshore” area from 12nm to the maritime border with France and the Channel Islands. It should be noted that definitions of the inshore area vary. In particular the jurisdiction of the Inshore Fisheries & Conservation Authorities (Southern IFCA and Devon & Severn IFCA) extends out to 6nm rather than the 12nm of the inshore Marine Plan. As an additional complication the jurisdiction of the Environment Agency extends out to 3 statutory miles.

These existing marine administrative boundaries may suggest a seaward limit to the marine national park component. However, an alternative rationale for establishing this boundary could be provided by ecological considerations such as natural depth-related biotope zones or the extent of perceptible reach of local land-sea interactions. The “infralittoral” zone for example stretches from MLWS to the depth contour where 1% of sunlight reaches the seabed, which corresponds to the minimum requirement for the growth of the brown alga Kelp (JNCC, 2011). In any event, to be ecologically coherent the marine component of the proposed park area should consist of both the seabed and overlying water.

On balance a seaward boundary at either 3 miles or 6nm offshore might provide the best combination of natural and administrative advantage.

8. The case for a Dorset & E. Devon marine National Park area

The general case for marine parks in the UK was articulated as early as 2012 by Attrill and Halls (2012), who commented that “the British need to start thinking about their seas in the same way they think about the countryside” and suggested that “small fishermen could become primary stewards of the sea in the same way as farmers are responsible for managing Britain’s land”. By 2018, in the context of a specific Plymouth Sound marine park proposal Attrill and Clover (2018) observed that “while (terrestrial) parks struggle to involve all social classes, beaches are more socially diverse places”. They also made the case in terms of economic uplift through coastal tourism, marine recreation and “protected-name status” for sustainable inshore fisheries within a marine park area.

The purposes and duties of National Parks in England combine: conservation of natural and cultural heritage; promoting understanding and enjoyment by the public; and fostering the economic and social well being of communities. In the marine environment there are as yet no equivalent set of purposes and duties.

Within the marine realm and despite the best efforts of those involved, complex patterns of distinct and sometimes overlapping responsibilities are not inherently conducive to coordinated governance. Moreover, increasing understanding of land-sea interaction makes coordination across these realms an increasingly recognised aspiration. In the context of environmental directives, it has been suggested that at the land-sea interface there is uncertainty about who is responsible for what and whether the scale of governance is fit for purpose. It is argued that an integrated vision of land-sea interaction is needed at regional level (EC, 2017).

The perceived deficit of coordination between environmental organisations and interests, each pursuing their own particular objectives across different areas and boundaries, has been emphasised in the first progress report on the Governments 25 year Environment Plan (HM Gov, 2019) which is clear on the need for a collective effort to be “more integrated and efficient” and “to work effectively together”. Similarly, the Natural Capital Committee (NCC) in advising the government on its 25 Year Plan has recommended a more holistic approach for the protection and growth of marine natural capital (NCC, 2019)

National parks provide a model through which the ostensibly conflicting needs and objectives of communities, visitors, agriculture and nature are reconciled through coordinated and inclusive processes. For a national park authority all the activities in the park area are of interest and the focus of attention is sustainable co-existence within a defined area. Add inshore fisheries to the list and the model has potential for marine places of aesthetic merit, especially where they are adjacent to terrestrial landscapes of equal value.

Properly and sustainably developed, an integrated land-sea park could address and support the elements needed to create thriving coastal communities in protected areas. To achieve this, two features of the administration of the marine area are likely to be essential. The first is a genuine concern for the economic welfare of communities, manifest in structures for stewardship involving co-management with those whose livelihoods depend on the inshore marine area. The second is a configuration of incentives and tangible resource benefits sufficient to motivate these various stakeholders to participate. For example, it would need to be clear that a National Park would not add to any planning or fishing restrictions but would add value through branding (“supplied from the heart of England’s newest National Park”), added value eco/heritage/cultural tourism where people stayed longer and spent more and where the season

was extended, and through helping fishermen exert a more coordinated and influential voice in shaping the future agenda and bidding for additional resources.

9. How it might work

National Parks are specialised local authorities and are the planning authorities for their area. These planning responsibilities are exercised through close liaison with other neighbouring local authorities and agencies and in close partnership and consultation with a wide range of stakeholders including communities, farmers/land managers, businesses and others. Working in partnership, NP Authorities take the lead in preparing two important plans for their areas: the Partnership Management Plan [PMP] and the Local Plan [LP]. The Partnership Management Plan provides an overarching long-term vision and strategy and a 5 year delivery framework for the management of the NP area and is prepared in close partnership following engagement and discussion with a wide range of stakeholders. The PMP considers impacts on the NP from outside its boundary as well as from within, for example through wildlife species migration, water flows and water use, transport and economic activity. All stakeholders contribute to the strategy and delivery framework and the latter is regularly updated. The PMP provides the framework for the Local Plan which in turn provides spatial planning policies for housing and other development including economic space.

The State of The Park baseline analysis which the South Downs NP undertook as soon as it was established offers a further potentially valuable model. The analysis could also be undertaken off-shore as well as on-shore and be based on inputs from all concerned to provide an agreed baseline analysis of the state of the marine environment. In the case of the South Downs, this analysis underpins the subsequent Partnership Management Plan (PMP) referred to above. For the South Downs analysis see: <https://www.southdowns.gov.uk/national-park-authority/our-work/key-documents/state-of-the-national-park-report/>

Offshore the MMO is the planning authority and it is not proposed to change this – not least since such a change would require legislation. Rather it is proposed that a Dorset & East Devon National Park could work with the range of current players and relevant statutory organisations such as MMO, IFCAs, NE, EA, LAs, port & harbour authorities etc. to develop with their active involvement an agreed long-term vision and partnership plan for the marine area. Such a plan would relate to and could be an integral part of the NP's Partnership Management Plan. The marine element of a partnership plan would build on the aims of the proposed Plymouth Marine Park in raising awareness and understanding - reflecting one of the statutory duties of a National Park. The marine area could be branded as part of the National Park but the National Park Authority would have primarily an advisory, coordinating and facilitating role. The NP could provide the impetus and resources to encourage the coordination of planning and activities at the local level, based on a collective and overarching conception of the future of the area in terms of the environment, biodiversity, economic activity (including tourism) and cultural heritage.

In addition to expediting coordinated and linked policies and planning in the area, the park could also promote the landscape, seascape, artisan fisheries etc as a united whole. The partnership approach could lead to the establishment of an in-shore fisheries advisory group which would represent the interests and views of this currently poorly coordinated and yet important economic and tourist sector. Such an advisory group would mirror the establishment of a land management group on-shore. Working closely with NGOs and other agencies could draw in important grant funding for research & development as has been achieved in Lyme Bay and Poole Harbour.

The marine element of the NP's Partnership Management Plan has the potential to help all the partners to deliver coherent, enhanced, expedited, more efficient and effective outcomes – including improved conservation and enhancement of the natural environment and more sustainable opportunities for responsible economic stakeholders including in-shore fisheries to thrive.

10. Conclusion and Next Steps

The Dorset & East Devon coast has England's only UNESCO World Heritage designation for the natural environment. What happens on-shore affects what happens off-shore; the two are intimately connected in terms of their geomorphology, their biodiversity, their economic activity and their heritage. Raising awareness and understanding of these interactions and interdependence and developing an agreed vision and partnership management plan through a National Park that has an off-shore as well as an on-shore role represents an exciting opportunity for this uniquely important area.

Viewing the land based and marine activities in an integrated and coherent way can address the overlap, uncertainties and inefficiencies in the current arrangements. It can lead to enhanced partnership working and so benefit all the current agencies and other players as well as the local communities and those who live in and visit the area.

The analysis and ideas in this paper are offered as the basis for further discussion amongst all those who have an interest in bringing about a more coordinated and coherent approach to what happens at the interface between land and sea. The paper would be developed to reflect the views of the various players. The next iteration would be submitted as a working document to Julian Glover and his Panel as part of their review of designated areas. The Dorset Coast Forum might convene a workshop to enable a wide range of interested organisations and individuals to further develop the ideas. A specialist group might be invited to take the lead in progressing the proposal under the auspices of the D&ED NP CIC.

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Credits

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