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Solent Sea the Value Workshop 3

16th April 2024 | 10:00-16:00 | Mill Dam, University of Portsmouth

Report author: Gordon Watson (May 2024)

Contributions from: Andy van der Schatte Olivier, Kate Gormley, Antony Ndah

The *Sea the Value* project, funded by NERC and ESRC, aims to understand the different values communities hold towards their local marine environment, the diverse benefits it provides, and how nature-based solutions can support and integrate with community development. The project is focussing on two case studies in the UK, the Cromarty Firth in Scotland, and the Solent on the south coast of England. The project outputs will be used to inform wider management and planning of marine biodiversity across the UK.

The University of Portsmouth, Plymouth Marine Laboratory and University of Aberdeen facilitated a third and final workshop for the Solent community, with the aim to identify how benefits are distributed amongst stakeholders and to support local knowledge on how natural capital measures can be delivered in the Solent. The output is a series of logic chains which link the features, benefits and beneficiaries within the Solent.

The third workshop was held at the University of Portsmouth. The workshop was attended by 9 stakeholders representing a range of organisations (Table 1). All organisations had previously been represented at the first two *Sea the Value* workshops. A full list of participants and their contact details is provided in Annex 1.

Organisations								
Solent Forum*	University of Southampton							
RSPB*	The Crown Estate*							
Langstone Harbour Board*	Blue Marine Foundation*							
Natural England*	Inshore Fisheries Conservation Agency (Sussex)							
Rewilding Britain								

Table 1: Workshop attendees organisations (*organisations were represented at Workshops 1 & 2).

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Welcome and Introductions

Dr Andy van der Schatte Olivier welcomed the attendees and thanked them for attending the *Sea the Value* project workshop series. He introduced the *Sea the Value* project team (Table 2), the *Sea the Value* project and outlined the aims and objectives of the third and final workshop. Andy summarised the activities and outputs from the first two workshops, recounting how stakeholders identified and mapped the natural features and benefits (Workshop 1) and reviewed the scenarios assessments undertaken for both saltmarsh restoration managed realignment and native oyster restoration (Workshop 2). All slides presented on the day are included in Annex 2.



Image 1: Sea the Value project workshop 3 Dr Ndah presenting mapping section.

Table 2:	The	Project	Team	on	the day	<i>'</i> .
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Name	Organisation	Role
Prof Gordon Watson	University of Portsmouth	Project PI, Facilitator
Dr Andy van der Schatte Olivier	University of Portsmouth	Facilitator
Dr Antony Ndah	Plymouth Marine Laboratory	Facilitator
Dr Kate Gormley	University of Aberdeen	GIS Mapping









Mapping Outputs

Dr Kate Gormley (University of Aberdeen) remotely presented the final mapping outputs to the group, which included: (1) a physical map of the Solent features (see Figure 1); (2) an interactive pdf of features and benefits; and (3) a virtual map of the using online ESRI mapping software. The participants were asked to think about how they could use the maps within their organisations and what form of maps they would like to receive as outputs from this project. All participants can request a printed version well as having access to all the digital outputs from the three workshops.



Figure 1: The final features map of the Solent.







Introduction to Logic Chains

The concept of logic chains and the aims and objectives of the workshop were outlined. Whilst examples of logic chains exist within the literature which link natural capital to benefits (Lusardi et al., 2018¹; Thornton et al., 2019²), this workshop aimed to develop these chains further by identifying the stakeholders, termed here as the 'beneficiaries' (Newton and Elliott, 2016³), who are reliant or dependent on those benefits. This development allows the logic chain to be viewed through either a natural capital lens (read left to right) focussing on the 'importance' of linkages from natural capital to people or a beneficiaries lens (read right to left) focussing on 'reliance or dependence' of people on natural capital (after Burdon et al., 2022⁴). The schematic logic chain for the Solent is presented in Figure 2. All the slides from the presentations are provided in Annex 2.



Figure 2: Logic chain structure applied to the Solent.

The categories of focus for the Solent are illustrated in Figure 3 and comprise 23 natural features and 21 benefits (both were identified by the stakeholders in Workshop 1 and were refined in Workshop 2) and 14 beneficiaries (which are the focus of Workshop 3).

¹ Lusardi, J., Rice, P. Waters, R.D. & Craven J., 2018. Natural Capital Indicators: for defining and measuring change in natural capital. Natural England Research Report, Number 076. <u>http://publications.naturalengland.org.uk/publication/674248036424089</u>

² Thornton, A., Luisetti, T., Grilli, G., Donovan, D., Phillips, R. & Hawker, J., 2019. Initial natural capital accounts for the UK marine and coastal environment. Final Report. Report prepared for Defra.

³ Newton, A., Elliott, M., 2016. A typology of stakeholders and guidelines for engagement in transdisciplinary, participatory processes, 16 November 2016 Front. Mar. Sci. <u>https://doi.org/10.3389/fmars.2016.00230</u>.

⁴ Burdon, D., Potts, T., Barnard, S., Boyes, S.J. & Lannin, A., 2022. Linking natural capital, benefits and beneficiaries: The role of participatory mapping and logic chains for community engagement. *Environmental Science & Policy*, 134, pp. 85-99. https://doi.org/10.1016/j.envsci.2022.04.003





Figure 3: Categories of natural features, benefits and beneficiaries included in the workshop.

Activity One: Identifying links between benefits and beneficiaries.

The first exercise sought to establish where linkages between beneficiaries and benefits existed in the Solent. For this, attendees were divided between three tables, each facilitated by members of the project team. A linkage was defined as a stakeholder having a reliance or dependence on a particular benefit known to derive from the Solent. The list of benefits was identified by the Solent stakeholders in Workshop 1 and was refined (where required) in Workshop 2.

Beneficiaries were identified as those organisations who have attended previous *Sea the Value* workshops or who have engaged in the project outside of the workshops. The list of beneficiaries was therefore not intended to be exhaustive but favoured those organisations who have participated in the *Sea the Value* workshops to date. The methodology, however, could easily be applied to additional organisations in the future.

A list of 14 beneficiaries were identified as the focus during the workshop. This first activity investigated the relationships between these 14 beneficiaries and the benefits but did not include individual perspectives; these were addressed separately in Activity Three. By way of demonstration, the project team completed the exercise for three beneficiaries prior to the workshop: Locks Sailing Club, Chichester Harbour Conservancy and the Environment Agency (Figure 4). Stakeholders were asked to first sense-check the results from these examples and discuss the linkages made. Stakeholders were asked to focus only on the shading of the cells for the purposes of Activity One; the relative importance of the relationships (i.e. the scores) would be assessed in Activity Two.





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Figure 4: Template used to capture relationships and scores during the workshop. The first three rows were used as examples to demonstrate the process.

Once all participants were comfortable with the approach, each table worked systematically to identify the linkages for the remaining 11 beneficiaries. Stakeholders could choose whether they wished to work across the rows, focussing on one organisation at a time, or down the columns, focussing on one benefit at a time. Each table completed the same exercise by highlighting cells to identify linkages on a pre-printed matrix (Figure 4 above). The facilitators took notes, where required, to explain the scores. The order of the beneficiaries was staggered between tables to ensure that all rows were completed by at least two tables; all three tables managed to complete the exercise within time on the day.

The results from each table (T1-T3) are presented in Figure 5. The results show a general agreement between the tables with respect to the identification of linkages. Out of the 294 potential linkages (21 benefits x 14 beneficiaries), 224 linkages (76%) had full agreement across all three tables, whilst the remaining 70 linkages (24%), highlight as bold boxes in Figure 5, had agreement across two tables.





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						S	ocietal Be	nefits (S	B)					Economic Benefits (EB) Other Benefits (OB)				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
		SB1	SB5	SB6	SB7	SB8	SB9	SB10	SB11	SB12	SB13	SB14	SB15	AB2	AB3	EB1	EB2	EB3	OB1	OB2	OB3	OB4	
		od (wild, farmed) / Drink	edicines and blue biotechnology	althy climate (Carbon Sequestration)	evention of coastal erosion	a def ence	aste burial / removal / neutralisation	urism / Nature Watching	iritual and cultural well-being	sthetic benefits	ucation, research	ysical health benefits	ychological health benefits	ater resources (quality and quantity)	nsport	ice to live	ice to work	lustry	nnectivity	odiversity	nse of space	rinsic Value	
All 3 tables Figure 5		ъ Р	Σ	μ	å	Se	×.	٩ ٩	ds S	Ae	Ed	Ч	Ps	Ň	tra	E.	đ	Ĕ	ů	Bic	Š	<u><u></u></u>	
Locks Sailing Club	T1																						
	T3																						
Chichester Harbour Conservancy	T1																						
,	T2																						
	Т3																						
Environment Agency	T1																						
	T2																						
	T3																						
Blue Marine Foundation	T1																						
	T2																						
	T3																						
Langstone Harbour Office	T1																						
	12 T2																						
Hampshire and Isle of Wight Wildlife	15																						
Trust	т1																						
	T2																						
	Т3																						
Natural England	T1																						
	T2																						
	T3																						
The Crown Estate	T1																						
	T2																						
	T3																						
Royal society for the Protection of Birds	T2																						
	T3		_																				
IFCAs	T1																						
	T2																						
	Т3																						
Rewilding Britain	T1																						
	T2																						
	T3																						
Academia	T1																						
	12																						
Landownors	13 T1																						
Landowners	T2																						
	T3																						
Hampshire County Council	T1																						
	T2																						
	T3																						
Activity One			No link	age			Linkag	e															
Activity Two		0	No reli	anco		1	Low ro	liance		2	Moder	ato reli	anco		2	High r	aliance						
Activity 1wo		L V	prio reli	ance		1	200016	nance		2	infouer	acerell	ance		5	- ago 16	ance						

Figure 5: Raw data on the linkages assessment for each table (T1-T3). Bold boxes represent the linkages which did not have full agreement across all three tables.





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Activity Two: Scoring links between benefits and beneficiaries.

Building on the outputs from Activity One, Activity Two aimed to score the relative reliance or dependence of the linkages (highlighted as yellow cells). The attendees were reminded that the scores were relative to the other beneficiaries listed. For example, scores for 'Education, Research' should be scored against universities which would score '3' for this category whereas the scores for 'Sea defence' should be scored against Environment Agency who would score '3' for this category given their major remit for flood protection. The overall scoring system was as follows:

- 0 = No linkage.
- 1 = Low reliance defined as an indirect linkage.
- 2 = Moderate reliance defined as an intermediate category between Low and High.
- 3 = High reliance defined as a direct linkage.

The matrix from Activity One was updated to include relative scores for reliance or dependence on benefits. Participants were allowed to add or remove any linkages that they had identified in the morning session if after reflection they so wished. All highlighted cells have a score (1 = Low, 2 = Moderate, 3 = High) assigned to them, whilst all white cells (i.e. identifying no linkage) score zero. Additional notes were taken on each table by the facilitator, where required.

The raw scoring data from each table are presented in Figure 6. To analyse these results, and generate logic chains, mean scores were calculated across the tables. A summary of the mean reliance or dependence of beneficiaries on the benefits and the range of scores across the tables is provide in Figure 7. The results show that of the 294 scores (21 benefits x 14 beneficiaries), 52 scores had full agreement across the three tables (i.e. a range of 0). Given the majority had a range of 1 or less between the tables, we can be relatively confident that there was a good level of understanding of the organisations assessed by those participants within the room.





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All 3 tables Figure 5	ocietal	Bene	efits (S	в)										Economic Benefits (OB)					3)			
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
		SB1	SB5	SB6	SB7	SB8	SB9	SB10	SB11	SB12	SB13	SB14	SB15	AB2	AB3	EB1	EB2	EB3	OB1	OB2	OB3	OB4
				F			_							_								
				ation			Itio							tity								
			ogy	stra			alise		b0					uar								
				due	5		t,		ei				ts	р d								
		rink	ech	Se	osic		, ne	ling	무응				hefi	y ar								
		2	biot	bor	al er		, al	atc	ž			fits	be	alit								
		ed)	lue	Car	asta		Ê	N a	nra	2	LG-	ene	alth	dr (dr								
		arm	d b	ate (2		/ re	tr	G	hefi	sea	th b	lhe	Seo.			J				e	e
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		N.	cine	λc	ji ji	efer	epr	Ē	len	etio	tion	and L	lo o	r re:	port	toll	tov	ţ	ecti	/ers	of	sic
		pod	edi	ealtl	e e	a d	ast	uri	iriti	esth	luce	iysi	3 ch	ate	ans	ace	ace	snp	uu	odiv	ense	tri
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Locks Salling Club	T2	0	0	1	2	2	0	3	3	3	2	3	3	3	2	2	1	0	1	1	3	3
	T3	0	0	2	3	2	2	2	3	2	3	3	3	3	2	1	1	1	1	1	3	3
Chichester Harbour Conservancy	T1	2	0	3	3	3	2	3	2	3	3	1	2	3	3	1	3	2	3	3	3	2
	T2	2	0	3	3	2	2	3	3	3	3	1	2	3	2	1	3	2	3	3	3	2
	Т3	1	0	3	3	3	3	3	2	3	3	2	2	3	3	2	3	3	3	3	3	3
Environment Agency	T1	1	1	3	3	3	3	2	1	1	3	1	1	3	1	1	1	2	3	3	1	1
	T2	1	1	3	2	3	3	2	1	2	3	1	1	3	1	0	2	1	3	3	1	1
	T3	1	1	3	3	3	3	2	1	1	3	1	1	3	1	2	3	1	2	2	1	1
Blue Marine Foundation	T1	1	0	3	2	1	2	1	1	1	3	1	2	3	1	1	1	2	3	3	2	3
	12	1	0	3	1	0	1	2	2	3	3	3	3	3	0	1	1	2	3	3	3	3
Langstono Harbour Office	13 T1	1	1	3	2	2	2	3	2	2	3	2	2	2	2	1	1	2	2	3	3	3
Langstone narbour onice	12	1	0	2	3	2	0	3	3	1	0	1	0	3	2	1	1	1	2	2	0	2
	T3	1	0	3	3	1	2	3	1	3	2	2	2	3	3	1	3	3	2	3	3	3
Trust	T1	2	0	3	3	3	2	3	3	3	3	3	3	3	1	1	1	1	3	3	3	3
	T2	1	0	3	1	1	1	3	2	2	3	1	3	3	1	1	2	2	3	3	3	3
	T3	1	1	3	3	3	2	3	2	2	3	2	2	2	1	1	1	1	2	3	3	3
Natural England	T1	1	0	3	3	3	3	1	1	1	3	2	2	3	1	1	1	2	3	3	3	3
	T2	1	1	3	3	2	2	2	2	1	3	1	1	3	0	0	3	1	3	3	1	2
	T3	2	0	3	3	3	2	2	2	2	3	2	2	2	1	2	2	1	3	3	3	3
The Crown Estate	T1 T2	1	1	3	3	3	2	1	1	1	2	1	1	2	3	1	2	3	3	3	1	1
	12 T2	1	0	0	0	0	1	0	0	1	1	1	1	1	1	0	1	3	2	2	1	2
Poyal Society for the Protection of Pirds	T1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Royal society for the Protection of Birds	T2	1	0	3	2	2	1	3	2	2	3	1	3	2	1	1	2	2	3	3	3	3
	T3	1	1	3	3	3	2	3	2	2	3	2	2	2	1	1	1	1	3	3	3	3
IFCAs	T1	3	0	1	0	0	1	1	1	1	2	1	2	3	2	1	2	3	1	1	0	0
	T2	3	0	3	2	1	1	2	0	0	3	0	0	3	1	0	3	3	3	3	1	2
	Т3	3	2	3	1	2	3	2	3	1	2	1	2	3	0	0	2	3	3	3	1	2
Rewilding Britain	T1	3	0	2	2	2	2	3	3	3	3	2	2	3	0	2	2	2	3	3	3	3
	12	1	0	0	1	0	1	3	2	2	3	1	2	3	0	1	0	2	2	3	3	3
	та	1	1	3	2	2	2	3	2	1	3	1	2	2	0	1	1	1	3	з	3	3
																-						
Academia	T1	0	0	3	1	1	1	0	1	1	3	1	1	2	0	2	2	2	0	0	1	0
	T2	1	3	2	1	1	1	1	1	1	3	2	2	2	0	0	1	0	3	3	0	3
	Т3	2	2	2	2	2	2	2	2	2	3	2	2	3	2	2	2	2	2	2	2	2
Landowners	T1	2	0	2	2	2	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	T2	1	0	0	2	2	0	0	3	3	0	3	3	0	0	3	2	2	1	1	2	2
	Т3	2	0	3	3	3	3	2	3	3	1	1	3	3	3	3	3	2	2	2	2	3
Hampshire County Council	T1	0	0	2	2	2	2	2	1	1	1	1	1	2	3	3	3	3	2	2	2	2
	T2	0	0	3	0	2	3	0	0	0	2	0	0	2	1	3	1	1	0	3	1	1
	T3	1	1	3	3	3	2	2	2	2	2	2	2	2	3	3	3	2	2	2	3	3

Figure 6: Raw data for the scores of the linkages based on level of reliance (L:_1, M: 2, H: 3) or dependence by each beneficiary on each benefit for each table (T1-T3).





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					Soc	ietal	Benefit	ts (Si	B)					pmic Benefitsther Benefits (OE								
		1	2	3.0	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
		SB1	SB5	SB6	SB7	SB8	SB9	SB10	SB11	SB12	SB13	SB14	SB15	AB2	AB3	EB1	EB2	EB3	OB1	OB2	ОВЗ	OB4
		Food (wild, farmed) / Drink	Medicines and blue biotechnology	Healthy climate (Carbon Sequestration)	Prevention of coastal erosion	Sea defence	Waste burial / removal / neutralisation	Tourism / Nature Watching	Spiritual and cultural well-being	Aesthetic benefits	Education, research	Physical health benefits	Psychological health benefits	Water resources (quality and quantity)	transport	Place to live	Place to work	Industry	Connectivity	Biodiversity	Sense of space	Intrinsic Value
Locks Sailing Club	Mean	0	0	1.3	2	2	0.7	3	3	2	2	3	3	3	2	1	1	0	1	1	3	3
	Range	0	0	1.0	2	0	2.0	1	1	1	2	0	0	0	0	1	0	1	1	0	0	0
Chichester Harbour Conservancy	Mean	2	0	3.0	3	3	2.3	3	2	3	3	1	2	3	3	1	3	2	3	3	3	2
	Range	1	0	0.0	0	1	1.0	0	1	0	0	1	0	0	1	1	0	1	0	0	0	1
Environment Agency	Mean Range	1	1	3.0 0.0	3	3	3.0 0.0	2	1	1	3	1	1	3	1	1	2	1	3	3	1	1
Blue Marine Foundation	Mean	1	0	3.0	2	1	1.7	2	2	2	3	2	2	3	0	1	1	2	3	3	3	3
	Range	0	1	0.0	1	2	1.0	2	1	2	0	2	1	1	1	1	0	1	1	0	1	0
Langstone Harbour Office	Mean	1	0	2.3	3	2	1.3	3	2	2	2	2	1	3	3	1	2	2	2	2	2	3
	Range	1	0	1.0	1	2	2.0	1	2	2	3	1	2	0	1	0	2	2	0	2	3	1
Hampshire and Isle of Wight Wil	Mean	1	0	3.0	2	2	1.7	3	2	2	3	2	3	3	1	1	1	1	3	3	3	3
	Range	1	1	0.0	2	2	1.0	0	1	1	0	2	1	1	0	0	1	1	1	0	0	0
Natural England	Mean	1	<u> </u>	3.0	3	3	2.3	2	2	1	3	2	2	3	1	1	2	1	3	3	2	3
indicator Englishing	Range	1	1	0.0	0	1	1.0	1	1	1	0	1	1	1	1	2	2	1	0	0	2	1
The Crown Estate	Mean	1	1	17	2	2	17	1	0	1	2	1	1	2	1	1	2	3	2	2	1	2
ine crown Estate	Range	1	2	3.0	3	3	1.0	2	1	1	1	1	1	1	3	2	1	0	2	1	1	1
Royal Society for the Protection	Mean	1.7	0.3	3.0	2.7	2.7	2.0	3.0	2.3	2.3	3.0	2.0	2.7	2.3	1.3	1.3	1.7	1.7	3.0	3.0	3.0	3.0
,	Range	2	1	0.0	1	1	2.0	0	1	1	0	2	1	1	1	1	1	1	0	0	0	0
IFCAs	Mean	3	1	2.3	1	1	1.7	2	1	1	2	1	1	3	1	0	2	3	2	2	1	1
	Range	0	2	2.0	2	2	2.0	1	3	1	1	1	2	0	2	1	1	0	2	2	1	2
Rewilding Britain	Mean	2	0	1.7	2	1	1.7	3	2	2	3	1	2	3	0	1	1	2	3	3	3	3
0	Range	2	1	3.0	1	2	1.0	0	1	2	0	1	0	1	0	1	2	1	1	0	0	0
Academia	Mean	1	2	2.3	1	1	1.3	1	1	1	3	2	2	2	1	1	2	1	2	2	1	2
	Range	2	3	1.0	1	1	1.0	2	1	1	0	1	1	1	2	2	1	2	3	3	2	3
Landownors	Moan	2		17	2	2	1.2	1	2	2	1	2	2	2	2	2	2	2	2	2	2	2
Landowners	Rango	1	0	2.0	2	1	2.0	2	1	1	2	2	1	2	2	1	2	2	1	1	2	2
Hampshire County Council	Maan	1	0	3.0	1	1	2.0	4	1	1	2	1	1	2	2	1	-	2	1	1	2	1
nampshire county council	Pango	1	1	1.0	2	2	1.0	2	1	1	1	1	1	2	2	3	2	2	1	1	2	2
	Kange	1	1	1.0	3	1	1.0	2	2	2	1	2	2	U	2	U	2	2	2	1	2	2
Kov	Marr	0		2.0	2																	
кеу	iviean	U	1	2.0	3																	
	Range	0	1	2.0	3																	

Figure 7: Summary data for the relative mean score (0 = No; 1 = Low; 2 = Moderate; 3 = High) and range in scores (0-3) across the three tables.







Logic Chain Analysis and Results

The aim of this workshop series was to demonstrate the multi-directional logic chain sequence between natural features, benefits and beneficiaries of the Solent. It is argued here that depending on the narrative, the logic chain can be read from left to right to identify the **importance** of the natural (capital) features providing benefits to beneficiaries, taking natural features as the starting point of the logic chain. Alternatively, the narrative can move from right to left, starting with the beneficiaries, to describe the **reliance or dependence** of beneficiaries on the benefits which are in turn provided by the underlying natural (capital) features.

The data gathered during the participatory mapping workshop series can be investigated in several different ways depending on the specific interests of the Solent community. Examples of some of the types of analysis which can be undertaken are presented below, however these are only presented to illustrate how the data can be investigated and are by no means exhaustive.

- **Example 1: Scenario Analysis.** The data gathered during the participatory mapping workshop series can be used when looking at future scenarios analysis. For example, following on from the restoration scenario (in Workshop 2) there may be interest in investigating which beneficiaries may gain the most from the benefits delivered under this scenario.
- **Example 2: Benefits Focus.** There may be interest in investigating the data with respect to a specific benefit. Two examples are provided below which focus on carbon sequestration (SB6) and bioremediation of waste (SB9). These benefits are the primary focus of the *Sea the Value* project however the same analysis could be undertaken for any of the benefits which were identified as being delivered by the Solent.
- **Example 3: Beneficiary Focus**. As an organisation, the data collected during the workshop series could be used to investigate the reliance or dependence of a specific organisation on the benefits provided by the Solent and the underpinning natural features which deliver those benefits. The example presented below is for the RSPB, however the same analysis could be undertaken for any of the beneficiaries assessed during Workshop 3.

Example 1: Scenario Analysis

In Workshop 2, future scenario assessments were undertaken to investigate the trade-offs in benefit delivery under different hypothetical future managed interventions. Workshop 2 focussed on two scenarios (saltmarsh and native oyster restoration) and identified how the delivery of benefits would change. The outputs from Workshop 3 allow these scenarios to be further explored by identifying which beneficiaries may be impacted under the different scenarios. To demonstrate this approach, the managed realignment scenario will be further explored here, with our focus being on the creation of saltmarsh. Given the focus is on a natural feature, then the logic chain would be constructed from left to right.

Natural Features Analysis

Our focus here is on saltmarsh, and therefore need to identify which benefits are delivered by this natural feature. These relationships were identified by the stakeholders in Workshop 1. A total of 18 out of 21 benefits were identified as being of relevance with respect to saltmarsh (Table 3). Of these 18 benefits, 10 were assessed by Potts et al. (2014) and therefore additional information is available on the relative importance of saltmarsh in providing these benefits and an indication of confidence level of the score (Table 3). This information forms the left-hand side of the logic chain (Figure 8).







For the remaining seven benefits where a linkage has been identified, no relative assessment has been undertaken in the literature and therefore these linkages would be identified as a dashed line in the logic chains.

Table 3: Summary of the benefits derived from saltmarsh identified by Solent stakeholders, and the relative importance of saltmarsh in delivering such benefits (after Potts et al., 2014).

	Relationship with	Taken from Potts et al. (2014)						
Benefits	Saltmarsh as identified in Workshop 1	Relative Importance	Confidence					
Food (wild, farmed) / Drink	Х	3	3					
Healthy climate (Carbon Sequestration)	Х	3	3					
Waste burial / removal / neutralisation	Х	3	3					
Tourism / Nature Watching	Х	3	3					
Aesthetic benefits	Х	3	3					
Prevention of coastal erosion	Х	2	3					
Sea defence	Х	2	3					
Spiritual and cultural well-being	Х	1	1					
Education, research	Х	1	1					
Psychological health benefits	Х	1	1					
Medicines and blue biotechnology	Х	Not as	sessed					
Water resources (quality and quantity)	Х	Not as	sessed					
Transport	Х	Not as	sessed					
Place to work	Х	Not as	sessed					
Industry	Х	Not as	sessed					
Connectivity	Х	Not as	sessed					
Biodiversity	Х	Not assessed						
Sense of space	Х	Not assessed						
Intrinsic value	0	n/a n/a						
Place to live	0	n/a n/a						
Physical health benefits	0	n/a	n/a					



High confidence Medium confidence Low confidence

Beneficiaries Analysis

Given that saltmarsh provides a wide range of benefits (18 out of 21) from which numerous beneficiaries will be dependent or reliant, the focus here is on those benefits which saltmarsh is highly important for delivery (i.e. which score 3 in Table 3 above). A summary of the reliance or dependence scores for each beneficiary on these five benefits is presented in Table 4.



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All beneficiaries have some reliance or dependence on at least one of these five benefits; however, it is of note that seven beneficiaries are highly reliant or dependent (i.e. soring 3) on healthy climate (carbon sequestration) and six on tourism/nature watching. For demonstration purposes, it is only the linkages which score 3 which have been reproduced on the right-hand side of the logic chain (Figure 9).

Table 4: Summary of the relative reliance or dependence of beneficiaries on the five most important
benefits derived from saltmarsh.

Beneficiary	Food (wild, farmed) / Drink	Healthy climate / Carbon Sequestration	Waste burial / removal / neutralisation	Tourism / Nature Watching	Aesthetic benefits
Locks Sailing Club	0	. 1	1	3	2
Chichester Harbour Conservancy	2	3	2	3	3
Environment Agency	2	3	3	2	1
Blue Marine Foundation	1	3	2	2	2
Langstone Harbour Office	1	2	1	3	2
Hampshire and Isle of Wight Wildlife Trust	1	3	2	3	2
Natural England	1	3	2	2	1
The Crown Estate	1	2	2	1	1
Royal Society for the Protection of Birds	2	3	2	3	2
IFCAs	3	1	1	2	1
Rewilding Britain	2	2	2	3	2
Academia	1	2	1	1	1
Landowners	2	2	1	1	3
Hampshire County Council	0	3	2	1	1

Logic Chain Analysis

A simplified logic chain has been produced which illustrates the relationships between saltmarsh and the benefits it provides in the Solent (left-hand side), and which beneficiaries are highly reliant or dependent (right-hand side) on the five highly important benefits provided by saltmarsh (Figure 8). Such illustrations can be used to identify which beneficiaries would likely benefit the most under future managed realignment interventions in the Solent.





Figure 8: Logic chain identifying the relative importance of the benefits that are delivered by saltmarsh (left-hand side) and the beneficiaries who are highly reliant (i.e. scoring 3) on these benefits (right-hand side).

Example 2: Benefits Focus.

The *Sea the Value* project focus is on carbon sequestration (SB6) and bioremediation of waste (SB9) and therefore these are presented as examples below. However, the same analysis could be undertaken for any of the 21 benefits identified within the Solent workshop series.

2.1 Carbon Sequestration (SB6)

Natural Features Analysis

The first step in developing the logic chain sequence is to look at which natural features, identified in Workshop 1, provide some level of carbon sequestration. The full list of natural features is presented in Column 1 (Table 5), with the linkages identified by the workshop attendees presented in Column 2 (Table 5). A total of 23 natural features were identified as providing a carbon sequestration benefit. The relative importance of natural features in delivering carbon sequestration were assessed by Potts et al. (2014) and therefore these relative scores can be used to make a richer logic chain. The relative scores, and confidence in those scores, are presented in Column 3 and Column 4 respectively (Table 5). It is of note that a number of the natural features identified in the Solent were not assessed by Potts et al. (2014) and therefore no scores are available for these natural features. The assessment shows that saltmarsh and reedbeds were the most important natural features identified in delivering carbon sequestration, seagrasses, mudflats and kelp were of moderate importance, and sandbanks/sand spit, sandflats and oysters were considered of low importance. These relationships, and their relative scores, form the left-hand side of the logic chain (see Figure 9).





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Table 5: Relative importance of natural features in providing the carbon sequestration benefit (adapted from Potts et al., 2014).

	Relationship	Taken from Potts et al. (2014)						
Natural features	with Saltmarsh as identified in Workshop 1	Relative Importance	Confidence					
Saltmarsh	Х	3	3					
Reedbed	Х	3	3					
Mudflats	Х	2	3					
Seagrass meadows/Zostrera marina	Х	2	2					
Kelp	Х	2	1					
Sandbank/sand spit	Х	1	2					
Sandflats	Х	1	2					
Oysters	Х	1	1					
Sand dunes	Х	Not as	sessed					
Saline lagoons	Х	Not as	sessed					
Shellfish beds/shellfish dredge areas	Х	Not as	sessed					
Algal cover	Х	Not as	sessed					
Woodland/mixed woodland/ancient woodland	Х	Not as	sessed					
Salt pans	Х	Not as	sessed					
Shingle banks	Х	Not as	sessed					
Invasive plant species (R. rugosa)	Х	Not as	sessed					
Clams/cockles (hand gathered)	Х	Not as	sessed					
Shingle beach/shingle and sand/shingle and shell	Х	Not as	sessed					
Vegetated shingle	Х	Not as	sessed					
Gravel and shell beach	Х	Not as	sessed					
Sub tidal mixed sediments	Х	Not assessed						
Scrub	Х	Not assessed						
Freshwater inputs	X	Not as	sessed					



Beneficiaries Analysis

The focus now turns to the relationships between the carbon sequestration benefit and the beneficiaries identified within Workshop 3. The mean scores and the range of scores between the three tables are presented in Table 6. All beneficiaries were identified as having a reliance or dependence on carbon sequestration (see Figure 7 above), with seven beneficiaries identified as being highly reliant or dependent (i.e. a score of 3). It is of note that there was total agreement across all three tables (i.e. a range of 0) that the first six beneficiaries have a high reliance or dependence on this benefit.



Six beneficiaries were identified as having a moderate reliance or dependence on carbon sequestration, whilst one beneficiary was identified as having a low reliance or dependence. These relationships form the right-hand side of the logic chain (see Figure 9 below).

Table 6: Mean relative reliance or dependence score of Beneficiaries on Carbon Sequestration (SB6) and the Range of scores across three tables (0 = full agreement across the tables).

	Carbon seque	stration (SB6)
Beneficiaries	Mean score	Range
Chichester Harbour Conservancy	3.0	0
Environment Agency	3.0	0
Blue Marine Foundation	3.0	0
Hampshire and Isle of Wight Wildlife Trust	3.0	0
Natural England	3.0	0
Royal Society for the Protection of Birds	3.0	0
Hampshire County Council	2.7	1
Langstone Harbour Office	2.3	1
IFCAs	2.3	2
Academia	2.3	1
The Crown Estate	1.7	3
Rewilding Britain	1.7	3
Landowners	1.7	3
Locks Sailing Club	1.3	1

Logic Chain Analysis

The logic chain presented in Figure 9 takes the benefit of carbon sequestration as its focus. Reading from the left identifies the relative importance of natural features in delivering this benefit, whilst reading from the right identifies the beneficiaries which are most reliant or dependent on this benefit. Taking only the highest scores (i.e. scores of 3) as an example, then saltmarsh is identified as the most important natural feature in delivering this benefit. With respect to the beneficiaries, Chichester Harbour Conservancy, Environment Agency, Blue Marine Foundation, Hampshire and Isle of Wight Wildlife Trust, Natural England, RSPB and Hampshire County Council have all been identified as the beneficiaries which are most reliant or dependent on the carbon sequestration benefit in the Solent.





Figure 9: Logic chain identifying the relative importance of natural features in delivering carbon sequestration and the reliance or dependence of beneficiaries on carbon sequestration.

2.2 Bioremediation of Waste (SB9)

Natural Features Analysis

Focussing on the bioremediation of waste benefit (SB9), stakeholders identified seven natural features which contribute to the delivery of this benefit within the Solent. Taking the relative importance scores from the Potts et al. (2014) assessment, this identifies saltmarsh, reedbeds, kelp and oysters as being the most important natural features in delivering this benefit, with moderate contributions from seagrass, whilst mudflats only provide a low level of this benefit. High confidence scores were associated with the score for saltmarsh, reedbeds and mudflats (being based on UK peer-reviewed evidence), whilst the confidence scores for kelp, oysters and sandbank/spit were all low, being based on expert opinion (after Potts et al., 2014). These seven natural features form the left-hand side of the logic chain for bioremediation of waste (see Figure 10 below).





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Table 7: Relative importance of natural features in providing the Bioremediation of Waste Benefit (adapted from Potts et al., 2014).

	Relationship	Taken from Potts et al. (2014)					
Natural features	with Saltmarsh as identified in Workshop 1	Relative Importance	Confidence				
Saltmarsh	Х	3	3				
Reedbed	Х	3	3				
Kelp	Х	3	1				
Oysters	Х	3	1				
Seagrass meadows/Zostrera marina	Х	2	2				
Mudflats	Х	1	3				
Sandbank/sand spit	Х	0	1				
Sandflats	Х	Not as	sessed				
Sand dunes	Х	Not assessed					
Saline lagoons	Х	Not as	sessed				
Shellfish beds/shellfish dredge areas	Х	Not as	sessed				
Algal cover	Х	Not as	sessed				
Woodland/mixed woodland/ancient woodland	Х	Not as	sessed				
Salt pans	Х	Not as	sessed				
Shingle banks	Х	Not as	sessed				
Invasive plant species (R. rugosa)	Х	Not as	sessed				
Clams/cockles (hand gathered)	Х	Not as	sessed				
Shingle beach/shingle and sand/shingle and shell	Х	Not as	sessed				
Vegetated shingle	Х	Not as	sessed				
Gravel and shell beach	X	Not as	sessed				
Sub tidal mixed sediments	X	Not as	sessed				
Scrub	Х	Not as	sessed				
Freshwater inputs	Х	Not as	sessed				



Beneficiaries Analysis

During Workshop 3, stakeholders identified all beneficiaries as having some reliance or dependence on the Solent for delivering the bioremediation of waste benefit (Table 8). Given the remit of the Environment Agency, it is not surprising it scored the highest level of reliance or dependence on this benefit and this score was agreed across all tables (i.e. had a range of 0). Nine beneficiaries were identified as having moderate reliance or dependence on the bioremediation of waste benefit, however the range in scores was higher (ranging from 1 to 2) and therefore there was less certainty within the room about the relative importance of these relationships.







Four beneficiaries were identified as having low reliance or dependence on this benefit, but with low agreement amongst the tables for some. These relationships and relative scores form the right-hand side of the logic chain (see Figure 10 below).

Table 8: Mean relative reliance or dependence score of Beneficiaries on Bioremediation of Waste Benefit and the Range of scores across three tables (0 = full agreement across the tables).

	Carbon sequestration (SB6)			
Beneficiaries	Mean score	Range		
Environment Agency	3.0	0		
Chichester Harbour Conservancy	2.3	1		
Natural England	2.3	1		
Hampshire County Council	2.3	1		
Royal Society for the Protection of Birds	2.0	2		
Hampshire and Isle of Wight Wildlife Trust	1.7	1		
The Crown Estate	1.7	1		
IFCAs	1.7	2		
Rewilding Britain	1.7	1		
Blue Marine Foundation	1.7	1		
Langstone Harbour Office	1.3	2		
Academia	1.3	1		
Landowners	1.3	3		
Locks Sailing Club	0.7	2		

Logic Chain Analysis

The logic chain for the bioremediation of waste (SB9) benefit provided by the Solent is presented in Figure 10. The Solent stakeholders considered a similar number of natural features to deliver this benefit, with saltmarsh, reedbed, kelp and oysters being the most important. The logic chain clearly illustrates a cluster of beneficiaries who are all reliant or depend on this benefit at a moderate level, with Environment Agency having the greatest reliance or dependence on this benefit provided by the Solent.





Figure 10: Logic chain identifying the relative importance of natural features in delivering the bioremediation of waste benefit and the reliance or dependence of beneficiaries on this benefit.

Example 3: Beneficiary Focus

The final example presented here takes a beneficiary focus, and for the purposes of demonstration uses the RSPB as an example. Given the focus on the beneficiary, then the logic chain is created from right to left, first identifying the benefits which the RSPB are reliant or dependent on, and then identifying which natural features are important in delivering those benefits.

Beneficiary Analysis

Outputs from the assessments undertaken in Workshop 3 show that the RSPB was identified as being reliant or dependent on all benefits within the Solent (Table 9). The assessment shows that RSPB are highly reliant or dependent on 10 benefits (score = 2.7/3) with the data showing good agreement across the three tables. The RSPB was also identified as being moderately reliant or dependent on eight benefits, with a low score for the remaining three benefits. In general, there was less agreement between the tables on these moderate and low scores for several benefits. These relative relationships form the right-hand side of the logic chain (see Figure 12 below).





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Table 9: Relative reliance or dependence of RSPB on benefits provided by the Solent.

Benefits	Mean	Range
Connectivity	3.0	0
Biodiversity	3.0	0
Sense of space	3.0	0
Intrinsic value	3.0	0
Tourism / Nature Watching	3.0	0
Education, research	3.0	0
Healthy climate (Carbon Sequestration)	3.0	0
Psychological health benefits	2.7	1
Prevention of coastal erosion	2.7	1
Sea defence	2.7	1
Spiritual and cultural well-being	2.3	1
Aesthetic benefits	2.3	1
Water resources (quality and quantity)	2.3	1
Physical health benefits	2.0	2
Waste burial / removal / neutralisation	2.0	2
Food (wild, farmed) / Drink	1.7	2
Place to work	1.7	1
Industry	1.7	1
Transport	1.3	1
Place to live	1.3	1
Medicines and blue biotechnology	0.3	1

Natural Features Analysis

Focussing on the 10 benefits which the RSPB is highly reliant or dependent on (Figure 11), the data can be further interrogated to investigate which natural features deliver these benefits and how (relatively) important these relationships are. Figure 11 illustrates where there are relationships (represented with a X in a pale green cell) and where available, provides the relative score of the relationship based on the outputs from Potts et al. (2014). This information forms the left-hand side of the logic chain (see Figure 12).





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	Healthy climate (Carbon Sequestration)	Prevention of coastal erosion	Sea defence	Tourism / Nature Watching	Education, research	Psychological health benefits	Connectivity	Biodiversity	Sense of space	Intrinsic Value
Saltmarsh	3	3	2	3	1	1	х	х	х	x
Reedbed	3	3	2	3	1	1	х	х	х	x
Kelp	2	2	2	3	х	3	x	х	х	x
Oysters	1	2	2	1	1	1	х	х	х	x
Seagrass meadows/Zostrera marina	2	2	2	2	1	2	х	х	х	x
Mudflats	2	1	1	1	1	1	х	х	х	x
Sandbank/sand spit	х	1	1	х	1	1		х	х	x
Sandflats	1	2	2	3	1	1		х	х	x
Sand dunes	х	х	х	х	х	х		х	х	x
Saline lagoons	2	х	х	х	1	х		х	х	x
Shellfish beds/shellfish dredge areas	х	х	х	х	х	х	х	х	х	x
Algal cover	х			х	х	х		х	х	x
Woodland/mixed woodland/ancient woodland	х	х	х	х	х	x	х	х	х	x
Salt pans	x			х	х	x	x	х	х	x
Shingle banks	x	x	х		x	x	x	х	x	x
Invasive plant species (R. rugosa)	x	x	x	x	x	x	x	x	x	×
Clams/cockles (hand gathered)	x	x	х	х	х	x	x	х	х	x
Shingle beach/shingle and sand/shingle and shell	x	2	2	3	1	1	x	х	x	x
Vegetated shingle	х	х	х	х	х	x	х	х	х	x
Gravel and shell beach	x	x	х	х	х	x	x	x	х	x
Sub tidal mixed sediments	x	3	3		1		x	x	x	x
Scrub	x	x	х	х	х	x	x	х	x	x
Freshwater inputs	x	x			х	x	x	х		x

Figure 11: Linkages between natural features and the 10 benefits which RSPB are highly reliant or dependent on. Green cells with an X represent that a linkage has been identified, coloured cells illustrate that a relative score is available for that linkage

Logic Chain Analysis

A simplified logic chain for the RSPB can be produced which focusses on the 10 benefits which were identified as those which the RSPB are most reliant or dependent on and can illustrate which natural features are most important in delivering these 10 benefits (Figure 12. The relative importance scores were only available for six benefits, with the other linkages represented by dashed lines. Stakeholders identified several other natural features which may deliver these benefits (see Table 9 above), however given that relative scores were not available then they have not been included in this simplified logic chain.





Figure 12: A logic chain focussing on the 10 most important benefits which the RSPB is reliant or dependent on and the natural features which provide these benefits.

Logic Chain Discussion

The series of three participatory workshops undertaken with the Solent community have generated the data required to populate the logic chain structure as demonstrated above. Generating logic chains in such a way enables the user to identify the importance of linkages between natural features, benefits and beneficiaries when viewed through a natural capital lens from left to right. The logic chains can also be viewed from a beneficiary's perspective when viewed from right to left focussing on the reliance or dependence of beneficiaries on the benefits, and the reliance or dependence of the provision of the benefits by the underlying natural features. Such logic chains can become very complex, with a potential to form 6,762 linkages (14 natural features x 23 benefits x 14 beneficiaries). Scoring the linkages, based on local knowledge or from the available literature, enables us to focus on the linkages which are considered the most important and therefore can remove some of the complexity in the logic chain and by extension, natural capital priorities and interventions. The level of complexity included within logic chains may be dependent on the question of interest. For example, the illustrative logic chains presented in this section have focussed on a single natural feature (Example 1), a single benefit (Example 2) or an individual organisation (Example 3) and where complexity became too great have focussed on the linkages which are considered most important. This recognises the fact that for logic chains to be of use on the ground, the focus and the level of complexity must be tailored accordingly, and the questions must be clear.

The data used to populate the logic chains are specific to the Solent, given that the list of features, benefits and beneficiaries, and the relative importance of the links between them were all derived by the Solent community. The list of features, benefits and beneficiaries provide a snapshot of the Solent, and it is recognised that these lists may need to be refined over time as new features develop and/or are restored, as new benefits are realised and/or as future developments may introduce new beneficiaries into the community.



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It is hoped that the systematic methods developed and applied in the *Sea the Value* project have provided the community with the skills and knowledge to capture changes in the future. For example, the Solent community may wish to expand the number of beneficiaries included in the assessment, to consider changes in the extent or location of features which are present within the Solent or to analyse the impact of future management interventions on the delivery of benefits and the individuals and organisations which are impacted (positively or negatively) by such interventions.

Activity Three: Identifying and scoring links between benefits and individual beneficiaries.

The final workshop activity asked attendees to score their own personal and individual relationships with the benefits provided by the Solent. The same methodology was applied as that undertaken for Activities One and Two whereby the relationships were first identified and then scored but this time from an individual perspective, rather than that of the organisation that they are representing at the workshop. All data were collected and presented anonymously. The results for the individual exercise are presented in Figure 13 with a summary of the supporting data provided in Table 10. For some benefits, there was much less connection with individuals, for example 89% of respondents reported having no connection with Medicines and blue biotechnology in the Solent, and 33% having no connection with industry. Tourism / nature watching scored relatively highly, with 66% of respondents identifying a moderate or high reliance on this benefit; this is further analysed below.



Figure 13: Raw data from the individual perspective analysis (n=9).





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Table 10: Summary data of the relative importance of each of the benefits to individuals (n=9).

Benefits	No (%)	Low (%)	Mod. (%)	High (%)
Food (wild, farmed) / Drink	11	56	22	11
Medicines and blue biotechnology	89	11	0	0
Healthy climate (Carbon Sequestration)	0	11	33	56
Prevention of coastal erosion	22	33	22	22
Sea defence	22	33	11	33
Waste burial / removal / neutralisation	11	33	56	0
Tourism / Nature Watching	0	33	22	44
Spiritual and cultural well-being	0	33	33	33
Aesthetic benefits	11	22	33	33
Education, research	11	11	33	44
Physical health benefits	0	22	44	33
Psychological health benefits	0	22	33	44
Water resources (quality and quantity)	11	22	44	22
Transport	22	33	33	11
Place to live	44	11	22	22
Place to work	0	22	22	56
Industry	33	22	44	0
Connectivity	11	22	44	22
Biodiversity	11	11	22	56
Sense of space	0	22	33	44
Intrinsic value	0	22	22	56

With respect to tourism / nature watching, respondents were also asked about which activities they have participated in over the last 12 months, and how often the have participated. The initial list of activities was those identified as subcategories of tourism / nature watching by the Solent stakeholders in Workshop 1. Respondents were also given the option to add 'Other' activities if they wished. The data obtained from this exercise are summarised in Figure 14. A broad range of activities were undertaken by respondents in the Solent (10 in total), with wildlife watching being the most popular, with 8 out of 9 respondents participating in this activity. Frequency of undertaking wildlife watching varies amongst the group ranging from daily (2 respondents), to weekly (1 respondent), monthly (2 respondents), quarterly (2 respondents) and annually (1 respondent) within the last 12 months. Rowing/kayaking/paddleboarding and swimming were also popular activities. One respondents participated in wildfowling or cruise ships in the last 12 months. With respect to 'Other' categories, individuals identified one additional activity, namely walking. Data for these categories have been included in the results, however it must be noted that as these were not on the original list of activities then we assumed individuals did not participate in these activities unless they stated otherwise. It is however recognised that participation rates in these activities may have been higher if they were included in the original list of activities for all respondents (Figure 14). Although the sample size was relatively small for this activity (n = 9), the methodology developed, and the data gathered could be considered as a pilot study and form a baseline of data for how individuals within the Solent community use and value the benefits provided by the Solent.





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Recreational activity data individsual								
	Participation		Frequency					
	Yes	No	Daily	Weekly	Monthy	Quarterly	Annually	Other
a. Wildlife watching (birds/marine mammals)	8	1	2	1	2	2	1	
b. Rowing / kayaking / paddleboarding	5	4			1	3		1
c. Cruising / boat trips	5	4		2	1		2	
d. Recreational fishing	2	7			1			1
e. Sailing / windsurfing	1	8			1			
f. Swimming	6	3		1	2	3		
g. Wildfowling	1	8				1		
h. Cycling	3	6				2		
i. Cruise ships	1	8						1
g. Other (Walking)	1				1			

Figure 14: Summary data from Activity 3 (Question 5) (n=9).

Future Opportunities in the Solent

Sea the Value reporting timeframe

Gordon Watson informed participants about the remaining timeframe for the Sea the Value project. It is hoped that the report will be circulated to all participants by the end of May 2024 and that the final maps will be printed and distributed to participants shortly after that. Although this will mark the end of the participatory mapping part of the Sea the Value project, Gordon informed the group that the project will run until the end of July 2025 and therefore the project team are keen to remain engaged with the group moving forwards. Contact details for the project team are included at the end of the workshop slides (Annex 2) and therefore please contact us to discuss any future opportunities for us to engage in the Solent or elsewhere within your region.

Gordon also informed the group that there is currently research ongoing within the Sea the Value project which focusses on economic valuation of benefits and green finance initiatives. These aspects of the project are being led by Plymouth Marine Laboratory and Eftec Ltd. If people wish to be kept informed of progress within these workstreams or to engage with the researchers directly then please let the project team know and we can put you in touch with the specific researchers.

Solent Network

Stakeholder feedback obtained through the Sea the Value workshops recognises that one of the great outcomes of the process has been getting different stakeholders around the same table and developing a shared understanding of the features, benefits and beneficiaries associated with the Solent that could potentially support future interventions. It would be a great legacy for the Sea the Value project if the network of stakeholders which have engaged during the process continues beyond the timeframe of the project and into the future. There was clear support by the participants for this to happen however it was recognised that further investigation of the feasibility of such a group would be required. For example, embedding the process and enabling discussions to continue within the Solent Forum would be an obvious option, although clarification is needed on who would administer the group and where funding could be secured from.









Project Recommendations

Having worked closely with the Solent community during the workshop series for the *Sea the Value* project, the Project Team have made three project recommendations for further consideration by the Solent community:

- 1. Explore the structure and support for a continuing natural-capital discussion that engages with the opportunities in restoration and conservation.
- 2. Explore the potential for engaging with other parts of the *Sea the Value* project that are exploring valuation of natural capital, finance for nature restoration.
- 3. Champion the use of the participatory mapping outputs to inform key local strategies such as place-based and community led plans, environmental education, marine conservation and restoration activities.

Workshop Feedback

Feedback from participants was obtained using a short questionnaire which was distributed at the end of Workshop 3. This feedback is important to the Project Team as it enables reporting on how the workshops have been received by the Solent community and helps to identify what future improvements could be made to the methodology. A summary of the feedback is provided in Figure 15 with graphical outputs in Annex 3. Feedback was received from all the participants who attended the workshop (n=9). Overall, the feedback was very positive with most participants scoring the sessions, the workshop materials and the workshop delivery as 'Very Useful' or 'Extremely Useful'.

	Not useful at all	Slightly useful	Moderately usefu	Very useful	Extremely useful	Total
Session 1: introduction			2	7		9
Session 2: mapping outputs				2	7	9
Session 3: Linkages between benefits and beneficiaries			1	6	2	9
Session 4: Scoring links between benefits and beneficaries			3	4	2	9
Session 5: scoring links for individuals		2	4	3		9
Session 6: future opprtunties for the Solent			2	5	2	9
	Not useful at all	Slightly useful	Moderately usefu	Very useful	Extremely useful	Total
Workshop materials				7	2	9
Workshop delivery				3	6	9
	Not useful at all	Slightly useful	Moderately usefu	Very useful	Extremely useful	Total
Overall, how useful did you find the workshop				6	3	9
	Very poor	Poor	Average	Good	Very good	Total
The venue			2	4	3	9
The catering			2	4	3	9

Figure 15: Summary feedback from Solent Workshop 3.

In addition, respondents were also asked whether participating in the *Sea the Value* project workshops has increased their understanding of the relationships between features, benefits and beneficiaries and whether they have gained confidence in using participatory mapping within their own organisation. A summary of the feedback is presented in Figure 16. The feedback was very positive, with all participants having an increased understanding of the participatory mapping approach and the links between features, benefits and beneficiaries as a result of attending the workshops.











Has the Sea the Value project	Yes, significantly	Yes, slightly	No	Not sure	Total
Increased your understanding of the					
participatory mapping approach?	9				9
Increased your understanding of the links					
between features and benefits?	4	5			9
Increased your understanding of the links					
between benefits and beneficiaries?	5	4			9
Given you more confidence in using PM					
within your organisation?	6	2		1	9

Figure 16: Summary of the impact of the Sea the Value project.

Finally, workshop participants were asked a series of open-ended questions where they could provide further detailed responses. A summary of responses is provided below.

What did you find most useful about the workshops?

- "Mapping"
- *"Meeting other new contacts, collaboration with stakeholders."*
- *"Considering links between benefits & beneficiaries."*
- "Participatory approach was very useful."
- *"Maps produced."*
- *"Discussing natural capital theory with a variety of stakeholders."*

How could future workshops be improved?

- "Having more stakeholders so a wider range of interests were present."
- *"Include more corporate organisations to group projects/work being done or opportunities for projects."*
- "More diverse stakeholders."
- "Slightly less rushed overview of content/outcomes from previous workshop)."
- "More stakeholder."

Will your organisation use the methods or outputs from the workshops in the future? If so, in what way?

- "Very keen to use these maps to identify restoration potential and add this approach to the toolkit."
- *"Will purchase for use with our members."*
- "GIS mapping very useful in our work."
- "Maps of protected habitats to inform conservation advice."





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Annex 2: Workshop 3 Presentations

















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Annex 3: Participant responses



















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