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6 April 2023

CHICHESTER HARBOUR CONSERVANCY

A meeting of the Chichester Harbour Conservancy will be held at **2pm on Monday 24 April 2023**, in the **Mitchell Room, Hampshire County Council, The Castle, Winchester, SO23 8UJ** to consider the agenda set below.

Please note that lunch will be served from 1pm in the Drop-In Room beside the Mitchell Room. The meeting will start with a short presentation from Royal Haskoning DHV with regards to the Feasibility Study for the future use of the land adjacent to Footpath 3059 and Footpath 555, Fishbourne.

Richard Craven

Director & Harbour Master

AGENDA

Part 1 -

1. Welcome and apologies

2. Declarations of interest

Members and officers are invited to make any declarations of personal or prejudicial interests that they know they may have in relation to items on the agenda (or at any stage during the meeting if it then becomes apparent that this may be required when a particular item or issue is considered).

3. Minutes of the meeting held on 30 January 2023

To approve the Part 1 minutes of the meeting held on 30 January 2023 (page 1).

4. Minutes of the Advisory Committee held on 17 April 2023

To receive the Part 1 minutes of the Advisory Committee meeting held on 17 April 2023 (to follow).

5. Chairman's Update

To note the verbal update from the Chairman regarding her work for the Conservancy since the last meeting.

6. Appointing Committee Report

To consider the report from the Clerk of the Conservancy (to follow).

7. Report from the Director & Harbour Master

To consider the report from the Director & Harbour Master (page 7).

8. Port Marine Safety Code

To consider the Port Marine Safety Code update from the Director & Harbour Master (page 11).

9. HR Sub Committee Summary Report

To note the report from the Director & Harbour Master (page 12).

10. Management Plan Progress Report

To note the report from the Director & Harbour Master and AONB Manager (page 14).

11. CHaPRoN Update

To note the report from the Director & Harbour Master and CHaPRoN Manager (page 24).

12. Farming in Protected Landscapes End of Year Report

To note the report from the AONB Manager (page 77).

13. Solent Eutrophication and Recovery

To note the report from the Environment Agency (page 81).

14. Footpath 108/56/2 – Langstone Sea Wall

To discuss the report from the AONB Manager (page 97).

15. Budget Monitor February 2023

To note the report from the Director & Harbour Master & the Finance Manager (page 99).

16. Planning Committee

The Planning Committee has met once since the last meeting of the Conservancy, on 6 March. Members wishing to raise matters of strategic importance or policy arising from the meeting of the Planning Committee may do so under this item (page 106).

17. Exclusion of Press and Public

To consider the exclusion of the press and public from the remainder of the meeting on the grounds that the publicity would prejudice public interest by reason of the confidential nature of the business to be discussed.

Part 2 -

(for Members of the Conservancy and the Advisory Committee only)

18. Part 2 Minutes of the Conservancy meeting held on 30 January 2023 (page 108).

19. Advisory Committee

To receive the Part 2 minutes (if any) of the Advisory Committee meeting held on 17 April 2023 (to follow, if any).

20. Report of Urgent Action

To note the report from the Clerk of the Conservancy (to follow).

21. Finance Risk and Audit Group Minutes

The Finance, Risk & Audit Group has met once since the last meeting, on 21 March 2023. Members wishing to raise matters of strategic importance or policy arising from the meeting of the Finance, Risk and Audit Group may do so under this item (page 109).

22. Unlicensed Houseboats

To note the report from the Director & Harbour Master (page 117) .

23. Freedom of the Harbour

To consider the recommendations of the Committee.

Conservancy members: Adrian Moss, Graeme Barrett, Mark Inkster, Lulu Bowerman, Pieter Montyn, Jeremy Hunt, Sarah Payne, Donna Johnson, Roger Price, Lance Quantrill, Jackie Branson, Ann Briggs (Chairman), Robert Macdonald, Alison Wakelin, Simon Radford.

The next meeting will be held on Monday 26 June 2023 to approve the accounts.

Chichester Harbour Conservancy

Minutes of a meeting held on Monday 30 January 2023 at 2.00 p.m. at County Hall, Chichester.

Present - Ann Briggs (Chairman)

Lulu Bowerman	Jackie Branson	Donna Johnson	Robert Macdonald
Pieter Montyn	Adrian Moss	Sarah Payne	Penny Plant
Roger Price	Lance Quantrill	Alison Wakelin	

Officers -

Richard Craven (Director & Harbour Master)	Richard Austin (AONB Manager)	Mel Belderson (Finance Manager)	Edward Carter (Senior Deputy Harbour Master)
Adrian Karn (Deputy Harbour Master)	Jane Latawski (Education Officer)	Fiona Morris (Deputy Treasurer)	Charles Gauntlett (Deputy Clerk)

Part 1

Apologies for Absence

66. Apologies for absence were received from Graeme Barrett, Jeremy Hunt, Mark Inkster and Simon Radford. It was noted that Penny Plant was acting as Deputy for Graeme Barrett.

Alan Rice, TD

67. A minute's silence was held in memory of Alan Rice, TD, past Chairman of the Conservancy, who had died recently.

Declarations of Interest

68. The following members and officers declared personal interests in items affecting the use of the harbour as harbour users: Robert Macdonald, Adrian Moss, Penny Plant, Richard Craven and Ed Carter.

Minutes of the Meeting held on 14 November 2022

69. **Resolved** - That the Part 1 minutes of the meeting of the Conservancy held on 14 November 2022 be approved as a correct record and that they be signed by the Chairman.

Minutes of the Advisory Committee held on 23 January 2023

70. The Chairman of the Advisory Committee agreed to bring points of note from the Advisory Committee discussion forward at the relevant item during the meeting.

Water Quality

71. Kate Rice, Natural Capital Strategy Manager - Southern Water, provided a presentation to the Conservancy on Southern Water's plans for the Chichester Harbour area. (copy of slides appended to the signed minutes). The presentation gave details of various improvements to waste water treatment works (WWTWs) and storm overflow facilities that were planned through a mixture of infrastructure improvements, nature based solutions such as developing wetlands at WWTWs and encouraging behaviour change for residents and businesses to reduce the amount of waste water being produced. Taken together in partnership, these solutions should provide a holistic approach to improving water quality in the coming years. Kate Rice also emphasized the difference between best long term value and cheapest option solutions.
72. The Conservancy welcomed the planned investment, but highlighted the increasing immediate concerns of many local residents facing problems with sewage. It welcomed Southern Water's recent letters to planning authorities to highlight pressure on the sewage network, while acknowledging that Southern Water could not object to planning applications on the grounds that it did not have sufficient sewage capacity. It hoped that Southern Water would work more closely with planning authorities to help target interventions as part of developments in future.
73. Southern Water's plans to consult and engage with the public and stakeholders on key messages was welcomed, and Kate Rice agreed to share public relations materials with the Conservancy to help spread best practice messages.
74. The Conservancy considered a report by the Director & Harbour Master (copy appended to the signed minutes). The Director & Harbour Master reported that the Advisory Committee had highlighted the importance of including data from Budds Farm WWTW and Lavant WWTW, as both impacted Chichester Harbour, while being based outside it. He emphasised that improved partnership working is now underway as part of CHaPRoN.
75. The Conservancy noted the update but continued to express concern about the levels of contamination in Chichester Harbour due to WWTWs, overflow pipes and nitrates coming from agriculture.

Port Marine Safety Code

76. Monty Smedley, Designated Person, ABPmer, gave a presentation on the audit he had undertaken on the Conservancy (copy of slides appended to the signed minutes). He confirmed that he had found the Conservancy to be fully compliant with all aspects of the Port Marine Safety Code (PMSC) for 2022. He confirmed that the Department for Transport was updating the Code during 2023, so the next audit would be based on this.
77. He outlined the range of assurances of compliance that he had obtained and highlighted areas where required improvements had been identified,

which the Harbour Team had agreed to action. He reminded members that as Duty Holder, the Conservancy members needed to ensure that they attended the appropriate training and harbour tours.

78. The Conservancy welcomed the report and thanked the Designated Person for his work.
79. The Conservancy considered a report by the Director & Harbour Master on the PMSC (copy appended to the signed minutes), which gave an update on safety matters and concluded that the Conservancy is compliant with the PMSC, delivering safe and good practice in the harbour during 2022.
80. The Senior Deputy Harbour Master gave an update on the Emsworth Jetty, advising that a planning application had now been made to install a gate at the Emsworth Jetty for the benefit of boat users, although it would only be closed when needed to control access.
81. The Conservancy, noting its role as Duty Holder, welcomed the report and acknowledged the Designated Person's comment that the Conservancy's use of prosecution powers was positive. The Senior Deputy Harbour Master agreed that use of prosecutions was important in some cases, although he highlighted that this was very much balanced with other methods of education and enforcement such as the warning ticket system, which was working effectively.
82. **Resolved** – That the Port Marine Safety Code report be endorsed by the Conservancy as Duty Holder.

Director and Harbour Master's Report

83. The Conservancy considered a report by the Director & Harbour Master (copy appended to the signed minutes). The Director & Harbour Master and the AONB Manager introduced the update report. The Director & Harbour Master advised members that the Chairman planned to hold a reception on 28 April 2023. The Conservancy welcomed and noted the updates, subject to the key areas of discussion as follows.

(i) Updates from the Director & Harbour Master

Chichester Bar Dredge

84. The Director & Harbour Master acknowledged concerns raised by the Advisory Committee about the depth of the channel at Mengham and inappropriate anchoring at East Head and confirmed that these would be investigated.

Harbour Office and Itchenor Jetty Proposals

85. The Director & Harbour Master reported that a risk assessment provided by Itchenor Sailing Club had been considered, but following an independent review from ABPmer, the risk assessment did not change the Conservancy's view on the matters raised, and consents for the project are being sought.

Beneficial Use of Dredged Sediment Trial

86. The Director & Harbour Master updated on progress to conclude the consents process and advised that the planning authority had at a late stage requested that their permission would be required for this work. Clarification is being sought as to whether this is adequately covered by derogations contained within Permitted Development Orders.

(ii) Updates from the AONB Manager

Footpath 3059, Fishbourne

87. It was hoped that this challenging situation could be assisted by Southern Water's exploration of developing wetlands near to WWTWs in the harbour.

Footpath 108/56/2, Langstone

88. The Chairman thanked Lulu Bowerman for her work in getting stakeholders together to try and find a workable solution for the site.

Ella Nore Spit, West Wittering

89. The AONB Manager reported that there is an opportunity to undertake a project to improve the environment and it was hoped that consents could be obtained in order to deliver the project as soon as a funding opportunity arose.

Marina Farm

90. The AONB Manager reported that the acquisition of this land provided an opportunity to undertake regeneration, depending on funding opportunities. He hoped that the Conservancy could visit the site on the Annual Tour in autumn 2023.

Solent Forum

91. The AONB Manager asked Conservancy members to contact him if they wish to attend the next meeting.

Budget Monitor November 2022 and Finance Risk & Audit Group Minutes

92. The Conservancy considered a report by the Director & Harbour Master and Finance Manager (copy appended to the signed minutes), which set out the current position.

93. The report was noted.

HR Sub-Committee

94. The Conservancy received a report from the Director & Harbour Master (copy appended to the signed minutes) which provided an update on staff who were leaving.

95. The Conservancy paid tribute to Ed Carter, Senior Deputy Harbour Master, for his excellent work over the last 10 years at Chichester Harbour and congratulated him on his appointment as Harbour Master of Weymouth Harbour.
96. It was also noted that Maria Court, Shared Services Manager, would be leaving the Conservancy and she was thanked for her role on the senior management team, which has produced an excellent atmosphere for Conservancy staff in recent years.

Annual Education Report

97. The Education Manager provided a presentation about the wide-ranging work of the Conservancy's Education Team. She advised of the improvement in numbers following the pandemic and the great success of the Team in providing a big increase in sessions for secondary schools, as well as maintaining good numbers of sessions for primary schools and the FE sector.
98. She advised of new charges and a new policy of limiting student numbers to 90 for a session, to keep sessions safe and manageable.
99. The Conservancy thanked the Education Team for its excellent work over the last year and the Chairman confirmed that she had written to thank the Friends of Chichester Harbour for their agreement to give a three year funding support package for the Service. Members also thanked the Education Manager for her work with other stakeholders on trying to improve the situation to enable children to walk safely in Dell Quay Road.

Planning Committee

100. The AONB manager introduced a report on the Planning Committee's activities (copy appended to the signed minutes) and highlighted the work of Steve Lawrence, Planning Officer, in defending the AONB at the planning appeal on Church Lane, Birdham.
101. The Conservancy welcomed the format and the positive outcome of the planning appeal. It also noted that the planning application for Maybush Orchard, Chidham, had now been withdrawn. It also welcomed an example cited of a parish council waiting to hear the Conservancy's comments on an application before making its own comments, a good demonstration of the high value placed on the Conservancy's planning work by other stakeholders.

Works Licence

102. The Committee considered a report on a works licence application on Trippet Wall, Bosham (copy appended to the signed minutes). The AONB Manager recommended approval of the wall repair due to the proximity of the wall to homes, but hoped that the owner, West Sussex County Council, would consider a more appropriate defence in future, as this was the third time in ten years that the wall had required repair.

103. **Resolved** – That the works licence be approved, subject to standard conditions and such other conditions as are appropriate to the method and site.

Exclusion of Press and Public

104. **Resolved** – That, in accordance with the Public Access Bodies (Admissions to Meetings) Act 1960, the press and public be excluded from the remainder of the meeting on the grounds that the publicity would prejudice public interest by reason of the confidential nature of the business to be discussed.

Part 2 (Confidential Items) Summary

Part 2 Minutes of the Conservancy held on 14 November 2022

The minutes were approved as a correct record.

Part 2 Minutes of the Advisory Committee held on 23 January 2023

The Chairman of the Advisory Committee agreed to bring points of note from the Advisory Committee discussion forward at the relevant item during the meeting.

Bosham Boat Park

The Committee noted a report on the Boat Park from the Director & Harbour Master.

The meeting ended at 5.00 p.m.

Chairman

CHICHESTER HARBOUR CONSERVANCY**24 APRIL 2023****DIRECTOR & HARBOUR MASTER'S UPDATE****1.0 The Merchant Shipping (Watercraft) Order 2023**

1.1 The Watercraft Order came into force on Friday 31st March. This brings powered watercraft (including personal watercraft) into scope of some of the provisions of the Merchant Shipping Act, including the collision regulations.

2.0 RedPol

2.1 The Interreg funded Reduce Pollution (from endocrine disrupting compounds) project came to an end in March, there is a further 3-month period to tie-up administration and final reports. Interreg approved the Conservancy's budget modification to facilitate a range of testing and there was a flurry of activity at the end of March as mud samples were collected for bivalve analysis, water samples for eDNA testing and muscles sent to French universities to be examined for endocrine disrupting compounds. Results and reports are keenly awaited.

3.0 BUDS Trial & Future Agreements

- 3.1 A successful trial to restore saltmarsh at Itchenor moving sediment recovered from maintenance dredging with a dredge box was completed in February. MMO Consents were not in place in time for the dredge of Northney marina, and instead utilised sediment from the dredge of the Chichester Marina approach channel. This entailed a larger barge with deeper draught which limited the range of tides that could be used to deposit the sediment but still managed to deliver over 1,500 m³ to the site. The site is being closely monitored, but early indications are that the sediment quickly solidified and is being retained on site.
- 3.2 This could prove a successful blueprint for saltmarsh restoration, but it is significantly more expensive to conduct than depositing sediment at sea. Nitrate offsetting has been identified a possible way to fund these types of projects in the future, although nitrate offsetting projects are not currently permitted within SSSI's. Earth Change are working with Natural England and industry experts in an effort to enable this as a means of funding future saltmarsh restoration projects.
- 3.3 In order to offer as Nitrate offsetting, the organisation providing the mitigation will need to have a long-term interest in the restoration sites as a restored saltmarsh will need to be maintained in the long term and likely for up to 80 years. Discussions about how best to facilitate this are ongoing, the Conservancy was initially exploring ideas of a joint venture, but Earth Change are advised that they will need a lease. The process is complex, and discussions are ongoing.

4.0 East Head Impact - Solent Seascape Project

4.1 The ambitious Solent Seascape Project bid exceeded the \$5 million award on offer and all partners were paid a skimmed budget of around 75% of the total leaving them with a 25 % shortfall to make up or to reduce the scope of their project. Given the importance of the project; part funding for the trial for the dredged

sediment project, and employment of 2 new members of staff, the Conservancy undertook to underwrite CHaPRoN's shortfall if other grants could not be found. East Head Impact, a charity with local roots, have generously agreed to fund £143,000 shortfall, and are positive about future collaborations.

5.0 New website

- 5.1 The Conservancy has a new website: www.conservancy.co.uk that went live 31 March 2023.

6.0 Chairs Reception

- 6.1 Hayling Island Sailing Club will host the Chairs Reception this will take place on Friday 19 May 1800 – 2000.

7.0 Visit from Rt. Hon. Gillian Keegan MP

- 7.1 On 3 February 2023, the Secretary of State for Education visited Chichester Harbour AONB to learn about the work of Bird Aware Solent and the Conservancy's Education Service. It is hoped that recreational disturbance will feed into the new Natural Environment GCSE that is being developed. Ms Keegan was also reminded of the development pressures the AONB is under, the wider ambitions of the Landscapes Review, and the need for Statutory Consultee status as a matter of urgency.

8.0 North Common Steering Group, Hayling Island

- 8.1 On 7 February 2023, the first meeting of the North Common Steering Group took place in over a decade. It was Chaired by Cllr Quantrill, with Jane Dodsworth, the AONB Manager, the Ecologist, and the Rangers in attendance, along with Officers from Havant Borough Council, and representatives of the North East Hayling Residents Association. The Council Officer indicated that they will be more involved with the day-to-day management of this green space going forward.

9.0 New Funding for National Parks Announced

- 9.1 On 1 March, Defra announced that England's national parks will benefit from new additional funding. £4.4 million will be provided to the country's ten National Park Authorities to support services such as visitor centres and park rangers. The funding award was in recognition of the vital role that our national parks play in protecting our precious wildlife and landscapes and the importance they have for tourism, the regional economy, and public access. Each authority will be awarded an equal share of the grant. No additional funding for AONBs was announced.

10.0 Solent Forum

- 10.1 The meeting of the Solent Forum took place 15 March 2023 in Portsmouth. It was a very well attended event, with research presentations from the University of Portsmouth, the Solent Seascape Project, and a talk from Coastal Partners on historic coastal landfills. It was attended by the AONB Manager and the CHaPRoN Manager. The next meeting is 11 October 2023 in Southampton. Although Cllr

Branson is officially the representative of Chichester Harbour Conservancy on this Group, other Members may attend if available and interested.

11.0 Fly-Tipping in the AONB

- 11.1 On 20 March 2023, the Conservancy received reports of illegal waste dumping at Cobnor Car Park, which is owned by the Conservancy. Therein, the Conservancy's Rangers found general household waste, building rubble, and a mattress. A skip was ordered, and the site was quickly cleared, at the Conservancy's expense. Cllr Moss and Cllr Plant are both aware of the incident.

12.0 Emsworth Jetty

- 12.1 W/c 20 March 2023 the Emworth Jetty was replaced by Walcon Marine. Planning permission is currently being sought from Havant Borough Council for a gate that will assist with the management of the jetty. The project was 89% funded by a one-off grant from Defra, with the remainder drawn from the Conservancy's Development Fund. The Defra funding award was competitive, with bids submitted across the AONBs and National Parks.

13.0 Visit from the Chief Executives of the NAAONBs and the BPA

- 13.1 On 20 March 2023, the Chief Executive of the National Association of AONBs, John Watkins, visited Chichester Harbour and met with the Chairmen of the Conservancy and the Advisory Committee, along with the Director & Harbour Master and the AONB Manager. John is 18 months into his role, and he is currently visiting all the AONBs to better understand local circumstances. Unfortunately, the Chief Executive of British Ports Association, Richard Ballantyne, was unable to attend the same meeting as planned, offering his apologies.

14.0 Bosham Association AGM

- 14.1 The AONB Manager gave a presentation to the Bosham Association on 25 March 2023 titled, 'Two Years on from the SSSI Condition Review'. The presentation explained the reasons for the Unfavourable Declining condition and some of the challenges with trying to reduce and stop the rate of biodiversity decline. A member of the public asked whether the Conservancy had considered an AONB boundary review, to increase the buffer zone between the land and the Harbour. The AGM was attended by Cllr Moss and Cllr Plant.

15.0 Return of the Terns – A Green Recovery Challenge Fund Project

- 15.1 The Returns of the Terns successfully completed on 31 March 2023, on-time, and on-budget. The project entailed the installation of new tern rafts, a small fish survey, a shingle recharge, and the groundwork for a new Nature Recovery Plan. The project video can be viewed here: <https://youtu.be/99j5HEynTRo>. The Project Manager will now support the Solent Seascape project.

16.0 £18 million Species Recovery Programme Capital Grant Scheme

16.1 On 3 April 2023, Natural England announced a new grant scheme to help save threatened species from extinction. The scheme will support projects over two years delivering targeted conservation action through the creation and improvement of specific wildlife habitats, conservation translocations, as well as supporting research and creating solutions to address species decline. As of time of writing, the AONB Team is assessing a potential grant application. The deadline for applying is mid-May 2023.

17.0 Thorney Island Conservation Group

17.1 The next meeting of the Group will be 29 June 2023, 13:00 to 16:00. Heather Baker is the representative of Chichester Harbour Conservancy on this Group.

18.0 Annual Conference of the National Association of AONBs

18.1 This year's AONB conference will be held at Bath University from 5 to 7 September 2023. Whilst the programme and guest speakers are still being finalised, there will be a focus on biodiversity net gain and other sources of green finance. AONBs are also at an advanced stage of rebranding to 'National Landscapes'. This will mean, 'Chichester Harbour National Landscape' as the title with 'An Area of Outstanding Natural Beauty' as the subtitle. Bookings are already open, and any Members wishing to attend should notify the AONB Manager as soon as possible. Last year Heather Baker was in attendance, along with a small delegation from the AONB Team.

Richard Craven
Director & Harbour Master

Richard Austin
AONB Manager

CHICHESTER HARBOUR CONSERVANCY

24 APRIL 2023

REPORT BY DIRECTOR & HARBOUR MASTER

PMSC UPDATE

1.0 Patrol Team 2023

- 1.1 With the majority of seasonal Patrol Officers returning for another season the recruitment of new Patrol Officers was limited to two this year. We are pleased to have a keen recreational boater William Leleu and Master Mariner Graeme Bissett joining the team.
- 1.2 A two-day training and familiarisation program was undertaken that covered a classroom day and a day on the water. Areas covered included the PMSC, roles and responsibilities, incident reporting, enforcement and administration. The on-water day covered boat handling skills and towing theory and practice.

2.0 Incidents

- 2.1 There have been 11 incidents recorded since 1 February including vessels aground, anchor problems and routine tows. An incident that could have resulted in more serious situation occurred when a single-handed sailor unexpectedly gybed and was struck by the boom. He remained conscious but in the water with his 8m yacht carrying on sailing where it struck another vessel. The sailor was assisted by a passing vessel and his yacht controlled by another. He was also assisted by the Patrol team and was advised to attend hospital where he had 3 stitches for a head wound.

3.0 Prosecutions

- 3.1 Two prosecutions outstanding from 2022 reached Court in March with both defendants pleading guilty to speeding within the Chichester Lake area of the Harbour. Fines and costs totalled £648 each.

4.0 Chichester Bar Survey

- 4.1 Bathymetric survey results just received indicate a least depth of 1.2m on Chichester Bar.

Richard Craven
Director & Harbour Master

CHICHESTER HARBOUR CONSERVANCY

24 APRIL 2023

HUMAN RESOURCES SUMMARY & UPDATE

REPORT BY THE DIRECTOR & HARBOUR MASTER

1.0 Staff Update

- 1.1 An amendment to the working hours for one of the Senior Management Team was approved.
- 1.2 Further training for two members of the Conservancy staff were supported by the HR Sub-Committee.
- 1.3 One of the Principal Planning Officers has retired. The two remaining officers have agreed to increase their hours which brings their roles to an equal job share.
- 1.3 Details of the recent exits interviews of two former employees were shared with the Committee as the information could help to inform future decisions. The employees were supportive of the Conservancy and would recommend it to others as an employer with personal reasons were given as the reason for leaving.
- 1.4 Interviews for the new CEO took place on 13 March 2023.

2.0 FOI Request & Complaint

- 2.1 The CHC has received an FOI request as well as a complaint. The Director & Harbour Master has taken advice from our solicitors who confirmed that it is following the correct procedures.

3.0 Recruitment

- 3.1 The new Harbour Master Jo Cox will be starting on Tuesday 16th May 2023.
- 3.2 Jessica Vagg has been appointed as the new Nature Recovery Officer. She has been the project manager for The Return of the Terns project.
- 3.3 A new Communications Manager is being recruited to replace the Shared Services Manager role.

4.0 Accidents and Incidents

- 4.1 There were no accidents or incidents to report.

5.0 Notice Periods – Senior Members of Staff

- 5.1 The HR Sub-Committee asked to review the notice periods for senior members of staff. It was agreed that when the opportunity arises, members of the Senior Management Team should be moved to 3 month notice periods if it is not already included in their contracts. The role of Communications Manager can remain at 2 months of notice.

6.0 Working from Home Protocols

- 6.1 The HR Sub-Committee asked for an update on the working from home protocols for the Conservancy. Sue Beeby from the HR Dept confirmed that once individual flexible working agreements are agreed, they should be kept on file.
- 6.2 The Committee agreed that the Health & Safety Home Working Checklist and display screen assessment be conducted annually. The Working from Home Policy is being reviewed by Sue Beeby.

7.0 Employee Volunteering Scheme

- 7.1 The Committee agreed in principle to adopt the Employee Volunteering Scheme subject to a review by Sue Beeby.

8.0 Chairman's Reception

- 8.1 Dates for the Chairman's Reception have yet to be finalized as an alternative location capable of accommodating more guests is being sought.

9.0 Change in salary scale for Harbour Master

- 9.1 There was a general discussion around the changes agreed to by the Sub-Committee in December 2022, prior to advertising the new Harbour Master role. There were concerns about whether the Committee had the authority to change the salary scale from that previously held by the Senior Deputy Harbour Master. It was agreed in December that as Deputy's salary had been downgraded when the role was downgraded to a Deputy the Committee had essentially reinstated the salary to the appropriate grade previously agreed for Harbour Master. As this fundamental decision had not been included in the minutes of the meeting held on 2nd December 2022, the following amendment was made by hand and signed by the Chairman; "*Correction – omitted from the minutes above. The new post of Harbour Master's salary was changed as the previous role was a Deputy Harbour Master role. This change was agreed by the HR Sub-Committee on 2nd December 2022.*")

Richard Craven

Director & Harbour Master

CHICHESTER HARBOUR CONSERVANCY

24 APRIL 2023

MANAGEMENT PLAN PROGRESS REPORT – FOR INFORMATION

1.0 Introduction

1.1 Areas of Outstanding Natural Beauty (AONBs) are afforded the highest level of protection in UK law. Each protected landscape is required to have a dedicated Management Plan, that details information about the area, the policies that will be used to guide its management, and the actions and priorities that will be delivered over the 5-year duration of the Plan. The Plan is legal requirement under the Countryside and Rights of Way Act (2001) and is a material planning consideration.

1.2 Chichester Harbour Conservancy prepares the Management Plan on behalf of the four Local Authorities. The current Plan was subject to a public consultation in 2018 over a period of 8 weeks. The Management Plan commenced on 1 April 2019, and was due to be replaced on 31 March 2024. However, the duration of the existing Plan will be extended by 12 months on this occasion, considering the emerging outcomes of the Landscapes Review (still to be finalised).

<https://www.gov.uk/government/publications/designated-landscapes-national-parks-and-aonbs-2018-review>

1.3 The Chichester Harbour Management Plan brings together the work of the Harbour Authority and the AONB Unit into one single integrated document. This was considered as best practice by the Designated Person.

1.4 This paper provides a progress report with the delivery of the existing Plan, as it passes 80% of its original duration. Similar information to this paper is reported to Defra. This paper can be cross referenced to the Chichester Harbour Management Plan, which all Members should be familiar with.

<https://www.conservancy.co.uk/page/management-plan>

2.0 Progress Report

2.1 For ease of understanding, Section 2 entails an 'at a glance' format.

Key

	Actions are ongoing, e.g., annual activities that get completed every year.
	Actions completed and no further input required.
	Actions are taking place and will be completed at some stage.
	Actions have not yet commenced or have been cancelled.

Policy 1 Conserving and Enhancing the Landscape			
1.1	Landscape Character Assessment.		Completed.
1.2	Understand s/m/l-term impacts of Climate Change.		Working with Prof. D. Cooper in this regard and will continue in 23/24.
1.3	Climate Change Adaptation Plan.		Working with Prof. D. Cooper in this regard and will continue in 23/24.
1.4	Natural Capital Report.		Completed.

1.5	Map key AONB viewpoints.	Green	Completed.
1.6	Planting trees and hedgerows.	Blue	Completed/ongoing
1.7	State of the AONB Report.	Red	Scheduled for 2024/25.
1.8	CHT to acquire new sites.	Green	Tournerbury Farm and Marina Farm.
1.9	Establish Wildlife Corridors.	Yellow	A LPA is consulting on these.
1.10	Respond to planning applications (like 2.1 and 13.12).	Blue	Ongoing.
1.11	Protect intervisibility between AONB and SDNP.	Green	Priority Views Report published.
1.12	Refresh Sustainable Shorelines.	Yellow	Work has started through CHaPRoN.
1.13	Decommission hard sea defences.	Yellow	Work has started through CHaPRoN.
1.14	Rollback footpaths.	Yellow	Work has started through CHaPRoN.
1.15	Raise awareness of the AONB.	Blue	Harbour Life magazine, social media, etc.
1.16	Undergrounding of cables.	Red	No such applications are in progress.
1.17	New EV charge points.	Yellow	Under consideration, inc. Itchenor Car Park.

Policy 2 Development Management

2.1	Respond to planning applications (like 1.10 and 13.12).	Blue	Completed/ongoing.
2.2	Offer AONB pre-app advice.	Blue	Completed/ongoing.
2.3	Respond to planning consultations.	Blue	Completed/ongoing.
2.4	Participate in public inquiries, hearings, examinations.	Blue	Completed/ongoing.
2.5	Help others to protect the AONB using the planning system.	Blue	Completed/ongoing.
2.6	Offer pre-app advice (NE/LPAs).	Blue	Completed/ongoing.
2.7	Take enforcement action for planning breaches.	Blue	Completed/ongoing.
2.8	Take enforcement action for other legal breaches.	Blue	Completed/ongoing.
2.9	Alleviate traffic congestion around the AONB.	Yellow	LPAs are working on these measures. WWE changed to pre-bookings only.
2.10	Promote Management Plan.	Blue	Completed/ongoing.

Policy 3 Diversity of Habitats

3.1	Deploy conservation volunteers.	Blue	Completed/ongoing.
3.2	Prepare Site Management Plans.	Yellow	Four are completed, ten still to do.
3.3	Improve wildlife habitats.	Blue	Completed/ongoing.
3.4	Restrict access where needed.	Blue	Completed/ongoing. Working with Bird Aware Solent.
3.5	Advice to landowners.	Blue	Completed/ongoing.
3.6	Improve biodiversity of ponds.	Green	Report finished.
3.7	Identify new sites for improvement.	Yellow	Work has started through CHaPRoN.
3.8	Monitor SSSI, SAC, SPA, Ramsar.	Yellow	Completed/ongoing.
3.9	Create new saltmarsh.	Yellow	Work has started through CHaPRoN.
3.10	Assess tree disease.	Yellow	Assessed Salterns Way.

Policy 4 Safety on the Water			
4.1	Nominate Board as Duty Holder.		Completed.
4.2	Nominate Designated Person.		Completed.
4.3	Review safety powers.		Completed/ongoing.
4.4	Confirm compliance with duties and powers.		Completed.
4.5	Up-to-date risk assessments.		Completed/ongoing.
4.6	Operate Marine SMS.		Completed/ongoing.
4.7	DP audit of Marine SMS.		Completed.
4.8	Recruit competent staff.		Completed/ongoing. There will be changes of personnel in 2023.
4.9	Annual Safety Plan.		Completed/ongoing.
4.10	Compliance with General Lighthouse Authority requirements.		Completed/ongoing.
4.11	Maintain staff job descriptions.		Completed/ongoing.
4.12	Maintain HOSIs.		Completed/ongoing.
4.13	Log of incidents and accidents.		Completed/ongoing.
4.14	Maintain H&S at work orders.		Completed/ongoing.
4.15	Patrol presence on the water (same as 10.2).		Completed/ongoing.
4.16	Update Admiralty Chart 3418.		Completed.
4.17	Maintain vessels.		Completed/ongoing.
4.18	Seasonal W/E Nav. Bulletins.		Issued throughout the year by emails to Harbour Users.
4.19	Publicise Harmony Leaflet.		Harbour Life.
4.20	Maintain safe navigation from future marine developments.		Planning applications and Works Licences considered by the Conservancy.
4.21	Use technology to support Marine SMS.		Introduced Harbour Assist.
4.22	Vessel Movement Survey (like 10.7).		Not yet scheduled for 2023.
4.23	Risk control measures for racing.		Overseen by Chichester Harbour Federation.

Policy 5 Facilitating Navigation			
5.1	Compliant navigation aids.		Completed/ongoing.
5.2	Maintain channel markers / buoys.		Completed/ongoing.
5.3	Undertake bathymetric surveys.		
5.4	Maintain 1.5m below Chart Datum on Chichester Bar.		Completed/ongoing.
5.5	Regulate works through Works Licences.		Completed/ongoing.
5.6	Sustainable dredging.		Completed/ongoing.
5.7	Maintenance Dredging Baseline document.		Completed.
5.8	Refuse Works Licences that would increase number of Harbour Users/intertidal launching structures.		Completed/ongoing.
5.9	Maintain hards, pontoons, and jetties.		Completed/ongoing.
5.10	Maintain moorings.		Completed/ongoing.

5.11	Maintain moratorium on new moorings.		Completed/ongoing.
5.12	Discourage increase in marina berths.		No new marina berths.
5.13	Claw back deep-water moorings.		Have clawed some moorings back since 2019.
5.14	Regulate all moorings.		Completed/ongoing.
5.15	Provide facilities for yachtsmen.		Completed/ongoing.
5.16	Reduce pollution.		Working with academic institutions on the RedPol project, due to completed June 2023.
5.17	Promote weather conditions forecasts to Harbour users.		Navigation bulletin.
5.18	Investigate swinging moorings.		Not yet commenced.
5.19	Consider alternatives to scrubbing piles to improve water quality.		This is being activity considered.
5.20	Review all boat facilities.		Completed in West Itchenor and Emsworth.
5.21	Allocate designated anchorage areas.		Completed/ongoing.
5.22	End of life strategy for vessels.		Working with the University of Brighton, more of a national issue, tracking people that have abandoned vessels.
5.23	Review of future facilities for quick access vessels.		Not yet commenced.
5.24	Maintain private aids to navigation.		Responsibility of private owners.

Policy 6 Water Quality			
6.1	Maintain Oil Spill Contingency Plan.		Completed/ongoing.
6.2	Maintain Port Waste Management Plan.		Completed/ongoing.
6.3	Maintain Oil Pollution Response Plan.		Completed/ongoing.
6.4	Support Green Blue, RYA, and British Marine in promoting best practice.		Completed/ongoing.
6.5	Maintain pump-out stations.		Completed/ongoing. New pump-out facility on the Itchenor Jetty.
6.6	Investigate marine plastics.		Completed/ongoing.
6.7	Chichester Water Quality Group.		Completed/ongoing.
6.8	UV Treatment at the WWTW.		Apuldram WWTW continues to be put under pressure during heavy rainfall.
6.9	All new dwellings to have suitable sewage provision.		Questions remain about wastewater provision with some new developments.
6.10	Utilise best available evidence.		Completed/ongoing.
6.11	Monitor water quality.		Completed/ongoing.
6.12	Address misconnections.		Responsibility of partner organisations.
6.13	Catchment Sensitive Farming.		Completed/ongoing.
6.14	Monitor macro algal weed.		Completed/ongoing.
6.15	Investigate seaweed harvesting.		Action cancelled due to environmental concerns (Natural England).

6.16	Awareness of impacts of antifouling.		Some progress, more to do.
6.17	Awareness of impacts of green waste.		Some progress, more to do.

Policy 7 Catchment Sensitive Farming

7.1	Advice to farmers.		Completed/ongoing, through FiPL.
7.2	Seek permissive access.		Awaiting planning permission for one site.
7.3	Hold Open Farm Days.		None held since 2019.
7.4	Publicise best practice farming.		Need to do more in this regard.
7.5	Diversity Eames Farm.		Under review.
7.6	Promote Agri-Environment Schemes.		Information on ELMS starting to emerge.
7.7	Reduce agri-run-off into the Harbour.		Encouraging winter cover crops, buffer zones, etc. Link to 7.4.
7.8	Promote local food.		Little progress in this area.

Policy 8 Thriving Wildlife

8.1	Continue WeBS Counts.		Completed/ongoing.
8.2	Create new seabird breeding sites.		Completed/ongoing. Return of the Terns.
8.3	Tern rafts.		Completed/ongoing. Return of the Terns.
8.4	New management agreements.		Information on ELMS starting to emerge.
8.5	Priority Species Strategy.		Will be integrated into the new Nature Recovery Plan.
8.6	Raise awareness of recreational disturbance.		Completed/ongoing.
8.7	Monitor Seal population.		Completed/ongoing.
8.8	Sub-tidal survey.		Plans to map the seagrass coverage with CHaPRoN.
8.9	Pollinators and insects.		Wildflower meadows at Cobnor and North Common.
8.10	Support Solent Waders and Brent Goose Strategy.		Completed/ongoing.
8.11	Work with Bird Aware Solent.		Completed/ongoing.
8.12	Protect Water Vole sites.		Completed/ongoing.
8.13	Plant native species.		Completed/ongoing.
8.14	Sustainable fishing.		Responsibility of Sussex IFCA.
8.15	Small-scale conservation projects.		Responsibility of Chichester Wildfowlers.
8.16	National campaigns and surveys.		Support where we can do. Will involve new Communications Manager.

Policy 9 Health and Wellbeing

9.1	Promote wellbeing benefits of AONB.		Completed/ongoing.
9.2	Promote ECP.		ECP not yet established, behind schedule.
9.3	Maintain footpaths (CHC owned).		Completed/ongoing.
9.4	Memorial benches.		Completed/ongoing.

9.5	Increase wheelchair accessible paths.		Considering plans at North Common.
9.6	Guided walks programme (like 10.4).		Completed. Guided Walks stopped with the retirement of the Communities Officer in March 2022.
9.7	Self-guided walks.		Completed.
9.8	Promote the Salterns Way cycle route.		Completed/ongoing.
9.9	Maintain the Salterns Way.		Completed/ongoing.
9.10	Footpath inspection programme.		Completed/ongoing.
9.11	Salterns Way inspections.		Completed/ongoing.
9.12	Maintain footpaths (all others).		Completed/ongoing.
9.13	Promote sustainable transport.		Need to more in this area.
9.14	Promote Countryside Code.		Completed/ongoing.
9.15	Seek sponsorship for cycle routes (like 13.5 and 13.9).		Being taken forward by the Friends of Chichester Harbour.
9.16	Extend Salterns Way around Manhood Peninsula.		A Sustrans volunteer is working on this project.
9.17	New cycle routes and bridleways.		Working on one new cycle route. No new bridleways yet.
9.18	Promote sailing and boating.		Completed/ongoing.

Policy 10 Enjoying Sailing and Boating

10.1	Byelaws and Harbour Directions.		Completed/ongoing.
10.2	Patrol presence (same as 4.15).		Completed/ongoing.
10.3	Increase maritime awareness (like 10.9 and 10.12).		Completed/ongoing.
10.4	Harbour Emergency Plan.		Completed/ongoing.
10.5	Maintain 8-knot speed limit.		Considering plans at North Common.
10.6	Discourage larger vessels.		Completed.
10.7	Monitor vessel movements (like 4.22)		Not yet commenced.
10.8	Maintain ban on water skiing, kit surfing, etc.		Completed/ongoing.
10.9	Encourage small boat training (like 10.3 and 10.12).		Completed/ongoing.
10.10	Licence commercial passenger vessels.		Completed/ongoing.
10.11	Operate Solar Heritage.		Completed/ongoing.
10.12	Increase safety learning opportunities for Harbour Users (like 10.3 and 10.9).		Completed/ongoing.
10.13	Solent Seals Code of Conduct.		Need to do more in this area.

Policy 11 Excellence in Education

11.1	Deliver Education Service.		Completed/ongoing.
11.2	Deploy education volunteers.		Completed/ongoing.
11.3	Deliver Junior Conservancy (citizenship programme).		Completed/ongoing.
11.4	Deliver Harbour Schools (at assemblies).		Completed/ongoing.

11.5	Reach new schools that were not using the Education Service in 2019.		Completed/ongoing. Engaged with 36 new schools and 3 new community groups since 2019.
11.6	Overcome barriers to participation.		Completed/ongoing. Friends of Chichester Travel Grants for Schools.
11.7	Encourage more winter school visits.		Completed/ongoing. Harbour Tots programme, Walking with Wellies.
11.8	Offer <i>Get Afloat!</i> Trips on <i>Solar Heritage</i> .		Completed/ongoing.
11.9	Increase environmental awareness of the sailing and boating community.		Ongoing, e.g., paddle sports leaflet.
11.10	Work with SEN Groups.		Completed/ongoing.

Policy 12 Connecting People to Nature

12.1	Publish Harbour News & Guide.		Completed/ongoing. Evolved into Harbour Life.
12.2	Deploy volunteer photographers.		Completed/ongoing.
12.3	Deploy leaflet volunteers.		Completed. No longer publishing leaflets.
12.4	Guided walks programme (like 9.6).		Completed. Guided Walks stopped with the retirement of the Communities Officer in March 2022.
12.5	Deploy other volunteers.		Completed/ongoing. E.g., <i>Solar Heritage</i> talks.
12.6	Publish regular newsletters.		Completed. Harbour CHIRP has stopped. Evolved into 12.1.
12.7	Deliver outreach talks.		Completed/ongoing. Still do some, but number has reduced since Communities Officer retired.
12.8	Raise awareness of wildlife names.		Need to do more in this area.
12.9	Maintain interpretation panels and information boards.		Scheduled to be replaced when AONB rebranding is confirmed.
12.10	Manage sites owned by CHT.		Completed/ongoing.
12.11	Manage other sites.		Completed/ongoing. E.g., North Common, Sandy Point, Gutner Point.
12.12	Organise star-gazing events.		Completed. No events organised since the pandemic.
12.13	Promote all-access wheelchairs at WWE.		Need to more in this area.
12.14	Support Secrets of the Solent project.		Responsibility of H&IoWWT. Project almost finished.

Policy 13 Prosperous Economy

13.1	New Valuing Chichester Harbour report.		Not yet commenced.
13.2	Maintain facilities for small commercial fishing.		Completed/ongoing. Plans at West Itchenor and Emsworth will be an improvement.
13.3	New visitor giving schemes.		Being taken forward by the Friends of Chichester Harbour.
13.4	Upgrade CHC properties so they are more environmentally efficient.		Plans underway for the Harbour Office.

13.5	New corporate sponsorships (like 9.15 and 13.9).		Being taken forward by the Friends of Chichester Harbour.
13.6	Improve visitor welcome in West Itchenor.		Completed/ongoing. Currently seeking permissions and consents.
13.7	Hold CHC Open Days.		Completed. No Open Days held since the pandemic.
13.8	Investigate new car park at Dell Quay.		Completed/ongoing. Community meeting in December 2022.
13.9	New corporate days out (like 9.15 and 13.5).		Investigated, but no capacity to do more at present.
13.10	Increase CHC presence in Emsworth.		Completed/ongoing. Will consider a new premises if the right one becomes available.
13.11	Continue CHOPI.		Completed. Responsibility of Sussex IFCA. Has evolved into CHaPRoN.
13.12	Maintain boat building heritage through planning system (like 1.10 and 2.1)		Completed/ongoing.
13.13	Promote Bait Digging Code of Conduct.		Completed, but remains an issue.
13.14	Determine fish stocks.		Completed/ongoing. Return of the Terns.
13.15	Compliance with fishery regulations.		Responsibility of Sussex IFCA and LAs (i.e., shellfish gathering).
13.16	Support local businesses and tourism associations.		Little work in this area, mainly through Harbour Life.
13.17	New Destination Management Plan for Chichester Harbour.		Not yet commenced. Change of market with the pandemic saw greater pressures at some locations in the short term.
13.18	Encourage new apprenticeships.		Completed/ongoing. CHC host an apprentice.

Policy 14 Marine Litter Pollution

14.1	Deploy Harbour Watch volunteers (like 14.3).		Completed/ongoing.
14.2	Encourage fishing industry to dispose of nets and equipment properly.		Responsibility of Sussex IFCA.
14.3	Litter pick fishing nets and equipment (like 14.1).		Harbour Watchers are picking-up litter.
14.4	Support research into microplastics.		Working with the University of Brighton and the RedPol project.
14.5	Reduce waste and promote recycling.		CHC reviewing its own operation with new Green Team.
14.6	Raise awareness of plastic pollution.		Completed/ongoing. Successful Symposium held in 2019.
14.7	Stop Chinese lanterns and similar items from being used.		Completed/ongoing. No reports since 2019.
14.8	Eliminate single use plastics.		Work in progress. New legislation will help.
14.9	Remove fly tipping.		Responsibility of the LAs, unless on private land.

Policy 15 Historic Environment

15.1	Continue CHHPs.		Heritage Partnership meeting twice per year.
15.2	Continue <i>Terror</i> .		Being taken forward by the Friends of Chichester Harbour and EYH. Lease renewed.
15.3	Conserve WWII pillboxes.		Work Parties have taken place.
15.4	Monitor Listed Buildings and Scheduled Monuments.		Responsibility of LAs and Historic England.
15.5	Continue archaeological fieldwork.		Responsibility of CDAS.
15.6	Support displays at Emsworth Museum and Fishbourne Roman Place.		Completed/ongoing.
15.7	Link-up with findings outside of the AONB.		Ongoing. Little work during pandemic.
15.8	New surveys were needed (e.g., coastal change).		Responsibility of the LAs.
15.9	Use of new technology (e.g., LiDAR).		Completed/ongoing.
15.10	Search for a Roman site on Thorney Island.		No evidence found yet.
15.11	Condition Assessment Programme.		Completed/ongoing. Responsibility of the LAs.
15.12	Encourage new heritage volunteers.		Completed/ongoing.
15.13	Publish articles on heritage.		Completed/ongoing.
15.14	Use social media to engage people with the historic environment.		Not yet commenced.
15.15	Keep HER up-to-date.		Responsibility of the LAs.

3.0 Officer Comments

3.1 Although there is a little duplication in places (as indicated), the Management Plan contains 222 actions.

	133
	22
	52
	15
Total	222

3.2 The majority of actions are annual or ongoing activities, that capture the core work of the Conservancy (133).

3.3 22 projects or activities have completed or ceased. This means that the Conservancy and/or its partners are no longer working on these actions, however they have been considered.

3.4 A further 52 actions have commenced and are underway in some form.

3.5 15 actions that were identified at the start of the Plan have not yet commenced, for various reasons (e.g., due to the pandemic, funding constraints, new and emerging priorities, etc.).

3.6 Members are reminded that the Management Plan is a guidance document. Whilst the Conservancy will not be held to account for non-delivery of actions, the Conservancy is expected to show that every effort has been made to try and deliver the spirit of the Plan. It is entirely appropriate that some actions will roll-forward into the next iteration.

4.0 Recommendations

4.1 This paper is 'For Information'.

4.2 Members may, of course, ask questions of the AONB Manager and Director & Harbour Master as appropriate.

Richard Austin
AONB Manager

Richard Craven
Director & Harbour Master



Chichester Harbour Protection and Recovery of Nature



Photo: Paul Adams

Annual Review: 2022/2023

**For Presentation to the Board of the Conservancy
& Advisory Committee**

Draft: 23/04/05

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1. Introduction

Chichester Harbour Protection and Recovery of Nature (CHaPRoN) is a partnership initiative to protect and restore nature within Chichester Harbour. There are 8 organisations represented on the Steering Group. These are:

- Chichester Harbour Conservancy
- The Environment Agency
- Natural England
- Coastal Partners: now representing both Havant Borough Council and Chichester District Council
- RSPB
- Sussex Inshore Fisheries and Conservation Authority (IFCA)
- Southern Water

The partnership was formed to protect, enhance and drive recovery of the natural environment within Chichester Harbour and help create a landscape more resilient to climate change.

In February 2021, Natural England's Condition Review Report downgraded Chichester Harbour Site of Special Scientific Interest (SSSI) to Unfavourable Declining condition. The overall reason for this is due to the continued loss of saltmarsh, the poor quality of saltmarsh and mudflat habitat, and the continued decline of several bird species (wintering and nesting). The report highlighted that despite being a highly designated area, Chichester Harbour had not escaped the gradual deterioration of the natural environment and loss of biodiversity.

<http://publications.naturalengland.org.uk/publication/5535304204419072>

This document is the first Annual Review since CHaPRoN began in December 2020. In planning the reporting period, the Steering Group realised that the CHaPRoN Annual Review did not necessarily need to coincide with the end of financial year. However, due to the forthcoming change in senior personnel at the Conservancy, the Annual Review has been brought forward from June to March this year. The Review will not only provide an update to the Board of the Conservancy on the progress of CHaPRoN, but will also provide a useful resource to the new senior members of staff who will be joining the Conservancy, partners, and the interested general public.

The Review covers the period from January 2022 to March 2023 following the last update to the Conservancy. It begins with a summary of two new partnerships that CHaPRoN has become part of, which bring funding to support delivery across the CHaPRoN initiative. Progress is then reported under the 8 key Focus Areas:

- Coastal Resilience & Saltmarsh Restoration
- Seabed Disturbance & Seagrass Restoration
- Water Quality & Clean Harbour
- Shellfish Populations
- Marine & Farmland Birds
- Landscape & Nature Recovery Network
- Engagement & Connecting People with Nature
- Green Funding

Each of the Focus Areas are progressing at different rates, as would be expected, due in part to the complexities of the subject areas and the deployment of available resource. Significant progress has been made towards the CHaPRoN aims, which demonstrates the value of collaborative and partnership working, aligning interests and enabling greater outcomes to be achieved together.

2. New CHaPRoN Partnerships

2.1 The Solent Seascape Project

CHaPRoN are delighted to have become a named partner in the Solent Seascape Project (SSP), which is a 5-year partnership project across 10 different organisations. The aim of the project is:

“To reconnect the Solent into a functioning seascape by improving the condition, extent, and connectivity of key marine and coastal habitats, using protection and restoration initiatives”.



In October 2022, the partners, led by the Blue Marine Foundation, formally secured \$5m from the Endangered Landscape Programme (ELP) to deliver their Vision for the Solent. The ELP is managed by the Cambridge Conservation Initiative and is funded by Arcadia, a charitable fund of Peter Baldwin and Lisbet Rausing.

The Solent Seascape Project will be the first of its kind in the UK to initiate seascape scale recovery. Its long-term vision is to protect and restore at least 30 per cent of the Solent’s seascape, tipping the balance from a degraded state to a naturally expanding, connected and productive ecosystem. By restoring and connecting the Solent’s seascape, the project will provide nature-based solutions to many of the issues currently affecting it and the people who depend on it, as well as helping to fight the impacts of climate change.

CHaPRoN’s key responsibilities for the SSP are:

- To work with partners to help develop the long-term seascape recovery plan, that supports better management of marine and coastal habitats.
- To deliver the Saltmarsh Restoration BuDs Trial at West Itchenor
- To developing wider saltmarsh restoration initiatives within Chichester Harbour
- To carry out seagrass survey work in the Harbour
- Comms and Engagement – to support the development and delivery of the SSP engagement plan with local communities, raising awareness and catalysing behavioural change
- To carry out monitoring work as required for the SSP
- To support partners with the delivery of restoration initiatives within the Harbour

As part of this project, CHaPRoN has secured funding of £425,989 from the ELP and is requested to secure match funding of a further £143,593. This funding will support delivery of our key responsibilities and provide funding for two new staff posts at the Conservancy to enable delivery on the ground. These posts are:

- i. a Nature Recovery Projects Officer (F/t)
- ii. a Comms & Engagement Officer (P/t).

The project brings together a wealth of experience and expertise from across all partners, including seagrass restoration, native oyster restoration, the monitoring of blue carbon and nutrient fluxes, marine birdlife and comms and engagement strategies. Collectively the project

forms a very powerful and exciting partnership and CHaPRoN looks forward to being part of this over the next 5 years.

2.2 New Partnership with East Head Impact

CHaPRoN is delighted to have formed a new partnership with East Head Impact, a local charitable trust, who have agreed to offer CHaPRoN its full match funding for the Solent Seascape Project. East Head Impact are extremely supportive of the work of both the Solent Seascape Project and CHaPRoN and are pleased to be supporting a local initiative striving to improve the natural environment within Chichester Harbour. We look forward to working with East Head Impact and developing the partnership over the next 5 years.



3. CHaPRoN Progress Updates Across the 8 Focus Areas

3.1 Focus Area: Coastal Resilience & Saltmarsh Restoration

The Coastal Resilience & Saltmarsh Restoration Focus Area is now a well-established working group and has engaged with 30 members representing a range of different stakeholder organisations. The Group is co-chaired by Jackie Mellan (Environment Agency) and Kate Bull (Natural England) and meets on a quarterly basis.

The focus area has 4 key aims within Chichester Harbour. To:

- i. Mitigate and Adapt to Climate Change
- ii. Improve coastal processes
- iii. Achieve sustainable development for the management of the coastline
- iv. Protect and enhance biodiversity, in particular through saltmarsh restoration and creation sites

The Group has established key targets and indicators (See Appendix 1A) and has made steady progress through the delivery of its prioritised plan for 2022/23.

This is a complex area of work, with many challenges and obstacles to overcome, as partners seek to develop new ways of working in response to a changing coastline.

Currently around 65% of the coastline is protected by hard sea defences which are a key contributing factor to the decline in Chichester Harbour SSSI. Within the Harbour, a Flood and Coastal Erosion Risk Management Plan (FCERM) is currently being developed for Hayling Island, but there is no FCERM from Emsworth to East Head, which covers approx. 80% of its coastline. The current North Solent Shoreline Management Plan (SMP) (2010) has the policies of 'Hold The Line', 'Managed Realignment', and 'No public funding available' for different sections of the harbour. The SMP refresh in 2020, identified the approach of 'Hold The Line' as being unsustainable across so many policy units. At the moment, there is no public funding available to carry out a formal SMP Review or develop a FCERM plan as there is limited property or infrastructure at risk of flooding and coastal erosion to justify public funding.

Over the past couple of years, with increasing storm events, sea defences have started to fail at a number of sites around the Harbour as they approach the end of their life expectancy. This is creating opportunity, but also many challenges to overcome and increasing urgency to

work collaboratively to determine the most appropriate and sustainable management of the shoreline.

Against this backdrop, the Coastal Resilience & Saltmarsh Restoration Focus Area has been making significant progress towards delivering against its aims. The following sections of the Review outlines the achievements to date under each of the four aims, and in line with the work areas identified in the Prioritised Plan. It should be noted however, that several work areas contribute to more than one of the key aims. A summary of the Focus Area's key progress indicators can be found in section 4.1.

3.1.1 Aim: Mitigate and Adapt to Climate Change

3.1.1.1 The Hayling Island Coastal Management Strategy

Progress with the new Hayling Island Coastal Management Strategy continues. Coastal Partners carried out the public consultation on the draft strategy between October and December 2022. The draft Strategic Environmental Assessment, Habitat Regulations Assessment and Water Framework Directive assessment are currently being finalised prior to consultation with statutory consultees.

3.1.1.2 Chichester Harbour Proposed Integrated Coastal Environment Management Strategy – Emsworth to East Head

The West Sussex side of Chichester Harbour from Emsworth to East Head does not currently have a Flood and Coastal Erosion Risk Management Strategy in place. This is now the only stretch of coastline within the Coastal Partners boundary that does not have this level of policy. With the downgrading of Chichester Harbour SSSI, several sections of failing sea defences and the conclusions from the Shoreline Management Plan refresh, the need for a strategic integrated environmental coastal management strategy for this section of the coastline has been exacerbated. The existing high level North Solent Shoreline Management Plan policies within the Harbour would significantly benefit from re-assessment as part of this proposed strategy, alongside confirming wider environmental opportunities.

Coastal Partners have been allocated funding from the 23/24 financial year within the Environment Agency's FCERM Capital Investment Programme to start developing this, however this will require further approvals. The next stages will be to confirm a scope for this work and apply to secure funding. This project is expected to require contributions from wider partners.

The proposed Strategy will link into wider and ongoing projects, plans and initiatives, such as the Environment Agency's Strategic Asset Review (see section 3.1.1.6) and the Chichester Harbour Coastal Characterisation Study (see section 3.1.2.1). It may also enable priority actions to be developed on the ground, whilst the strategy is under development.

3.1.1.3 The Shoreline Management Plan Refresh

Coastal Partners are leading on the work arising from the Shoreline Management Plan (SMP) Refresh published in 2020. The first Environment Sub-Group meeting was held in October 2022 and environment actions within the SMP Action Plan were updated. An overview of these

actions was provided to the Coastal Resilience working group in January 2023. These actions included:

- developing the Emsworth to East Head Strategy.
- actions related to bird data and movements.
- continuing to maintain an up-to-date Regional Habitat Compensation balance sheet.
- further studies on coastal squeeze through the Solent Dynamic Coast Project.
- a strategic Solent & South Downs (SSD) coastal grazing marsh study
- further studies for opportunities at Conigar and Warblington.
- actions linked to Habitat Regulations compliance.
- developing and understanding mechanism for Biodiversity Net Gain delivery and Net Zero Carbon.

Coastal Partners are currently preparing scopes for two of the key SMP environmental actions. This includes the Solent Coastal Grazing Marsh study (see section 3.1.4.1), and an update to the Solent Dynamic Coast Project by re-calibrating 'coastal squeeze' calculations across the North Solent region, using latest sea level rise data (UKCP18). These initiatives will help advise / clarify opportunities for intertidal habitat creation across the Solent region and apply some ground truthing (modelling vs. what's actually happening on the ground).

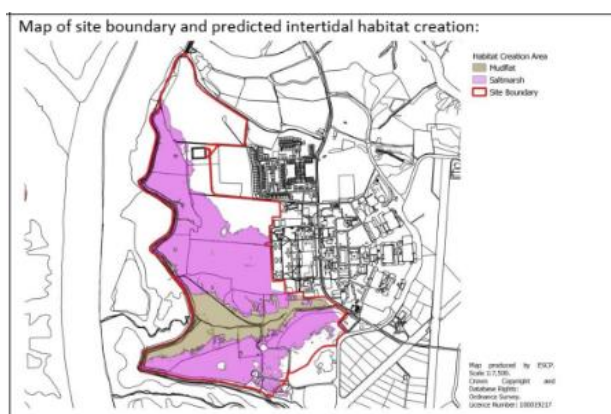
3.1.1.4 Habitat Compensation and Restoration Programme (HCRP)

Coastal Partners have been working with the Environment Agency to continue to progress the Habitat Compensation and Restoration Programme (HCRP) (formally known as the Regional Habitat Compensation Programme). The annual progress report is with DEFRA. They are working with stakeholders and partners to assess and deliver managed realignment at several sites around the Harbour/Solent.

As part of this programme, Coastal Partners continue to investigate opportunities for intertidal habitat creation on the East Coast of Hayling Island linking in with the new Coastal Management Strategy.

The potential HCRP site on the west side of Thorney Island, known as Project Marker, is currently under review. The project is being led by the Environment Agency and discussions continue regarding potential ground contamination levels at the site. The Conservancy sit on the stakeholder group for the project.

The length of coastline under review is approx. 2.5km. The site could potentially provide a total area of 30 hectares of intertidal habitat. However, coastal grazing marsh and semi-improved grassland would be lost.



Location of Project Marker from HCRP (Coastal Partners)

Statutory bodies will decide on the direction of the project at this site in 2023/24.

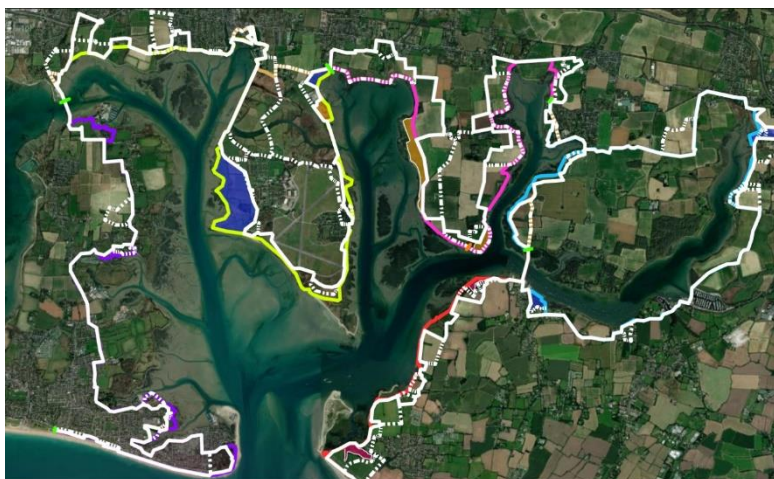
3.1.1.5 England Coastal Path – Footpath Review

The England Coast Path (ECP) that runs around Chichester Harbour provides great recreational and health and well-being benefits to a large number of local people and visitors. However, its current route also creates challenges when considering opportunities to roll back the coastline and create/extend intertidal habitat. Climate change is also placing increasing pressures on the coastal path, rising sea levels combined with increasing storminess, often overtop and flood areas and there are an increasing number of sections impacted by erosion.

Those people who enjoy using their local footpaths are very protective of the route they currently follow. However, as the pressures start to increase on the coastal path, society needs to be thinking more strategically about its future route. It is no longer sustainable to automatically repair hard sea defences that only protect the coastal path, due to the adverse impact on the SSSI and the high, on-going costs required. Often the ECP is sandwiched between a failing sea defence and private land, so natural roll back is not a straightforward option. However, if there is a greater understanding of the potential options for the future coast path, it will help to inform and prioritise habitat restoration efforts and increase awareness of the need for change. By working with local communities a long term sustainable plan that delivers an enhanced visitor experience can be developed.

(a) The England Coast Path – 2100 high level study

To begin this work, the Conservancy, with support from the Environment Agency and Natural England, hosted a second year Environmental Science undergraduate from the University of East Anglia for a summer placement during July and August 2022. During the placement, the student completed a project to explore options for the potential future route of the England Coast Path around the Harbour. His final report focuses on where the ECP could potentially be re-routed to by the year 2100, based on both sea level rise predictions, and the Highest Astronomical Tide +1m. The options for the potential routes for different sections of the ECP have been mapped out, following hedgerows and existing routes as much as possible. The report also highlights sites where the coastal path is under greatest threat due to erosion or sea level rise and will require attention in the near future.



An image showing the fully mapped current ECP and potential 2100 ECP options within Chichester Harbour (by Luke Davenport)

The information provided in this report, emphasises the need to develop an agreed approach to the future management of the ECP and provides a valuable resource to help inform restoration efforts.

(b) ECP Langstone Bridge to Prinsted (SHE2)

Hampshire County Council (HCC) are currently working with Natural England to review the section of path from Langstone Bridge to Prinsted, known as SHE 2. This will take into account Langstone, Warblington and Nore Barn Woods. The report is currently being reviewed by NE before being made public.

HCC and partners are currently looking at options for the footpath between Langstone and Wade Lane where the seawall is failing. Please see Section 3.1.2.5 for further update on this.

(c) Partnership Working for the ECP

The ECP Officers from Hampshire County Council and West Sussex County Council, together with some other Hampshire Access Authorities are currently in discussions as to whether a joint trial partnership to manage the ECP should be established.

The ECP Officers are also currently waiting for the stretch of the ECP from South Hayling to East Head to be approved by the Secretary of State (SoS). Once it has been approved, the ECP Officers will be able to share details of how they plan to engage with local communities and address the challenges they face regarding the ECP. This will provide opportunity to work more collaboratively with CHaPRoN moving forwards.

In the meantime, the ECP Officers are involved in discussions regarding a couple of key sites within the Harbour where the footpath is being directly impacted by erosion and there is strong community interest in the future of the path. The ECP Officers are supportive of working collaboratively to help determine solutions.

3.1.1.6 Environment Agency Strategic Asset Review within Chichester Harbour

The Environment Agency are commencing a strategic review of all the assets they own within Chichester Harbour including sea defences, outfalls and other infrastructure and developing a strategy for their future management. This review will identify whether the EA will continue to manage an asset or whether it will be decommissioned. Decommissioning may include removal, change of management approach or transfer of ownership. This review is due to be completed by Autumn 2023 and the information will feed into a wider integrated coastal management strategy for the Harbour.

3.1.1.7 Tournerbury Farm

In November 2022, the ownership of Tournerbury Farm changed. Chichester Harbour Trust are now the new owners of this 99-acre site.

The acquisition of this site by the Trust is a significant step towards protecting sites to enable future roll back, supporting coastal resilience and intertidal habitat creation.

Location of Tournerbury Farm, East Hayling



The site will continue to be grazed by the previous owners under a Farm Business Tenancy. When this tenancy comes to an end in 2037, the Conservancy will take on a 99-year lease of the site.

The length of coastline at this site is approximately 1.8 km of hard sea defence in varied condition. The whole site has excellent potential for a habitat creation scheme in the future which will support all 4 of the focus area's aims. Although it is some years until the Tenancy agreement ends, feasibility studies, optioneering, planning and consenting processes can begin in advance.

3.1.1.8 Failing Sea Defences

Chichester Harbour Conservancy carried out a review to identify all the locations within the Harbour where sea defences are currently failing. A total of 16 locations were identified at the time, but it is a continually evolving scene.



Map to show location of failing sea defences in Chichester Harbour

Failing defences provide an opportunity to review the management of the coastline, consider its impact on the SSSI, the future pressures of climate change and ascertain whether management approaches need to change and adapt. However, this is not without its challenges as society adapts to sea level rise.

Three key sites are discussed in section 3.1.2 below: Colner Creek, Apuldram and Langstone (see sections 3.1.2.3, 3.1.2.4 and 3.1.2.5).

The situation has exacerbated the need to work collaboratively to develop a consistent approach to dealing with failing sea walls and to review the Conservancy's Sustainable Shoreline Guidelines. The Conservancy will be working with the CHaPRoN partnership to review and update these guidelines this year. Changing approaches will support the Harbour's natural environment to adapt to climate change and feed into the wider coastal strategy.

3.1.2 Aim: Improving Coastal Process

3.1.2.1 Chichester Harbour Coastal Characterisation Study – Environment Agency

To help increase our understanding of the potential opportunities for managed realignment, increasing natural sediment supply and habitat creation within the Harbour, Uwe Dornbusch, an EA Senior Coastal Specialist and member of the CHaPRoN Steering Group, has carried out a detailed study looking at the land use and elevations of the shoreline, existing saltmarsh areas, predicted future elevations, potential to enhance natural coastal processes and habitat creation opportunities. His study comes with several caveats, but his report is an extremely valuable piece of work, alongside other evidence, to help inform future potential restoration and prioritisation of sites.

The study includes a GIS analysis of the elevation of existing saltmarsh areas and how this compares with the available area for intertidal habitat based on elevation and simple astronomical tide levels. It then projects this area analysis into the future, with 1 m of sea level rise, to indicate how sustainable the present intertidal habitat extent is into the future (approx. 2100).

Following on from this, the study carries out a characterisation analysis of the entire Harbour coastline based on its elevation, habitat availability, defence status and land use behind the coastline. This analysis is based on a subjective interpretation of data collected for this piece of work.

The results of the analysis have revealed trend data that can help to inform potential habitat restoration options. These include identifying landward locations suitable for saltmarsh creation, raising the elevation of the intertidal area at appropriate sites to encourage saltmarsh establishment, and the managed realignment of higher ground fringes rather than the traditional low-lying areas. The latter approach looks at options to potentially remove defences at locations with appropriate elevations, which would not cause a flood risk, erosional processes would be very gradual, and land loss would be comparatively small. This approach would support natural coastal processes, increasing sediment supply within the Harbour. The study explores a number of sites within the Harbour suggesting potential opportunities to be further investigated.

3.1.2.2 Sea Defence Review within Chichester Harbour – Royal Haskoning DHV

To further develop the Coastal Characterisation Study completed by Uwe Dornbusch from the EA, CHaPRoN commissioned a supplementary report to review the sea defences within the Harbour, which is due to be completed by 31 March 2023. The study is being carried out by Royal Haskoning DHV and is being commissioned and funded by Natural England.

The main purpose of the work is to explore two of the recommendations that were raised in NE's Condition Review of the SSSI (February 2021). These were the need to:

- Remove barriers to coastal change caused by inappropriate coastal management including coastal squeeze, which are resulting in saltmarsh erosion and the interruption of sediment supply; and

- Identify options for increasing low nutrient sources of sediment into the harbour, particularly mud sediment, if removing the barriers does not restore the sediment supply.

The study will begin by reviewing ownership of seawall assets around the harbour, trying to fill in the gaps where ownership is uncertain. The report will then look in more detail at the land elevations at a number of sites (22 in total) with both existing and +1m HAT of sea level rise. The report will assess at these sites whether:

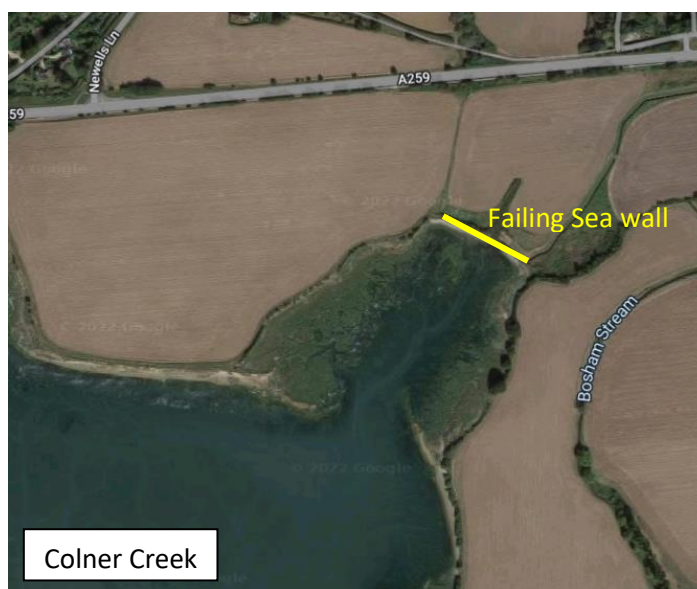
- there is currently enough land at the right elevation to support the creation of saltmarsh
- which areas could benefit from BuDs (Beneficial Use of Dredgings)
- which areas may never be suitable for saltmarsh
- where there might be areas that could enable cliff erosion to bring sediment back into the system
- where it is important to factor in loss of coastal grazing marsh as saltmarsh moves back
- how we deal with any loss of coastal grazing marsh

Once the report is complete, the information it provides will be extremely valuable in helping CHaPRoN to strategically plan restoration efforts, identify any further knowledge/data gaps, and prioritise sites.

3.1.2.3 Colner Creek Sea Defence – Appeal Overturned

The landowner at Colner Creek applied for SSSI consent to repair the failing sea defences at the top of the channel (approx. 0.12km). Natural England refused the SSSI Consent on the 21 September 2021. The landowner appealed against the decision.

On the 28 October 2022, the Secretary of State affirmed Natural England's decision to refuse SSSI consent and the landowner lost the appeal. The reason for this decision is that hard sea defences are having an adverse effect on the integrity of the SSSI site and are known to be one of the key contributing factors causing its decline. As the sea defences are not protecting any property or key infrastructure, just farmland, the benefits of repairing the sea wall do not outweigh the likely impacts on the features of the SSSI that make it of special interest.



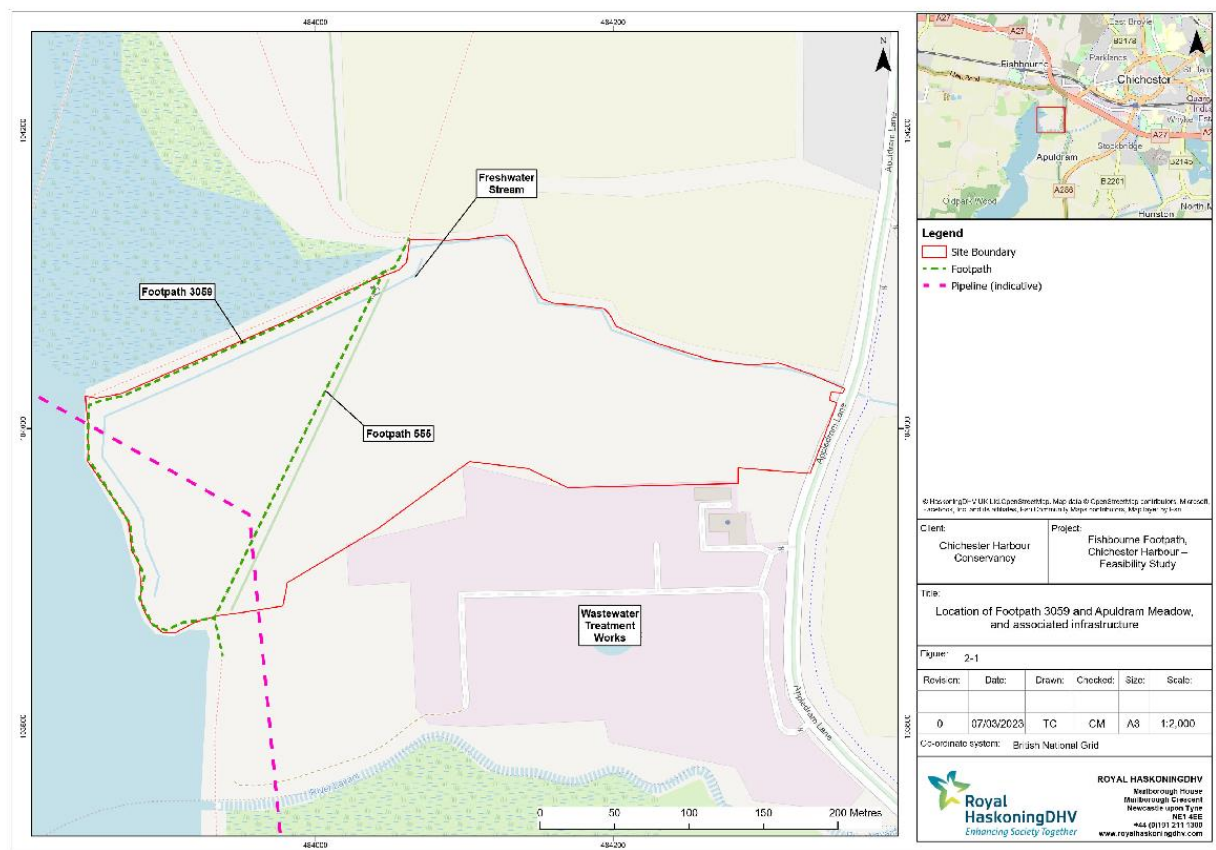
This decision somewhat sets a precedent for future requests for SSSI consent to repair failing sea defences. It will support opportunities to review options for more nature-based solutions to managing the coastline at appropriate locations around the Harbour and facilitate the recovery of the SSSI.

The landowner is currently discussing alternative options with a range of partners.

The site behind the failing sea wall is a potential site for grazing marsh, another priority habitat.

3.1.2.4 Feasibility Study at Apuldrum for future management options and habitat creation – Royal Haskoning DHV

The failing sea wall at the site at Apuldrum owned by the Chichester Harbour Trust, has created an opportunity for CHaPRoN to review the future management of this site, its potential for habitat creation and enhancement, improving coastal processes within the Harbour and recreational benefits. With Natural England unlikely to give SSSI consent for the repairing of the sea wall, and no public funds available, CHaPRoN are keen to explore more nature-based management solutions supporting recovery of the SSSI.



Map to show boundary of the site at Apuldrum owned by Chichester Harbour Trust and location of footpaths – Royal Haskoning DHV

The Footpath 3059 around the edge of the site (approximately 0.4km) has been temporarily closed by the Highways Authority, West Sussex County Council for safety reasons. Chichester Harbour Conservancy has laid a new boardwalk along Footpath 555 to improve accessibility along this route whilst management options are explored. The boardwalk was funded through Chichester District Council and the Friends of Chichester Harbour.

Local residents enjoy the recreational benefits of the site and have expressed concern about the closure of the footpath 3059 and the future of the site. CHaPRoN held a site visit on the 16 November 2022 with representatives from Fishbourne Parish Council and a Senior Coastal specialist from the Environment Agency to discuss the site and listen to local concerns. The Conservancy also discussed the issue at the Apuldram Parish Meeting on the 30 November 2022.

The CHaPRoN partnership developed a specification for an independent Feasibility Study to consider the future options for the site, the pros and cons of these options and outline a recommended stakeholder engagement plan. The specification includes consideration of:

- Baseline conditions of the site and surrounding area
- The implications of sea wall failure and taking no action
- Risks and mitigation to key infrastructure
- Costs to repair and maintain sea wall, although consent unlikely
- The options to enhance, protect and maximise biodiversity, the environmental and recreational benefits.
- Options for managed realignment
- History of the site
- Current value of the land parcel
- Estimated costs of different options

On 21 December 2022, Royal Haskoning DHV were appointed by the Conservancy to prepare and publish the Feasibility Study. The study is now well underway and the target date for completion of the report is 30 April 2023. The study is being funded by the Environment Agency through the Water Environment Improvement Fund (WEIF).

On completion, the findings of the report will be shared with the Conservancy, Fishbourne Parish Council and wider stakeholders. CHaPRoN are keen to engage with local stakeholders to assist with determining the preferred management option for the site moving forwards. The preferred option will then be developed up into a detailed plan for the site.

3.1.2.5 Failing Sea Defence at Langstone along Coastal Footpath



Location of failing sea defence at Langstone along coastal path (length approx.. 33m)

A section of sea wall north of Langstone Mill Pond collapsed 2 or 3 years ago, and public discontentment at the lack of inaction led to the launch of an online petition, which has so far attracted 2,321 signatories. Two Local Councillors convened a working group last year to oversee the way forward. The working group includes the Conservancy, Hampshire County Council, Coastal Partners, and the England Coast Path Officer (hosted by HCC). The Environment Agency and Natural England were invited to attend meetings as well. It became apparent that the issue was greater than the collapsed section of wall, with questions raised about the rest of the length up to Langstone Mill, and the future of the Mill Pond itself. The Conservancy published an Ecological Report into the Mill Pond, to help inform the discussions. The Cllrs are currently speaking to landowners and the working group is considering installing a boardwalk to allow the footpath to rollback.

<https://www.change.org/p/coastal-erosion-at-langstone>

<https://coastalpartners.org.uk/news/damaged-defences-langstone-to-wade-lane/>

3.1.2.6 Ellanore Spit

Discussions regarding a potential shingle recharge at Ellanore Spit have continued during this reporting period. This project was originally part of the Return of the Tern Project (see section 3.5.1). However due to increasing costs and complexities, it was agreed with the Heritage Fund, that this would not go ahead under this project, although the Conservancy would seek the relevant planning and consents. There are currently discussions taking place between stakeholders to the extent and location of a shingle recharge. The main interested parties include the landowner, the leaseholder (Chichester Harbour Trust), the Conservancy, Chichester District Council, Natural England, the Environment Agency and the Marine Management Organisation.

3.1.3 Aim: Achieve Sustainable Development

3.1.3.1 Beneficial Use of Dredged Sediment (BuDs) Trial – West Itchenor

In February 2023, as part of the Solent Seascape Project, the CHaPRoN partnership together with Land & Water, Earth Change and ABPmer, successfully trialled a new technique to place dredged sediment on the upper foreshore at a site at West Itchenor to support saltmarsh restoration. The technique was piloting the innovative Saltmarsh Restoration Dragbox, Victorian technology reinvented by Land & Water to transfer dredged sediment to the upper foreshore and raise the elevation of the mudflats to a suitable level to encourage the regeneration of saltmarsh.



There were many variables to align to enable successful delivery of the project, but after a huge, combined effort from all partners, everything came together to enable delivery. Nearly 1600m³ of dredged sediment has now been placed at site, and the elevation has been raised to sufficient heights to encourage saltmarsh to start to colonise the site. The post-trial LIDAR survey is currently being analysed by ABPmer to determine the exact levels and changes in elevation.

The site will continue to be monitored over the coming months and years. A monitoring plan has been developed to study the following variables that support both the BuDs trial and the wider Solent Seascape Project:

- Sediment Accretion
- Topography
- Benthic invertebrates
- Saltmarsh Vegetation
- Overwintering bird usage
- Water Clarity
- e-DNA (biodiversity)
- Carbon Stock assessment
- Nutrient Fluxes

The data collected from the on-going monitoring will help to evaluate the success of the trial and inform statutory bodies. A 'Lessons Learnt' document is currently being compiled so that partners can learn from the trial and seek to improve and develop the approach.

The project is also part of the Centre of Ecology and Hydrology's 'Living Laboratory' who are supporting us with the monitoring of Carbon and Nitrogen. This feeds into the national work being led by Angus Garbutt to establish the saltmarsh carbon code and nutrient absorption ability of saltmarsh.

The Marine Licence for the site at Itchenor is for 5 years. If the trial is deemed successful by statutory bodies and funding can be secured, we will seek to repeat the process within the licence period.

This trial was the first initiative to be delivered as part of the wider Solent Seascape project, demonstrating that effective partnerships and collaborative working can deliver greater outcomes for conservation and move quickly under the right circumstances.

3.1.3.2 Study for Chichester Harbour SSSI on Saltmarsh Restoration and sediment dispersion – opportunities for Beneficial Use of Dredgings

Further to the BuDs trial at Itchenor, CHaPRoN have commissioned an additional report that will support the Sea Defence Review (3.1.2.2) that is currently underway and build on Uwe Dornbusch's work (3.1.2.1). This study is reviewing opportunities for the Beneficial Use of Dredgings across the Harbour. The study is a Sussex Harbours Priority Place Project, supported by the NRN Seedcorn funding and commissioned by NE.

The project will:

- Review and map of existing sites of dredging activity in Chichester Harbour (primarily from annual maintenance dredging of marinas) and where dredged sediment has been used 'alternatively' in activities rather than depositing it at sea, thus enabling its retention within the harbour system.
- Identify potential receptor sites for beneficial use of dredged sediment to increase the elevation of existing intertidal habitat, making it more suitable for the restoration of saltmarsh
- Capturing these sites into GIS, linking to a set of attributes for success.

The information provided by the report will feed into new and existing conversations with partners and landowners to inform the decision-making process around further BuDs work within Chichester Harbour and assist with the development of the wider coastal strategy. The report is being carried out by Royal Haskoning DHV and is due for completion by 31st March 2023.

3.1.3.3 Local Plans – Policy on coastal setback

Both the Chichester and Havant Local Plans are currently being developed. The draft Local Plan for Chichester was open for consultation between the 3 February and the 17 March 2023. Natural England, EA, the Conservancy and Coastal Partners responded to the draft. Within both authorities, policy on setback and distance from the coast for development, should ensure that any future coastal flooding/natural processes can happen in appropriate areas and negate the need for unsustainable defences.

The new Chichester Plan proposes that all new Harbourside properties should be set-back at least 25 metres from the shore. However, given the projected rate of sea level rise, and the non-dynamic nature of dwellings, this distance will need to be reassessed in future years.

No further update on the Havant Local Plan.

3.1.4 Aim: Protect and Enhance Biodiversity

3.1.4.1 Coastal Grazing Marsh Study

Chichester Harbour contains around 290ha of coastal grazing marsh, another Priority Habitat which is subject to a range of threats including sea-level rise and coastal squeeze, agricultural intensification, and development pressure. As options are explored for rolling back the coastline and creating intertidal habitat, it's also important to consider the future options for coastal grazing marsh within the Harbour. If a habitat creation scheme was to reduce the area of coastal grazing marsh, it would need to be compensated for at another location.



Coastal Grazing Marsh along east-facing coast of north Hayling

To increase our understanding of the future potential, CHaPRoN commissioned a report to provide a feasibility study to identify suitable locations for arable reversion to coastal grazing marsh and creation of coastal grazing marsh at new sites. The report was completed by Royal Haskoning DHV and was funded by the EA and a grant from the Farming in Protected Landscape (FiPL) scheme.

The report identified 10 broad areas containing existing sites with potential for arable reversion. For each of these areas, the study used the current distribution of coastal grazing marsh habitat and identified sites adjacent to it that would be suitable for arable reversion. Furthermore, 3 potential new sites for coastal grazing marsh were identified taking into consideration both current and future conditions.

Alongside this, the report also discusses the current and future mechanisms that are required to deliver the improvements for coastal grazing marsh. The technical elements of delivery are outlined alongside financial and investment considerations, including financial benefits to landowners and options for funding in line with conservation objectives.

The information provided within the report will to help inform restoration efforts and plan strategically across the Harbour. Further research in this field will be required, which is being progressed by Coastal Partners.

3.1.4.2 Solent Coastal Grazing Marsh Study – Coastal Partners

Expanding on the Grazing Marsh study which was completed for Chichester Harbour (see section 3.1.4.1 above), Coastal Partners are currently working with EA and NE to develop the scope for a Solent Coastal Grazing Marsh Study. This will clarify opportunities in the wider Solent area, and is now considered critical to the success of the Habitat Compensation and

Restoration Programme (HCRP), in order to assess and maintain key environmental networks and enable informed decisions on future coastal management.

3.1.4.3 Feasibility Study for Using Dredged Sediment for Saltmarsh Restoration at Langstone

Coastal Partners commissioned a feasibility study to explore the potential of using dredged sediment for a saltmarsh restoration project at Langstone as part of the Langstone FCERM scheme. The final report has been received, and it concluded that large scale restoration within the study area is not currently considered to be feasible. However, the report also recognised the historic importance of the saltmarsh in this area and recommended exploring a pilot study approach.

Due to the specialist nature of this field of work, Coastal Partners are now seeking a second opinion to confirm whether a pilot study is worthwhile, or whether there are other opportunities in the adjacent area. Coastal Partners have secured funding from the Solent Seascape Project towards the delivery of this initiative.

3.1.4.4 The Church Commissioners for England and Wetland Habitat Creation Opportunities

The Church Commissioners for England (CCE) have recently been introduced to the Coastal Resilience Working Group. As a significant landowner in the vicinity of both Chichester Harbour and Pagham Harbour they are keen to engage with stakeholders, particularly in regard to wetland habitat creation schemes. It should however be noted that the CCE land is leased to farming tenants who will need to be a working stakeholder in exploring opportunities. CCE are one of the Blue Recovery Leaders amongst the Wildfowl and Wetland Trust (WWT) and have significant contacts who may be able to assist the work of the Coastal Resilience Working Group, including with regard to funding. A number of meetings have been held to date with the Chichester Harbour Conservancy, WWT, Land & Water and Earth Change to start to explore interests. A site visit took place on Monday 23rd January 2023 to visit sites at West Chidham, Apuldram, Chichester Marina reed beds and Sidlesham/Pagham.

3.2 Focus Area: Seabed Disturbance & Seagrass Restoration

The Seabed Disturbance & Seagrass Restoration Focus Group consists of representatives from Chichester Harbour Conservancy, Natural England, Environment Agency, University of Brighton and Sussex IFCA. The Group currently meets on an occasional, ad hoc basis.

A Prioritised Plan has been developed for this Focus Area (see Appendix 2A) together with a Key Targets and Indicators document (see Appendix 2B). Important groundwork has been achieved to enable progress in this area, but further work needs to be done to enable measurements against the key indicators for this focus area.

3.2.1 Data Collation and Research Analysis

All known existing data on seagrass extent, condition and related research has been collated. The most recent seagrass surveys within the Harbour were carried out by the Hampshire and Isle of Wight Wildlife Trust (HIWWT) from 2016-2018 and some small scale localised mapping by Fathom Ecology. The routine Water Framework Directive (WFD) monitoring on macroalgal weed carried out by the Environment Agency identified some co-ordinates where seagrass has been observed in unmapped areas. A PhD student called Natalie Huckle has carried out a literature review as part of her initial research for her project. As part of the EA's ReMeMaRe (Restoring Meadows, Marsh and Reefs) project, seagrass potential maps have also been generated, but further ground truthing needs to be carried out.

3.2.2 Solent Seagrass Working Group

CHaPRoN is now represented on the Solent Seagrass Working Group, to build relationships and learn from the experts in the field of seagrass restoration. The group meets monthly, and members represent organisations from the Solent, Plymouth and Wales who are involved in seagrass initiatives. It has proven extremely valuable in learning about previous trials and methodologies, successes and failures, licencing processes, and engagement initiatives. In April, the Conservancy will attend a Seagrass Monitoring Workshop run by the HIWWT to learn the standard, agreed techniques and methodology for monitoring.

3.2.3 Visit to Langstone Harbour Seagrass Restoration trials

In May 2022, the Conservancy visited the seagrass trials in Langstone Harbour with the HIWWT to find out more about the techniques they have been trialling and the challenges they have faced. Levels of macroalgae weed smothering the trial sites continued to be an issue, but there were signs of the seed bags starting to germinate.



Visiting the Seagrass Trials at Langstone with the HIWWT



(i) On the mudflats checking the trial sites; (ii) Macroalgal weed; (ii) Seagrass

3.2.4 PhD: Investigating the causes of environmental degradation in coastal ecosystems and evaluating restoration potential.

Natalie Huckle, a PhD student from Brighton University is conducting a 3-year research project within Chichester Harbour, into the causes of environmental degradation in coastal ecosystems and evaluating restoration potential. The PhD is joint funded by the Conservancy and the Manor of Bosham and will increase our understanding of the pressures on the Harbour's coastal habitats and help inform suitability of potential restoration sites.

Her research is focusing on contaminants within the Harbour, particularly within the sediment of seagrass beds and accumulation in the tissue of shellfish populations. Natalie is also utilising citizen science to support her research and engaging with the Friends of Chichester Harbour for volunteers. Her work therefore spreads across three of our CHaPRoN Focus Areas.

Following her initial stakeholder engagement, literature review, data collection and analysis, Natalie has been developing and refining her laboratory methods to use for analysing her field samples. These include analysis of dissolved inorganic nitrogen in water samples, sediment trace element analysis, particle size analysis, organic content in sediment and genomic analysis of microbial community. Natalie has also been exploring techniques for analysing pharmaceutical accumulation in the tissue of shellfish.

Natalie has begun her fieldwork. She has surveyed 7 sites for suitability, accessibility and health and safety for sediment sampling. She has carried out a pilot study at 2 sites using a peat corer to ascertain depth of sediment contamination. Wider sampling collection will commence at the end of March with the support of volunteers.

Furthermore, Natalie has collected *Crassostrea Gigas* (Pacific Oysters) from 3 sites ready for tissue analysis. She has placed caged *Mytilus edulis* (Blue Mussel) at 4 sites for 7-days in the field. These too have now been collected for analysis.

The results of her analysis work will be of interest to many organisations.

3.2.5 Dwarf Seagrass Trial – Fathom Ecology

Fathom Ecology have secured funding from the Solent Forum's Natural Environment Group towards a dwarf seagrass (*Zostera noltei*) trial within Chichester Harbour. Initial discussions have taken place with CHC, NE and HIWWT regarding the approach for the project.

A number of sites will be sampled and analysed to determine an appropriate location to carry out the trial. This is most likely to be along the east coast of Hayling Island. Fathom Ecology is currently studying the sites where the intertidal area is owned by Chichester Harbour Conservancy.

If a suitable site with favourable conditions can be found, the trial will test 3 different restoration techniques in adjacent plots. The current proposal is to test the following approaches:

- i) injecting the seeds into the sediment using a corking gun. This will be trialled on two plots with the seed mix at different densities
- ii) replanting seedlings that are found washed up on the strand line

Each trial plot will be 10x10m². Following deployment, each plot will be monitored for survival, shoot density and epiphyte abundance at monthly intervals to assess the success and efficiency of the different approaches.

The project will require SSSI consent. Site selection, seed and seedling collection will take place this summer, potentially providing an opportunity for volunteers to assist. Deployment will take place in 2024.

3.2.6 EU Life Remedies Seagrass Project - Anchoring and Mooring best practice webinars.

As part of the EU Life Remedies Seagrass Project, the Green Blue have been hosting a short series of webinars on anchoring and mooring best practice. These webinars were run to raise awareness of the value of seagrass, promote best practice for anchoring and mooring boat management and encourage boat users to help protect seagrass beds. CHaPRoN promoted these webinars to encourage attendance by the local sailing community.

3.3 Focus Area: Water Quality & Clean Harbour

This is a multi-pronged area of work, with many different factors impacting on water quality. A number of initiatives are already underway and being delivered by partners. Some of these initiatives are summarised within this section.

The first meeting to formally progress this focus area as part of the CHaPRoN initiative was held in November 2022. This was a workshop held at Eames Farm and more details can be found in section 3.3.9.

Further work is required to clarify the role of this focus area, its objectives, targets and measures.

3.3.1 Project RedPol – Reduction of Pollution by endocrine disrupting compounds at source.

The aim of the REDPOL project (an Interreg funded project) is to develop innovative tools that can determine whether chemical pollutants in the environment interfere with the endocrine systems of wildlife. These pollutants are known as endocrine

disruptors. They can interfere with endocrine (or hormonal) systems in humans, causing cancerous tumours, birth defects and other developmental disorders, as well as impacting the wider environment. Endocrine disruptors can cause reproductive, developmental and behavioural problems in wildlife and plant populations, leading to an imbalance in environmental health. Chichester Harbour Conservancy has been continuing to support the



work of the various research scientists. The project is now drawing to a close and is due to end in June 2023.

3.3.1.1 RedPol Symposium at Chichester Yacht Club

On the 6th October 2022, the Conservancy hosted a Symposium on Endocrine Disruptors in the English Channel, at Chichester Yacht Club. The symposium drew together the findings of the RedPol research together with closely related research from other universities and organisations, to further understand the issues, identify gaps in knowledge and start to embark on the journey to solutions.

The event was chaired by Lucy Seigel a journalist, broadcaster and environmentalist and was attended by a number of senior figures from academia, regulation, utilities and wider Harbour community.

3.3.1.2 Final RedPol Funded Research within Chichester Harbour

As the project comes to a close this year, some remaining RedPol funding is being used to support some further research work within Chichester Harbour and collect scientific data to inform the 'State of the Natural Environment'. The work is being lead by the PhD student Natalie Huckle, alongside her PhD research, and with support from the Conservancy.

The following research will be carried out:

- Placing mussel cages at 3 further locations for 7 days and subsequent LC-MS tissue analysis for presence of 6 different EDCs.
- Faecal indicator analysis of water undertaken at deployment and collection of mussel cages as indicator of recent pollution events (to be aligned with Combined Sewers Overflows (CSO) release data).
- Benthic mollusc diversity analysis at same locations within the harbour being undertaken.
- eDNA analysis of water at same locations being undertaken.
- Microbial community analysis of water at same locations being undertaken.

The Conservancy assisting with collecting eDNA samples



The data and information generated from this research will not only add to the findings from the RedPol project, but also support CHaPRoN in understanding the pressures on our coastal ecosystems.

3.3.2 PhD: Study into nutrient and faecal contamination and source apportionment across the harbours

Southern Water are funding another PhD with Brighton University to focus on nutrient levels, faecal and microbial analysis, and source apportionment across the 3 Harbours – Langstone, Chichester and Pagham. The outcomes of this research will be of great interest.

3.3.3 Environment Agency – Real Time Water Quality Monitoring at Dell Quay

Further to the research carried out by the CHASM project (Crustaceans, Habitat and Sediment Movement) whereby very low levels of dissolved oxygen were found in the Fishburne Channel outside Chichester Marina, the Environment Agency have set up a sonde unit at Dell Quay to record real time water quality data. The sonde will measure temperature, dissolved oxygen levels, salinity, chlorophyll and turbidity. The information gathered by the sonde unit is relayed via a telemetry unit and satellite to the Environment Agency offices.

CHaPRoN will look forward to receiving further information regarding the data collected at this site. It will be very valuable to understand how the data compares to that collected outside Chichester Marina. The data analysis will help to inform whether the conditions outside Chichester Marina were unusual, or if similar conditions prevail in another area of the channel.

3.3.4 Abandoned Boats Project – University of Brighton

The University of Brighton (UoB) have secured funding for a project to raise awareness of abandoned boats and the impact they have on the natural environment.

Fibreglass boats have, for the past sixty years, provided an affordable and durable means for small scale commercial fishers, and professional sailors, to secure their livelihoods and enjoy recreational practices across the globe. As these boats age and decay they release toxic microfibres including glass reinforced plastics (GRPs) into the aquatic environments within which they are moored. These toxins inhibit marine life and intractably embed themselves in human/animal soft tissue if ingested. Boat abandonment and disposal at sea through scuttling is a route often taken by some boat owners in the UK and elsewhere, mostly due to the lack of legislation around boat disposal/recycling. This project will evidence these practices in order to secure reliable data.

The aims of the research are:

1. To capture the differing perspectives from local community actors with regards to ameliorating end-of-life and abandoned fibreglass boat littering.
2. To enable local community actors to evidence incidences of marine pollution within aquatic environments.
3. To support local community actors to communicate their data findings in a range of media.
4. To develop a range of policy recommendations and action points from a community perspective targeted at individual sailors and sailing organisations, governance practitioners and the boating industry.

To support their research, UoB will be using citizen scientists to help gather the data and will be engaging with the Friends of Chichester Harbour. They will be running three workshops for volunteers on water quality testing, photography and blog writing to enable them to support the evidence collection. They also have 6 x £100 bursaries to award to local schools or community groups to engage with the project and raise awareness amongst young people.

The Conservancy are facilitating the delivery of this project and are interested in the outcomes.

3.3.5 Overview of Solent Eutrophication and Recovery Report – Environment Agency

Further to discussions between the Environment Agency and Natural England, the Solent and South Downs Marine Team within the Environment Agency, have now released their report on eutrophication and recovery within the Solent. This has been shared with the Chichester Water Quality Group and will be published on the Solent Forum website

The data collected by the Marine Team over the last 20 years, as part of the requirements under the Water Framework Directive (WFD), shows that as a result of reductions of Nitrogen entering the waterways, we are now seeing reduced amounts of green macroalgae in several Solent estuaries, plus other encouraging signs of recovery.

As predicted, it has taken time to see signs of recovery due to biological time lag and the influence of groundwater. Although the amount of macroalgae does vary annually due to environmental factors, EA data confirms that Chichester Harbour demonstrates sustained reductions in macroalgae compared to historic levels of growth. In fact both Chichester and Langstone Harbours, now meet their target classifications of GOOD status for macroalgae under the Water Framework Directive (WFD) which achieves their Natura 2000 eutrophication objective set in 2015.

It is important to recognise this success and that the work that has been taking place over the last 20 years, has helped to shift things in the right direction. The EA regulatory work will continue. However, there are still clearly areas within the Harbour where levels of macroalgae continue to be a concern. In particular, locations near the top of the channels. This indicates that further work still needs to be done to help reduce nutrients. The Environment Agency will be working collaboratively with CHaPRoN to determine how to take this work forwards.



Macroalgal weed – Emsworth Channel

3.3.6 Southern Water's Water Quality Testing Buoys

Southern Water wishes to improve water quality understanding amongst local stakeholders and communities. In Summer 2022, they launched two water quality testing buoys into the sea – one off Tankerton shore and one off Hayling Island. These buoys are currently being used on a 12-month pilot to monitor water quality. Once the data has been calibrated, it will be publicly available online and provide live data.

3.3.7 Southern Water Beachbouy Improvements

Southern Water has listened to feedback from customers and stakeholders regarding their Beachbouy App. They have now improved the functionality so that Beachbouy provides a more accurate indication of whether a release actually impacts the bathing water. This feature uses the location of the outfall, duration of the spill and the tide conditions to determine whether the release impacts the bathing water or not. Details of any spill is still available in the release table.

3.3.8 Southern Water's Clean Rivers and Seas Task Force

Southern Water Clean Rivers and Task Force is a dedicated team that is seeking to significantly reduce the use of Combined Sewers Overflows (CSOs) by 2030. They are piloting six pathfinder projects across the South, that will test solutions to removing or slowing down the level of rainwater entering the sewer network. They will also be building and delivering a regional plan to reduce storm releases between now and 2030, which will include optimisation of existing infrastructure and building bigger infrastructure.

At the same time, they will be raising awareness of what people and local communities themselves can do to help protect water quality. There are several small things that can be done, but collectively they can make a significant difference.

3.3.9 Water Quality Focus Group Workshop November 2022

In November 2022, the first meeting was held with stakeholders to start to determine the role and purpose of this CHaPRoN focus area. It was a workshop held at Eames Farm.

There is a large amount of work that is already being carried out by partners to address water quality and CHaPRoN does not wish to duplicate these efforts. It's important therefore that the role of this focus area adds value and brings stakeholders together to work collaboratively, to achieve greater outcomes that support recovery of the natural environment.

Representatives from Chichester Harbour Conservancy, Environment Agency, Natural England, University of Portsmouth, University of Brighton, Southern Water, Clean Harbours Partnership, Arun and Rothers River Trust and Rampion Consulting attended the workshop.

The objectives of the workshop were:

- To identify what work is already being done
- To identify gaps in existing projects and activities

- To understand areas of interest of stakeholders
- To determine what role the focus group is best placed to take on that will support and enable the healthy functioning of the Harbour's natural environment
- To agree key priorities
- To seek potential opportunities to align interests and develop further partnership working

The workshop generated valuable discussion, and ideas from all stakeholders were collated and reviewed. Three core themes stood out from the feedback which could help inform the role of this focus area and identify where CHaPRoN could add value. These are:

A] Nutrient Levels – further reduction from agricultural sources within the harbour catchments, identifying gaps in catchment-based initiatives.

Exploring opportunities to align interests between partners and the work that is already being done, working more collaboratively to achieve greater outcomes.

B] An Academic Hub – develop a central hub for all academic research both historic and present within Chichester Harbour.

This will bring together past and existing research and help inform the focus of future research, increasing our understanding of the pressures on the Harbour's natural environment. Aligning interests, securing funding and gathering scientific evidence to inform interventions.

C] Comms and Engagement linked to water quality – providing informed and accurate data. Identifying the key messages and stakeholders to engage with. Developing a co-ordinated programme of projects/initiatives to raise awareness, deliver key messages, educate and empower people to help make a difference.

The next step in progressing this focus area is to bring stakeholders together to define the objectives for these work areas, targets and indicators and work in partnership to develop a prioritised plan of action and determine how to drive these areas forward.



CHaPRoN Water Quality Workshop at Eames Farm

3.4 Focus Area: Shellfish Populations

The focus group for this area, currently consists of a small group with representatives from Chichester Harbour Conservancy, Sussex IFCA and University of Brighton.

The focus area was established to seek to increase our understanding as to why the native oyster populations have declined so dramatically within the Harbour, develop initiatives that help to reduce these pressures and explore potential active restoration methods to restore native oyster populations to self-sustaining levels again.

Furthermore, the focus area is seeking to also increase monitoring of other shellfish within the Harbour including cockles and clams, to gather evidence regarding the health, size and population numbers of these species. Through regular monitoring we will be able to identify trends in other shellfish which are an important food source for many wading birds.

3.4.1 Native Oyster Reef – Feasibility Study

As part of the Solent Seascape Project, Blue Marine are taking the lead on oyster restoration work. They have secured funding to carry out a feasibility study to determine whether the conditions are suitable for a native oyster reef within Chichester Harbour. To begin the consultation process, a meeting was held in March to discuss potential sites for a reef within Chichester Harbour and gather local knowledge about the area. Blue Marine will now continue to investigate potential sites with the support of partners.

3.4.2 SxIFCA New Byelaw: Bait-digging and Hand-gathering

Sussex IFCA's new Byelaw for bait-digging and hand-gathering is currently waiting to be approved by Defra. The byelaw will cover the Sussex side of the Harbour and will cover two key management areas:

- Bait digging for angling
- Collection of shellfish for the human food chain

The Byelaw will introduce a system whereby it would restrict the amount of marine flora and fauna that an individual could collect from the intertidal zone to 5kg for personal use. Above this, a permit would be required.

The byelaw will also restrict hand gathering to certain areas, to contain activities and protect the seabed in sensitive locations.

The byelaw will be a starting point, to help manage hand gathering throughout the district, put a framework in place and assist in gathering evidence for the future.

3.4.3 RedPol Research Into the state of shellfish populations

As part of the RedPol project a study is being carried out within the Harbour to analyse benthic mollusc diversity at some locations. This research will be of great value to start to inform and

provide data on the health of wider shellfish populations. For further details on this research please see section 3.3.1.2.

3.4.4 Invasive Non-Native Species (INNS) – Biosecurity measures

The Solent Forum are working with APEM Ltd, Natural England, and the Marine Biological Association to raise awareness of marine invasive species in the Solent and develop actions that can be taken to reduce the likelihood of their introduction and manage them through biosecurity measures.

During March they held free workshops to help raise awareness amongst users and operators in the Solent of what species are already here and what we need to watch for in the future. They also started to discuss how people can develop and action biosecurity measures and what resources they need to achieve this.

The Conservancy attended a workshop to start to learn more about the INNS within the Solent and biosecurity measures. This is an area of work to support and develop with adequate resource.

3.5 Focus Area: Marine & Farmland Birds

This focus area currently consists of a small group of stakeholders, including representatives from Chichester Harbour Conservancy and the RSPB. The group originally met in early 2022 and reviewed the prioritised list of projects and initiatives to support bird habitat.

The ambition for the coming year is to review the stakeholder membership for this focus area and reach out to wider representation, including Bird Aware and the Coastal Partners Environment Team. The Focus Area will then review the list of prioritised projects, align interests, agree targets and measures and work in collaboration to start to develop a pipeline of prioritised projects ready to be delivered once funding can be secured.

However, a number of successful initiatives have continued during this reporting period which supports this focus area.

3.5.1 Return of the Terns Project

In 2021, Friends of Chichester Harbour, in partnership with the Conservancy, secured funding from the Green Recovery Challenge Fund for the Return of the Tern Project. Over the past 18 months, Return of the Tern has delivered a series of projects that will assist the population of little terns and common terns in Chichester Harbour.

A] Shingle recharge capital works

The shingle recharge capital works looked at enhancing the naturally occurring nesting habitat we have in the Harbour. Due to sea level rise and more extreme weather, the vegetated shingle habitat which the terns nest on is often washed over on a high spring tide, resulting in a rapid decline in fledging chicks. Stakes Island, south of Cobnor, was identified as a perfect site for a shingle recharge as it mostly inaccessible to predators and has no public access.



Stakes Island Shingle recharge

Therefore, 500 tonnes of shingle was used to raise the Stakes Island bank to approximately 1 metre above our current highest spring tide height. The work has conducted by Walcon Marine and was completed in October 2022. The shingle has remained in place over the winter and has been used by the winter waders as a high tide roost. As the terns arrive back to the Harbour this Spring, we hope to see how the restored habitat is used.

B] Tern rafts



Tern rafts were first launched on Thorney Island in 2019 and have had a huge impact on the common tern population in the harbour. As part of the project, 5 purpose-built rafts were bought that are double the size of the original rafts and sit higher in the water.

Baby tern on tern raft

The table below shows the number of common terns nesting in the harbour between 2019-2022.

Year	No of rafts	Common tern pairs	Fledged young
2019	1	9	20
2020	2	33	48
2021	3	34	15
2022	8	42	54

C] Small fish survey

The aim of the small fish survey was to increase our understanding of how both nesting and visiting terns in the harbour use the area as a feeding ground. Working in partnership with Sussex IFCA, we conducted 4 surveys at 2 sites in mid-June 2022, which is in line with when terns are feeding their young, and a further 2 surveys in October 2022. The findings of these surveys are being compared to data over the past 12 years. The project has allowed us to purchase all the necessary equipment, which will allow us to repeat the survey ourselves in future years.

Other aspects of the project, includes development of a Nature Recovery Plan for the South Coast Plain and Engagement initiatives. This will be covered in the relevant CHaPRoN Focus Areas.

Return of the Tern Nature Recovery Project – Chichester Harbour AONB

<https://www.youtube.com/watch?v=99j5HEynTRo>

3.5.2 Snowhill Marsh – West Wittering – Habitat Enhancement Scheme

Discussions have taken place over the past year to consider options for a habitat enhancement scheme at Snowhill Marsh, West Wittering. The landowners, West Wittering Estate, and the National Trust are very supportive of the scheme. It will potentially provide alternative habitat for seabirds, away from East Head, which is so heavily used by visitors and dog walkers.

Southern Water are also interested in supporting the development of the scheme as part of their Environmental and Conservation initiatives. They are currently employing a contractor to carry out an initial feasibility study and ecological survey work.

3.5.3 Wildlife Refuge Buoys

The Conservancy are currently piloting some 'Wildlife Refuge Buoys' to protect a sensitive wildlife site along the coast of Hayling and discourage harbour users from getting too close and disturbing the wildlife. Volunteers have been monitoring the site to help assess their effectiveness.

Feedback from the pilot, suggests that the buoys were too far apart for harbour users to appreciate the request to navigate around the area. The location of the buoys will be reviewed this year.

3.6 Focus Area: Landscape & Nature Recovery Network

The National Association of AONB's made 3 nature recovery pledges as part of the Colchester Declaration:

2020 – All AONB's to develop a Nature Recovery Plan

2024 – Ecosystem Services to be incorporated into AONB Management Plans

2030 – at least 200,000ha of SSSIs in AONBs will be in favourable condition

These are ambitious targets, but they help to inform and direct the focus of this CHaPRoN work area.

The NAAONB has recently appointed a National Landscapes Nature Recovery Coordinator who is co-ordinating collaborative sessions and providing support to AONB's with the development of their nature recovery plans.

3.6.1 CHaPRoN – Nature Recovery Plan Workshop

In May 2022, CHaPRoN held a workshop to bring stakeholders together to start discussions regarding the development of a nature recovery plan, not just within Chichester Harbour AONB, but also including strategic wildlife corridors linking the AONB to the wider area including Langstone Harbour, Pagham Harbour & Medmerry and the South Downs National Park.

The workshop was attended by a number of representatives from different stakeholder organisations, including the Conservancy, Chichester District Council, Sussex Local Nature Partnership, Havant Borough Council, Langstone Harbour and Natural England.

At this time, partners were still waiting for further guidelines from Defra on the details of Local Nature Recovery Strategies (LNRs) that were introduced under the Environment Act 2021, including how they were to be delivered and funded. Consequently, representatives from West Sussex County Council and Hampshire County Council were not able to attend. However, the workshop generated useful discussion and a sharing of initiatives between partners, that could feed into a Nature Recovery Plan.

3.6.2 Local Nature Recovery Strategies (LNRs)

On 23 March 2023, Defra published the LNRs Regulations and Statutory Guidance documents. These documents will establish 'the rules' to enable high quality and consistent LNRs to be prepared across England.

Defra intends that the LNRs provide a new system of spatial strategies that will: support efforts to recover nature across England; help planning authorities incorporate nature recovery objectives; support the delivery of Biodiversity Net Gain; and help deliver the Government's national environment targets.

Under the Regulations: *"The responsible authority must take reasonable steps to involve such persons and organisations as appear to the responsible authority to be appropriate in the preparation of its local nature recovery strategy"*.

During the coming year, we will seek to continue to engage with the responsible authorities as we develop our Nature Recovery Plan, enabling the AONB to be a consultee in the development of local LNRs.

3.6.3 Development of the Nature Recovery Plan

As part of the Return of the Tern Project and in support of this area of work, one of the deliverables is to develop a Nature Recovery Plan for the South Coast plain. Our project manager has been developing this area of work. Initially reviewing the outcomes from national pilot projects, reviewing nature recovery documents available from other AONBs, and starting to consider what the Nature Recovery Plan for Chichester Harbour might look like; its purpose, the area it covers, how it will inform nature recovery initiatives, who will engage with the plan, what data is required within the plan, the practicalities of mapping this data and how it could feed into a LNRS. It's important that this work is comprehensive as it will direct, inform and support funding for future nature recovery initiatives. The first draft of the plan will be finalised soon.

3.6.4 Local Plans Update – Protecting the AONB landscape

Chichester District Council consulted on its revised Local Plan between 3 February and 17 March 2023. The Plan can largely be considered as the next iteration of the Preferred Approach consultation of December 2018. The revised Plan includes 300 new dwellings at Bosham on the boundary of the AONB, 300 dwellings at Chidham & Hambrook (exact location to be determined), and 1,050 dwellings at Southbourne (exact location to be determined). The Conservancy has Objected to these allocations, on the grounds of the likely impacts to the character and setting of the AONB, as well as a host of other reasons.

Aside from a few technical corrections, the rest of the Plan featured no real surprises. The proposed wildlife corridors will help with the connectivity between the AONB and the National Park, however there is a sense that the geographical coverage still somewhat lacks ambition.

The Plan cites the Local Nature Recovery Strategy as well, which is a new addition since 2018. There is some discussion taking place nationally as to the planning status of LNRSs. As things stand, they will be used as evidence to inform the preparation of a Local Plan, rather than as a standalone Supplementary Planning Document (SPD). Whilst this will mean LNRSs can be regularly updated, it is a concern that they will not actually inform decision-making, when it comes to real development applications.

There are no further updates on the Havant Local Plan as of time of writing. The last iteration of the Plan did not pass inspection, so it is understood the Authority are working on a revised Plan, taking into account the reasons why it failed.

(see also section 3.1.3.4)

3.6.5 Farming in Protected Landscapes (FiPL)

In April 2022, we successfully appointed a Farming Officer and a Farming Admin Assistant to support the delivery of the Farming in Protected Landscapes scheme within Chichester Harbour AONB.

During this financial year, the FiPL Team have successfully allocated all our FiPL budget for project delivery, totalling £80,440 and all projects are due to be completed on time. The support of the Local Assessment Panel (LAP) has been essential in enabling successful delivery of the scheme.

In total, across the 2 years of FiPL, 23 projects have been approved by the LAP and 19 have been completed. These projects support the 4 FiPL themes of Climate, Nature, People and Place as well as the Chichester Harbour Management Plan. Four of the approved projects are due for completion in Year 3 of the FiPL programme.

The table below provides summary of what all the Year 2 (22/23) projects will be helping to deliver:

Land Managed with Regenerative Farming (ha)	2248
Projects to improve soil quality (no.)	7
Projects to reduce flood risk (no.)	2
Hedgerows planted (metres)	712
Positive management on SSSIs (ha)	1
Habitat improvement for biodiversity (ha)	1298
Habitat connectivity improved (ha)	316.6
Projects delivering educational visits (no.)	3
Projects making landscape more inclusive for visitors (no.)	2
Projects to support public engagement in land management (no.)	5
Other People outcomes (description and quantity of metric)	1
Projects increasing resilience of nature friendly sustainable farm business (no.)	5
Farmers engaged in programme (no.)	13
Farmers who the PL has not engaged with before (no.)	1
New Farm Clusters created (no.)	1
Land managers engaged in programme (no.)	2

The new Farm Cluster that is establishing on the Manhood Peninsula has the potential to really support the programme and the recovery of nature. The FiPL programme granted the cluster some seed money to help establish the group. They are a group of young farmers, passionate about improving the natural environment and supportive of nature-friendly farming techniques. They farm land across the Manhood Peninsula and within the AONB. CHaPRoN looks forward to seeing the cluster grow and working collaboratively to help restore nature.

The Conservancy is delighted that following the success of the FiPL programme across all the protected landscapes, Defra have announced that the FiPL programme will be extended for a further year, up until 2025. Confirmation of budgets for the next two years is pending.

3.6.6 Southern Water Conservation Grant Scheme – 3 Harbours Project

In 2022, Southern Water launched their own Conservation Grant Scheme as part of their 3 Harbours Initiative. They wish to support sustained conservation improvement in the 3 harbours by:

- Reducing the amount of nitrate entering the harbours
- Enhancing and connecting available habitat; and
- Enhancing public rights of way, to improve access and reduce bird disturbance.

Southern Water's Grant Scheme will run over a period of three years (2022 to 2025), providing grants up to £10,000 per applicant, for conservation projects to improve the conservation status of the three harbours. The aim is to award at least five fully funded projects each year although they are keen to support as many projects as the funding allows.

Projects must be delivered within Southern Water's eligibility area, which spans across the 3 harbours – Langstone, Chichester and Pagham.

Each application is being considered on a case-by-case basis by Southern Water and a local stakeholder panel. The Conservancy's FiPL Team are members of the stakeholder panel and supporting the scheme.

The delivery of this scheme in parallel with the FiPL programme has also provided opportunity to secure match funding to support farm projects. Furthermore, by working in collaboration, it provides opportunity to enhance and build on initiatives to support nature recovery.

3.6.7 The 3 Harbours Nature Recovery Strategy & Partnership

In November 2022, the RSPB appointed the 3 Harbours Project Manager (funded by Southern Water) to develop a vision and strategy for nature protection and recovery for Langstone and Pagham Harbours, including identifying projects. This strategy will form part of the wider programme of landscape-scale recovery for the eastern Solent and is intended to complement CHaPRoN. The Project Manager will facilitate the wider partnership, and help develop a pipeline of projects that will particularly focus on coastal and wetland habitats and species.

The Project Manager has set up a Steering Group to assist with the development of the strategy. Four members of the CHaPRoN Steering Group currently sit on the 3 Harbours Steering Group. The work within this initiative will link with the 3 Harbours Technical Working Group and Southern Water's Harbour Summit Group. As the strategy develops members will determine how best to align the two initiatives effectively.

3.6.8 Marina Farm – Thorney Island

In January 2023, Chichester Harbour Trust bought Marina Farm, which is a site directly north of Eames Farm, Thorney Island.

The site has fallen into disrepair and requires a significant amount of clearance. Much of the detail still needs to be worked out, but it could become a special green space for local people to enjoy, especially as a public footpath currently runs through the site. Applications will be made for grant funding to support this work.



Location of Marina Farm and outbuildings to be cleared.



3.6.9 The Queen's Green Canopy Project

Chichester Harbour Conservancy took part in the Queen's Green Canopy Project and were successful with four applications under the Chichester District Council tree scheme. During 2022, a total of **3,165 trees** were planted. The trees were planted with the help from the Friends of Chichester Harbour, volunteer work parties.

Trees were planted in the following locations:

- Itchenor Park Farm, Itchenor
1,465 young trees planted, made up of a mixture of Holly, Scots Pine, Alder, Norway Maple and Hawthorn.
- Ella Farm, West Wittering
95 young trees planted, made up of a mixture of Holly, Scots Pine, Alder, Norway Maple and Hawthorn.
- Lowerhone Farm, Bosham
77 young trees planted, made up of a mixture of Holly, Scots Pine, Alder, Norway Maple and Hawthorn.
- Hammonds Farm, Birdham
117 young trees planted, made up of a mixture of Hazel, Pedunculate oak, Field Maple, Hawthorn and Yew.

Prior to this, as part of the Defra Test Project, the following trees were planted:

- Hone Farm, Bosham - 1411 trees and whips

The total trees planted during 2022 was: 3,165

3.7 Focus Area: Engagement Activities & Connecting People with Nature Focus Area

The stakeholder analysis for CHaPRoN has been completed identifying a wide range of stakeholders that we need to engage with and to varying extent. The Comms & Engagement Strategy has also been developed. The next step is to develop this up into a delivery plan.

The Conservancy are currently advertising for the part-time Comms and Engagement Officer as part of the Solent Seascape Project. This role will support the Comms and Engagement for the SSP, being led by the HIWWT, as well as CHaPRoN initiatives.

3.7.1 CHaPRoN Website

The CHaPRoN website was launched towards the end of November 2022 and received a positive response. We have since posted 11 news items on the site and will continue to keep the website up to date with news and blogs, linking with social media posts.

Statistics on the website usage will be reported in the next Annual Review.

[Chichester Harbour Protection & Recovery of Nature \(chapon.org.uk\)](http://chapon.org.uk)

3.7.2 Return of the Tern Project

This project has worked with the Conservancy Education team to engage with approximately 100 young people. Providing lessons focused on nature recovery and the tern species in the Harbour.

The success of the project has been promoted through a range of channels, including the Friends of Chichester Harbour social media, where one video received 26,000 views. Jessica Vagg, Project Manager, has presented to numerous community groups and been interviewed by local press about the project.



Working with the Youth Rangers – painting model terns

3.7.3 Thorney Island Community Primary: Harbour Wildlife Day –March 2022

Lizzie Hibberd, Education lead for Bird Aware invited the Conservancy to work on a joint Community project to raise awareness of wildlife and habitats among Thorney Island residents

The RSPB and Conservancy had raised concerns about coastal disturbance on the island, in particular the bird colonies at Pilsey Island.

It was hoped that working with the island's school would help to promote understanding of the Harbour habitats and the need to give wildlife, particularly the birdlife, space.

Bird Aware and the Conservancy Education Centre worked together to design a full day of activities for 5 classes at the school.

The children learnt about wetland birds, bird biodiversity, shoreline creatures, food chains and the seal population.

A variety of learning tools and styles were used, with games, art activities and hands on identification of animals and plants.

Feedback from the staff and children was excellent.

The project was a very successful collaboration for the Conservancy and Bird Aware Solent, and the project has led to other partnership work.

3.7.4 BuDs Trial

A Comms and Engagement plan was delivered for the BuDs Trial, engaging with local businesses and communities, successfully raising awareness of the initiative. This included presentations, information flier sent to local communities and businesses, information board along the footpath, 1:1 engagement with members of the public during the works, website update and press releases. Blue Marine are currently developing a short documentary film on the BuDs trial.

3.7.5 Volunteer Engagement Opportunities

Through CHaPRoN we are seeking opportunity for volunteers to become involved in the work of the initiative. In February 2023, Natalie Huckle the PhD student, with the support of the Conservancy, hosted a workshop for the Friends of Chichester Harbour, to talk about her research and to seek volunteers to help with her sample collection. She also promoted the University of Brighton's Abandoned Boats Project, through which there are further opportunities for volunteers to get involved. More than 25 members attended the workshop, indicating the enthusiasm from local people to become involved.

As CHaPRoN evolves, there will be further opportunities for volunteers to get involved and support the conservation work.



Volunteer Workshop at Eames Farm

3.7.6 CHaPRoN Presentations

A number of presentations have been given during this reorting period to local groups and organisations, continuing to raise awareness of CHaPRoN. These include:

- The Bournes Forum
- Southern Water Regional Forum

- Natural England National Marine Advisers
- Chichester Harbour Marina Managers
- The Solent Forum
- Itchenor Sailing Club
- Church Commission England & Wetland & Wildfowl Trust
- Newtown Harbour & Partners IOW
- Students from Kent University
- Students from Portsmouth University

3.8 Focus Area: Green Funding

The focus group for this area of work has not yet been established. However, CHaPRoN has successfully secured the following funding during the reporting period to support the work of the partnership:

Funding Source	Purpose	Total
Green Challenge Recovery Fund	Return of the Tern Project	£202,580.00.
Endangered Landscape Programme	Solent Seascape Project	£425,989
East Head Impact	Solent Seascape Match Funding	£143,593
Environment Agency – Water Environment Improvement Fund (WEIF)	Apuldram Feasibility Study	£20,000
Environment Agency	Coastal Grazing Marsh Study	£12,000
Farming in Protected Landscapes scheme	Coastal Grazing Marsh Study	£3,874
Natural England	Seawall Review	£25,000
NRN Seedcorn funding (NE)	Saltmarsh restoration and sediment dispersion in Chichester Harbour SSSI Report – opportunities for Beneficial Use of Dredgings	£10,000
Chichester Harbour Conservancy	Development of CHaPRoN Website	£4,999
Farming in Protected Landscapes	Delivery of the FiPL Programme 22/23	£120,132.00
TOTAL FUNDING SECURED:		£968,167

Other funding applications that are currently in the pipeline are:

- Dream Fund application led by Blue Marine – this includes funding to secure the match funding for the SSP project. As CHaPRoN has already secured match funding, we have requested for this potential funding to be directed towards restoration initiatives.
- Environment Agency's Capital Investment Programme - Coastal Partners have requested funding to be allocated from this programme to support the development of the Emsworth to East Head Integrated Coastal Management Strategy. Further work is needed to secure this funding, together with match funding.

3.8.1 Metrics for Ecosystem Services

To support the mechanisms for green funding streams, the metrics for ecosystem services need to be defined, agreed, and approved. Work is currently underway nationally to determine the saltmarsh carbon code, which will then hopefully lead to saltmarsh being included in the Greenhouse Gas Inventory. A considerable amount of research is also being carried out into nutrient absorption and other blue carbon ecosystems.

There are a number of pilot studies taking place across the country from which we can learn from. The Natural Environment Investment Readiness Fund (NEIRF), provides grants of up to £100,000 to environmental groups, local authorities, businesses and other organisations to help them develop nature projects to a point where they can attract private investment. A number of projects funded by this initiative are underway, so it would be of great value to take the learning from these projects and develop a project initiative within the Harbour.

To support the metrics work, CHaPRoN will be working with the University of Portsmouth as part of the Solent Seascape Project to gather data and help provide evidence for the ecosystem services provide by coastal habitats. We will also be supporting the Centre of Ecology and Hydrology, who will be monitoring the BuDs trial site to gather data on nutrient absorption capabilities of saltmarsh.

3.8.2 National Carbon Absorption Study

The Environment Agency are undertaking a National Carbon Absorption Strategy study. The aim of the study is to provide an evidence base that carbon offsetting nationally is possible, achievable/deliverable and justifies further investigation. CHaPRoN have proposed some sites in Chichester Harbour for the pilot study (< March 2024) and main programme (2024 – 2034).

3.8.3 Biodiversity Net Gain Update

In February 2023, Defra published further details on Biodiversity Net Gain (BNG) which is a strategy to develop land and contribute to the recovery of nature. It is a way of making sure the habitat for wildlife is in a better state than it was before development.

The biodiversity metrics and calculator is available to calculate the biodiversity net gain of a project or development. The online service for recording BNG and the buying and selling of credits will be available from November 2023.

4 CHaPRoN Key Indicators & Measures

This section of the report contains a summary of the key indicators and measures for each of the CHaPRoN Focus Areas. Each focus area is developing at a different rate, so in some areas the targets and measures still need to be clarified and agreed by stakeholders.

4.1 Coastal Resilience & Saltmarsh Focus Area

NB. The targets and the layout of the Priority Plan for this focus area do not currently align. This needs to be reviewed with the co-chairs.

Mitigation & Adaptation to Climate Change		
Indicator	Measure	Total
Length of coastline where there is a changing attitude towards managing the coastline towards more natural processes	Tournerbury Farm (CHT) = 1.8km Apuldram Site (CHT) = 0.4km Colner Creek = 0.12km Langstone Seawall = 0.03km Project Marker = 2.5km	4.85km
Delivery of HCRP in Harbour	See 1.1.4 On-going Project Marker on Thorney under review	
Key infrastructure with a risk & resilience strategy for climate change in place	Apuldram Feasibility study will start to identify risk to utilities eg high pressure gas main and wwtw in this location	
Strategy & Plan for a sustainable coastal footpath in place	See 1.1.5 . ECP 2100 high level study completed.	
Improving Coastal Processes		
Length of hard sea defence or structures removed/changed to improve natural coastal processes (<i>physical changes</i>)	Project sites under development	0
Volume of sediment retained within the Hbr /brought into the Hbr to improve supply	West Itchnor – BuDs Trial	Approx 1600m ³
No. of sites/area recharged with sediment to support habitat restoration	West Itchenor	1
Achieving Sustainable Development		
<ul style="list-style-type: none"> Area of land acquired by CHaPRoN/ gained landowner support for future NbS initiatives 	Tournerbury Farm (CHT) = 99 acres Apuldram Site (CHT) = 13.5 acres (approx.)	112.5 acres

<ul style="list-style-type: none"> Coastal policies adopted by CDC & HBC Local plans to safeguard land for salt/grazing marsh and policy applied 	Consultation on draft plan for CDC closed on 17 March 23	
<ul style="list-style-type: none"> Licences in place for habitat restoration initiatives 	5 year MMO licence in place for West Itchenor BuDs project	
<ul style="list-style-type: none"> Coastal Concordat in place to streamline regulatory and licencing processes for habitat restoration work 	The Solent Seascape Project will bring partners together to feed into this work.	
Biodiversity & Habitat Enhancement		
<ul style="list-style-type: none"> Condition of SSSI & international sites 	6 yearly reviews. Next SSSI review due 2027	
<ul style="list-style-type: none"> Extent of Saltmarsh/Coastal Grazing Marsh losses/gains 	No data available	
<ul style="list-style-type: none"> No./area of habitat restoration project sites underway (e.g. saltmarsh, coastal grazing marsh, mudflat) 	<ul style="list-style-type: none"> West Itchenor – BuDs - saltmarsh Feasibility study for BuDs saltmarsh restoration at Langstone under review Feasibility study for habitat creation at Apuldrum underway 	1
<ul style="list-style-type: none"> Coastal Demonstration Site established 	To be confirmed	
<ul style="list-style-type: none"> Coastal restoration sites mapped as part of the wider NRN 	No progress - Priority for 23/24 to map sites	

4.2 Seabed Disturbance & Seagrass Restoration Focus Area

Indicator	Measure	Total
Understanding of pressures on seagrass – academic research	PhD: Investigating the causes of environmental degradation in coastal ecosystems and evaluating restoration potential is underway. See item 2.4 for update	1 academic study
Extent of seagrass	Baseline survey to be carried out 2023	
Condition of seagrass	Baseline survey to be carried out 2023	
No. of moorings removed from sensitive sites	0	
Change in boating behaviour	No data currently available	

Number of Seagrass Champions recruited	0	
No. of trial sites for active restoration	Dwarf seagrass trial currently being developed	1
Licences in place for larger scale active restoration	0	

4.3 Water Quality & Clean Harbour

NB. The measures and indicators for this focus area need to be reviewed to align with the agreed purpose and role of this working area. The group has not yet been established to provide data for these indicators.

Indicator	Measure	Total
Changes in policy reducing inputs to harbour.		
Pollution loads entering the Hbr - WFD indicators		
% cover of macroalgal weed – tops of channels		
No. of serious Pollution incidents		
Condition of Shellfish (Bathing) Water - bacteria levels		
Use of pump out stations by boat owners		
No. of boatyards with scrub and capture systems in place		
Area of farmland managed using CSF techniques		
Volume of litter collected by volunteers		
Increase in understanding of contaminant impact on the environment		

4.4 Shellfish Populations

NB. The indicators and measures for native oysters should be reviewed to align with the monitoring for the Solent Seascape Project

Indicator	Measure	Total
Outputs from academic research.	PhD and RedPol research underway. Awaiting outcomes of research analysis.	
Ecological status of benthic invertebrates under WFD	Good	
Native Oysters CPUE (<i>not currently taking place</i>)	<i>Not currently taking place as no fishing due to decline in numbers</i>	
Number of pilot oyster restoration initiatives in the harbour	Blue Marine currently carrying the initial consultation into feasibility study	1
Area of oyster reef (ha)	<i>Oyster beds not currently being monitored due to low numbers</i>	
Biodiversity measures at reefs (eDNA)	<i>No data</i>	
Monitoring of wider shellfish populations (methodology tbc)	<i>No methodology in place yet</i>	
Initiatives in place to reduce impact of boating/fishing/hand gathering on shellfish populations	New Byelaw for bait digging and hand gathering awaiting approval	
No. of marinas/sailing clubs with biosecurity action plans in place	Solent Forum currently working with APEM Ltd, Natural England, and the Marine Biological Assoc to develop biosecurity policies within the Solent, with the support of Marine organisations and businesses.	

4.5 Marine & Farmland Birds

NB. These targets and measures still need to be reviewed by the Focus Area group.

Indicator	Measure	Total
Webs count data	As required for analysis of population trends	
No. of bird habitat restoration projects underway	(i) Return of the Terns – nearly complete (ii) Snowhill Marsh – early days, initial feasibility discussions	2

Area of bird habitat increased/enhanced	(i) 5 more tern rafts (ii) 500 tonnes of shingle on stakes island, raising elevation by 1m	
No. of pairs of breeding Terns & fledglings	42 pairs of common tern 54 fledged young	
Understanding of seabird movement and foraging habitats increased	(i) Small fish survey conducted as part of the Return of the Tern project to help assess food supply for terns	
Change in water -based harbour user behaviour to reduce bird disturbance	(i) Wildlife Refuge Buoys piloted – feedback recommends relocating the position of the buoys to make the area more clearly	
Change in land -based harbour user behaviour to reduce bird disturbance	<i>No data available</i>	
No. and success of volunteer groups established in Hbr through Life on Edge project (RSPB)	No update <i>Due to change in personnel at the RSPB, the discussions regarding this initiative stopped. However, following on from this, Harbour Education worked in partnership with Bird Aware to deliver a project with Thorney Island School last year to raise awareness of the Harbour bird life and reducing disturbance. – see engagement initiatives</i>	

4.6 Landscape & Nature Recovery Network Targets & Measures

Indicator	Measure	Total
Nature Recovery Plan in place	Initial draft currently being finalised	
Area of habitat improvement for biodiversity	FiPL = 1298ha	
Area of habitat improvement for connectivity	FiPL = 316.6ha	
Length of hedgerow planted	FiPL = 712m	
No. of trees planted	CHC = 3,165	
Area of land managed using regenerative farming techniques	FiPL = 2248ha	

No of stakeholders engaged with the Nature Recovery Plan	None to date – waiting for draft plan to be completed	
Number of FiPL projects delivered	2022/23 = 10	
No. of green funding streams in place (CHC)	<i>None</i>	

NB. Would be interesting to also include data form Southern Water's Conservation Scheme

4.7 Engagement Activities Focus Area Indicators & Measures

NB. These indicators and measures should be reviewed to align with the SSP measures

Indicator	Measure	Total
No. of different stakeholders engaged with the natural environment	<i>No data readily available</i>	
No. of engagement initiatives delivered	CHaPRoN website Buds Trial engagement plan RoTT Project engagement plan 10 x presentations	
No. of people engaged in social action for the environment	PhD research: 14 Abandoned boats project: 15 (approx.) FoCH working parties: 357 volunteers	
Change in Environmental attitudes and behaviours	<i>Need to determine how to measure this</i>	
Health and Well-being benefits	<i>Need to determine how to measure this</i>	

5. CHaPRoN Priorities For 23/24

The next CHaPRoN Steering Group Meeting to be held in April 2023, will review this Report and start to determine the priorities for 23/24. To assist with this process, some initial priorities are recommended below, however, the Steering Group will discuss and provide direction moving forwards.

5.1 CHaPRoN Wide Priorities

There are some priorities/considerations that impact across the whole CHaPRoN initiative:

- To review all the indicators and measures across the CHaPRoN initiative. Do we have the right indicators? How easily can the data be collected? Do they align with other initiatives to ease data collection? Do they help to inform the progress of CHaPRoN? Do we have too many? Are key indicators missing? Should we be linking with the 25YEP Indicator Framework?
- Does CHaPRoN wish to align its key target dates with the Environment Improvement Plan 2023? I.e. to set medium term targets for 5 years?
- CHaPRoN is a huge initiative. How do we continue to drive forward all 8 focus areas? Do other members of the Steering Group have capacity to chair one of the Focus Areas? Important to keep the momentum going so that Stakeholders continue to engage.

5.2 Priorities for the Coastal Resilience & Saltmarsh Focus Area 23/34

The Working Group will be meeting on 2nd May to review the Prioritised Plan and agree priorities for 23/24. Some of the key priorities are likely to be:

- Mapping work to combine on all the data and information we have obtained from studies and reports to help inform a wider coastal management strategy.
- Identify the blockers and challenges impacting this area of work and identify solutions
- Prioritising sites for habitat creation opportunity and start to develop project schemes
- Identify the coastal change demonstrate site to support engagement
- Update the Conservancy's Sustainable Shoreline Guidelines
- Continue to develop opportunity for Beneficial Use of Dredged Sediment
- Work collaboratively with ECP officers and other partners to develop Comms and Engagement for the ECP to raise awareness of pressures of climate change and agree solutions for access issues, opportunities and changes to the coastal path.

5.3 Seabed Disturbance and Seagrass Restoration Priorities for 23/24

The priority for this focus area during 23/24, is to carry out the baseline monitoring for seagrass within the Harbour. This includes both extent and condition for intertidal and subtidal seagrass.

Natural England have put in a bid for funding to carry out a Solent wide baseline survey for seagrass this summer. If successful, it will require match funding and partner support to enable delivery. We need to ensure that the methodology and approach is consistent across the Solent for the data to be of value. The data will then become open data to share. The CHaPRoN Seagrass working group will be meeting in April to discuss approach and start to plan the survey work.

5.4 Priorities for the Water Quality and Clean Harbour Focus Area 23/24

The main priority for this focus area is to bring stakeholders together to define the objectives for the three key work areas identified at the workshop in November. Review the benefits mapping work that has been completed for this focus area, agree targets and measures that inform progress and then work collaboratively to develop a delivery plan of action and determine how to resource this work.

5.5 Priorities for the Shellfish Populations Focus Area 23/24

The priorities for this work area during 23/24 will be to:

- continue to support Blue Marine with their work on a native oyster reef within the harbour
- grow the number of stakeholders supporting this group
- agree targets and measures and develop prioritised plan
- learn from the RedPol research being carried out on shellfish within the harbour and increase our understanding of the pressures
- develop methodology for on-going monitoring of wider shellfish populations within the harbour so that we can increase our understanding of the trends and patterns in the numbers, size and health of shellfish populations overtime.

5.6 Marine & Farmland Birds

The priority for this working group is to extend the membership of the group to wider stakeholders. Agree the objectives of the group, targets and measures and work collaboratively to develop a pipeline of projects that will support bird habitat and function in the Harbour.

5.7 Priorities for the Landscape & Nature Recovery Network Focus Area 23/24

Key priorities for this focus area are:

- to continue the development of the Nature Recovery Plan, engaging with stakeholders to help inform the plan and seeking to align with LNRs.
- delivery of the FiPL programme, supporting projects that fulfil the FiPL criteria, support the AONB Management Plan and align with the emerging Nature Recovery Plan
- continue to support Southern Water's Conservation Grant Scheme and identifying opportunity to align interests

- work with the 3 Harbours Steering Group to determine how the 3 Harbours Strategy can complement CHaPRoN and work collaboratively for maximum impact

5.8 Priorities for the Engagement Focus Group for 23/24

There are a number of key priorities for this focus area:

- Develop the Comms and Engagement Delivery Plan for CHaPRoN
- Prioritise stakeholders and deliver engagement initiatives – inc. Harbour Federation & Coastal Footpath
- Develop visual resources to engage the public - what does nature recovery look like?
- Support the Solent Seascape Project and development of the Comms and Engagement Strategy
- Develop and deliver the Comms and Engagement plan for the Apuldram site

5.9 Priorities for the Green Funding Focus Area 23/24

The priorities for this focus area are:

- To bring together interested stakeholders and determine how to take this focus area forward
- To continue to support the Solent Seascape Project with monitoring, to help provide evidence for ecosystem services
- To get ready for BNG. Link with the Nature Recovery Plan to identify locations for nature recovery projects. Engage with landowners to work up BNG credits.

CHICHESTER HARBOUR CONSERVANCY

24 APRIL 2023

FARMING IN PROTECTED LANDSCAPES END OF YEAR REPORT - FOR INFORMATION

1.0 Introduction

- 1.1 The Conservancy is taking part in the Farming in Protected Landscapes (FiPL) grant programme. The programme started in July 2021 and was scheduled to operate until 31 March 2024.
- 1.2 In April 2022, the Conservancy appointed a Farming Officer and a Farming Administration Assistant to oversee the programme.
- 1.3 The Chairman, Cllr Briggs, and the Vice Chairman, Cllr Montyn, represent the Conservancy on the Local Assessment Panel – the decision-making body for the grant applications. The other Panel members are drawn from the farming community, Natural England, and other conservationists.
- 1.4 In total, across the first two years of FiPL, 23 projects have been approved by the LAP and 19 have been completed. 4 existing projects are due to complete in Year 3. This paper primarily focusses on the achievements of Year 2.

2.0 Year 2 in Summary

2.1 Outputs and Outcomes

Chichester Harbour AONB FiPL Year 2	
Land Managed with Regenerative Farming (ha)	2,248
Projects to improve soil quality (no.)	7
Projects to reduce flood risk (no.)	2
Hedgerows planted (metres)	712
Positive management on SSSIs (ha)	1
Habitat improvement for biodiversity (ha)	1,298
Habitat connectivity improved (ha)	316.6
Projects delivering educational visits (no.)	3
Projects making landscape more inclusive for visitors (no.)	2
Projects to support public engagement in land management (no.)	5
Other People outcomes (description and quantity of metric)	1
Projects increasing resilience of nature friendly sustainable farm business (no.)	5
Farmers engaged in programme (no.)	13
Farmers who the PL has not engaged with before (no.)	1
New Farm Clusters created (no.)	1
Land managers engaged in programme (no.)	2

- 2.2. A new Farm Cluster was established on the Manhood Peninsula. The FiPL programme granted the cluster some seed money to help establish the group. The young farmers are aiming to improve the natural environment and are supportive of nature-friendly

farming techniques. They collectively farm the land across the Manhood Peninsula and within the AONB.

Year 2 Projects

Applicant	Area	Grant	Total	%	Description
Hale Farm	Chichester	£14,600	£23,250	60	Purchase a GPS Fertiliser spreader to apply levels of fertilizer more accurately. Reduction of Nitrates runoff into the water courses round the harbour. Only the volume of Nitrates needed by the crop to be applied.
Northney Farm	Hayling Island	£5,425	£6,425	80	Wildlife boxes and educational film, to increase the habitat and nesting opportunities for a range of endangered species such as Kestrels, Swifts and Bats.
Chichester Harbour Conservancy	Chichester Harbour	£1,500	£1,500	100	Hay Rake for wildflower meadows. Raking and collecting of cuttings more effectively and reduce trampling of habitat caused by hand raking.
Osier Dell Manor Farm	Hayling Island	£10,424	£25,500	40	Purchase of a Fertiliser Spreader with new GPS headland management, overlap management and variable rate technology. Greater precision of the application of Phosphorus, Potassium, Sulphur, and Nitrogen. Reduced run-off.
Mapson Farm	Chichester	£19,662	£33,143	CS Rate	712m of native mixed wildlife hedging and 2,327m of stock fencing to protect previously planted native mixed wildlife hedging. New wildlife corridors to increase biodiversity enhance AONB.
Mapson Farm	Chichester	£11,132	£18,554	60	New low disturbance tool bar to enable planting over winter cover crops and winter cereals using existing farm machinery. Will reduce soil disturbance, erosion,

					compaction and leaching through reduced cultivation passes.
Tuppenny Barn	Emsworth	£4,959	£4,959	100	Lighting of polytunnels, two new sheds, and six new wheelbarrows to support a year-round programme of educational delivery and growing.
Cobnor Estate	Cobnor	£1,328	£1,328	CS Rate	Equipment for Wildlife Workshops, 30 wildlife boxes, an owl box camera, Swift calling systems, to show locals how to build their own wildlife boxes, for Swifts, House Martins and Bats.
Itchenor Gate Farm	Chichester	£1,659	£8,955	FETF Rate	GPS Farming Tool which will enable older non-GPS tractors to have autosteer. Precision application of sprays, fertilizer and drilling to a 2cm accuracy. Reduction excess nutrient run-off.
Manhood Cluster Group	Chichester	£9,390	£9,390	100% + CS Rate	Establishment of the Manhood Cluster Group. Specialist farm training, environmental surveys, how to increase biodiversity, carbon sequestration, and nutrient management.
Chichester Harbour Trust	Thorney Island	£361	£450	CS Rate	Wildflower seed for Marina Farm.
Total		£80,440	£133,434		

CS = Countryside Stewardship, FETF = Farming Equipment and Technology Fund

3.0 Looking Ahead

- 3.1 Defra have announced that the FiPL programme will be extended for a further year, up until 31 March 2025 (Year 4). Whilst the Conservancy has received an indicative budget, it has not yet been finalised.

Year 3	Provisional project delivery allocation (£)	£255,062
	Provisional admin max allocation (£)	£13,367
FY 23/24	Provisional advice and guidance max allocation (£)	£22,724
	Total	£291,152
Year 4	Provisional project delivery allocation (£)	£189,060
	Provisional admin max allocation (£)	£25,899
FY 24/25	Provisional advice and guidance max allocation (£)	£44,028
	Total	£258,986

The Conservancy will ask to move a proportion of the Year 4 revenue costs to Year 3, to help cover the costs of running the programme in Year 3. The staff split between Years 3 and 4 will therefore be equal.

- 3.2 Further details on ELMs, the Environmental Land Management Schemes, that will replace FiPL, and other subsidy programmes, remain limited and may not commence under the current Government administration (which may explain the decision to extend FiPL by 12 months).

4.0 Recommendations

- 4.1 This paper is 'For Information'.
- 4.2 Members may, of course, ask questions of the AONB Manager as appropriate.

Richard Austin
AONB Manager

CHICHESTER HARBOUR CONSERVANCY**24 APRIL 2023****REPORT BY THE ENVIRONMENT AGENCY****OVERVIEW OF SOLENT EUTROPHICATION AND RECOVERY****1.0 Background**

- 1.1 A significant cause for concern by the Conservancy over many decades has been in impact of macroalgal weed in Chichester Harbour caused by excessive Nitrates and the damage this causes.
- 1.2 Macroalgal weed caused by excess Nitrates was one of the significant pressures acting on Chichester Harbour highlighted by Natural England in their SSSI assessment
- 1.3 The issue has been a focus for action for many years predominantly with upgrades to the WWTW's and interventions with farmers.
- 1.4 This report completed by the EA in January 2023 demonstrates the improvements of the last 20 years, where we have seen a reduction of 35% in N, and a significant reduction in macroalgal weed and we are beginning to see the benefits, with new growth of seagrass, and an increase in the abundance of seahorses.

2.0 EA Caveat and Comment

- 2.1 As a result of a range of nutrient reduction measures introduced at Wastewater Treatment Works (WwTW) and through changes in agricultural practice over the last 20 years, we are now seeing a reduction in the amount of macroalgae in the estuaries and harbours of the Solent at a waterbody scale. At a feature scale we are still seeing impacts of nutrients on the designated features as described in Natural England's condition assessments, so we recognise there is still much more to do. The report, however provides hope for the future of the Solent and its harbours by demonstrating that investment in nutrient reduction measures can, with time, result in positive changes for the environment.
- 2.1 Groups such as the Harbours Summit, CHaPRoN, Solent Forum, Sussex Marine and Coastal Forum and the Solent Seascape Project present an opportunity to direct more funding and action to support further improvements in the Solent environment to increase resilience and aid nature recovery across its designated sites. The Environment Agency and Natural England will continue to work together with our partners to achieve this recovery. We hope this report gives us all the confidence and reassurance that we can make a difference now and in the future.

3.0 Recommendation

- 3.1 It is recommended that the Conservancy notes this report.

Richard Craven
Director & Harbour Master

Overview of Solent Eutrophication and Recovery



Preface

Report signals hope for the recovery of the Solent

Eutrophication occurs where increased nutrients in the water result in excessive plant growth, seen in the Solent as green macroalgal mats which cover intertidal mudflats, negatively affecting the ecology and the designations.

This report shows, at the larger waterbody scale for the purposes of the Water Framework Directive, a reduction in the amount of macroalgae within the estuaries of the Solent, compared to the last two decades. The report concludes that recovery from eutrophication in parts of the Solent area is well underway. These changes are the result of a range of nutrient reduction measures introduced at wastewater treatment works and through changes in agricultural practice over the last 20 years.

Looking at more local (feature) scale for the purposes of the Habitats Directive we still see the impacts on designated features from nutrients, as featured in Natural England's [condition assessments](#). Within Chichester Harbour, areas of macroalgae are still common at the top reaches of the Harbour arms where there are shallow and sheltered waters being fed by nutrients from local streams.

This report and Natural England's Condition Assessments for Chichester Harbour sites identify the need to continue work to reduce these nutrient inputs further and address the localised areas of macroalgae coverage. However, this report provides hope for the future of the Solent and its harbours by demonstrating that investment in nutrient reduction measures can, with time, result in positive changes for the environment.

Working in partnership with groups such as the Harbours Summit, Chichester Harbour Protection and Recovery of Nature (CHaPRoN), Solent Forum and the Solent Seascape Project presents an opportunity to direct more funding and action to support further improvements in the Solent environment to increase resilience and aid nature recovery across its designated sites. The Environment Agency and Natural England will continue to work together with our partners to achieve this recovery.

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1. Background

Nitrogen enrichment (especially nitrate) in some Solent estuaries has contributed to the excessive growth of green macroalgae on intertidal mudflats (Figure 1) which can have adverse effects on ecology, eg impacts on birds. This process is known as eutrophication.

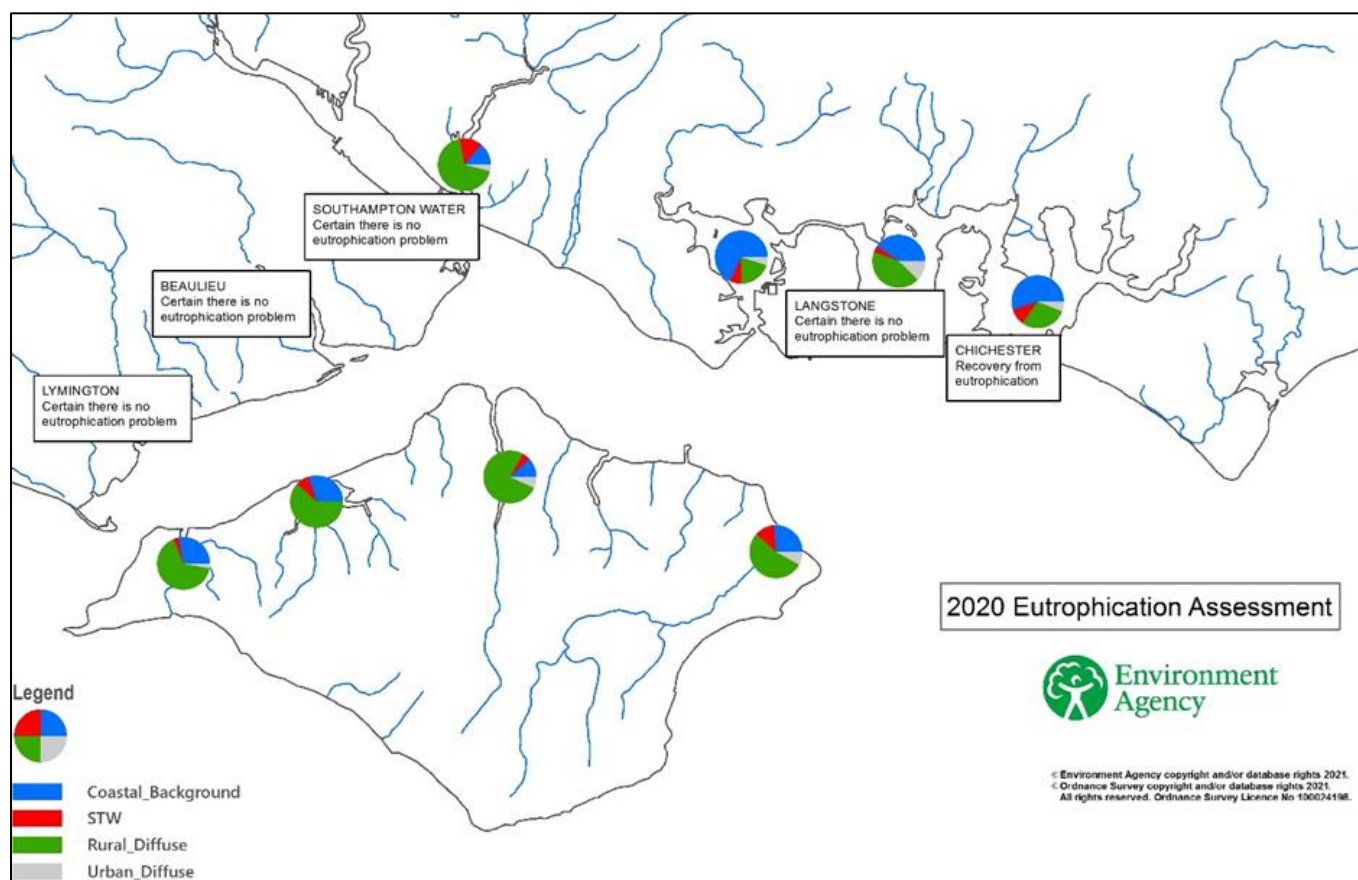
Figure 1 Green macroalgae (Chichester Harbour)



Levels of nitrate in the Solent are not high but they are sufficiently elevated to stimulate plant growth in some locations, adversely affecting the ecology. There are much higher nitrate levels elsewhere around the UK (eg Thames estuary) with no adverse effect on ecology. The Solent does not suffer from problem phytoplankton blooms.

Source apportionment work has confirmed that the main sources of nitrogen (N) to Solent estuaries are diffuse sources from agriculture (on average about 50% N is from agriculture, often via rivers) and point sources from sewage discharges (on average about 10% N is from sewage). The remainder includes coastal background and urban sources. The exact proportions vary between different estuaries. Figure 2 shows the proportion of N sources in estuaries around the Solent and highlights the estuaries where there are no eutrophication impacts at waterbody scale, as levels of macroalgae achieve Good status under the Water Framework Directive (WFD).

Figure 2 Sources of Nitrogen into Solent Estuaries



Notes: STW = Sewage Treatment Works
Boxes show estuaries with no eutrophication impacts, based on the 2020 EA Weight of Evidence Eutrophication Assessment
Where stated 'no eutrophication problem', this is assessed at waterbody scale

2. Nutrient reductions

2.1 Nutrient reduction measures

The Environment Agency has been aware for several decades of eutrophication in some Solent estuaries. Consequently, during this time we have undertaken a series of eutrophication reviews and used regulatory means to reduce nitrogen inputs (see Appendices 1 & 2). These have included putting in place permits that require N reductions from both marine and riverine sewage discharges (via the Urban Waste Water Treatment Directive [UWWTD] and Habitats Directive) and reducing N inputs from agriculture (via the Nitrates Directive, which enabled designation of Nitrate Vulnerable Zones [NVZ] and subsequent actions required by farmers). Figure 3 summarises the designated eutrophic areas in the Solent and the regulatory measures that have been used to reduce N inputs.

Figure 3 Solent designated Sensitive Areas (Eutrophic) and locations of regulatory Nitrogen reductions



Notes: STW = Sewage Treatment Works
The Eastern Yar (Bembridge Harbour) also has a eutrophication designation – it is a Polluted Water (Eutrophic)
Woolston STW improvement (planned for 2014/15) was delayed until 2018

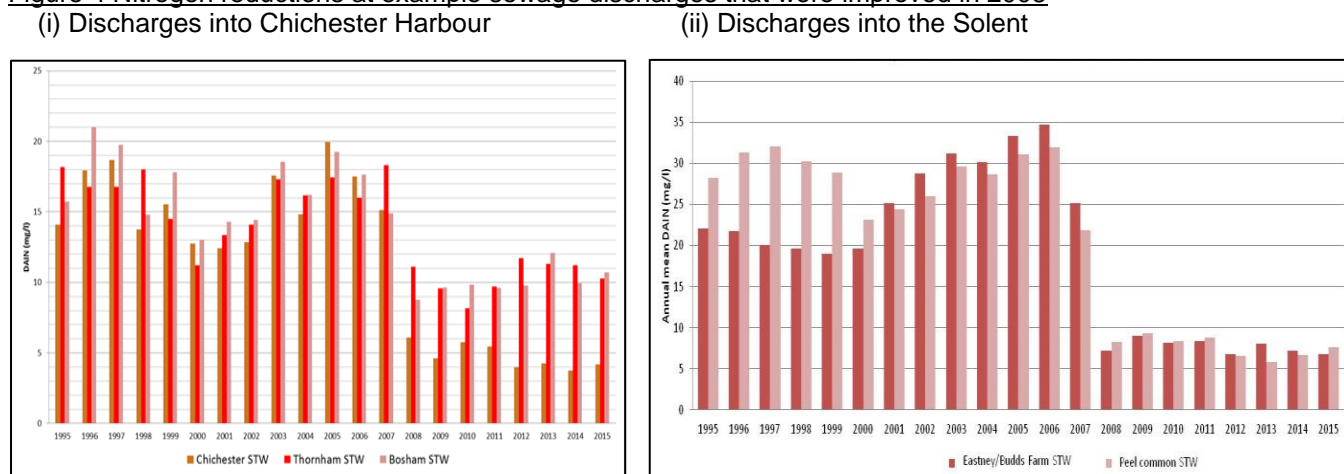
Figure 3 shows that most of the Solent is a designated NVZ, especially those areas that drain to eutrophic waters. The NVZ designations occurred in 2008 so for many years subsequently, landowners in NVZs have had to reduce N inputs to water. A 2015 study by ADAS¹ suggests that as a result of NVZ designations in the Solent area, N inputs from agriculture to Solent estuaries have decreased by 8% on average. Voluntary measures such as Catchment Sensitive Farming and Environmental Stewardship schemes have resulted in additional, smaller reductions.

Figure 3 also shows the 11 sewage treatment works discharges to marine/estuarine waters that have had N reductions via changes to their permits, and the 3 sewage discharges that have been moved out of estuaries (brown lines). These improvements have been delivered between 2001 and 2018, so some have had time to contribute to environmental improvement while others are too recent.

2.2 Nutrient changes from STWs

EA data confirms that where N permits have been put in place, N concentration in the discharge has generally decreased by over half, although this varies with individual STW discharges. Figure 4 shows an example of the decrease in N from some of these discharges. Significant reductions in N loads from STW discharges have occurred throughout the Solent area, despite population growth in the catchments. N permit reductions were based on each STW's 'fair-share' contribution to eutrophication and the permits included a small allowance for development growth up to 'headroom'.

Figure 4 Nitrogen reductions at example sewage discharges that were improved in 2008

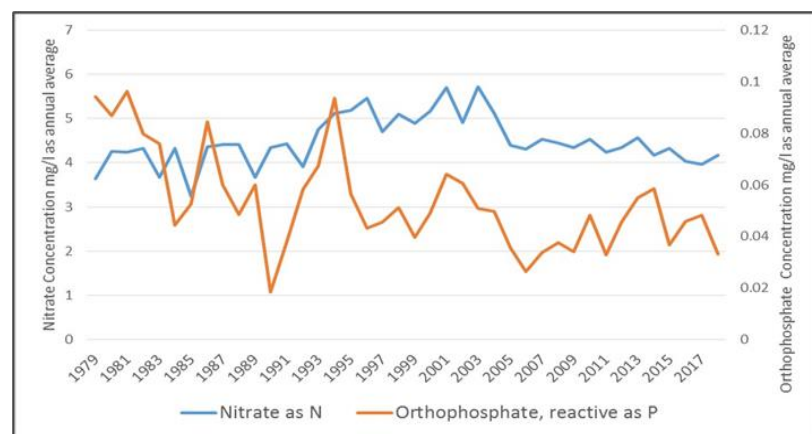


Note: N is expressed as DAIN (Dissolved Available Inorganic Nitrogen) in $\mu\text{g/l}$

2.3 Nutrient changes in rivers and groundwaters

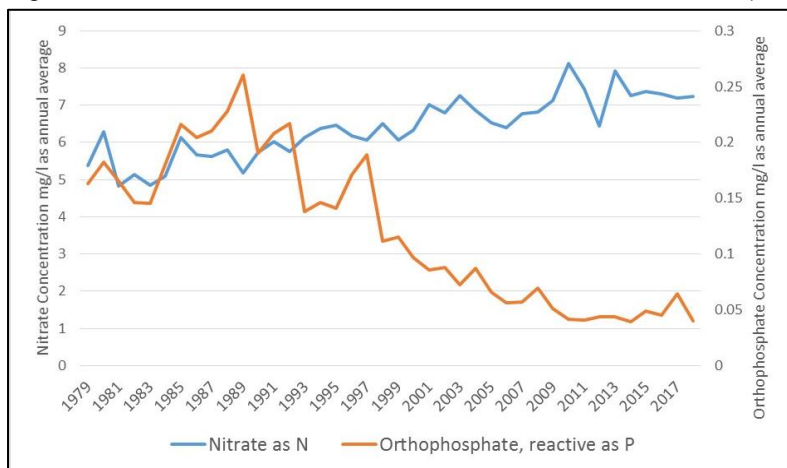
Many Solent rivers are now decreasing in N. In addition, most Solent rivers are decreasing in phosphorus (P), mostly as phosphate, due to improvements at STWs (due to tighter permits) and reductions in P from detergents over many years. (P is also a plant nutrient and is needed for growth; P tends to be the limiting nutrient for plant growth in freshwaters whereas in saline waters N is usually the limiting nutrient). Figure 5 shows slowly reducing concentrations of N in the River Medina since its peak in 2001, along with a general trend of reduced P over a longer period.

Figure 5 Trends in concentrations of N and P in the River Medina (at Shide Weir)



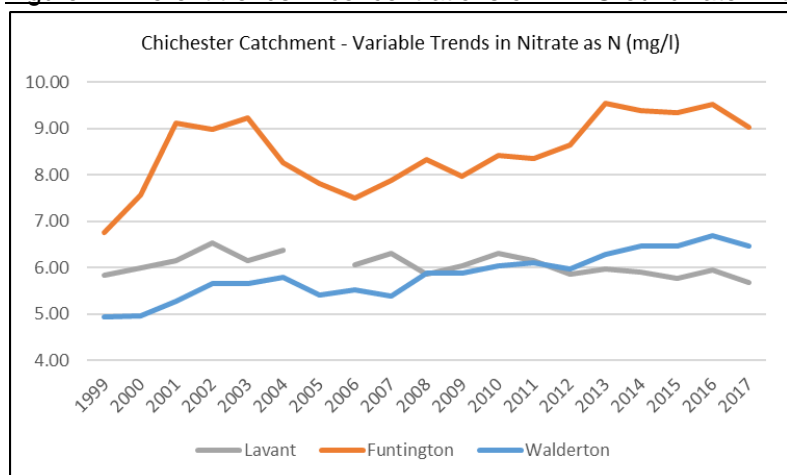
However, some rivers like the Test & Itchen have chalk geology so are strongly fed by groundwater which can 'hold up' historic N for many years, and so N in these rivers is still increasing. Current N concentrations in such rivers reflect historic farming practices. Figure 6 shows N and P concentrations in the River Test where N continues to rise due to the influence of groundwater, but P (which is naturally low in groundwater and not 'held up') is reducing due to improvement actions in the catchment.

Figure 6 Trends in concentrations of N and P in the River Test (at Testwood)



In other groundwater within Solent catchments, N has already started to reduce. For example, in the Chichester catchment, in the relatively young groundwater at Lavant, peak nitrate levels have already occurred and groundwater N levels are now reducing (Figure 7). In the same catchment at Funtington, N is predicted to peak soon (around 2023) then reduce slowly, whereas at Walderton, where much of the groundwater is older, nitrate peaks are still about a decade away.

Figure 7 Different trends in concentrations of N in Groundwater within the Chichester Catchment



In summary, river and groundwater N trends vary throughout the Solent catchments, depending on factors including geology and when improvements came on-line. However, recent evidence from EA studies confirms that overall N loads to Solent estuaries have significantly decreased over the last 20 years, as detailed in the following section.

2.4 Overall decreases in nutrient loads to estuaries

In 2020 the EA undertook modelling work² in Solent estuaries to review eutrophication issues. As part of this work, actual monitored nutrient loads were assessed from two different time periods approximately 20 years apart:

- Baseline (circa 1997-2000, prior to any significant improvement work)
- Present Day (circa 2015-2019)
Note that the precise dates varied between estuaries, as they were chosen to reflect both the timing of improvement works and the available data sets.

This assessment confirmed that there have been significant overall reductions in both N and P loads to Solent estuaries, as summarised in Figures 8 and 9. For example, in Langstone Harbour the N load has decreased by 49% and the P load by 75%. (Langstone Harbour was the earliest site to benefit from nutrient reductions because a direct discharge from STW was transferred outside the estuary and into the Solent in 2001, in addition to tightening the N permit). These load reductions are a result of all the measures that have occurred over a long period in the Solent catchments.

In general P loads to estuaries have decreased more than N because STW are a main source of P and these have been highly regulated, so P (mostly as phosphate) is decreasing in most of the Solent area rivers, as previously

explained. The biggest P decreases are in the estuaries where sewage discharges were diverted out of the estuaries in Langstone Harbour (75% P load decrease), Medina estuary (77%) and Hamble estuary (66%).

In contrast, much of the N load to Solent estuaries comes from diffuse inputs from agriculture which are harder to reduce. In addition, in areas of the Solent that are strongly influenced by N-rich groundwater, rivers may still be rising in N due to historical agricultural inputs; eventually, when younger water starts to come through, N in these rivers will reduce and contribute further to the N load reductions in the estuaries. Nevertheless, overall, over a 20 year period, it is evident that N loads have significantly reduced to all Solent estuaries, despite the influence of groundwater and other factors like development growth in the catchments.

Figure 8 N load reductions to Solent estuaries over approximately 20 years

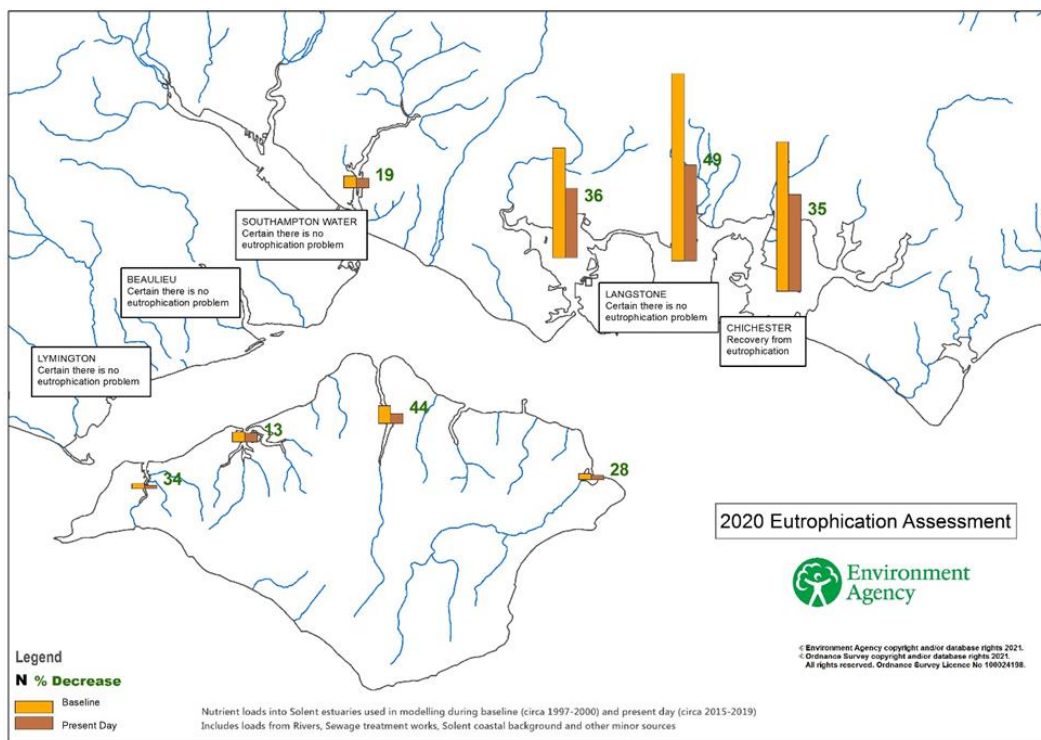
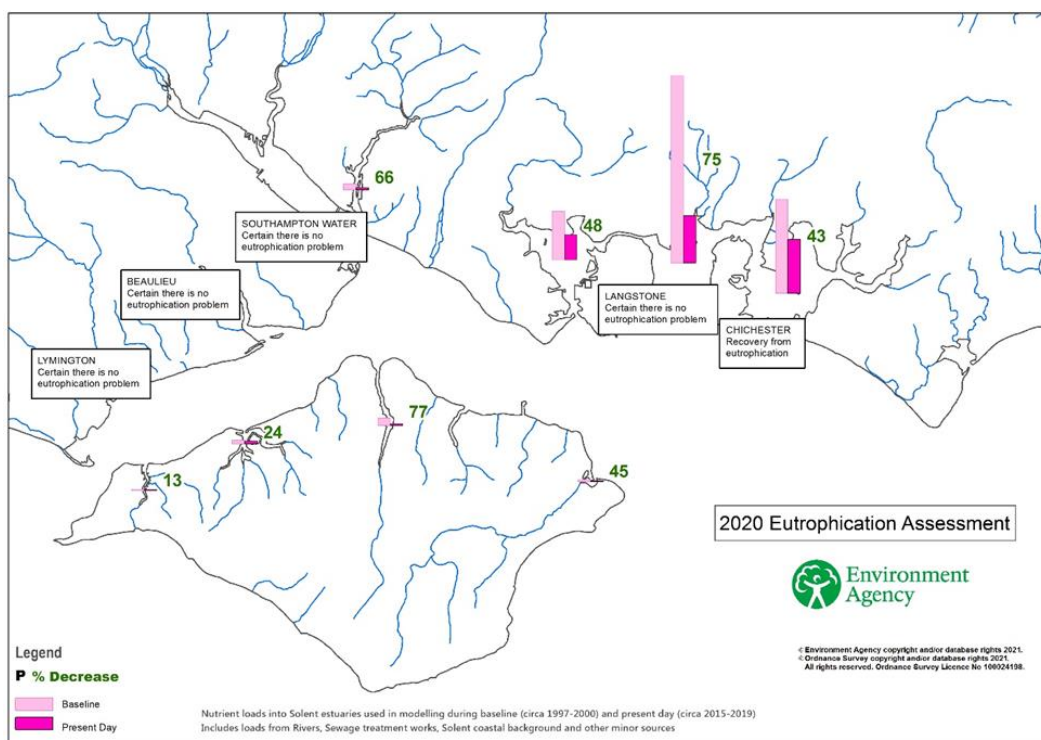


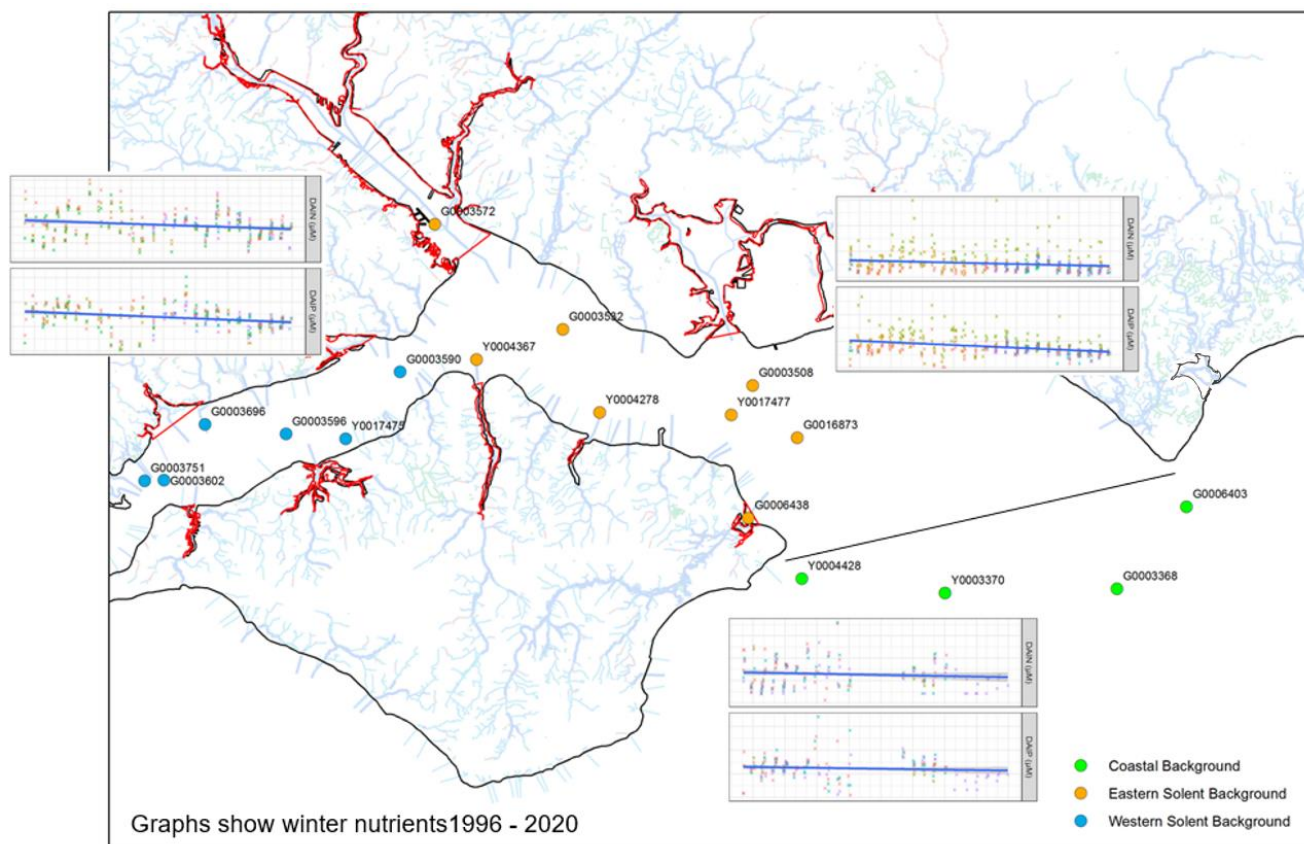
Figure 9 P load reductions to Solent estuaries over approximately 20 years



Notes on Figs 8 & 9: Boxes show estuaries with no eutrophication impacts, based on the 2020 EA Weight of Evidence Eutrophication Assessment. Where stated 'no eutrophication problem', this is assessed at waterbody scale.

There has also been a trend of decreasing nutrients in the Solent itself, as well as in the coastal background water, due to nutrient reductions from many sources. Figure 10 shows the decreasing nutrient trends in these waters over a 15 year period. Note that coastal background nutrients (green dots) are mostly from the English Channel – see Appendix 3 for further explanation.

Figure 10 Reducing nutrient concentrations in the Western Solent, Eastern Solent and Coastal Background water



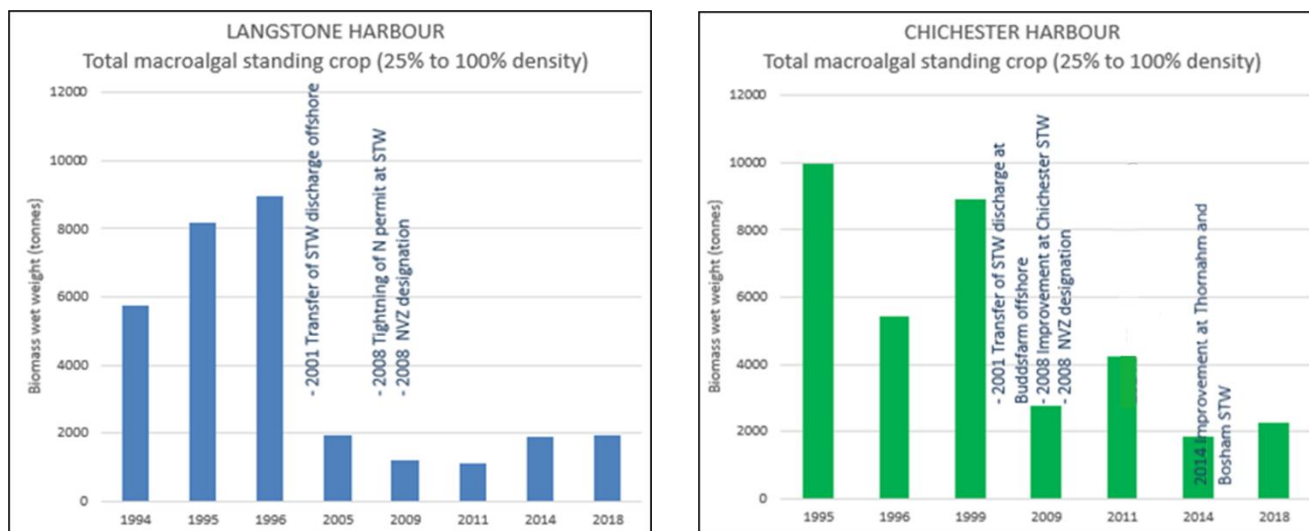
Notes: N is expressed as DAIN (Dissolved Available Inorganic Nitrogen) in μM
P is expressed as DAIP (Dissolved Available Inorganic Phosphorus) in μM

3. Environmental Recovery

As a result of all the reductions in nutrients that have occurred over the last 20 years, we are now seeing reduced amounts of green macroalgae in several Solent estuaries, plus other encouraging signs of recovery. Recovery has taken time due to the influence of groundwater and ecological time lag: the latter is the time it takes a natural system to rebalance and respond following a change.

Figure 11 shows monitoring data illustrating the reduction in macroalgal standing stock in Langstone and Chichester Harbours from 1994/5 to 2018; it also shows the timings of some of the key N reduction measures. Figure 12 shows photographic comparisons illustrating the reduction in macroalgae at fixed monitoring sites in Chichester and Portsmouth Harbours from 2004/2011 to 2019. Note that the amount of macroalgae does vary annually due to environmental factors (eg wet winters increase river flow and flush more nutrients into estuaries which fuel spring growth), but overall the data confirms that these harbours demonstrate sustained reductions in macroalgae compared to historic levels of growth. Indeed, Langstone and Chichester Harbours now meet their target classifications of GOOD status for macroalgae under the Water Framework Directive (WFD) which achieves their Natura 2000 objective set in 2015 (to 'Improve water quality to a level that biological indicators of eutrophication [opportunistic macroalgal and phytoplankton blooms] achieve GOOD WFD overall status'). Natura 2000 objectives that were agreed in 2015 are shown in Appendix 4. Further WFD information and data can be found in the Environment Agency [Catchment Data Explorer](#).

Figure 11 Monitoring data showing reducing macroalgal standing stock in Langstone and Chichester Harbours over time (showing dates of some of the key N reduction measures)



Overall, the Environment Agency uses a ‘weight of evidence approach’ to assess eutrophication in the estuaries at WFD water body scale and following the most recent (2020) assessment we can say that in Langstone Harbour we are certain there is no longer a eutrophication problem and that Chichester Harbour is recovering from eutrophication. Note that macroalgae is still present in these harbours, but, at water body scale, not at problematic levels.

Figure 12 shows photographic illustrations of the improvements in Chichester and Portsmouth Harbours at the same sites over time.

Figure 12 Photos showing reducing macroalgal cover in Chichester and Portsmouth Harbours at fixed monitoring sites

Chichester Harbour at Dell Quay in July 2011 and July 2019



Portsmouth Harbour at Grove Avenue July 2004 and July 2019



Other significant signs of recovery from eutrophication in Solent estuaries, and signs of improved water quality, include the following:

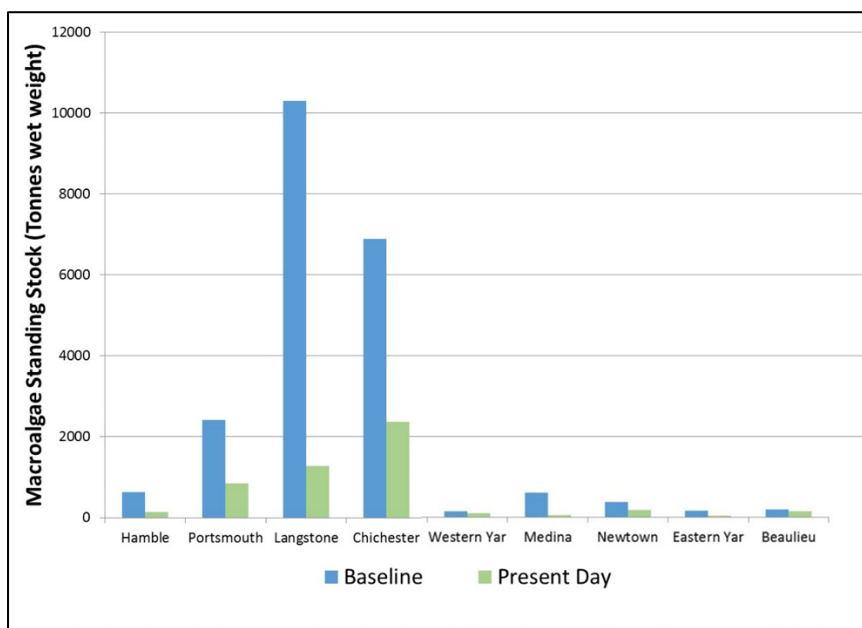
1. Portsmouth Harbour’s WFD macroalgae classification has improved and is now on the Good/Moderate boundary. (As already described, Langstone Harbour and Chichester Harbour already meet their target WFD classification of GOOD).
2. In estuaries where buried* macroalgae was recorded frequently (eg Chichester and Portsmouth Harbours) it is no longer found during EA surveys.
3. In estuaries where macroalgae used to persist throughout the winter* months it is now significantly reduced or no longer persists at EA long term survey sites.
4. In Portsmouth Harbour seagrass beds are extending - one of the original macroalgae survey sites is now within a seagrass bed!
5. In Chichester harbour, we recorded seagrass during the 2018 macroalgae survey in locations we have never seen it before.
6. Seahorses are now frequently observed in surveys in Southampton Water and Chichester Harbour.

*See Appendix 5 for notes on the relevance of buried and over wintering macroalgae to environmental recovery.

4. Modelling work increases confidence

The modelling work² referred to above by the EA in 2020 was undertaken to quantify the nutrient contributions from different sources and assess the effect of these nutrients on the trophic status of the estuarine systems. The dynamic Combined Phytoplankton Macroalgal (CPM) models were applied over a baseline period and a present day period, approximately 20 years apart. The results predict significant decreases in overall nutrient loads and macroalgal standing stock in all the estuaries studied. Figure 13 shows the predicted reductions in macroalgal standing stock (tonnes of macroalgae, baseline and present day) from the modelling.

Figure 13 Comparison of predicted baseline and predicted present day macroalgal standing stock



One of the reasons for undertaking the CPM modelling was to evaluate the expected effects of improvements already completed, once historic nutrients have left the system – in other words, because the modelling is not subject to ecological time lag it can predict the full extent of macroalgal reductions. The modelling results conclude that in most of the Solent estuaries there will be further reductions in macroalgae even if no additional nutrient reduction measures are undertaken, particularly in those estuaries where measures occurred more recently. This is because of the ecological time lag before the full extent of reductions will be seen. In addition, in some Solent catchments with chalk geology we’ll see further reductions in macroalgae in future, as groundwater N reduces over time.

Finally, the modelling assessed the factors which can limit primary production, (light, space, N, P) and predicted the fraction of the year that each factor limits algal growth. It concludes that some estuaries have experienced significant changes in N:P ratio due to all the improvement measures undertaken and warns that further reductions in P are likely to move the local environment further away from a natural balance. It suggests that the best opportunities to continue controlling algal growth while protecting the wider marine ecosystem are to continue measures to reduce N, to catch up with the improvements which have been made in P and restore a more natural N:P ratio.

Overall, the CPM modelling results support the changes we are seeing in the environment and increase our confidence that the existing nutrient reduction measures are, and will continue to, reduce eutrophication impacts in the Solent.

5. Conclusions

1. A wide range of nutrient reduction measures have been undertaken over the last 20 years in the Solent wide area.
2. As a direct result of these measures, there have been very large reductions in N & P loads into affected estuaries. For example, in Langstone Harbour there has been a 49% reduction in N load and a 75% reduction in P load since the 1990s.
3. Consequently, there have been significant reductions in macroalgae (the primary biological indicator of eutrophication) in many Solent estuaries. For example, macroalgae has reduced in Langstone and Chichester Harbours by more than half and both harbours now achieve their WFD target status of GOOD for macroalgae. (However, at a smaller, feature scale, NE condition assessments indicate that in some localised areas macroalgae levels remain higher than required for Habitats Directive purposes). Further WFD information and data can be found in the Environment Agency [Catchment Data Explorer](#).
4. In estuaries where measures started early eg Langstone and Chichester Harbours, there are good signs of recovery; elsewhere it will take longer.
5. Recent modelling supports the improvement we are seeing in the environment – we are now even more confident that existing measures do/will make a measurable difference to eutrophication impacts in the Solent.
6. Modelling confirms that in some harbours there will be further reductions in macroalgae even if no additional nutrient reduction measures are undertaken. This is because there is an ecological time lag before we will see the full extent of reductions. There may still remain pockets where there are more dominant localised influences affecting macroalgal growth.
7. There will be additional future reductions in nitrogen in some areas of the Solent as groundwater N reduces over time.
8. We need to continue catchment measures to tackle the large diffuse agricultural sources of N that affect rivers and groundwater as these are the dominant N sources.
- 9. Recovery from eutrophication in the Solent area is well underway, with further improvement to come.**

6. References

1. ADAS UK Ltd, 'Solent Harbours Nitrogen Management Investigation'. Report for Natural England by Gooday R., Hockridge B. and Lee, D. (March 2015).
2. Environment Agency, OCS Water Quality & SSD Analysis and Reporting Team (Marine) 'Summary of 2020 dynamic CPM modelling in Solent Wide Area, Final Version' (April 2021).

Please send any enquiries about this Overview to the Environment Agency at SSDEnquiries@environment-agency.gov.uk

For data retrieval please use the following links:

Open data, Water Quality archive: <http://environment.data.gov.uk/water-quality/view/landing>

Open data, Biosys archive: <https://data.gov.uk/data/search?q=biosys>

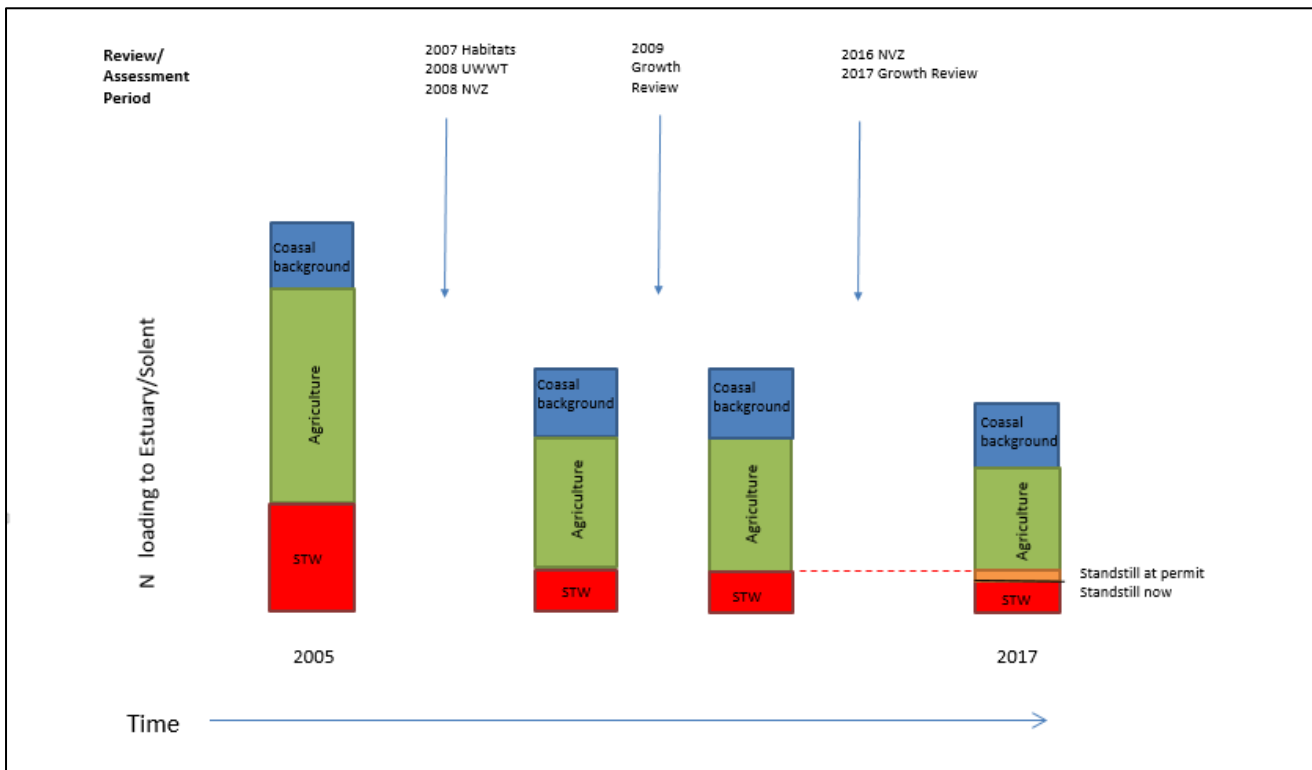
Appendix 1 Timeline of eutrophication reviews/designations and implementation of regulatory measures in the Solent area. (Additional voluntary measures are not shown for clarity).

The Environment Agency frequently reviews what measures are required to protect the Solent marine sites from eutrophication as shown below, most recently including NVZ reviews in 2016 and water industry Periodic Reviews in 2019.

<u>Designations and Reviews</u>	<u>Year</u>	<u>Environmental Status</u>	<u>Regulatory Measures tackling N</u>	
	1994	1994 – 2002 Baseline macroalgae and nutrient status		
	1995			
	1996			
	1997			
UWWTD Sensitive Area designations (1998)	1998			
Natura 2000 designations (Birds Directive & Habitats Directive)	1999			
UWWTD Sensitive Area designations (2002)	2000			
	2001			2001 – Eastney/Budds Farm STW improvement and transfer (from Langstone) under UWWTD
Periodic Review assessments (2004)	2002			
	2003			
	2004			
	2005			
	2006			
Habitats Directive Review of Consents (2007)	2007			
UWWTD SA & Nitrates Dir NVZ designations (2008)	2008		2008 – various STW improvements under UWWTD	
Population growth assessments (2009)	2009	2009 - 2014 Interim macroalgae and nutrient status. Too early to see improvements	2009 – NVZ measures tackling diffuse inputs	
Periodic Review assessments (2009)	2010			2010 – Fairlee STW transfer (Medina)
Diffuse Water Pollution Plans (2010)	2011			
	2012			
	2013			
WFD nutrient Investigations (2014/15)	2014			2014/2015 – Habitats Directive improvements to STWs in Southampton Water and Solent
Periodic Review assessments (2014)	2015			
NVZ Reviews (2016)	2016			
Population growth assessments (2017)	2017			
Periodic Review assessments (2019)	2018			
Solent DWPP Judicial Review (2019/2020)	2019	Beginning to see signs of environmental recovery	2018 Woolston STW improvement	
	2020			
	2021			
	2022			
	2023			
	2024			
	2025			
	2026			
	2027			
	2028			
	2029	Predicted reduction in macroalgae following time lag in groundwater N, uptake of N in sediments etc		
	2030			
	2031			
	2032			
	2033			
	2034			
	2035			
	2036			

Note: Different types of designation/review are colour coded for clarity

Appendix 2 Schematic diagram of N reduction and key reviews in the Solent area



Note: arrows are EA reviews, the orange bar represents development growth

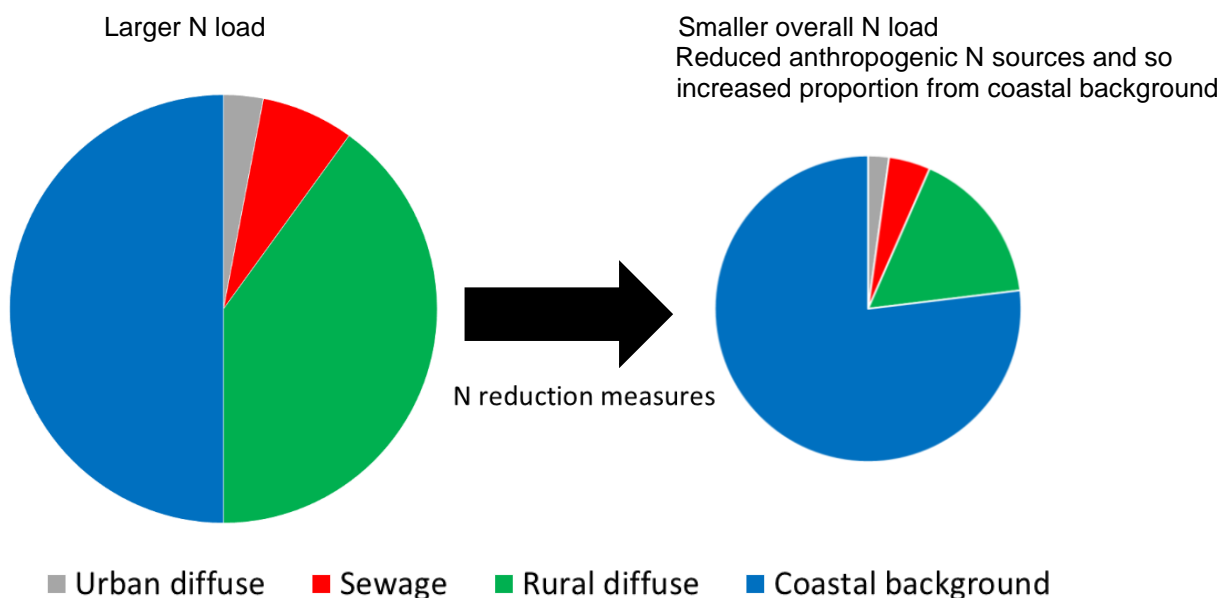
Appendix 3 Note about Coastal Background Nitrogen

Coastal background nitrogen (N) is the 'background' concentration of nitrogen in the sea that enters the Solent on each tide. (This is not the same as the water that enters the estuaries on each tide). The source apportionment for most Solent estuaries shows a large proportion of N from coastal background sources due to the large volume of seawater exchange with each estuary, not because nitrogen concentrations in the sea are high (they are not).

In the Solent source apportionment modelling 'coastal background' N is mostly N from the English Channel, which could be described as 'natural' N (largely non-anthropogenic). However, it does also include other small contributions of N from sources that the models cannot enumerate: these include direct inputs to estuaries and the coast (ie not via rivers) such as direct run-off (urban and rural), direct minor streams and ditches and direct private package sewage plants. Although the latter sources are included in coastal background N they will be very small compared to 'real' coastal background N coming from the English Channel. (Note that the Solent modelling does enumerate all other N sources from rivers and STWs, including direct and indirect sources). Coastal background N is likely to reduce very slowly over time, reflecting measures to reduce N that enters the English Channel.

As N reduction measures in estuaries progress, the N contributions from sources like rural diffuse, sewage and urban diffuse will reduce, and so the coastal background element will increase proportionally. However, the overall N load to the estuary will have decreased – see the schematic diagram, Figure 15, below. In an idealised pristine estuary, most of the N source apportionment would be from coastal background N!

Figure 15 Schematic diagram of change in N source apportionment in a Solent estuary over time



Appendix 4 Objectives for marine Natura 2000 sites agreed by NE and EA in 2015

Maintain water quality (mean winter dissolved inorganic nitrogen) at existing levels where biological indicators of eutrophication (opportunistic macroalgal and phytoplankton blooms) achieve GOOD WFD overall status.

Improve water quality (mean winter dissolved inorganic nitrogen) to a level that biological indicators of eutrophication (opportunistic macroalgal and phytoplankton blooms) achieve GOOD WFD overall status.

Appendix 5 Notes on the relevance of buried and over wintering macroalgae

The presence of **buried** macroalgae increases the impact on designated intertidal habitats and birds, by increasing the risk that changes in sediment conditions will occur, resulting in a change in the benthic community. It can also provide a nutrient source in the sediment which fuels macroalgae growth in the spring/summer and potentially delays the recovery time of intertidal habitats.

The presence of **over wintering** macroalgae increases the impact on designated wintering birds by affecting their access to prey species and increasing the risk of altering the benthic community. It can also enable a greater and more rapid growth spurt of macroalgae in the spring.

CHICHESTER HARBOUR CONSERVANCY

24 APRIL 2023

FOOTPATH 108/56/2 – LANGSTONE SEA WALL – FOR DISCUSSION

1.0 Introduction

- 1.1 Footpath 108/56/2 covers a stretch of path between Langstone Mill and Wade Lane. 35 metres of sea wall collapsed in the last 2 or 3 years on to the Conservancy's mud land. There is no identified owner of the sea wall. The sea wall remains on the mud land. The site is entirely within the AONB.
- 1.2 Hampshire County Council has footpath responsibilities as the Highways Authority. Footpath 108/56/2 will be part of the England Coast Path. The Council also host the England Coast Path Officer on behalf of Natural England. Although the Coastal Protection Authority is Havant Borough Council, these duties are delivered by Coastal Partners – a partnership of neighbouring coastal Local Authorities.
- 1.3 The Langstone Mill Pond, and the paddock adjacent to the collapsed sea wall, are in separate private ownership. The sea wall around Langstone Mill Pond is in private ownership.
- 1.4 There is an outflow pipe on the stretch of the fallen sea wall that serves four properties in Wade Lane.
- 1.5 On 23 February 2021, Natural England published the Chichester Harbour Site of Special Scientific Interest (SSSI) Condition Review, which cited the detrimental impact of hard sea defences, causing coastal squeeze.
<http://publications.naturalengland.org.uk/publication/5535304204419072>
- 1.6 On 28 October 2022, an Inspector dismissed an appeal for the repair of a sea defence at Colner Creek, Bosham. In her report, she says, "The [SSSI] Condition Review identifies that a major cause of the decline in intertidal habitats and bird features is 'coastal squeeze'. Further that 'Holding the line' would not allow restoration of the protected sites and although it is difficult to quantify the effect of this project on the integrity of the European sites in isolation, it is apparent that any further loss of habitat would exacerbate the problem." This appeal decision has implications for the site at Langstone.
- 1.7 In October 2022, a local resident started a petition to get the sea wall repaired. The story was reported in The News (Portsmouth) and as of time of writing the petition has 2,343 signatories.

<https://www.change.org/p/coastal-erosion-at-langstone>

A protest march was planned for 16 April 2023 for "failing to repair the seawalls at Langstone." After further consideration, the march was postponed.

2.0 Working Group

- 2.1 Cllr Bowerman (HCC, HBC) and Cllr Pike (HBC) convened a Working Group to discuss the issue at Langstone and to try and find a solution. The Group has met on:
 - 7 October 2022
 - 18 November 2022
 - 20 December 2022 (virtual)
 - 27 January 2023 (with the Environment Agency)

- 17 March 2023

2.2 It soon became apparent that issue was more than the 35m of collapsed sea defence. In no particular order, other discussion points included:

- The other 155m of sea wall between Langstone Mill and this site, which is showing vulnerabilities.
- The ecological value and future of Langstone Mill Pond, and the implications of not maintaining the sea defence around this habitat.
- The unknown toxicology of the Langstone Mill Pond.
- The viability of rolling back the footpath at this location.
- The private ownership of the land and the extent to which the Local Authorities can influence proceedings.
- The costs of any agreed works, whether repairs or re-routing the footpath, the sources of funding, and the timing of the works.
- The views of residents and visitors.
- The health and wellbeing benefits to society of the network of Harbour footpaths.
- The economic implications of closing the footpath, in terms of the Royal Oak and the The Ship Inn public houses.
- The options for potentially defending the site, in terms of materials and the duration.
- The outflow pipe serving the nearby properties.

2.3 The AONB Manager has briefed the CHaPRoN partnership at regular intervals during these discussions.

2.4 The Conservancy's Ecologist prepared and published a short report on the ecology of Langstone Mill Pond, to help inform discussions.

<https://coastalpartners.org.uk/news/damaged-defences-langstone-to-wade-lane/>

Photographs of the site are available on this link as well.

2.5 Coastal Partners are measuring the rate of erosion. The current forecast is 10cm per year.

2.6 A solution that is in accordance with the SSSI Condition Review (2021) and meets the ambitions of the landowners, residents and visitors, the England Coast Path, and other organisations, has not yet been identified.

2.7 The Working Group are exploring the possibility of a boardwalk to roll the footpath back in this location, but no decisions have been made and discussions are ongoing. The land rises as it moves away from the water in this location, so it seems to be a viable option if it goes ahead.

2.8 However, it remains to be seen if the residents and visitors would support a boardwalk. Questions have been raised about the impact of the boardwalk on the nesting birds that use the Mill Pond, and around the future of the rest of the sea wall, and whether it will ultimately be left to collapse and merge with the Harbour.

3.0 Next Steps

3.1 This paper is 'For Discussion'. It was prepared to brief the Conservancy Members on this case study. The Working Group will continue to meet to discuss the issues and options until such time as a solution is found.

3.2 Members may, of course, ask questions of the AONB Manager as appropriate.

Richard Austin
AONB Manager

CHICHESTER HARBOUR CONSERVANCY

Budget Monitor Report To 28th February 2023

Report by the Director & Harbour Master and Finance Manager

1. Introduction

- 1.1 This report sets out the Conservancy's budget position for the period to 28th February comparing actual income and expenditure to the 2022-23 agreed budget.
- 1.2 The budget monitor considers the budgets of the Harbour operation and AONB operation as separate entities.
- 1.3 Budget profiles have been reviewed, taking account of known income and expenditure to ensure they represent a realistic expectation of future performance.
- 1.4 Projections take account of known variations and are based on the prudence concept.
- 1.5 The bank reconciliation is complete to 28th February 2023 and is available for review upon request.

2. Harbour Budget

- 2.1 Appendix 1 sets out the budget monitor to the end of February 2023. Details of the key issues within the Harbour budget are set out below.

Income

- 2.2 The Other Income budget is currently £20,500 ahead of profile with a projected year-end positive variation of £21,700. This variation largely relates to additional rechargeable works for one sailing club. In addition, the increased demand for the facilities at Westlands, as experienced in 2021-22, has been maintained and adds to this variation on profile.
- 2.3 The Harbour Dues budget is currently ahead of profile with a year-end positive variation of £19,500, due to an increase in the number of vessels in the harbour.

Expenditure

- 2.4 There are numerous variations within the Staffing Costs budget. Of note are the one-off cost of living pay award and the recently agreed NJC pay award of £1,925 per grade. Savings have been made on vacant posts which are offset by adjustments to other roles and an overspend on season patrol staff. When combined, these result in an anticipated year-end overspend of £20,000.
- 2.5 The anticipated variation on the Premises Costs budget is due to backdated rates relief from Chichester District Council combined with an expected refund due on electricity this year due to a previous overpayment. This is partially offset by rent reviews for two large leases.
- 2.6 The Transportation budget is currently overspent by £14,400 with a projected year end overspend of £12,600. This is due to the increased cost of fuel plus necessary repairs required for vehicles and vessels.

- 2.7 The Equipment budget is currently overspent with projected year end overspend of £5,000. This is due to addition moorings maintenance supplies and increased IT software and support charges.
- 2.8 The Professional Services budget is underspent against profile with a projected year-end underspend of £10,000. This is largely due to the contingency fund of £7,500 which is unlikely to be required this financial year.
- 2.9 The Business Plan Expenditure budget is currently underspent with a year-end predicted underspend of £5,300. £3,300 of which relates to the CHC day, which did not take place this year.

Transfers to/from Reserves

- 2.10 There are no changes to transfers to/from reserves.

Surplus

- 2.11 As a result of the identified variations budgeted surplus increases by £47,300 to £176,200.

3. AONB Budget

- 3.1 Appendix 2 sets out the budget monitor to the end of February 2023. Details of the key issues within the AONB budget are set out below.

Income

- 3.2 DEFRA have awarded supplementary core grant funding of £22,100, increasing the total DEFRA grant to £173,100.
- 3.3 The Other Income budget includes Education and Solar Heritage revenue. Both of which are currently ahead of profile and make up part of this variation. Also included is a contribution from Friends towards the maintenance works undertaken on oyster boat Terror. The modest year-end projection is likely to increase should all planned Solar Heritage trips take place with good passenger numbers.

Expenditure

- 3.4 The Staffing Costs budget is overspent against profile. As with the Harbour budget, there are numerous variances within this budget line, including the cost of living payment and NJC pay award. In addition to this is the unfunded element of the FiPL team which is partially offset by savings from the vacant Communities Officer post, combined with the changes to the planning officer provision, which is currently 0.2 FTE lower than within the set budget.
- 3.5 The current and projected year end overspend on the Maintenance budget largely relates to maintenance and building works at the Dell Quay classroom.
- 3.6 The Premises Costs budget has a projected underspend of £13,400, this is due to backdated rates relief from Chichester District Council, combined with a refund due on electricity this year due to a previous overpayment.
- 3.7 The overspend, and associated year-end variance on the Transportation budget relates to annual maintenance works to the Solar Heritage and oyster boat Terror (corresponding contribution towards Terror from Friends mentioned in para 3.3).
- 3.8 The overspend on the equipment budget relates largely to purchases of IT equipment and associated set up costs for new staff.

- 3.9 The variation on the Professional Services budget relates to underspends on a number of sub-budgets including bank charges and contingency. These are currently projected to result in a year-end underspend of £6,000.
- 3.10 The business plan expenditure budget is underspent against profile with a year-end predicted underspend of £5,700, £3,700 of which relates to the CHC day which did not take place this year.

Transfers to/from Reserves

- 3.11 There are no changes to transfers to/from reserves.

Surplus

- 3.12 As a result of these variations a deficit of £8,800 is projected and could be funded from the balance brought forward from 21-22.

4.0 AONB Grants

- 4.1 Appendix 3 details grants and other 'one-off' sources of income which have been awarded for specific purposes.
- 4.2 The agreed grant from Friends of Chichester Harbour is £30,000. Spending to date includes £10,000 on the boardwalk project at Fishbourne Meadows and £6,631 has been spent by the education centre, including issuing travel grants. £10,000 has been received towards the Green Recovery project (Return of the Tern).
- 4.3 In 2021-22 Section 106 funds of £26,000 were made available by Chichester District Council to be spent on Fishbourne Meadows. Part was spent in 2021-22 and the balance has been used this financial year to purchase materials to install the planned boardwalk.
- 4.4 £120,100 has been spent under the FiPL programme, including staff salaries. To date £65,300 has been claimed and received.
- 4.5 £162,500 has been spent from the Green Recovery Challenge fund, to fund the Nature Recovery Officer role and project costs. £160,700 has been reclaimed to date.
- 4.6 The first installment of the Solent Seascape funds from Blue Marine have been received, expenditure against this project includes the BUDs trial which will be accounted for before the end of this financial year.
- 4.7 The Rotary club have awarded a contribution of £1,245.72 towards the Queen's Green Canopy project.
- 4.8 The Environment Agency have awarded funding of £20,000 to carry out a feasibility study relating to saltmarsh creation at Fishbourne.
- 4.9 £50,100 of unrestricted funds have been brought forward from the previous financial year. It was originally anticipated that around £40,000 of this balance would be allocated towards a planning barrister for the public inquiry relating to a proposed housing development in Chidham. The inquiry, originally scheduled for August, was then postponed to January 2023 and again to May 2023. Any overspend in the core

AONB budget may be funded from this balance. Any remaining funds will be carried forward for the rescheduled inquiry.

Richard Craven
Director & Harbour Master

Melanie Belderson
Finance Manager

Budget Monitor - Harbour
Appendix 1

 Chichester Harbour Conservancy
 For the 11 months ending 28th February 2023

Account	Harbour Budget	Harbour Profile	Harbour Actual	Harbour Variance	Year End Projection	Projection Variance	Comments
				- Additional Income + Reduced Income			
Income							
Other Income	136,500.00	120,105.00	140,606.58	(20,501.58)	158,200.00	(21,700.00)	Rechargeable Works, Westlands, Hard Charges
Harbour Dues	446,500.00	446,500.00	466,006.22	(19,506.22)	466,000.00	(19,500.00)	
Moorings Income	843,700.00	843,500.00	846,944.00	(3,444.00)	847,200.00	(3,500.00)	
Harbour Rent/ Boat Park/ Car Park	148,100.00	93,200.00	99,169.35	(5,969.35)	157,500.00	(9,400.00)	
Total Income	1,574,800.00	1,503,305.00	1,552,726.15	(49,421.15)	1,628,900.00	(54,100.00)	
				- Additional Expenditure + Reduced Expenditure			
Expenditure							
Staffing Costs	630,800.00	574,338.00	585,157.51	(10,819.51)	650,800.00	(20,000.00)	Numerous variations including one-off cost of living, NJC pay award, Patrol overspend, re-grading and backdated pay
Maintenance	49,200.00	45,705.00	42,912.99	2,792.01	49,200.00		
Premises Costs	307,500.00	298,780.00	305,474.19	(6,694.19)	294,500.00	13,000.00	Rent reviews offset by rates rebate and electricity overpayment
Transportation	57,500.00	51,570.00	65,963.24	(14,393.24)	70,100.00	(12,600.00)	Increased cost of fuel. Vehicle and vessel repairs
Equipment	131,700.00	120,829.00	127,414.02	(6,585.02)	136,700.00	(5,000.00)	IT Software / Support and Moorings Maintenance
Office Supplies	49,000.00	40,138.00	36,812.22	3,325.78	46,500.00	2,500.00	Smaller underspends across range of sub-budgets
Professional Services	116,400.00	76,080.00	63,643.61	12,436.39	106,400.00	10,000.00	Contingency plus underspends across sub budgets
County Council Charges	16,300.00	0.00	0.00	0.00	16,300.00		
Business Plan Expenditure	5,300.00	1,835.00	0.00	1,835.00	0.00	5,300.00	CHC Day
Total Expenditure	1,363,700.00	1,209,275.00	1,227,377.78	(18,102.78)	1,370,500.00	(6,800.00)	
Transfers to/from Reserves							
Budgeted transfers to Reserves	82,200.00	0.00	0.00	0.00	82,200.00		
Total Transfers to/from Reserves	82,200.00	0.00	0.00	0.00	82,200.00	0.00	
Surplus (Income - Expenditure - Transfers to/from Reserves)	128,900.00	294,030.00	325,348.37	(31,318.37)	176,200.00	(47,300.00)	

Budget Monitor - AONB
Appendix 2

 Chichester Harbour Conservancy
 For the 11 months ending 28th February 2023

Account	AONB Budget	AONB Profile	AONB Actual	AONB Variance	Year End Projection	Projection Variance	Comments
				- Additional Income			
				+ Reduced Income			
Income							
DEFRA Grant	151,000.00	151,000.00	173,074.57	(22,074.57)	173,100.00	(22,100.00)	Confirmed supplementary core grant funding
Other Income	68,300.00	58,687.00	63,011.27	(4,324.27)	70,300.00	(2,000.00)	Terror works
County Council Precept	419,800.00	419,800.00	419,800.00	0.00	419,800.00		
Harbour Rent/ Boat Park/ Car Park	42,300.00	26,300.00	23,592.99	2,707.01	40,300.00	2,000.00	Reduced room booking income
Total Income	681,400.00	655,787.00	679,478.83	(23,691.83)	703,500.00	(22,100.00)	
				- Additional Expenditure			
				+ Reduced Expenditure			
Expenditure							
Staffing Costs	496,900.00	455,493.00	486,011.43	(30,518.43)	528,500.00	(31,600.00)	FiPL posts. Cost of living award
Maintenance	17,200.00	15,870.00	18,464.64	(2,594.64)	19,200.00	(2,000.00)	Maintenance works at Dell Quay and increased cleaning costs
Premises Costs	30,800.00	23,690.00	18,253.94	5,436.06	17,400.00	13,400.00	Covid additional rates relief. Electricity overpayment / refund due
Transportation	20,500.00	16,960.00	29,129.21	(12,169.21)	32,500.00	(12,000.00)	Solar Heritage and Terror
Equipment	11,200.00	10,267.00	14,848.40	(4,581.40)	15,200.00	(4,000.00)	IT for new starters
Office Supplies	12,800.00	11,737.00	9,134.98	2,602.02	11,800.00	1,000.00	
Professional Services	45,100.00	35,604.00	27,974.80	7,629.20	39,100.00	6,000.00	Small variations on number of budgets including bank charges
AONB Projects	23,900.00	21,913.00	29,257.31	(7,344.31)	31,300.00	(7,400.00)	
County Council Charges	6,300.00	0.00	0.00	0.00	6,300.00		
Business Plan Expenditure	5,700.00	5,535.00	0.00	5,535.00	0.00	5,700.00	CHC Day
Total Expenditure	670,400.00	597,069.00	633,074.71	(36,005.71)	701,300.00	(30,900.00)	
Transfers to/from Reserves							
Budgeted transfers to Reserves	11,000.00	0.00	0.00	0.00	11,000.00		
Total Transfers to/from Reserves	11,000.00	0.00	0.00	0.00	11,000.00	0.00	
Surplus							
(Income - Expenditure - Transfers to/from Reserves)	0.00	58,718.00	46,404.12	12,313.88	(8,800.00)	8,800.00	Deficit to be funded from 21-22 brought forward balance

AONB Grants

Appendix 3

Grants / Income	2022-23		Year End Projection	Total Grants / Income Expected (2022-23)
	Grants / Income Received to Date	Expenditure to Date		
Friends				
- Boardwalk at Fishbourne Meadows	10,000.00	10,000.00	0.00	10,000.00
- Education		6,631.00	0.00	10,000.00
- Green Recovery Challenge	10,000.00	10,000.00	0.00	10,000.00
S106 (Fishbourne Meadows)	18,463.66	18,463.66	0.00	18,463.66
FiPL	120,132.00	65,274.58	0.00	120,132.00
Green Recovery Challenge Fund - HLF	162,480.86	160,679.75	0.00	162,480.86
DEFRA - Access Improvement Grant	51,748.85	0.00	0.00	88,848.65
Solent Seascape Project	158,500.00	160.00	0.00	158,500.00
Rotary Club - Green Canopy	1,245.72	1,245.72	0.00	1,245.72
Environment Agency - Feasibility Study	20,000.00	0.00	0.00	20,000.00
21-22 Unrestricted Project Budget	0.00	0.00	0.00	50,100.00
Total	552,571.09	272,454.71	0.00	649,770.89

It is expected that each Grant / Income and specific expenditure will equal £0 by the end of the financial year. Any remaining balances will be subject to accounting adjustments to ensure the correct transactions are included in the relevant financial year.

Specific funding has been allocated to the AONB for specific purposes and must be spent in accordance with individual project criteria

CHICHESTER HARBOUR CONSERVANCY

24 APRIL 2023

PLANNING COMMITTEE – FOR INFORMATION

1.0 Introduction

- 1.1 Between 1 February 2023 and 31 March 2023, the Conservancy responded to 60 planning applications. 3 were resolved by the Planning Committee with 57 applications fully delegated to the Principal Planning Officers. The Conservancy Objected to 9 development applications during this period.
- 1.2 The total figures for 2022/23 are as follows:

Cases Fully Delegated to Officers	281
Consulted with Members by Email	16
Planning Committee	35
Total	332
No Objection	259
Objection	40
Holding Objection	9
Pre-App Advice	3
No Comments	15
Clarification Sought	6
Total	332

By way of comparison, there were 338 cases in 2021/22. In 2018/19, there were 278 cases.

- 1.3 Until 6 April 2023, the Conservancy employed 3 part-time Principal Planning Officers. One has since retired, with the other two subsequently increasing their hours to help cover the shortfall.

2.0 Gosden Green Nursery Hearing Appeal, Southbourne

- 2.1 The above appeal (112 Main Road) was upgraded to a Hearing and took place on 28 February 2023. The case reference is APP/L3815/W/21/3289451 and the proposed development entailed 29 dwellings, public open space, landscaping, parking, and associated works (following demolition of existing buildings). The site is inside the AONB, and the Conservancy objected, along with Chichester District Council, and Southbourne Parish Council. The appeal was attended by the AONB Manager and one of the Conservancy's Principal Planning Officers.
- 2.2 The Inspector dismissed the appeal on 22 March 2023 citing the likely impact on the character and setting of the AONB, leading to the suburbanisation of and encroachment into the landscape. The appellants argued that the development would only cover 0.4% of the AONB. The Inspector rejected this since the AONB includes large tracts of water. Ultimately, the Inspector determined it would constitute a major development for the purposes of paragraph 177 of the NPPF, and that there are no exceptional circumstances.

3.0 Local Plans - Update

- 3.1 Chichester District Council consulted on its revised Local Plan between 3 February and 17 March 2023. The Plan can largely be considered as the next iteration of the

Preferred Approach consultation of December 2018. The revised Plan includes 300 new dwellings at Bosham on the boundary of the AONB, 300 dwellings at Chidham & Hambrook (exact location to be determined), and 1,050 dwellings at Southbourne (exact location to be determined). The Conservancy has Objected to these allocations, on the grounds of the likely impacts to the character and setting of the AONB, as well as a host of other reasons.

- 3.2 Aside from a few technical corrections, the rest of the Plan featured no real surprises. The proposed wildlife corridors will help with the connectivity between the AONB and the National Park, however there is a sense that the geographical coverage still somewhat lacks ambition. The Plan cites the Local Nature Recovery Strategy as well, which is new addition since 2018. There is some discussion taking place nationally as to the planning status of LNRs. As things stand, they will be used as evidence to inform the preparation of a Local Plan, rather than as a standalone Supplementary Planning Document (SPD). Whilst this will mean LNRs can be regularly updated, it is a concern that they will not actually inform decision-making when it comes to real development applications.
- 3.3 Finally, the new Plan proposes that all new Harbourside properties should be set-back at least 25 metres from the shore. Given the rate of sea level rise, and the non-dynamic nature of dwellings, a greater distance may need to be considered in future years.
- 3.4 There are no further updates on the Havant Local Plan as of time of writing. The last iteration of the Plan did not pass inspection, so it is understood the Authority are working on a revised Plan, considering the reasons why it failed.

4.0 Chidham & Hambrook Public Inquiry

- 4.1 The references are APP/L3815/W/22/3295004 and APP/L3815/W/22/3295000 and the proposed development would entail 198 dwellings on the boundary of the AONB. The Public Inquiry will take place from 15 May to 19 May, then from 5 June to 6 June, and finally from 12 June to 16 June 2023. The Conservancy has objected and will be a Rule 6 Party with legal support. The AONB Manager and one of the Conservancy's Principal Planning Officers will be in attendance.

5.0 Member Training

- 5.1 A one-day training session took place for Members of the Planning Committee on 28 March 2023. The training covered the roles and responsibilities of Members, the Environment Act, an overview of the other relevant Acts, appeals, hearings, examinations, and public inquiries, and a general Q&A session. It was also attended by the AONB Manager, a Principal Planning Officer, Cllr Bowerman, and Simon Radford.

6.0 Recommendations

- 6.1 This paper is 'For Information'.
- 6.2 Members may, of course, ask questions of the AONB Manager as appropriate.

Richard Austin
AONB Manager