



Natural Environment Group (NEG)

2nd November 2022 via MS Teams

Meeting Notes

1. Welcome

Jess Taylor (JT) from Natural England the NEG chair welcomed everyone to the meeting. She noted that Karen McHugh (KM) always pulls together a good agenda.

A round robin was held to introduce new members.

2. Attendees

Karen McHugh (KM) – Solent Forum, NEG Secretary
Kate Ansell (KA) – Solent Forum, SEMS Secretary
Jess Taylor (JT) – Natural England, NEG Chair
Ian Barker (IB) – New Forest NPA
Alison Fowler (AF) – River Hamble Harbour Authority
Eleanor Howe (EH) – Portsmouth International Port
Zara McKie (ZM) – IoW Council
Stevyn Ricketts (SR) – Gosport BC
Blair Davies (BD) – RHDV
Gavin Holder (GH) – Coastal Partners
Jack Thompson (JTh) – RSPB
Megan Roberts (MR) – LHB
Jake Wilson (JW) – SIFCA
Daisy Durden (DD) - WWF
Jackie Mellan (JM) – EA
Sue Hawley (SH) – IoW Estuaries
Emma Chisnall (EC) – Havant BC
Paul Howe (PH) – Eastleigh BC
Kate Rice (KR) – Southern Water
Liberty Cast (LC) – Southern IFCA

3. Actions Arising from the Last Meeting 27/04/22

KM reported that NEG has money allocated every year to fund projects. Typically it funds about four with a budget of approx. £4000 per year depending on the reserves excess. There was an action for KM to talk to Southern Water about the possibility of sponsoring NEG projects. Kate Rice (KR) agreed to have further discussions with KM on this possibility.

Action: KM and KR to discuss the possibility of Southern Water funding NEG projects.

KM had an action to explore widening the University of Portsmouth Temith project across the Solent. She has spoken to Gordon Watson from the University but there is currently no funding to

take that workstream further. The mudflat disturbance work will now be progressed via the Solent Bird Sensitivity mapping project.

4. Update on NEG actions from SEMS

KM went through Paper 1 that looks at the actions for NEG arising from SEMS.

Land Recreation walking (incl. dog walking) – Bird Aware have commenced their five year review of how their work has mitigated recreational pressures from new housing. KM is attending a workshop run by the consultants undertaking the work, Footprint Ecology. The Review will be published in 2023 and she will report back on its findings.

JTh and MR noted that they have attended one of the workshops and have provided input.

Littering and removal of litter – The CSSS hub continues to be populated, the microplastics page has been updated and includes information on end of life boats. The habitats and species is nearly completed.

Aerial recreation – Bird Aware were asked to report on any drone disturbance seen via rangers, no concerns were reported last year, we will keep a watching brief.

Non-motorised watercraft (paddlesports) – Chichester Harbour are piloting surveys looking at paddlesports use and disturbance events. Peter Hughes will update on findings in spring 2023. The intention is to roll out the pilot more widely across the Solent.

Generic actions - Solent Bird Sensitivity Mapping project - this will cross map non-licensable activities against bird sensitive areas. KM has spoken to the SF Steering Group and asked whether SF core finding can be allocated, it was agreed that up to £30k can be used which includes £1k already allocated for the mudflat disturbance mapping. The project aligns with one of the Blue Marine Foundation's Solent Seascape projects workstreams, KM is liaising with Blue Marine to build this mapping into that workstream.

Action: Agenda item for Chichester Harbour Conservancy to report on the pilot paddlesports survey work at April 2023 meeting.

5. NEG Funded Projects

For 2022/23 NEG has funded three projects, KM hasn't got any updates as the funding was only allocated in spring 2022.

- Fathom Ecology - Intertidal Seagrass Restoration in the Solent
- HCC - Recoding Snipe on coastal site using one thermal imager
- HCC - equipment to capture Snipe at Lymington/Keyhaven

Project funded in 2021/22:

- [Tackling the microplastic pollution – testing a new biocomposite material as artificial filtration device, Chichester Harbour](#). (Presentation given at April 2022 meeting)

Project funded in 2020/21:

- [Saltmarsh passive regrowth promotion – Lands End, Old Bursledon](#) (see Appendix A)

Alison Fowler said that she would like to give her thanks for the Bursledon saltmarsh project as it has helped to progress other work.

Action: KM to provide an update on the progress of the 2022/23 projects at the next meeting.

6. Microplastics Discussion

KM presented [Paper 2 on microplastics](#). She added that the Clean Solent shores and Seas Hub has a chapter on littering plastics and microplastics and the latter has been updated with the increasing work on the impacts of end of life fiberglass boats.

JM commented that it's really good to increase the visibility and effort in this area of work. Defra term this an emerging risk. The Environment Agency have a plastics and sustainability team and she has asked them to comment on the paper and also if they can signpost to any relevant information, whether that's policy or data and information, for example different research that's happening. Then we can start to think about some of the gaps and how best to fill those. There is also an EA research team looking at the impacts of microplastics and toxicity, she will report back.

JM added that the EA have been cleaning up nurdles on the River Itchen, the next clean up will be Christmas. Malcolm Hudson from Soton University is preparing a report on the past work done which is due imminently. The EA also have funding to hopefully bring in wider stakeholders to get greater commitment to making the behavioural and management changes that are needed to actually stop the pollution or reduce it. She added that the Final Straw Solent are keen to be involved.

AF cautioned that we need to focus on the work that RAs should be involved with, and not get drawn into more national and international work.

KA suggested a simple table of responsibility looking who is responsible for the disposal of craft and the impacts from degradation.

JM noted that James Anderson Scott (ex-British Marine Federation) now has his own consultancy looking at end of life boats.

Action: KM to contact EA Plastics and Sustainability Team.

Action: JM to give KM contact details for James Anderson Scott, circulate the Soton University report when available and report back on the EA microplastics research team.

Action: KM and KA to draft a simple responsibility table for end of life boats.

Kate Rice (KR) added that Southern Water have information on the water industry and microplastics which she will share. See Appendix B.

JT commented that the issue of plastics and microplastics impacts on designated sites for conservation advice is being looked at by NE nationally. They need to be able to monitor impacts regularly for meaningful inclusion in conservation advice.

JT added that NE only have formal condition assessments for SACs, so habitat based. SPA methodology is under development, Portsmouth Harbour will be the first site. We could use macro plastics as a proxy for microplastics, it's very difficult to attribute impacts from microplastics on site features as they are habitat based.

Action: JT to report back on NE work on plastics and microplastics in designated sites.

KM asked whether shellfish legislation is a route to look at? JT suggested speaking to IFCA and CEFAS. Jake Wilson (JW) offered to chat with colleagues and feedback to KM.

Action: JW to report back to KM on any IFCA work on shellfisheries and microplastics.

Resources

- [End game: What next for the end-of-life boat sector? - Marine Industry News](#)
- RedPol Symposium on 6 October: [Chichester Harbour Conservancy - YouTube](#)

7. Lymington trials and new techniques for restoring saltmarsh using beneficial use of dredgings - Colin Scott, ABPmer

Colin Scott (CS) presented on the technical aspects of delivering a beneficial use of dredgings scheme in the Solent. His presentation available on the [SEMS website](#).

JM asked for clarification on the timeline. CS replied that as it links to the sediment supply the dredging will be done in the late winter (February to March), but this also needs to tie it in with dredging schedules. The Lymington recharge will be in the autumn. JM also asked about the consents required. CS replied that the main licence needed was for the sediment placement and the movement of it to the shore; so a Marine Licence for deposit and the reworking zone was key. A HRA was completed and a water framework assessment. Planning permission is not required.

SH asked how marine licences work with adaptive management in trial work. CS replied that having monitoring in place allows you to adapt and be a bit more flexible; if you are submitting monitoring reports it allows for greater flexibility in licence conditions.

KA asked as part of the baseline and ongoing monitoring for habitat restoration can you link this restoration value to blue carbon credits or the nitrogen mitigation market. CS replied that yes they have this in their central thinking but there is a long way to go to get the evidence together to say how much benefit you're creating. The consultancy Land and Water are doing lots of research on this working with them at ABPmer and Portsmouth University. We also need to remember that eroding sites like Boiler Marsh are leaking carbon into the environment, so with the tools we've got currently we also need to hold on to that carbon for as long as we can.

Gavin Holder (GH) brought to others attention that Coastal Partners have recently undertaken a feasibility study at Langstone Village where they are designing new flood and coastal erosion risk management defences. The study looked at how they could use beneficial reuse to restore what used to be a very healthy saltmarsh in front of that location. Unfortunately, the report has left them with uncertainty, and it is recommending a series of trials, which they would like some advice about. CS replied that he would be happy to assist Coastal Partners in looking at the options.

CS added that going forward he knows that the Environment Agency are keen for a more national effort in smaller locations. As a bare minimum we need to be trying to recharge locations using smaller hopper barges. We need to be finding local areas where we can bottom place like at Lymington. People are starting to think about taking material from Southampton Water and using it to recharge Keyhaven marshes to protect Hurst Spit.

KM commented that with regards to the BUDS Solent project they were careful to differentiate between bottom placement and top placement; she agreed with CS that as a bare minimum we need to look at bottom placement where the consenting process is very different to top placement which can disturb existing saltmarsh.

8. Paper 3. Finance

KM presented paper 3 which shows the financial position. In summary the budget is balanced with a small surplus each year which is used to fund NEG projects.

JM asked whether we are gaining NEG members and there might be the potential to increase the project income and conversely whether we might be losing some or losing any income. KM replied that the situation is stable. Subscriptions are raised by CPI and to please contact her if anyone can provide sponsorship or funds for NEG work and projects.

9. AOB

JT noted that we now have good evidence of INNS in the Solent, and Natural England have obtained funding to update biosecurity plans; they will be visiting harbours to assist if required. She will present on this at the next Solent Forum meeting in March 2023. KA requested that JT write an article on this work for the next edition of Solent News (December 2022).

KM noted that there will be an update on seagrass work at the next NEG meeting. She has also updated the [NEG Terms of Reference](#).

KM reminded the group of the [Greater Solent Project tracker](#). The Solent Forum is now updating this so please could people remember to send updates and amends to the Solent Forum Office.

KA ran a poll on how members of the group would like to meet, the majority opted for NEG meetings to remain online.

10. Date of Next Meeting

The group will next meet on **26^h April 2023** via MS Teams.

11. Apologies

Winchester CC
Blue Marine Foundation
Portsmouth University
Chichester Harbour Conservancy
Beaulieu River Management Ltd
Bird Aware Solent
Kings Harbour Master

12. Appendix A

NEG Project Update - Salt marsh passive regrowth promotion

AQASS and SAND Geophysics have been undertaking a small scale salt marsh restoration trial through the 2021-2022 period at a site (Lands' End, Old Bursledon) on the River Hamble. The work was funded through a NEG Grant and via funding from the landholder, Mr Mark Keeling. Initial surveys were undertaken in March 2021 to provide a baseline site condition of a chosen creek site at Lands' End (Hackets marsh). A full ecological survey was not undertaken, but a general assessment was carried out using photography and qualitative assessment of marsh conditions, pioneer species presence (noting time of year), cliffing, and channel / erosion development. Importantly as per the NEG proposal, a baseline drone flight was undertaken to provide a spatial / temporal reference from which to compare the subsequent 5 permitted (by Natural England) flight data. The final flight was on 16th March, 2022. To begin the trial study, a series of coir rolls held in place by chestnut stakes were placed in the creek (see plate 1).

Whilst it is acknowledged that a more ambitious structure/ study would potentially have yielded a higher sediment accretion rate, it was expected, and found, that the necessary regulator permissions were time consuming to achieve from the Marine Management Organisation (MMO) and Natural England (NE); Hamble Harbour Authority were, however, rapid in their response. The protracted permissions period was due to MMO necessarily considering if a Marine Licence was required, NE were very helpful and undertook a rapid HRA for the project as the marsh is SPA / Ramsar.

Accordingly, we did not wish to be more ambitious in structure design, wanting to avoid more detailed legislation requirement, which may have significantly depleted the research time budget. The five subsequent drone flights in 2021-2022 (Plate 2) are being analysed using photogrammetry methods to assess sediment change (height / morphology) and if there is evidence of potentially promoted pioneer species (e.g. *Spartina* / *Salicornia*) (Plate 3) where sediment has / may have accreted to a height allowing them to establish. The coir structures are still in place and in good order thus will continue to affect flows and sediment movement in the creek going forward. We will casually monitor this as no more drone flights are permitted. When worked up, results will be disseminated to Solent Forum / NEG, an interim presentation has been given on methods to the Hydrographic Society in November 2021 at the National Oceanographic Centre which was met with interest.

Plate 1.



Plate 2



Plate 3



13. Appendix B

Kate Rice provided an update for the group on Southern Water's work on microplastics.

Southern Water is part of the UK Water Industry Research group (UKWIR). UKWIR has been researching microplastics for a number of years. UKWIR Project: Plastics Received by the Water Industry & How Best to Tackle Them Through Source Control. This is a new project.

- Concern about plastic and the environment is at it's highest ever.
- Wastewater systems are a pathway for plastic to enter the environment.
- Inappropriately flushed items cause the majority of the 300,000 sewer blockages costing £100million per year.
- Customer awareness campaigns alone will not solve the issue of sewage related debris.
- Internal Markets Act 2020 prevents restrictions in one devolved nation only.
- This project brings together water industry stakeholders across Scotland, England, Wales and the whole of Ireland.

Microplastics in wastewater systems

Water companies collaborate on a national level on the WINEP Chemical Investigations Programme – this has carried out research on microplastics in the wastewater system. Key findings so far are that the vast majority of microplastics are removed in sludge. This however leads to a need to understand what happens to microplastics in sludge when, for example, it is spread on land. Investigations will continue in AMP8 (including research to look at potential sludge treatment processes to remove microplastics).

Southern Water are working with University of Portsmouth to baseline our higher resolution understanding of microplastics in our wastewater systems. This is ongoing, led by our Bluewave Innovation team.

Innovate UK proposed project

Southern Water supports the Water Research Centre (WRc) Knowledge Transfer Partnership (KTP) application with Queen Mary University of London (QMUL) for research that will benefit the industry's understanding of microplastics. The 2 year project is expected start in December 2022.

Southern Water also supported and responded to the recent Government consultation on banning plastic in wet wipes and other single use products. They cause sewer blockages and obviously release microplastics into the environment as they degrade.

Biobeads

We're currently producing a report on biobeads for the EA. Southern Water have 5 biobead sites including Sandown WwTW. However, this site uses an expanded clay media, and not plastic.