

Solent Forum Marine Invasive Species Workshop 2: Collation of comments from Eastern Harbours, Southampton Water and Isle of Wight Online Workshops via Jamboard

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Please see Appendix 1 for lists of actions noted in the text. Frame 1 was the workshop introduction.

Frame 2. Do you agree with the way we have split this Biosecurity Plan into 3 sections, or would you prefer a different way?

Attendees across all workshops agree with the three divisions. The Eastern Harbours pointed out that the split needs clarification on the homepage with a suggested fourth section on 'future issues'. Southampton suggested naming using 'non-native' species to ensure we recognise our responsibility in having brought these species to the Solent.

Frame 3. Do you agree with the Solent Forum being the lead for the Solent biosecurity plans?

Attendees across all workshops agree. Southampton voiced concerns whether the Solent Forum can reach all relevant authorities and the IoW questioned whether additional funding needs to be secured for this role.

Frame 4. What do you think about the content of our [marine invasive species information page](#)?

Attendees across all workshops like the format and content of the page and suggested the inclusion of more photos of the relevant Solent species. The IoW suggested a potential breakup of the sections into a simple summary followed by detailed content to allow understanding by all audience groups. They also suggested the inclusion of behavioural change identification of species carrying parasites. Both the Eastern Harbour and Southampton suggest the inclusion of a 'future' risk section (horizon species). The Eastern Harbours suggested the creation of a simple download of the relevant species for people to print off and whether/how to include brackish species. The IoW mentions the inclusion of information for users regarding marine invasive species reduction.

Frame 5. Do you agree with the [five biosecurity pathways](#) we have selected? Or would you prefer different or amended/combined pathways? What do you think of the content/layout of the pathway pages?

Attendees across all workshops suggested creating separate pathways for recreational and commercial vessels, including their individual kit and equipment. The Eastern Harbours suggested the need for waterside infrastructure to include more information on the maintenance of assets. Southampton saw the need for more detail about how habitat and species restoration is linked to biosecurity. The IoW suggested the inclusion of other marine activities such as dredging and food processing and the introduction of waterborne parasites from outside the Solent. They also mentioned that the pages are laid out well, but text heavy pages could be broken up by pictures.

Frame 6. What do you think of the local generic actions?

See Appendix 1 for action lists.

The local generic actions need more clarity, in terms of the wording of the actions, emphasize benefits for user/company for reducing invasives (IoW) and on reporting/validating sightings of invasive species (Eastern Harbours). The Eastern Harbours also mentioned that the biosecurity leads

need access to free role training and the support of their senior managers. Southampton suggested grouping similar actions together, e.g., 1, 2 and 3, to make actions seem less daunting, with IoW mentioning the actions being a process leading on from one another rather than being a priority list. Actions 1-8 were prioritised with 6 being the most popular in the Eastern Harbours and Southampton, 3 being most popular in Eastern Harbour and IoW, and 2 being most popular in Southampton and IoW.

Frame 7. What do you think about the recreational boating actions?

Attendees across all workshops supported the actions. The Eastern Harbours noted that there was a need to push and publicise all the great resources available more widely, Southampton and the IoW suggested the creation of greater awareness and engagement of users to carry out the actions. Southampton also suggested linking up with other initiatives outside the Solent as boats travelling longer distances increase the spread of marine invasive species as well as grouping similar actions together. Both the Eastern Harbours and Southampton prioritised actions 1 and 3, with the IoW generally supporting the order of actions.

Frame 8. What do you think about the actions for waterside infrastructure?

The Eastern Harbours suggested a new title of 'coastal and marine infrastructure' for clarity. Both the Eastern Harbours and IoW mentioned insufficient information for contractors in general, advice on materials to use and infrastructure design to minimise marine invasive spread; there is a need to create audit trails for coastal and marine materials. Southampton also mentioned actions 2, 3 and 4 could be helpful for MMO Marine Licence Applications, with contractors adhering to biosecurity protocols. Attendees across all workshops showed an interest in using settlement panels to monitor for marine invasives, be it as part of a citizen science project (Southampton) or to attract local funding (IoW). The IoW would like a template/design guide to help set up settlement panels. The IoW also suggested the creation of infographics to secure funding for waterside infrastructure and attracting conscious users. Prioritisation was spread across all actions; there are different needs depending on people's work areas.

Frame 9. What do you think about the actions for commercial and recreational vessels?

The attendees of both the Eastern Harbours and Southampton noted that voluntary measures will be difficult to implement due to the international movement of larger vessels; legislation is needed to make it enforceable. The Eastern Harbours mentioned that there is no statutory duty for commercial vessels to check for marine invasives, so it is commonly not built into existing protocols. The IoW queried who will oversee the actions put in place for such vessels. Southampton suggested the creation of incentives to support filtered closed loop wash systems as many marinas still wash off into the harbour/river.

Frame 10. What do you think about the actions for kit/equipment?

Attendees suggested adding information about construction and site operatives (Eastern Harbours), and other user groups, e.g., rowers, kite surfers (IoW) to the list. The Eastern Harbours noted that operators should be providing information on biosecurity measures to their clients, so clients should request it. Both the Eastern Harbours and the IoW recognise that it is difficult to get casual users engaged with actions. The IoW also voiced their concern as to who is responsible for increasing awareness amongst casual users. Southampton suggested displaying information for anglers and boaters at known angling areas and marinas should publicise Check, Clean, Dry if they don't already.

The Eastern Harbours noted that the Wildlife Trust were happy to educate volunteers in these measures in their work.

Frame 11. What do you think about the actions for habitat/species restoration?

The IoW attendees liked the layout of the website, but mentioned it being text heavy which could be broken down by pictures to engage the audience. The Eastern Harbours also appreciated the good information on oyster restoration and would like to see it expanded into other restoration activities. The Eastern Harbours noted the consents and licensing conditions needed for marine invasives in restoration work; the IoW noted that habitat restoration is already financially difficult due to licensing costs. The IoW and Southampton raised the costs of eDNA testing, so it needs to have a clear benefit. The Eastern Harbours requested guidance on how to prevent marine invasive spread when importing materials and any best practice design to minimise risk. Southampton attendees brought up the need to investigate other measures, e.g., translocation, which could be effective at controlling marine invasives.

Frames 12/13. What do you think about the national actions/evidence requirements that we have set out?

Attendees across all workshops had a mix of responses but no one disagreed with any of the proposed actions. The Eastern Harbours prioritised actions 6 to 10; the IoW prioritised 6 and 7. Attendees at Southampton mentioned looking into adapting existing apps rather than creating a new one to help identify and report marine invasives. They also mentioned the need to think about the future when species expand their habitat range or move due to climate change.

Frame 14. How could we measure action implementation?

Both the Eastern Harbours and Southampton attendees mentioned that reporting activities, either through daily record keeping in logbooks (Southampton) or annual online reporting through the Solent Forum (Eastern Harbours) would be best for measuring action implementation. Southampton mentioned that record keeping might be more difficult for sectors such as gear cleaning, and incidents should be reported to biosecurity leads or relevant authorities. The IoW noted that there is a lot of work to do in initially raising awareness of the issue, which will take some time, before actions are implemented. Southampton attendees noted difficulties for both the commercial and recreational sector as successful action requires an attitude and behavioural change. The Eastern Harbours attendees were not keen on formalised reporting timescales for actions but did like the use of settlement panels across the Solent as a quick and easy way to begin looking for species. The IoW noted the importance of creating baseline species identification to monitor into the future.

Appendix 1: List of Actions

Local Generic Actions

1. Support and endorse this plan and utilise its resources to help improve biosecurity throughout your organisation.
 2. Encourage staff throughout your organisation to be aware of the issue of marine invasive species in the Solent, provide a link to these pages in internal staff communications.
 3. Nominate a biosecurity lead in your organisation and include this term in their job description. Encourage them to talk to staff and customers about this issue and others more widely at any events held. This person should use the resources on these pages to help improve biosecurity throughout the organisation.
 4. Establish a system such as a logbook to record any marine invasive species found at your location. Ask the biosecurity lead to report any species found on [iRecord](#).
 5. Obtain a copy (free from the Solent Forum office) of the 'Identification guide for selected marine non-native species' and leave in a public place for staff/customers to browse. Show and encourage site contractors to browse through it too. An [online copy](#) is available on these pages.
 6. Educate your staff, customers and contractors by including information on marine invasives and biosecurity in your existing print and online media such as harbour guides and websites. Please use our media pack for copy and images (in prep). This pack also contains QR codes for these pages to add where there is limited space.
 7. Support invasive non-native species week (May) with an annual refresh of communications on this issue.
 8. Consider establishing a small working group for the locality, for example to include local estuaries officer, government agencies and local catchment partnership officer, to explore further awareness raising on this topic.
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Recreational Boating

1. Encourage recreational boaters to adopt the [Check, Clean Dry](#) campaign and utilise their resources for best practice. Encourage staff and recreational boaters to watch [The Green Blue's Check, Clean, Dry videos](#).
2. Ask the biosecurity lead to check what measures may need to be taken when planning boating events (see [resources section](#) on our recreational boating pathway page).
3. Insert a biosecurity clause in information put out at boating events to ensure that competitors from outside the Solent are aware of [Check, Clean, Dry](#) and the need to stop marine invasive spread.
4. Share the [Green Blue's guide to coastal boating](#) which includes an information page on how to avoid spreading marine invasives when boating.
5. Use [The Green Blue's](#) comprehensive guidance resources including the [coastal biosecurity signage kit](#) for lots of detailed best practice information.

Waterside Infrastructure

1. Consider using [settlement panels](#) to monitor marine invasive species colonisation of waterside infrastructure.
2. If marine invasive species are found, seek guidance from your local Natural England office about the best way to eradicate from infrastructure. The [INNS management toolkit](#) has information on the [pacific oyster](#), [carpet sea squirt](#) and [slipper limpet](#).
3. Ask relevant contractors and suppliers about what biosecurity measures they have in place regarding their operations as part of the commissioning process for new development. If appropriate ask them to follow guidance in this biosecurity hub.
4. For construction materials with a marine source, or that have been stored in water, ask the suppliers about their biosecurity protocols and whether the materials were checked for marine invasives at source. Ask your biosecurity lead to check for marine invasives on delivery.
5. Be aware of the risk of spreading marine invasive species when redeploying navigational aids outside of your locality. If redeployment is further afield check (e.g. into another harbour) for marine invasives and if found use Check, Clean, Dry protocol or clean off the fouling if technically feasible.

Vessels

1. Raise awareness with vessel owners that are in long term berth (over 2 months) about the risks of hull colonisation by marine invasive species and the need to check for marine invasives and hull clean, particularly if they are taken out of the Solent.
2. Ask owners of new vessels arriving in the Solent if they have biosecurity measures to check for invasive risk via fouling of hulls or anchors and if they have been cleaned. Focus on vessels that may have been at anchor or berthed for over two months in a different location.
3. Check if arriving ships have a [ballast water management plan, record book and certificate](#) (vessels over 400 gt).
4. When undertaking vessel survey or maintenance, look out for marine invasives, photograph and record if found.
5. When selecting a vessel maintenance/refit facility ask if it has biosecurity measures in place.
6. Consider installing a closed pressure washing system for vessel hulls.
7. For slow moving vessels like dredgers and barges, ask if they have a vessel biofouling management plan or what measures have been taken to ensure the vessel is free of marine invasives before reaching your site.

Kit and Equipment

1. Use the [GB Non Native Secretariat Check Clean Dry webpages](#) for best practice and resources on the following topics:

- [Anglers](#)
- [Boaters](#)

- [Paddlers](#)
 - [Field workers](#)
 - [Clubs and managers of water bodies](#)
 - [Event organisers](#)
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Habitat and Species Restoration

1. Be prepared that a biosecurity plan may be requested as part of a marine licence application. See the [resources section](#) in our pathway page for a link to an example.
 2. View the Blue Marine Foundation's [biosecurity decision cycle](#) for an example of the factors that need to be considered when carrying out species restoration.
 3. When undertaking beneficial use of dredgings for habitat creation ask if grab samples can be DNA tested to check for marine invasive species (this type of monitoring is still in its infancy but will become more readily accessible over time).
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National Actions

1. Create a role description for a marine biosecurity lead and a short online e-learning module to explain their role
2. Create an online template for a biosecurity logbook
3. Publicise and keep in print the free MBA 'Identification Guide for Selected Marine Non-Native Species'
4. Create/adapt a citizen science APP where people can undertake a simple species scan to identify them and report if they are found to be a marine invasive
5. Set up/adapt an existing social media account to report on marine invasive sightings around the country and any new best practice published
6. Provide standard copy to insert in contractor and supplier specifications on marine biosecurity measures
7. Produce a standard biosecurity plan template for people to use when submitting a Marine Licence where this is needed as a condition.

8. Guidance needed:

- How to manage and dispose of marine invasives from different waterside infrastructure, e.g. wood, steel, concrete, plastic, also include hydraulic pumps and rams
- How marine invasives are likely to settle on different hull types, e.g. wood, aluminium, GRP, how long colonisation takes and what to do if found in terms of management and eradication
- Installation of settlement panels, how to use them and next steps if marine invasives are found on the panels
- The likely spread of marine invasives from the beneficial use of dredgings for habitat restoration and how this can be mitigated
- Case studies with costings on how adopting biosecurity measures can save money by reducing fuel use, vessel and waterside infrastructure damage, kit longevity etc.

9. Develop (or add to an existing system) biosecurity accreditation to help marine operators select suppliers and contractors that carry out best practice
10. Provide online e-learning modules on best practice marine biosecurity measures, e.g. pressure washing, settlement panels
11. Produce a map of areas in the world that international ports should be most concerned about when ships arrive in terms of marine invasives being able to survive and colonise in the Solent
12. Create web resources for best biosecurity practice for undertaking habitat and species restoration