

**Queen's Harbour Master Plymouth**

Longroom House  
RM Barracks  
Stonehouse  
Plymouth PL1 3RT

QHM/532/3

6 August 2019

**NOTES OF THE TAMAR ESTUARIES CONSULTATIVE FORUM MEETING**

**HELD AT 1015 ON THU 18 JUL 2019**

**WARSPITE ROOM, COUNCIL HOUSE, PLYMOUTH**

<b><u>Present</u></b>	<b><u>Representing</u></b>
Mr N Trathen	Deputy Queen's Harbour Master (Chairman)
Mrs K Curry	PCC and TECF Coordinator
Mr A Jones	QHM Port Conservancy Officer
Capt. T Charlesworth	Cattewater Harbour Commissioners
Mr R Allen	Cattewater Harbour Commissioners
Mr C Hicks	Cattewater Harbour Commissioners
Mr M Reynolds	ABP
Ms K Fletcher	ABP
Ms A Gall	Natural England
Ms S Wordley	MMO
Mr R Price	Environment Agency
Mr O Thomas	Devon & Severn IFCA
Mr N Mortimer	South Devon AONB
Mr J Sewell	Marine Biological Association
Mr P Naylor	Wembury Marine Conservation Area Advisory Group
Ms K Deeney	Plymouth City Council
Ms F Crouch	Plymouth City Council
Mr L Gibson	Plymouth City Council
Ms P Buchan	Plymouth City Council
Mr M Goble	PCC Pier master
Mr C Matthews	Duchy of Cornwall
Ms F Stacey	Westcountry Rivers Trust
Mr M Parry	Ocean Conservation Trust

<u>Item</u>	<u>Discussion and Decisions</u>	<u>Action</u>
1. Welcome and Introductions	Chairman welcomed everyone to the TECF Meeting and gave all present an opportunity to introduce themselves.  A change to the agenda was proposed and accepted to move Agenda Item.8 - National Marine Park presentation forward.	
2. Apologies for Absence	Apologies for absence had been received from:  C Necker (QHM), S Curtin (D&S IFCA), K Pritchard (Devon CC / DMF), R English (S.Devon AONB), G Wheeler (PCC), R Baker (Cornwall Council), R Sekula (South Hams), V Darwell (TV AONB), S Hipsey (W. Devon Council)	
3. Agree Notes of the last meeting.	The notes of the last meeting held on 14 Mar 19 were accepted as a true record of the meeting.	
4. Matters Arising.	20.1 <u>TECF Newsletter</u> : All TECF Members received a further request from NIO for TECF Newsletter content.  Update Jul 19: August publication is in the final stages with space still available. Ideally articles should be pass 100-150 words and an include image. Any contributions should be forwarded to Fiona Crouch.  <u>Ongoing</u>	All
	5. Devon Maritime Forum: The forum is actively looking for funding opportunities and looks to grow closer links with stakeholders (including TECF members) via the "Joint Sustainable Seas Strategy".  NIO to reinstate/ensure partnership.  <u>Complete</u>	
	7. Finances for 2019/20: NIO to provide adequate notice in future years, NIO to release next years requests for the July meeting. Update Jul 19: Agenda Item.10  <u>Complete</u>	
	8a. <u>INNS Pacific Oysters</u> : NE to provide further advice – What would NE like TECF to do to help? Update Jul 19: NE outlined that the problem is rapidly spreading and would affect the condition of the SAC. Removal trial results awaited from Fowey. TECF members are requested to support and promote NE advice on the removal of Pacific Oysters  <u>Action</u>	All

	<p><u>8b. Wrasse Potting:</u> Is this seen as a growing/high risk through the annual survey?</p> <p>Wrasse potting is an IFCA project. A limited number of commercial operators have licences and their impact is being monitored. Request for update from IFCA's.</p> <p><u>Action</u></p>	IFCA's
	<p><u>9. Draft Management Plan Extension:</u> All member were requested to provide feedback, specifically with evidence on the appendices.</p> <p>Update Jul 19: Limited feedback received. The updated plan was being presented for endorsement at Agenda Item. 7.</p>	
	<p><u>12.3a. Marine Litter:</u> A "sea bin" will be installed in QAB marina and monitored by Plymouth University. It is hoped that if it is effective more can be installed. NIO(EMS) asked for assistance in identifying locations; QHM suggested PPMLC members should be consulted for information.</p> <p>Update Jul 19: the trial was initially successful however ongoing maintenance is high with large volume of small plastic "nurdles" collected. An update will be provided at the November meeting.</p> <p>Babcock are looking to trial a seabin within a non-tidal basin.</p> <p><u>Ongoing</u></p>	NIO
	<p><u>7. Water users' leaflet:</u> Any changes, additions or updates to the water user leaflet are requested.</p> <p>Update jul 19: 2019 edition has been published and copies are available from NIO(EMS) for distribution</p> <p><u>Complete</u></p>	
	<p><u>8. Developments: Boston's Boat Yard Development:</u> Concern raised by Cattewater Harbour Master regarding a quay wall close to the development. The wall is likely to fall down in due course and will be less disruptive to sort now rather than later.</p> <p>MMO to investigate and advise.</p> <p>Update Jul 19: CHCs concern refers to a different location to that on the current MMO licence and would not be covered by future licencing. There have also been some issues identifying the land owners.</p> <p><u>Complete</u></p>	

	<p><u>15i. Marine Planning:</u> Policies to be in place by spring, request to all members to respond to consultation process by 29 Mar 19</p> <p><u>Complete</u></p>	
Presentations		
5. Wastewater from Abandoned Metal Mines (WAMM) Project	<p>Mr Price gave his presentation which can be found at Annex A.</p> <p>Due to the number of abandoned mines throughout the Tamar Estuary the risk of pollution is considered high.</p> <p>Upper Tamar has the potential to be considered poor or failing due to heavy agriculture, industry, anthropogenic modification and waste from abandoned mine workings. WFD action levels at the moment have not be triggered.</p> <p>Data collection above standard monitoring will be implemented under project "TAMARA" along with stakeholder engagement. This information will contribute to the EA building a funding business case.</p>	
6. Marine Biological Association and Beach Rangers	<p>Mr Sewell gave a presentation which outlined the work of the MBA outreach programme.</p> <p>The presentation included information on the scope and ambition of the current outreach activities. Opportunities were being sought to identify new opportunities and secure sustainable future funding for the work.</p> <p>This years programme would be launched later in Jul. It was requested that details are passed to NIO(EMS) for dissemination to TECF members.</p> <p>The Beach Rangers would be supporting Wembury Bio Blitz 27 – 28 Sep 19.</p>	Mr Sewell/ NIO(EMS)
Matters for Information and Action		
7. Matter for agreement: Draft Management Plan Extension	<p>NIO outlined the proposal for the management plan extension (detail at Annex B).</p> <p>The management plan was endorsed by the forum and agreed that the extension would be made available electronically.</p> <p>Where necessary members were asked to obtain formal approval from their organistaions. Any concerns were requested no later than 9 Sep 19. Thereafter, the updated plan would published, subject to no objections being received.</p> <p><u>Action</u></p>	All

<p>8. National Marine Park</p>	<p>Ms Deeney outlined progress with the current National Marine Park Proposal:</p> <p>PCC have held over 70 one-to-one meetings with relevant stakeholders to identify the support for the proposal and challenges.</p> <p>PCC is planning to issue a declaration launching the NMP in early September. A paper explaining the the vision for the NMP is being drafted and will be shared in advance of the Declaration Event. This will aim to articulate what the NMP is.</p> <p>The declaration will be the starting of the process to develop and refine the scope and governacne of the NMP.</p> <p>The first year will be dedicated to developing a business plan which will aim to embrace, highlight and recognise the good work that is already being done.</p> <p>A film to be shown at the launch has been commissioned in collaboration with the Blue Marine Foundation.</p> <p>A website is currently under development.</p> <p>The biggest challenge is recognised that an NMP must have a very clear and unambiguous rational and that this must be provided to stakeholders soon.</p> <p>Funding (£75k) has been secured from the MMO for consultants to assist with developing the concept and engaging with stakeholders.</p> <p>Ms Deeney was challenged that the current proposal is still heavily environmentally driven even though it has been verbally recognised that environmental designation is already well established and managed. There appears to be little or no consideration for commercial goods and traffic or general maritime activity.</p> <ul style="list-style-type: none"> <li>- Agreed that ALL aspects must be covered and that information has been collected from stakeholders such as CHC and ABP, this information will be passed to the MBA who are assisting in developing the educational element of the NMP to be included in activities such as Beach Rangers.</li> </ul> <p><u>Action</u></p>	<p>NIO</p>
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	<p>It was highlighted that it was “brave” of PCC to make a declaration at an early stage before the concept had fully matured.</p> <ul style="list-style-type: none"> <li>- Agreed and reconfirmed that the “declaration” must be clear and include <u>all</u> water users.</li> </ul> <p>Ms Deeney emphasised that the current governance (environmental, statutory etc.) must be utilised and experience embraced, also the declaration must include what the NMP will not be and this will be tested with TECF members.</p> <p>Ms Deeney finished by offering all members the opportunity to have a direct briefing to their organisation if desired.</p> <p><u>Action</u></p>	K Deeney/All
9. Advanced Mooring Systems	<p>Mr Parry presented a request for TECF funding to support the ongoing trial of the Advanced Mooring System in Cawsand Bay. The detailed bid is at Annex C.</p> <p>Mr Parry left the meeting o/c of his presentation to allow the bid to be discussed.</p> <p>It was agreed that the continuation of the trial should be supported to allow the effectiveness of the AMS to be assessed over an extended timeframe.</p> <p>DQHM recommended that continued support should be linked to specific deliverables and full funding may need to be in collaboration with the upcoming ReMIDES project through NE.</p> <p>TECF members supported the proposal that TECF Officers will convene to decide on the amount that can be contributed and direct the project accordingly reporting back to TECF members at the next meeting.</p> <p><u>Action</u></p>	NIO/DQHM
10. TECF officers report	<p>NIO presented her report which is given in Annex D.</p> <p>2. Finances and Priorities</p> <p>NIO was requested to provide forecast funding contributions for 20/21.</p> <p><u>Action</u></p> <p><u>PMN: The forecast is circulated with the minutes.</u></p>	NIO
11. Natural England Officers Report	<p>Mrs Gall presented Natural England’s update which is given in Annex E</p>	



	<p>d. IFCA: The Wrasse fishery has opened on 16 Jul with limited licences issued; IFCA will be monitoring for any impacts.</p> <p>Hand gathering byelaw is under review with an initial call for information on methods and scale. The next stage will be to assess the information and consider future options for management.</p> <p>PMN – a update can be viewed on the following link: <a href="https://www.devonandsevernifca.gov.uk/Latest-news/Update-on-Hand-Gathering">https://www.devonandsevernifca.gov.uk/Latest-news/Update-on-Hand-Gathering</a></p> <p>Since the last meeting 5 patrols have been completed monitoring the use of pots and 2 offences logged</p>									
<p>18. Dates of Next Meetings</p>	<p>Dates of the forthcoming PPMLC and TECF meetings were published as follows:</p> <table border="0"> <tr> <td style="text-align: center;"><b><u>PPMLC</u></b></td> <td style="text-align: center;"><b><u>TECF</u></b></td> </tr> <tr> <td style="text-align: center;"><b>1400 on 10 Oct 19</b></td> <td style="text-align: center;"><b>1015 on 14 Nov 19</b></td> </tr> <tr> <td style="text-align: center;"><b>1400 on 13 Feb 20</b></td> <td style="text-align: center;"><b>1015 on 12 Mar 20</b></td> </tr> <tr> <td style="text-align: center;"><b>1400 on 11 Jun 20</b></td> <td style="text-align: center;"><b>1015 on 16 July 20</b></td> </tr> </table>	<b><u>PPMLC</u></b>	<b><u>TECF</u></b>	<b>1400 on 10 Oct 19</b>	<b>1015 on 14 Nov 19</b>	<b>1400 on 13 Feb 20</b>	<b>1015 on 12 Mar 20</b>	<b>1400 on 11 Jun 20</b>	<b>1015 on 16 July 20</b>	
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Distribution: NBC, All Committee members

**Annex A – EA WAMM Project**

**Annex B – Draft Management Plan**

**Annex C – Request for TECF Funding**

**Annex D – NIO Report**

**Annex E – NE Update**

# Wastewater Abandoned Metal Mines (WAMM)

Environment Programme  
July 2019





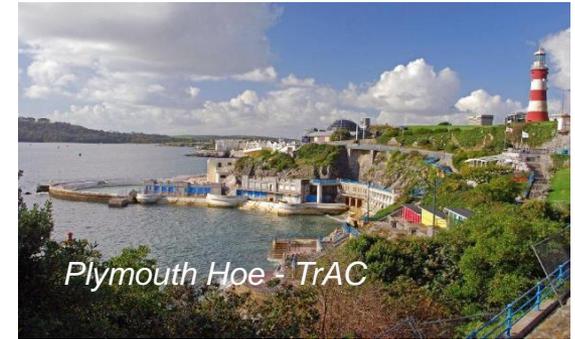
Our Area Vision is a sustainable, healthy and safe water environment.

A living catchment that is respected, harnessed, appreciated, enjoyed and cared for by our communities, businesses and visitors working in partnership.

A great Area that benefits our wildlife, economy, prosperity and well-being.

*Picture: River Tamar at Calstock*

# Our Water Environment



Number of water bodies	Ecological status or potential					Chemical status	
	Bad	Poor	Moderate	Good	High	Fail	Good
56	0	3	38	15	0	1	55

Plymouth TraC – Moderate (MMA)

Plymouth Sound – Moderate (TIN)

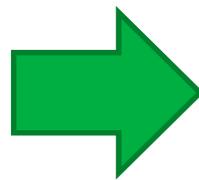
Plymouth Coast – Good

## Pressures:

- Nutrients/Sediment
- Modification
- Metals

## Main Sources:

- Agriculture
- Water & other industry
- Heavy Modification e.g. Flood Risk
- Wastewater from abandoned metal mines



Chemical

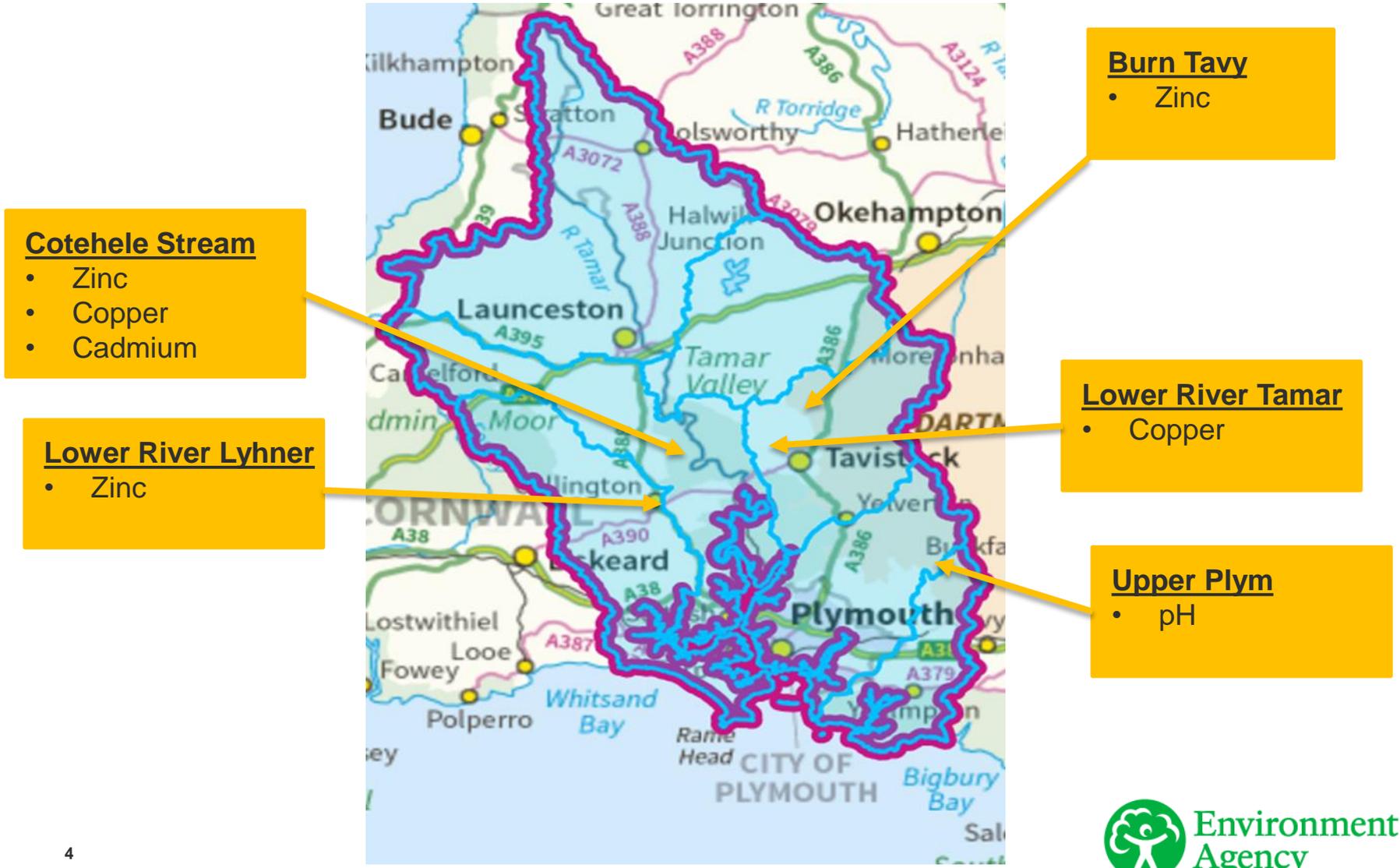
Biological

Hydro-morphological

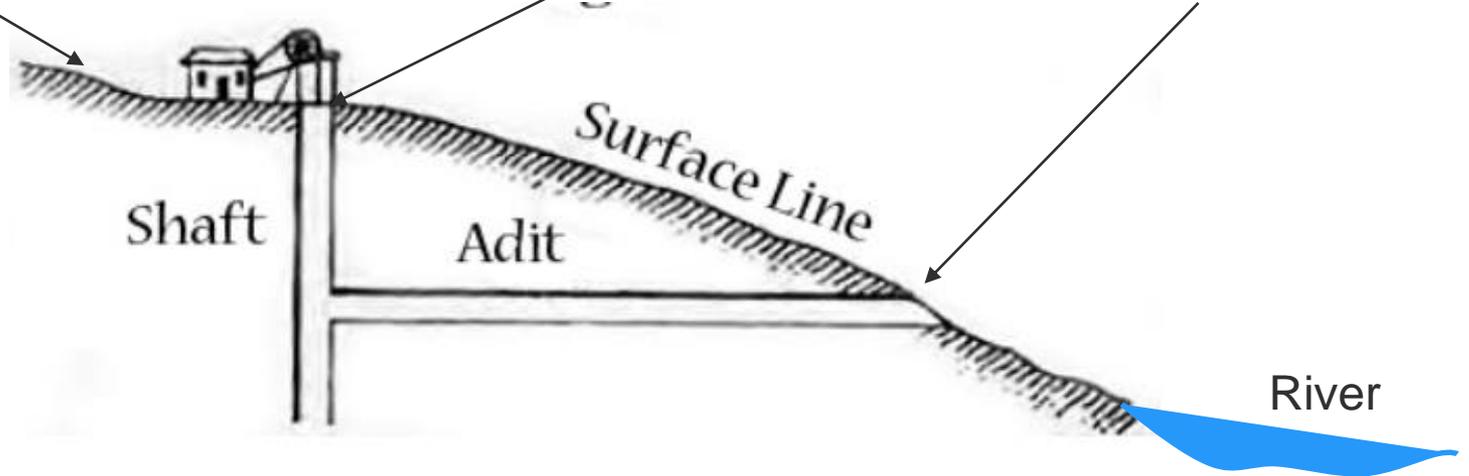


Quality of Water Environment

# Tamar Management Catchment WAMM water bodies



# Example Pollution Sources (Not Tamar)



# WAMM Programme

## Our Vision:

- **Catchment collaboration** delivering 1,200km of river improvement by 2027 consistent with Defra Strategies
- Maximise opportunities for **additional benefits & wider funding** streams
- Reduce cost to Government – **turn liabilities into assets.**

## Our aim is to achieve:

- Cleaner rivers for current and future generations
- More wildlife for people to enjoy
- More tourism and opportunities for industry which rely on clean rivers
- **Writing the next chapter in the mining story**

## In the South West WAMM :

- affects up to 5% of waterbodies in RBMD
- up to 450km of watercourse suffers from pollution
- investigations are underway or planned for most affected rivers

## 25 Year Environment Plan

We will look to the water industry and manufacturers of pesticides and other agri-sector industries to deliver these various approaches. They will be encouraged to develop good practices, and voluntary and catchment-based initiatives to protect drinking and/or groundwater resources. In addition, cleaning up pollution from abandoned metal mines will protect aquatic organisms and deliver economic and environmental benefits for local communities.



Funding and programme owner



Evidence/catchment characterisation

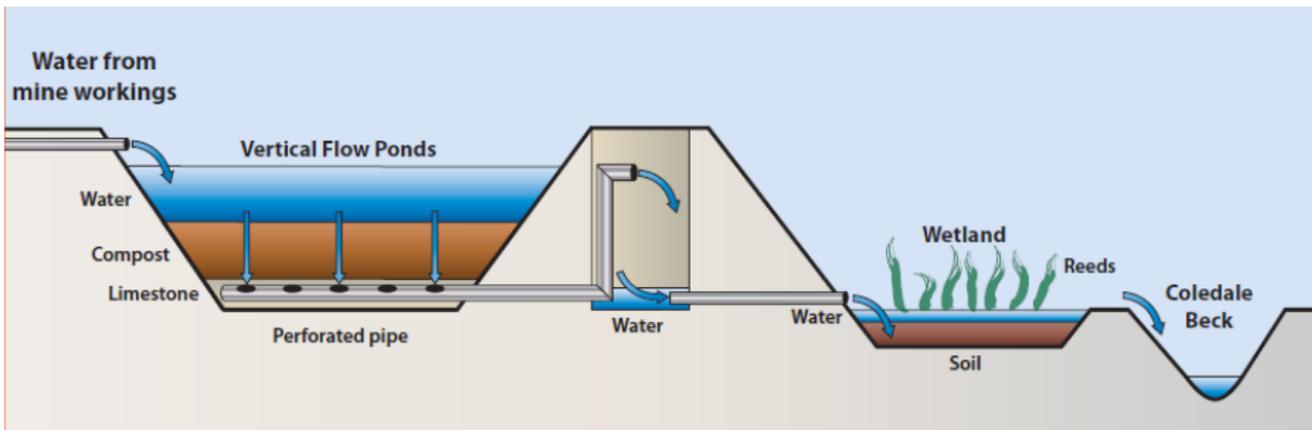


Solutions and delivery

# Example solutions

# Challenges

- Mining Waste Directive from 2000
- Funding of remediation
  - Capital investment
  - Ongoing maintenance
- Available physical footprint
- Landscape impact
- UNESCO World Heritage
- Tailings colonisation – rare bryophytes
- Climate Change



# Useful links

- <https://www.gov.uk/government/collections/metal-mine-water-treatment>
- <https://environment.data.gov.uk/catchment-planning/>
- <https://whc.unesco.org/en/list/1215>
- <https://www.gov.uk/government/organisations/the-coal-authority>

## Agenda Item 7 Tamar Estuaries Management Plan 2012 - 2018: Two Year Extension until 2020

### Recommendation

- That TECF agree the two year extension to the Tamar Estuaries Management Plan (TEMP) 2012 – 2018 now 2020.
- That TECF members seek to get their organisations formal approval by the end of December.
- That members agree that the Extended TEMP to be available electronically only although printed versions can be requested.

### 1. Introduction

- 1.1. At the last TECF Meeting, the draft for the two year extension to the Tamar Estuaries Management Plan was discussed. Members were invited to send any comments to the NI Officer.
- 1.2. No comments were received and therefore the attached is brought forward as a recommendation for the Forum to extend the Tamar Estuaries Management Plan until 2020.

### 2. Extension for 2019 - 2020

- 2.1. In order to extend the TEMP for a further two years, text changes and additions have been identified and are provided in Table 1. Throughout this *new text is shown in italics and underlined.*

Table 1: Revisions required

Page	Section	Comment
	<b>Front Cover</b>	Add text: <u><i>Annex: 2018 - 2020</i></u>
	<b>Foreword</b>	Information needed to explain extension by two years: New Text: <u><i>“In order to enable a smooth transition as we move into Brexit, it has been decided to extend the Tamar Estuaries Management Plan for two years until the end of 2020.”</i></u>
<b>Part 1</b>	<b>Introduction 1.1 and 1.2</b>	1.1 No change to overarching objectives 1.2 No change
	1.3 new challenges and opportunities –	<b>1. Update to include Brexit and National Marine Park. Also JLP and new way for working together for managing Recreation.</b>  New text under Challenges: <ul style="list-style-type: none"> <li>• <u><i>Brexit has brought uncertainties around what this will mean for the management of European marine sites. <b>Challenge:</b> how to develop meaningful actions when it is unknown whether there will be changes to the underlying legislation.</i></u></li> </ul>

		<p>New text under Opportunities:</p> <ul style="list-style-type: none"><li>• <u>The anticipated adoption of the Plymouth and South West Devon Joint Local Plan bring opportunities for even closer more integrated working and a stronger approach for managing recreational impacts.</u> <b>Opportunity:</b> <u>Develop closer and more integrated ways of working.</u></li></ul> <p>New text under Opportunities:</p> <ul style="list-style-type: none"><li>• <u>Discussions around the creation for a new Marine Park as part of a wish to see the city link more strongly with the marine environment.</u> <b>Opportunity:</b> <u>Place TECF at the heart of the design and establishment of a new Park and build further on the strong partnership and values of TECF.</u></li></ul> <p><b>2. Update on EMS CIL project and unfavourable status for seagrass. Summarise site condition.</b></p> <p>New text under Opportunities:</p> <ul style="list-style-type: none"><li>• <u>A single approach to managing recreational impacts is required to address impacts arising from increased development.</u> <b>Opportunity:</b> <u>Work together with local planning authorities to agree and implement new recreation management strategy with costings.</u></li></ul> <p>New text under Challenges:</p> <ul style="list-style-type: none"><li>• <u>In 2018 Natural England altered its assessment of the condition of the seagrass to 'unfavourable' based on potential impacts from boat moorings and other factors including contamination and invasives.</u> <b>Challenge:</b> <u>Management must not be put in place to address what measures might be put in place to allow recovery of this feature.</u></li></ul> <p><b>3. Highlight MMO and the Marine Plan. Pick up integrating with Start Point to Plymouth Sound and Eddystone SAC and MCZs including the Tamar Estuaries MCZ.</b></p> <p>New text under Opportunities:</p> <ul style="list-style-type: none"><li>• <u>The Inshore Marine Plan for the South West is to be published 2020 by the Marine Management Organisation, the Start Point to Plymouth Sound and Eddystone SAC and MCZs have now been designated.</u> <b>Opportunity:</b> <u>Ensure that the next</u></li></ul>
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		<p><u>Management Plan for the waters has regard to the Marine Plan and the adjacent designated sites.</u></p> <p><b>4. Opportunities for habitat creation with EA tied to Shoreline Management Plan.</b></p> <p>New text under Opportunities:</p> <ul style="list-style-type: none"> <li><u>The Shoreline Management Plan will be looking to identify opportunities for habitat creation.</u></li> </ul> <p><b><u>Opportunity: Identify suitable sites particularly for intertidal sites within the Tamar Estuaries.</u></b></p>
	1.4 Management Framework	No change proposed.
	1.5 Area covered	No change proposed
	1.6 How and why management plan produced	<p>Update to include dates of draft produced and circulation.</p> <p>New text proposed:</p> <ul style="list-style-type: none"> <li><i>Circulation of draft Extension text to TECF members (Spring 2019).</i></li> <li><i>Extension agreed Summer 2019.</i></li> </ul>
	1.7 How will it link with other plans	<p>Need to mention NMP and work which will take place relating to this.</p> <p><b>New paragraph proposed:</b> <u>Brexit, the South West Inshore Marine Plan and the proposed National Marine Park all provide opportunities to enable local management solutions to address local issues whilst working within a broader strategic framework. It will be important that all work taken forward through this document continues to integrate with these important initiatives in order to ensure that the waters of Plymouth Sound and the Tamar Estuaries achieve sustainable management delivering balanced outcomes that address economic, social and environmental benefits.</u></p>
	Fig 4	<p>Include MCZ and also proposed NMP boundary.</p> <p><b>Figure 4 to be replaced:</b> <i>A replacement Figure 4 will be inserted.</i></p>
<b>Part 2</b>	<b>Plymouth Sound &amp; Estuaries European Marine Site 2.1</b>	<p>Update all references to Habitat Regulations to reflect new legislation.</p> <p><u>All references to the “Conservation of Habitats and Species Regulations 2010” and “Habitat Regulations 2010” or any variations to be changed to “Conservation of Habitats and</u></p>

		<p><u>Species Regulations 2017 (as amended) and “Habitat Regulations 2017”.</u></p> <p>Refer to management advice provided by NE.</p> <p><b>New fourth paragraph to be added:</b> <u>Under Regulation 37 of the Habitat Regulations, Natural England have published Advice packages that set out site information, supplementary advice and advice on operations. Relevant Authorities will need to have regard to these advice packages when carrying out their duties and the advice needs to inform the Management Plan.</u></p>
	2.2	No changes needed.
<b>Part 3</b>	<b>Critical Risks</b>	<p>Update reference to NE’s Reg 35 Advice Package.</p> <p>Replace all references to “Natural England’s Regulation 34 Advice Package” to “Natural England’s Regulation 37 Advice Package.”</p>
		No obvious changes needed to Critical risks and activities.
Part 4	Thematic Management Plan	<p>The Thematic Plan is currently given under the following:</p> <ul style="list-style-type: none"> <li>• Coordination</li> <li>• Monitoring and information management</li> <li>• Landscape and biodiversity conservation</li> <li>• Historic environment</li> <li>• Water quality</li> <li>• Development and coastal change</li> <li>• Fisheries</li> <li>• Shipping, navigation and safety</li> <li>• Public access, recreation and moorings</li> <li>• Awareness, understanding and community engagement</li> </ul> <p>No changes needed.</p>

### 3. Sign-off process

3.1. The extension will now need to be agreed by all parties. All members are asked to inform the NIO what their procedures are for this with a view to full adoption by December 2019.

### 4. Production

4.1. The extended TEMP will be published online and will be made available on the website and also to download. Electronic copies will be made available to all TECF members. Printed copies will be available by request only.

4.2.

<b>Recommendation</b>
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| <ul style="list-style-type: none"><li>• That TECF agree the two year extension to the Tamar Estuaries Management Plan (TEMP) 2012 – 2018 now 2020.</li><li>• That TECF members seek to get their organisations formal approval by the end of December.</li><li>• That members agree that the Extended TEMP to be available electronically only although printed versions can be requested.</li></ul> |
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# Request for TECF funding Stirling Advanced Mooring System trial in Cawsand Bay

## 1. Introduction

### Stage 1 – Stirling Riser trial

Firstly thank you TECF for your continued support to find solutions to anchoring in sensitive habitats and funding the first iteration of the Stirling Advanced Mooring System (SAMS) through the NMA CSI project. The data for the period TECF funded has been presented to the TECF and the NMA is working to continue monitor the mooring. The SAMS is still working as intended with the riser kept off the seabed and the condition of the mooring and the alterations are in good condition.

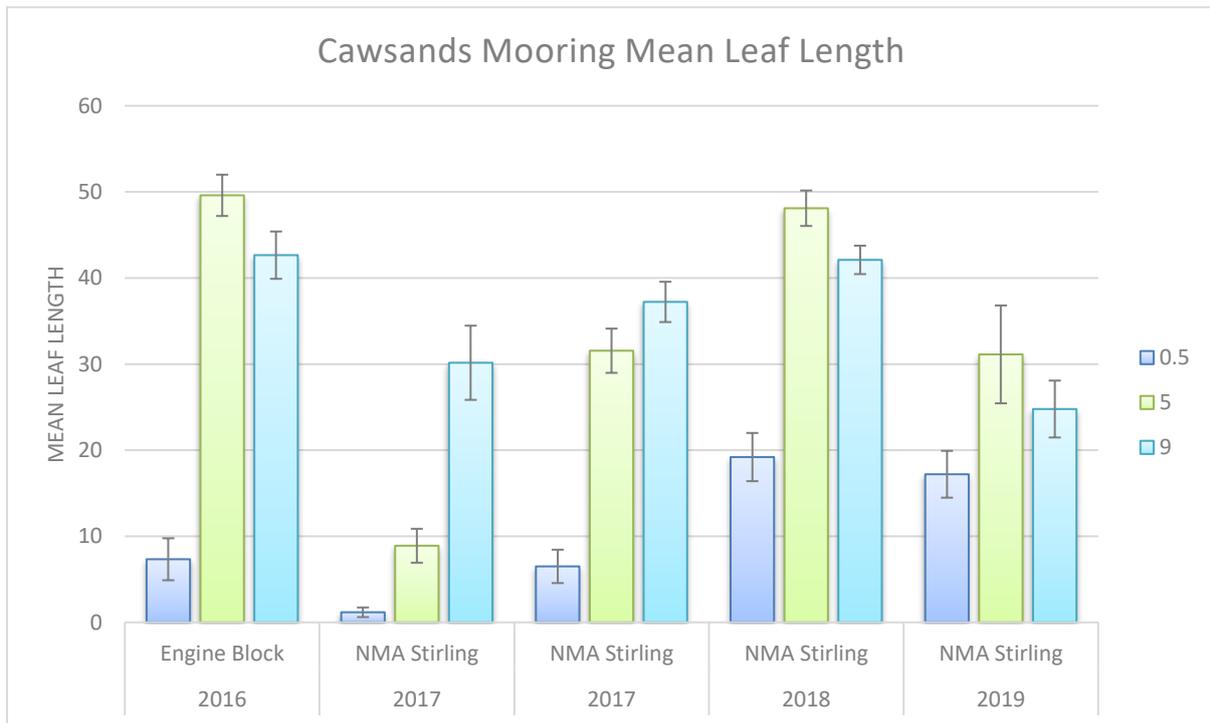
*Figure 1: Diving in Cawsand Bay*



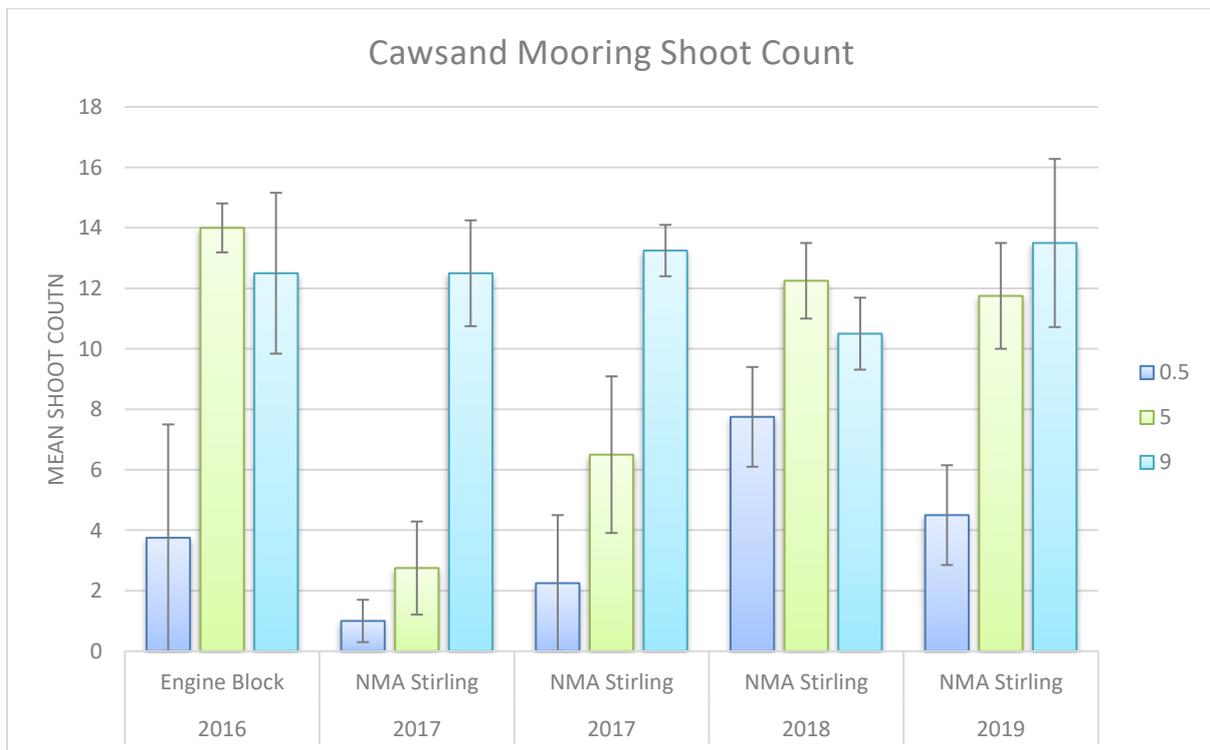
The NMA will continue to monitor the original SAMS when we have the resources available in the future.

Historically surveys have recorded mean canopy height. In the latest survey (graph 1) there is an overall reduction of mean leaf length in the 2019 data, this is potentially due to the recording period, in 2016, 2017 and 2018 surveys all took place in the

centre of the growing season (summer) where the 2019 survey was performed at the start of the growing season in April. Efforts continue to survey the site in the summer period to create a comparable data set. The mooring was surveyed in April to contribute towards a DEFRA and MMO report, at present Plymouth is leading the way in trailing Advanced Mooring Systems.



Graph 1. Mean Leaf Length

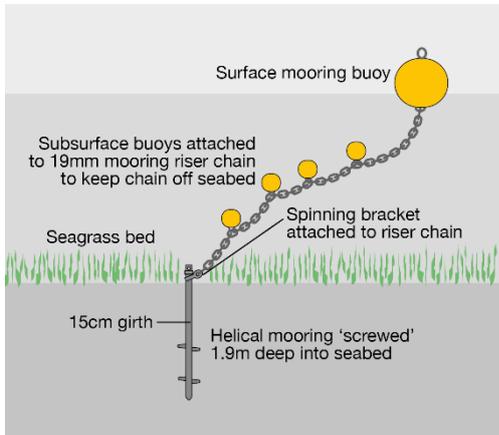


Graph 2. Mean Shoot Count

The 2019 survey has also observed a slight decrease in the mean shoot count close to the mooring, this was not expected since there is no sign of scour around the mooring block, the mechanism of loss still needs to be identified.

## 2. Stage 2 - Larger Trial of five SAMS with helical screw piles.

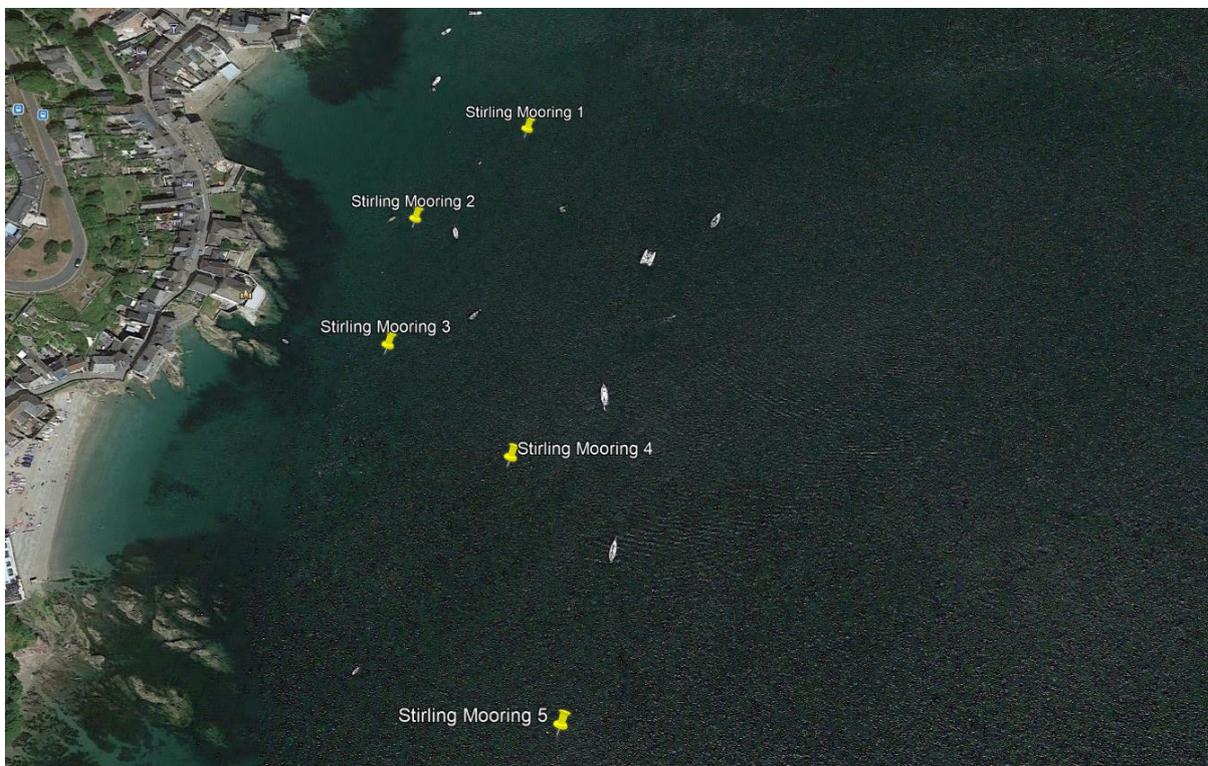
### Introduction



The original trial has attracted further support from the Marine Conservation Society funded by Princess Yachts and the NMA has agreed in partnership with the MCS working with volunteers to install five additional SAMS in Cawsands. Within the previous trial it was permissible to use a concrete one tonne sinker, but for the next iteration of the trial Natural England's recommendation required the use of a helical screw pile in seagrass locations to reduce the footprint of the sinker. While the NMA feel this is a very positive suggestion and has pioneered the process for using helical screws it has resulted in a considerable delay and cost increase to the previous iteration of the trial. The riser from the previous trial is now combined with the screw pile to reduce the impact of the mooring on the seabed further.

Five additional mooring holders (local residents) have volunteered to take part in the next stage of the trail. The project has offered to remove volunteers' old moorings and replace it with a screw pile and new riser that is less impactful to the seabed. The volunteers moorings are evenly spaced around Cawsands Bay (see aerial photograph below).

Figure 2: Aerial photo showing location of volunteers' moorings in Cawsand Bay



## Scope:

The scope of the Stage Two trial was identified as:

- Protect and enhance seagrass beds
- Increase awareness and support for eco-moorings by local and national boating sector
- Support well-managed MPAs
- Deliver 20 days of community awareness raising, liaison with NE and delivering support for condition assessments.

## Outcomes:

- Seagrass beds will increase in density, extent, and biodiversity
- Boating sector will call for more Advanced Mooring Systems.
- NE/UK can report on well-managed seagrass beds.

## Assessing targets:

- Research by seagrass using quadrats along transects from the mooring locations showing blade density, extent and species distributions compared to areas of conventional moorings.
- Surveys of attitudes to moorings will be undertaken as the project starts and, if the project is renewed, after three years.
- Results of biological recording, and sea-user surveys will inform managers as to the effectiveness of the intervention to make seagrass bed MPAs well-managed.

This next stage of the trial will be deployed for three years working with five volunteers, the SAMS will be monitored three times a year to study regrowth towards the new anchor point. The five moorings will be assessed with the support of Seasearch diving volunteers using the same survey strategy as the first part of the trial.

## Hypotheses of the trial

- H1 Seagrass density will be reduced around the moorings
- H2 Sediment cover above the seagrass rhizome will be thinner around the moorings
- H3 Seagrass associated epifaunal diversity will be reduced around the moorings
- H4 Impacts will be greater around the Stirling AMS than the control site.

## Survey Methodology

The following measurements will be undertaken:

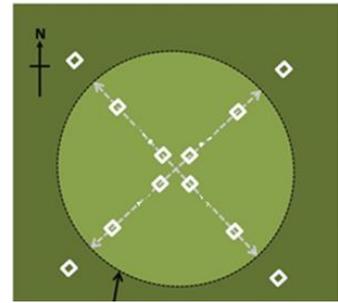
- Seagrass (counts in a quadrat): shoot density, max. Shoot length, sediment depth covering rhizome mat.
- Epifauna (visual counts): species richness, abundances

## Method.

- Pair 1 of divers: Reel out tape SW to NE distance (i) and place the quadrat.
- Once sampling is complete on SW bearing, divers return to the mooring and repeat the sampling methodology to a bearing of NE. Repeat but on bearings of NW and SE.

### Tasks at each sample site:

- Place Quadrat – shoot count in Quadrat
- Photograph Quadrat
- Measure leaf length – 10 leaves per quadrat
- Sediment cover over roots – stick measure into sediment (ruler, feeling root resistance).
- Note conspicuous marine life present
- Record benthic inverts through Seasearch methodology
- Sample Sites at (i) 0.5m, (ii) 5m, (iii) 9m from the helical screw (outside length of mooring chain)
- Transect Bearings - NE, SE, SW, NW
- This is a total of 12 sample sites from one mooring.
- Repeat until all five Stirling Advanced Mooring Systems sites are surveyed.



### Partners

Within this stage of the trial, University of Plymouth Marine Institute and Marine Station have both committed to support the monitoring of the baseline health of the site by monitoring the control sites. UoP have committed to the three years monitoring of a control site and three of the standard moorings following the same survey strategy that has been used for the SAMS moorings. To source this contribution independently the costs are estimated at £16,200 for a dive team for nine days. This UoP data will be used for comparison for seagrass bed health for assessing the five new installed SAMS. Stage 2 of the trial therefore presents a robust scientific approach with multiple stakeholders working together.

- **Princess Yachts** through MCS has provided funding.
- **National Marine Aquarium** is providing advice and formalised design of the SAMS.
- **University of Plymouth** is providing boat time and diver time.
- **Seasearch** is providing diver support for SAMS monitoring.

## 4. Rationale for requirement of additional funding

At the start of the project, the NMA intended to install five SAMS, co-ordinate all monitoring and provide outreach to the local boating community. The success of the original project that TECF funded was partially due to positive engagement work in the Cawsands and Plymouth boating community and this will be essential for the future success of this part of the project.

Originally all costs for the aims and outcomes were covered, the project was able to achieve all the elements within a budget of £12,500. Through the requirement to use a helical screw pile the project has been limited by mooring installers so with limited supply options the costs have increased. The project suffered a setback when the only screw pile deployment contractor withdrew from the project shortly after it commence in November 2018. The contractor returned all the funding but the costs have risen due to the need to find a new mooring contractor who was willing to source the equipment and take responsibility for the installation of the helical screws. After a lengthy period of negotiation with the new mooring contractor (CDM), suppliers of the equipment (ABC) and interested parties the moorings were successfully installed May 2019.

The change in mooring providers saw the construction and installation costs increase from £5,500 to £10,500. The increase has come from the costs associated with developing the process and redesigning the method of attachment of the buoyancy to the riser. We do feel that in the long term with mooring tackle bought on bulk the Stirling Advanced Mooring System can be brought in line with costs of deployment of a traditional mooring.

The project has the finance to fulfil its minimum monitoring requirements laid out in the original remit but not enough to fulfil the engagement work of the study. By installing the five SAMS we feel the first of our objectives have been fulfilled - Protect and enhance seagrass beds. The cost increase has not allowed for the equally important engagement to take place, since habitats within the Plymouth Sound MPA which TECF administers. The AMS installed do support the objectives of the EMS Recreational Impacts Project. Given the EMS Recreational Impacts Project does benefit from a fully funded mooring project and the SAMS project works closely with the with PCC EMS Recreational Impacts Project Officer I'm writing for your consideration of contributing towards the delivery of the project, the project requires funds to fulfil the following:

### 1. Increase awareness and support for eco-moorings by local and national boating sector

- Presentations with local yacht clubs and stakeholder groups to raise awareness of the work taking place on the EMS. Creation of digital media outputs as a tool for all contributors to disseminate with the aim of raising confidence in the SAMS system.
- Articles created for local and national media outlets.

### 2. Support well-managed MPAs

- Working with the community and creating buy in from the boating community is essential to a well managed MPA. At present the mooring designations / allocations in Cawsand Bay is going through a tidying up process the SAMS mooring project assists the Rame Gig Club in the streamlining of its mooring allocations. Natural England has identified a pressure on the annex 1 habitat within Plymouth Sound as mooring pressure, through working with the gig club the SAMS project aims to provide a solution to the identified pressure. Though providing practical solutions in situ the SAMS project is supporting the community in managing their MPA which has benefits to the EMS.
- An additional cost has been at the beginning the mooring owners were not aware of the condition of the tackle they had in situ till we replaced the moorings (its clear annual inspections are not taking place). THE NMA agreed to remove the tackle and return the mooring tackle to the owners, subsequently on retrieval none of the mooring owners required their old tackle back. Once we had removed the tackle cleaning up the seabed the NMA incurred an addition cost of waste disposal which was not the case until we highlighted the inappropriate condition of the moorings. I hope you can see value in the work that's taking place here and feel the TECF can contribute to this important work for the EMS.

### 3. Provide 20 days of community awareness raising, liaison with NE and condition assessments

- These will be undertaken in the Plymouth area with presentations to Harbour Authorities, local stakeholders, boat users and the public.

#### Finance Sought

The request is for £5,000 to contribute towards the delivery of a successful project for Plymouth Sound.

- £ 2,000 - 20 days Community Outreach Work through NMA education department.
- £ 500 Waste disposal of old moorings tackle.
- £ 750 - 10 visits to yacht club visits through Plymouth and surrounding area
- £500 digital media outputs photos, videos
- £550 boats days for monitoring through seasearch
- £500 contribution to report development
- £200 T&S, coffees for volunteers, printing – ancillaries for 12 months.

**Total: £5,000**

**End.**

Mark Parry  
National Marine Aquarium  
20 June 2019

## Agenda Item 7 Natural Infrastructure Officer's TECF Report Item for Information

### 1 Strategic Planning

#### a) Plymouth & South West Devon Joint Local Plan

The Plymouth and South West Devon Joint Local Plan was adopted in the Spring and now shapes all planning decisions made in the three local authorities.

Further information is available from

<https://www.plymouth.gov.uk/planningandbuildingcontrol/plymouthandsouthwestdevonjointlocalplan>

#### a) Proposal for National Marine Park

Since the announcement by Plymouth that the Council will lead the project to create the UK's first National Marine Park, the Council has been:

- 60 face to face meetings (details are listed in the Appendix 2).
- 160 individuals and organisations contributed to the first engagement exercise providing detailed comments, views and challenges
- Presentations at a range of boards, workshops, networking events including the City Conversation, TECF, PPMLC etc.

TECF and PPMLC members attended a single workshop which explored the issues around the proposed park, and the findings have been previously circulated.

The £75,000 EU grant funding secured through the MMO will fund consultants to support the process and provide information on how this might work locally whilst also putting forward options on how it might be rolled out nationally. There will be a further series of engagement workshops over the coming months to help inform the process.

#### b) Marine Planning

The MMO are working towards the following timetable in order to achieve the adoption of the Inshore and Offshore South West Marine Plan.

April – Aug 19 Policy amendment

Aug – Sep 19 Internal Plan drafting

Sept – Oct 19 Draft Plans Consultation preparation

Nov 19 – Feb 20 Draft Plan Consultation Period

## 2 Finance and Priorities

### a. TECF Income 2019/20

ORGANISATION	2018/19	2019/20 (+2.75% CPI)
<b>Harbour Authorities</b>		
Ministry of Defence, QHM	3,000	3,075
Associated British Ports	2,000	2,050
Cattewater Harbour Commission	9,000	9,225
Sutton Harbour Commission	2,000	2,050
<b>Harbour Authorities Subtotal</b>	<b>16,000</b>	<b>16,400</b>
<b>Local Authorities</b>		
Plymouth City Council	10,000	10,250
Devon County Council	2,000	2,050
Cornwall Council	2,000	2,050
West Devon Borough Council	4,500	4,613
South Hams District Council	4,500	4,613
<b>Subtotal</b>	<b>23,000</b>	<b>23,575</b>
<b>Other</b>		
Natural England	1,000	1,025
Duchy of Cornwall	4,375	4,484
Environment Agency		
Devon & Severn IFCA		
Cornwall IFCA		
Marine Management Organisation		
English Heritage		
<b>Other total</b>	<b>5,375</b>	<b>5,509</b>
<b>Grand Total</b>	<b>44,375</b>	<b>45,484</b>

Invoices have now all been issued and most payments received.

### 3 Annual Survey 2018/19

It is now that time again to capture what has changed from the previous year. With this in mind, the TECF Annual Survey will be sent out in the next few weeks. We will be using the Survey Monkey online system, however paper copies will be available on request.

Please look out for the email and provide your responses before the deadline of **the end of August.**

### 4 EMS Managing Recreation Impacts Project

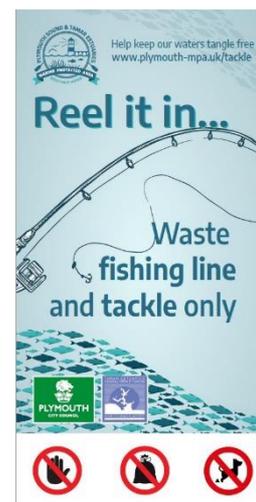
**Biosecurity Plan:** A meeting was organised in May to bring together those organisations working on non-native species primarily Pacific oysters, within the MPA. Devon Wildlife Trust, Natural England, South Devon AONB Estuaries Partnership, Cornwall Wildlife Trust and Marine Biological Association (MBA) attended. We are all now more aware of who is doing what and where and agreed to have a coordinated approach where possible especially at events. The EMS Non-natives species logbook was circulated to all for collation of records within the MPA.

Fiona has attended two oyster surveys at Mount Batten organised by the MBA. Over 4,000 oysters have been eradicated on the foreshore in front of the Mount Batten Centre. Unfortunately, the surveys and culling has been stopped due to the closure of the area by PCC as there is a risk of low grade asbestos in the area.

**Advanced Mooring Systems Project:** Five helical screws were deployed in Cawsands Bay in April and the risers attached in May. The first dive to survey the moorings took place on the 19<sup>th</sup> June organised in collaboration with Seasearch and the NMA.

**Recreational angling:** On the 17<sup>th</sup> April QHM (Andrew Jones) took Fiona and Liam (PCC Student Work placement) out on their RIB to investigate reports of ghost fishing line in an area off Cove Head Jetty. A small grappling hook was towed along the seabed to try and snag the fishing line. A number of transects were undertaken going from the Jetty out into the estuary with only a small amount of line recovered. Further transects were done further offshore from the last mooring buoy NW of the jetty moving SE along the front of the jetty. On several passes, fishing line was snagged opposite the jetty in the area where ghost fishing line was reported by 'Diving belle'. Attempts were made to recover the line, once snagged but swiftly broke. However, it was evident that there is an accumulation of line in the reported area especially as only a small amount of line was found in other areas.

A meeting was held with PCC Street Services to discuss the placement and emptying of the Angling Waste Bins. Concerns were raised regarding health and safety of PCC staff emptying the bins and users placing line and hooks through the small hole at the top. Also bins could be vandalised e.g. set on fire/melted, screw bottom removed, stolen and other items being placed in the bin. Actions have been agreed with Street Services, risk assessment approved and the stickers for the bins are now at the printers. Two bins will be placed and West Hoe and Elphinstone as a trial. A second option is being pursued which is to encourage volunteer groups to 'adopt' an angling waste bin; taking responsibility for emptying and maintaining the bin.



*Angling bin sticker*

**Marine Litter** – The trial of the Sea Bin installed at QAB in March is going well. There have been a couple of 'teething' problems regarding the position of the Sea Bin in the water but these appear to have been resolved. Liam Gibson (PCC Student work placement) continues to monitor the efficiency of the bin to remove litter from the marina. A full report will be available at the end of the trial period in September.

## COMMUNICATIONS

**Newsletter:** The next edition of the TECF newsletter will be distributed in August. We are still looking for articles so if you have any interesting news on projects, events or issues please email to [coastal@plymouth.gov.uk](mailto:coastal@plymouth.gov.uk). Articles should be between 100 – 150 words with images if possible.

**Website:** Is updated when required. Any suggestions for new pages or changes are welcome.

**Information Panels:** Following the successful installation of the first phase of panels at five locations in Plymouth. Thank you to all those who responded to the request to approve the 'In this Area' section of the next 5 panels to be installed at: Mount Batten, North slip and floating pontoon entrance, Elphinstone, Cremyll Street will be correctly named Strand Street and Clovelly Slip, Turnchapel. The information is now with PCC Graphic designer to make the changes before printing.

**Social Media** – Regular tweets are sent via the @TamarEstuaries twitter account. There are presently 581 followers.

**Events** – PCC will have a stand at The Fastnet Race Village, Yacht Haven Marina, 6<sup>th</sup> to 8<sup>th</sup> August. This is a great opportunity to promote the work of PCC and TECF and highlight the importance of the marine environment within the Sound.

## 5 ReMEDIES Seagrass Project

TECF / Plymouth City Council has been part of a bid, coordinated by Natural England, for European LIFE funding. The project is called ReMEDIES (Reducing and Mitigating Erosion and Disturbance Impacts affecting the Seabed) and is for a total of €2.9k. If successful the project will secure 60% of the total costs as grant funding with the remaining coming from partners which include Natural England, National Marine Aquarium, RYA and Plymouth City Council.

The Secretariat came back with a request for more information from PCC which has now been provided. The official start date for the project was the 15<sup>th</sup> July. Natural England

have given the go ahead to begin the project although we are still awaiting the agreement between LIFE and Natural England to be signed. The first partners face-to-face meeting will be held at the NMA on the 12<sup>th</sup> August.

## 6 Water User Leaflets

The Water Users Leaflet 2019 has now been printed and is available for distribution and can be downloaded from the MPA website <http://www.plymouth-mpa.uk/activities/>

To request further copies please email [coastal@plymouth.gov.uk](mailto:coastal@plymouth.gov.uk).

## 7 Developments

Current planning and marine planning matters include the following.

### PLYMOUTH

- **Drakes Island:** the variations to the planning conditions have now been agreed. None of them affect the mitigation in place for the Little Egret.
- **Vauxhall Quay Boardwalk with commercial units, Sutton Harbour (18/00901/FUL):** This planning application was originally granted in 2015, but it has now lapsed resulting in this resubmission. The MMO license for the marine element was finally granted in December 2017. Decision granted

Kaja Curry  
Natural Infrastructure Officer  
[kaja.curry@plymouth.gov.uk](mailto:kaja.curry@plymouth.gov.uk)

Fiona Crouch  
Natural Infrastructure Officer  
[fiona.crouch@plymouth.gov.uk](mailto:fiona.crouch@plymouth.gov.uk)

Tamar Estuaries Consultative Forum  
@TamarEstuaries  
Mar 2019

# Natural England Update

## TECF Meeting 18<sup>th</sup> July 2019

### [Priority issues in the European Marine Site](#)

Our work in this area has been prioritised largely based on our Condition Assessment of the Special Area of Conservation. You can view the detailed results of the Condition Assessment [online](#) alongside our Conservation Advice. This is regularly updated as new evidence comes forward.

Our recent work in the site includes:

- Last month we received news from the EU LIFE fund that Natural England and partners have been successful in our funding application for national project called **Reducing and Mitigating Erosion and Disturbance Impacts affecting the Seabed ReMEDIES**. Our project partners are TECF/Plymouth City Council, RYA, the National Marine Aquarium and Marine Conservation Society. The project aims to improve the condition of seagrass within 5 Special Areas of Conservation including Plymouth Sound and Estuaries SAC. A project start up meeting is planned for August and priority actions such as seed collection for seagrass restoration trials will be underway soon. Natural England is about to appoint an interim project manager.
- Volunteer engagement within our funded project on invasive non-native Pacific oysters is being led by South Devon AoNB in the Yealm and other estuaries in South Devon and Cornwall Wildlife Trust in Cornwall. There are several groups of volunteers working in this area to monitor and manage the spread of Pacific oysters. In April the Marine Biological Association ran a training session in identification on other Invasive Non Native Species that may be associated with Pacific oysters.
- We continue to work with the Environment Agency and South West Water to identify and deliver improvements to Allis shad migration from the Tamar estuary into the freshwater river. The fish pass proposed for the main weir at Gunnislake is likely to be a vertical slot pass that will be suitable for Allis shad and smelt. It will also allow migratory salmonid passage to be maintained and an eel passage measure will be included.

### [Plymouth EMS and Tamar Estuary Sites MCZ Monitoring](#)

**Intertidal habitat mapping** – This ‘biotope survey’ of all the intertidal areas of the SAC was carried out by Ecospan Environmental Ltd in 2017. This updates our existing habitat maps and the data will be available through the MAGIC mapping website <http://www.magic.gov.uk/magicmap.aspx> . The report and maps will be now available.

**Subtidal reef survey** – This survey focuses on 5 areas of reef within the SAC and was carried out by Natural England’s monitoring team in 2017 and again in 2018 to allow for comparison. A report from those two years is available and we have just repeated the survey last week, building up our dataset. A report next year will analyse all the data so far against data from the same sites from the 1990s.

**Subtidal seagrass** – The subtidal seagrass in the SAC was monitored last summer by a combination of diving and drop down video. We revisited the sites monitored in 2012 to allow comparisons and did a detailed survey of the seagrass beds beneath the moorings in Cawsand Bay. The report and GIS are now available (though not yet formally published). They show that there was a decline in the extent of some seagrass beds since 2012 and an increase in others.

Overall the results suggest a net loss of density and extent of seagrass within the SAC. Further work is needed to understand whether this is natural variation or is driven by human pressures. There was evidence from the moorings part of the study that helped to quantify the loss of seagrass habitat beneath moorings and supported Natural England's view that the seagrass beds within the site are damaged by moorings. More monitoring will take place through the LIFE ReMEDIES project.

**Allis shad and smelt** – These two species of migratory fish spawn in the Tamar. We are working with the Environment Agency to better understand their use of their spawning grounds and the extent of the habitat available to them for spawning. We are using a fish sonar to monitor the adults and kick sampling to monitor their eggs both above and below the main weir at Gunnislake. We also supported an underwater videographer Jack Perks who has managed to film the Allis shad in the Tamar, the first time they have been filmed like this in the wild in the UK  
<https://www.youtube.com/watch?v=4VHhDQ3tz9k&t=1s>

Once published, reports can be accessed here <http://publications.naturalengland.org.uk/> or you can request them via me.

Angela Gall, Marine Lead Adviser  
Devon, Cornwall & Isles of Scilly Team, Natural England, Polwhele, Truro. TR4 9AD  
Landline: 0208 026 8159. Mobile: 07500 761201 Email: [angela.gall@naturalengland.org.uk](mailto:angela.gall@naturalengland.org.uk)