

# Impact Report: EMB PP19

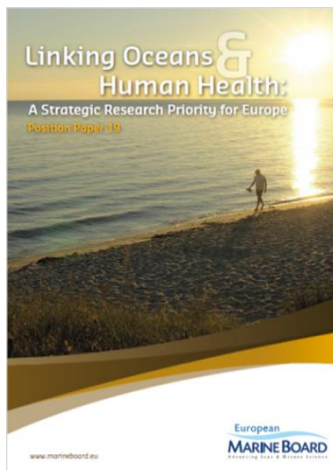
## Linking Oceans & Human Health: A Strategic Research Priority for Europe

### Introduction

**Publication reference:** Moore MN, Baker-Austin C, Depledge MH, Fleming, L, Hess P, Lees D, Leonard P, Madsen L, Owen R, Pirlet H, White M, Vasconcelos V, Boase N, Osborne N, Viarengo (2013). Linking Oceans and Human Health: A Strategic Research Priority for Europe. Position Paper 19 of the European Marine Board, McDonough N, Evrard M, Calewaert, J-B, French V (Eds.) European Marine Board, Ostend, Belgium.

**Working Group:** European Marine Board Working Group on Oceans and Human Health, WG OHH. Chair: Michael Moore (PML and ECEHH, UK).

**Publication date:** March 2013



**Summary:** This position paper examined the links between the seas and oceans and human health and well-being. The main aims of the position paper were to identify some of the most pressing scientific and societal questions in this emerging field; to raise the profile of the emerging integrative metadiscipline of Oceans and Human Health Oceans amongst policy makers, research funders and the scientific community; and to promote the establishment of a coherent and policy-relevant Oceans and Human Health research framework in Europe.

**Launch:** An advanced draft of the paper was officially launched at European Maritime Day, Malta in 2013.



Official launch of EMB position paper 19 at European Maritime Day, Malta, 2013. From left to right: Niall McDonough (EMB), Gioconda Miele (Ministry of Infrastructure and Transport, Italy), Michael Moore (University of Plymouth, WG Chair), Caroline Bocquel (Irish Marine Institute), Kathrine Angell-Hansen (JPI Oceans), Rudy Herman (Government of Flanders), Mathew White (University of Exeter, UK), and Bernhard Friess (EC DG Mare).

**Recent Print run:** ~ 1500 (March 2014)

## Communications strategy

WG members were consulted to provide contacts for dissemination of the paper. All of the suggested contacts were added to a mailing list. An email was sent to approximately 1,700 people announcing the publication of the paper, with the paper in attachment and requesting an email to the Secretariat with hard copy orders.

The communication and impact strategy included:

- e-dissemination to a stakeholder list including approximately 1,700 addresses (by EMB Secretariat)
- Dissemination of hard copies to WG members and key users and stakeholders and at events e.g. relevant conferences, meetings and initiatives (at both European and international level)
- Oral presentations by WG members at relevant conferences
- Monitoring of uptake and impact up to two years after publication (EMB Secretariat ongoing)
- Dedicated web searches (EMB Secretariat)
- Gathering informal and formal feedback from external stakeholders/contacts, WG members and delegates.

## Output

Presentations:

**Concluding conference for the Research Programme on the Oceans and Coastal Areas conference, Trondheim/ Tromsø , Norway, 7 – 9 April 2015** – NMD (Niall McDonough) presents the outcomes of the Rome Declaration and focuses on Oceans and Human Health at a session titled, ‘Perspectives on future marine research’.

**The US Collaborative on Health and the Environment, 8 January 2015:** Lora Fleming presented Oceans and Human Health and featured in a call/podcast titled ‘The State of the Water: Linking Ocean Health to Human Health’. NMD was co-author of the presentation. [http://www.healthandenvironment.org/partnership\\_calls/16158?res](http://www.healthandenvironment.org/partnership_calls/16158?res)

**Sea for Society meeting, ‘Sea Academy’, Lisbon, Portugal, 16 December 2014** – NMD presents Oceans and Human Health during a Blue Café event.

**ECEHH (European Centre for Environment and Human Health) workshop on ‘Fostering sustainable environments for improving future health and wellbeing’, Cornwall, UK, December 3 and 4, 2014.** – NMD attended

**2<sup>nd</sup> Marine NanoEcoSafety Workshop, Palermo, Italy, 17-18 November 2014**– Presentation by NMD titled, ‘Unravelling the complex links between the oceans and human well-being: developing an interdisciplinary research capacity in Europe’.

**2nd International Ocean Research Conference, Barcelona, Spain, 17-21 November 2014** – NMD speaks about Oceans and Human Health as part of a panel discussion titled, ‘The science-policy interface: Scientists communicating with Decision-Makers’.

**EuroOCEAN 2014, Rome, Italy, 7 – 9 October** – Session on Oceans and Human Health, chaired by Michael Depledge and at which NMD presented a talk titled, ‘Building an Oceans and Human Health research capacity in Europe’.

**CBD SBSTTA 18, Montreal, Canada, 23-27 June 2014 – Convention on Biological Diversity, Subsidiary Body on Scientific, Technical and Technological Advice.** David Johnson introduced the paper at the Sustainable Ocean Initiative side event.

[Feedback from David Johnson: ‘Just a note to let you know that my short Oceans and Human Health intervention at SBSTTA went well. I think there is an opportunity for the Sustainable Ocean Initiative to use any research outputs in their capacity building efforts. I received specific requests for details from colleagues from UNEP and IUCN - and was able to pass on digital copies.’]

**2nd Meeting of the Stakeholder Group for the Galway Statement** (Transatlantic Ocean Research Alliance), 11 June 2014, Brussels. NMD presented the key headlines of the OHH paper and proposed OHH as a potential priority topic for the transatlantic Ocean Research Alliance.

**Gordon Research Conference in Oceans and Human Health in Maine, USA (1-6 June 2014).** Presentation at the conference by NMD with a talk titled, ‘Embedding Oceans and Human Health in Science and Maritime Policy: A European Perspective’.

**Oceans & Human Health Conference (20-21 March 2014, Cornwall, UK)** The science-policy workshop was convened by the European Centre for Environment and Human Health and the European Marine Board.

Postage:

112 copies were posted in response to hardcopy requests after an initial email announcing publication, including some international requests (eg. Nepal and Brazil).



Oceans & Human Health: A Rising Tide of Challenges and Opportunities for Europe, 20-21 March 2014, Cornwall, UK (workshop co-organized by the European Centre for Environments and Human Health and the EMB)

## Total copies disseminated

Total no. of hard copies disseminated: 796 (43 in 2013, 698 in 2014, 55 in 2015).

Copies sent to events including:

- European Maritime Day 2013, Malta
- European Maritime Day 2014, Bremen
- European Environment Agency Oceans and Human Health workshop in Copenhagen
- Oceans and Human Health Workshop, Cornwall
- Gordon Research Conference on Oceans and Human Health, US
- COST conference on climate change, Brussels
- Galway Statement Stakeholder meeting, Brussels
- CBD Subsidiary Body on Scientific, Technical and Technological Advice, Montreal, Canada
- EuroOCEAN 2014, Rome
- Oceans and Human Health meeting in Bergen, Norway (January 2015) to foster cross-disciplinary thinking in the Oceans and Human Health field at the University of Bergen and among Bergen Marine Research Cluster partners. WG member Lora Fleming gave a keynote speech. Organized by Anders Goksyør.
- Oceans and Coastal Areas conference, Research Council of Norway, Norway, 7 – 9 April 2015

## Uptake (national/EU/International)

- Two peer-reviewed articles were published by members of the EMB Oceans and Human Health WG:

Fleming *et al.* (2014) Oceans and Human Health: A rising tide of challenges and opportunities for Europe. *Marine Environmental Research* **99**, 16 – 19.

Moore *et al.* (2013) Oceans and Human Health (OHH): a European Perspective from the Marine Board of the European Science Foundation (Marine Board-ESF). *Microbial Ecology* **65**, 889 – 900.

- A third article focusing on the economic aspects of ocean and human health interactions has been prepared by the EMB Secretariat for a special issue on Oceans and Human Health, due to be published in the Journal of the Marine Biological Association of the UK during 2015.
- The *Message from Bedruthan* published as an output of the Cornwall conference on Oceans and Human Health. Fleming *et al.* (2014) Message from Bedruthan. A statement from the participants of the Oceans & Human Health workshop, A rising tide of challenges and opportunities in Europe, Bedruthan, Cornwall, UK, 20-21 March 2014.
- Position paper 19 was referred to in the H2020 BG 13 'Sea Change' project proposal submitted on June 26<sup>th</sup> 2014. The project will be funded from 2015-2018.

- A link to the position paper is catalogued in the library section of the new GOES website (Global Oceanic Environmental Survey) <http://www.goes.foundation/> . The newly formed GOES Foundation aims to analyse the marine environment for priority chemicals, determine their potential impact on primary productivity, relate the results to atmospheric CO<sub>2</sub> and raise awareness of impacts of environmental pollution.
- The Dr. Edouard Delcroix prize 2013 was presented for excellence in research on the links between Oceans and Human Health. Lora Fleming (EMB Oceans and Human Health working group member) received the 2013 award for her innovative research on harmful algal blooms. The media coverage of this event also included coverage of Oceans and Human Health WG outputs. For example, when reported in the online UNESCO/IOC newsletter 'Harmful Algal News', the Message of Bedruthan accompanied the article (<http://www.e-pages.dk/ku/899/26>) and the link to the position paper was provided when reported by VLIZ (<http://www.vliz.be/en/2014-06-24-future-status-Belgian-coastal-waters-human-health-perspective-Prize-Delcroix2013>).
- **Online Media:** Position paper 19 and associated WG activities were reported online through the websites of the EMB and other networks such as JPI Oceans, Marine Biotech ERA-NET and on the website of the European Centre for Environment and Human Health. Oceans and Human Health (in reference to position paper 19), was publicized in tandem with the Rome Declaration through online media as a result of its inclusion in the Rome Declaration press release. As a result it received coverage in approximately 100 online articles in 30 countries and 7 languages. In addition, media coverage reports tracking further website references and uploads of EMB Position Paper 19 were produced by ESF Communications (Annex 1).

# Impact

## Horizon 2020

The most recent draft of the 2016-2017 work programme for Horizon 2020 Societal Challenge 2 includes 3 pillars under the Blue Growth Focus area. One of these pillars is “**Healthy Oceans and Healthy People**” which is a direct response to the Oceans and Human Health paper. The current text is listed below:

**BG - 6. [2017]: Effectively managing the interaction between humans and the oceans and seas: factors impacting healthcare and wellbeing.**

**Specific Challenge:** The interaction between humans and oceans and seas is a broad domain with key impacts on human health and wellbeing and yet it remains fragmented, poorly understood and underexploited. There is a need to coordinate research knowledge across Europe about the benefits and risks of the interaction so as to structure a strategic research agenda on Oceans and Human Health and formulate pan-European evidence-based recommendations supporting more effective, relevant EU policies.

**Scope:** Proposals should bring together relevant stakeholders across Europe in order to generate, aggregate and mine data pertaining the link between oceans and human health. Proposals should structure a multi-stakeholder forum that enables a better understanding of the potential health benefits from marine and coastal ecosystems, contributing to reduce the burden of disease caused by marine-degraded environments and enabling a more effective anticipation of new threats to public health.

**Type of action:** CSA

**Horizon 2020**

There is a direct, almost word-for-word similarity between the current text of the call topic (highlighted in yellow above) and the three major benefits to be accrued from an Ocean and Human Health research programme, outlined on page 4 of the EMB Position Paper on OHH:

“The establishment and implementation of such a programme will ultimately allow us to:

- improve our understanding of the potential public health benefits from marine and coastal ecosystems;
- reduce the burden of human disease linked with marine environmental causes; and
- anticipate new threats to public health before they become serious.”

**EMB**

## JPI Oceans

- Oceans and Human Health is listed as one of the 10 priority areas in the Strategic Research and Innovation Agenda for the Joint Programming Initiative on Healthy and Productive Seas and Oceans.

## Other

- Position paper 19 is referenced in the introductory chapter of a book on the impact of climate change on marine ecosystems. The full reference is: Zielinski, T., Weslawski, M. and Kuliński, K. (eds.) (2015) *Impact of Climate Changes on Marine Environments*, GeoPlanet: Earth and Planetary

Sciences, Springer International publishing, Switzerland. pp. 1-6. ISBN: 978-3-319-14282-1, DOI 10.1007/978-3-319-14283-8\_1

- The European Environment Agency referenced position paper 19 in their 2015 State of the European Environment Report, as part of a section on changing disease burdens and risks of pandemics, referred to as global megatrend 3 in the state of the environment report (<http://www.eea.europa.eu/soer-2015/global/health>).
- A call for a transnational and interdisciplinary research programme on Oceans and Human Health is included in the Rome Declaration (page 4 – bullet 2), adopted at the EurOCEAN 2014 Conference, where there was also a dedicated session on Oceans and Human Health chaired by Mike Depledge.
- Oceans and Human Health is listed as a priority area for potential cooperation on the Roadmap for the Transatlantic Ocean Research Alliance. For this cooperation, NOAA is the proposed international coordinator and the European Marine Board is the proposed European coordinator.
- The “Sea Change” proposal on ocean literacy has been approved for funding from the 1st round of Horizon 2020. Oceans and Human Health is a key theme of the proposal.
- The FP7 project Sea for Society Framework paper (framework paper on the cross cutting question defined at a Sea for Society consensus workshop) is titled, ‘Linking Ocean, human health and well-being’ and uses the EMB Oceans and Human Health position paper as the key reference document. Additionally, there is a Sea for Society event on the topic of Oceans and Human Health, June 6<sup>th</sup> 2015.
- WG member Lora Fleming is leading a COST (European Cooperation in Science and Technology) application based on Oceans and Human Health

## Lessons Learnt

One of the key lessons learnt from this activity is the value of engaging in a programme of actions to promote the paper and its key messages in the period after publication. Although the Secretariat will always organize an official launch and disseminate papers very actively post publication. However, in this instance the post-publication support extended beyond this, to include organization (with the UK partner) of a workshop, preparation of a short policy brief arising from this (Message from Bedruthan), publication of peer-reviewed articles in the scientific literature (two published, a third in the review process), and presentation of the paper and its messages at numerous meetings.

## Summary

Position paper 19 on Oceans and Human Health proved timely in profiling the links between the seas and oceans and human health and well-being in Europe as well as promoting the establishment of a coherent Oceans and Human Health research framework in Europe. Although established as a discipline in the US, Oceans and Human Health is seen as a new angle from which to consider our relationship with the marine environment in Europe and the position paper has played a key role in raising awareness of this discipline. Together with the EMB Secretariat, WG members actively disseminated the position paper and were involved in follow-up activities such as peer reviewed publications and a science-policy workshop in

Cornwall in 2014. A key impact of the position paper to date is the inclusion of “Healthy Oceans and Healthy People” as a pillar in the scoping paper for the 2016-2017 calls under Horizon 2020 Societal Challenge 2. This represents the growing momentum of Oceans and Human Health activities in Europe, of which Position Paper 19 has played a key role.

**EMB Position Paper 19 has, therefore, had a significant and demonstrable impact on the science agenda in Europe, with explicit responses in the Horizon 2020 programme and the JPI Oceans Strategic Research Agenda. Its impact has surpassed the expectations originally set in the terms of reference for this activity.**



## Annex 1: Media Coverage Report by ESF



EMB position paper 19

### [Linking Oceans and Human Health: A Strategic Research Priority for Europe](#)

#### Media coverage

JPI

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Oceans

<http://www.jpi-oceans.eu/imis?module=ref&refid=234468>

Phycotox

<http://www.phycotox.fr/agenda/gdt-ocean-et-sante-humaine-a-bedruthan-cornouaille.html?lng=en>

AASW- PDF- 20/11/2013

<http://proxy1.strasbourg.esf.org/cgi-bin/patience.cgi?id=7d2d485f-9930-414b-a1ff-3e314802078d>

Science Direct - 08/2014

<http://www.sciencedirect.com/science/article/pii/S0141113614001032>

Flanders Marine Institute

<http://www.vliz.be/en/2014-06-24-future-status-Belgian-coastal-waters-human-health-perspective-Prize-Delcroix2013>

Marine Institute - 24/06/2013

<http://www.marine.ie/Home/site-area/news-events/news/charting-course-european-marine-science-technology-and-innovation>

University of Copenhagen

<http://www.e-pages.dk/ku/899/26>

The Collaborative on Health and the Environment - 08/01/2015

[http://www.healthandenvironment.org/partnership\\_calls/16158?res](http://www.healthandenvironment.org/partnership_calls/16158?res)

**New-Medical - 09/10/2014**

<http://www.news-medical.net/news/20141009/European-experts-publish-common-vision-of-priorities-for-marine-research.aspx>

**Science Nutshell - 11/11/2014**

<http://www.sciencenutshell.com/impacts-human-health-global-climate-change/>

**EEA - 18/02/2015**

<http://www.eea.europa.eu/soer-2015/global/health>

**Seas-era**

[http://www.seas-era.eu/np4/%7B\\$clientServletPath%7D/?newsId=19&fileName=SEAS ERA D 6.1.4 Atlantic Report FINAL 2.pdf](http://www.seas-era.eu/np4/%7B$clientServletPath%7D/?newsId=19&fileName=SEAS ERA D 6.1.4 Atlantic Report FINAL 2.pdf)

**University of Exeter**

[http://medicine.exeter.ac.uk/about/profiles/index.php?web\\_id=Mathew\\_White&tab=pubs&view=date](http://medicine.exeter.ac.uk/about/profiles/index.php?web_id=Mathew_White&tab=pubs&view=date)

**Open Air**

[https://www.openaire.eu/search/person?personId=dedup\\_wf\\_001::6cd7faee3e7900eb2462df6fd3ff6d9c](https://www.openaire.eu/search/person?personId=dedup_wf_001::6cd7faee3e7900eb2462df6fd3ff6d9c)

**Plymsea - 18/05/2014**

<http://plymsea.ac.uk/6081/1/MERE-S-14-00196-2.pdf>

**Parasite**

<http://parasite-project.eu/publications>

**Marine Environmental Research - 02/06/2014**

[http://www.google.fr/url?sa=t&rct=j&q=&esrc=s&source=web&cd=7&ved=0CD8QFjAG&url=http%3A%2F%2Fwww.researchgate.net%2Fprofile%2FAlexander\\_Smalley%2Fpublication%2F262874907\\_Oceans\\_and\\_Human\\_Health\\_A\\_Rising\\_Tide\\_of\\_Challenges\\_and\\_Opportunities\\_for\\_Europe%2Flinks%2F53df5b180cf2cfac992973ee.pdf&ei=fECVeLBL8GsU4\\_dgbgL&usg=AFQjCNECiLc10KjMs7ulNzQmjfHjlox5Zg](http://www.google.fr/url?sa=t&rct=j&q=&esrc=s&source=web&cd=7&ved=0CD8QFjAG&url=http%3A%2F%2Fwww.researchgate.net%2Fprofile%2FAlexander_Smalley%2Fpublication%2F262874907_Oceans_and_Human_Health_A_Rising_Tide_of_Challenges_and_Opportunities_for_Europe%2Flinks%2F53df5b180cf2cfac992973ee.pdf&ei=fECVeLBL8GsU4_dgbgL&usg=AFQjCNECiLc10KjMs7ulNzQmjfHjlox5Zg)

**Marine Biotchec - 26/03/2014**

<http://www.marinebiotech.eu/news-and-events/other-news/emb-position-paper-19-linking-oceans-and-human-health>

**Ifremer - 08/2014**

<http://archimer.ifremer.fr/doc/00192/30328/>

**Elsevier - 08/2014**

<http://www.journals.elsevier.com/marine-environmental-research/most-downloaded-articles/>

**Ciimar**

<http://www.ciimar.up.pt/researchgroup.php?page=5&ipp=20&id=BEE&area=publications>

**Vectors**

<http://www.marine-vectors.eu/Publications?page=3>

**Springer - 29/01/2015**

[http://link.springer.com/chapter/10.1007%2F978-3-319-14283-8\\_1](http://link.springer.com/chapter/10.1007%2F978-3-319-14283-8_1)

**SEPA - 14/05/2014**

[http://www.google.fr/url?sa=t&rct=j&q=&esrc=s&source=web&cd=25&ved=0CDUQFjAEOBQ&url=http%3A%2F%2Fwww.sepa.org.uk%2Fabout%2Fsepa%2Fboard%2Fagendas%2Fagendas%2Fidoc.ashx%3Fdocid%3D733ba252-8a9d-42e8-9ff5-80854c28046e%26version%3D-1&ei=g\\_QCVbe-D4q9Ue7rg7AO&usq=AFQjCNGtVZgM7MW6O6b3ychk5n7SlhDA3Q](http://www.google.fr/url?sa=t&rct=j&q=&esrc=s&source=web&cd=25&ved=0CDUQFjAEOBQ&url=http%3A%2F%2Fwww.sepa.org.uk%2Fabout%2Fsepa%2Fboard%2Fagendas%2Fagendas%2Fidoc.ashx%3Fdocid%3D733ba252-8a9d-42e8-9ff5-80854c28046e%26version%3D-1&ei=g_QCVbe-D4q9Ue7rg7AO&usq=AFQjCNGtVZgM7MW6O6b3ychk5n7SlhDA3Q)

**JournalTocs - 02/2015**

<http://www.journaltocs.ac.uk/index.php?action=tocs&journalISSN=0141-1136>

**Refdoc**

<http://cat.inist.fr/?aModele=afficheN&cpsidt=28665345>

**Universia - 13/03/2015**

[http://biblioteca.universia.net/html\\_bura/ficha/params/title/oceans-and-human-health-rising-tide-of-challenges-and-opportunities/id/58606063.html](http://biblioteca.universia.net/html_bura/ficha/params/title/oceans-and-human-health-rising-tide-of-challenges-and-opportunities/id/58606063.html)

**Natural Awakenings Magazine - 30/01/2015**

<http://www.naturalawakeningsmag.com/Natural-Awakenings/February-2015/European-Eco-Cooperation/>

**Medindia - 11/10/2014**

<http://www.medindia.net/news/human-health-wealth-require-expanded-marine-science-experts-142380-1.htm>

**PRBuzz.com - 10/10/2014**

<https://www.prbuzz.com/energy/260610-human-health-wealth-require-expanded-marine-science-experts-say.html>

**The Numbers - Marketplace from American Public Media - 10/10/2014**

[http://thenumbers.marketplace.org/publicradio/news/read/28434329/human\\_health](http://thenumbers.marketplace.org/publicradio/news/read/28434329/human_health)

**Stock - AZCentral.com - 10/10/2014**

[http://thenumbers.marketplace.org/publicradio/news/read/28434329/human\\_health](http://thenumbers.marketplace.org/publicradio/news/read/28434329/human_health)

**Science Codex - 10/10/2014**

[http://thenumbers.marketplace.org/publicradio/news/read/28434329/human\\_health](http://thenumbers.marketplace.org/publicradio/news/read/28434329/human_health)

**Press-News.org - 10/10/2014**

[http://thenumbers.marketplace.org/publicradio/news/read/28434329/human\\_health](http://thenumbers.marketplace.org/publicradio/news/read/28434329/human_health)

**EurekAlert! - 10/10/2014**

[http://thenumbers.marketplace.org/publicradio/news/read/28434329/human\\_health](http://thenumbers.marketplace.org/publicradio/news/read/28434329/human_health)

**LifeSciencesWorld - 10/10/2014**

[http://thenumbers.marketplace.org/publicradio/news/read/28434329/human\\_health](http://thenumbers.marketplace.org/publicradio/news/read/28434329/human_health)

**Middle East North Africa Financial Network - 10/10/2014**

[http://thenumbers.marketplace.org/publicradio/news/read/28434329/human\\_health](http://thenumbers.marketplace.org/publicradio/news/read/28434329/human_health)

**Nanotechnology Now - 09/10/2014**

[http://www.nanotech-now.com/news.cgi?story\\_id=50270](http://www.nanotech-now.com/news.cgi?story_id=50270)

**ScienceNewsline - 09/10/2014**

<http://www.sciencenewsline.com/articles/2014100915430020.html>