SEA CHANGE
PROJECT LAUNCHED!

IN THIS ISSUE

Introduction to Sea Change ...................... 2
Interview with Jon Parr, Sea Change Coordinator .................. 3
What is Ocean Literacy? .......................... 4
Ocean Literacy News ................................ 5
Ocean Literacy Co-Creation and Participation Protocols Training ............. 6
Making a Sea Change at EMSEA 2015 .... 6
Tips for Protecting the Ocean .................... 6
Dates for your Ocean Literacy Diary .................... 7
Partner Map ........................................ 8

Cover image © Fiona Crouch (MBA)

seachangeproject.eu
Sea Change is a new three-year EU funded project that aims to establish a fundamental “Sea Change” in the way European citizens view their relationship with the sea. Sea Change will empower Ocean Literate citizens to take direct and sustainable action towards a healthy ocean and seas, healthy communities and ultimately a healthy planet. This joint venture of 17 partner institutions from nine EU countries is led by the Marine Biological Association (MBA) and has a budget of €3.5 million which is funded by the EU H2020 Programme.

The project officially began in March 2015 and held its kick-off meeting in Plymouth (UK) in May. The project has been established on the premise that Europe will not achieve a sustainable exploitation of marine resources and Good Environmental Status of its seas and ocean unless citizens understand the influence of the ocean on their lives, and how their behaviour can have an impact on marine ecosystems. This is a prerequisite to developing the ecosystem based approach for marine activities and promoting the understanding and protection of marine ecosystem services.

By using the concept of Ocean Literacy, Sea Change will create a deeper understanding amongst European citizens of how their health depends on the health of our seas and ocean. Sea Change will move to bring about real actions using behavioural and social change methodologies. Building upon the latest social research on citizen and stakeholder attitudes, perceptions and values, the Sea Change partnership will design and implement mobilisation activities focused on education, community and governance actors, and directly targeted at citizens. These actions will be assessed for their effectiveness which, in turn, will allow the project to improve its techniques and spread a “Sea Change” in behaviour across Europe.

Sea Change is collaborating with an independent International Advisory Group (IAG) consisting of high level experts, predominantly from outside Europe, who have knowledge and experience of Ocean Literacy and scientific public engagement. The IAG met in Lisbon in June this year as part of “Blue Week” where they participated in a transatlantic Ocean Literacy workshop and gave their advice on the project and the way ahead for Ocean Literacy.
Interview with Jon Parr, Sea Change Coordinator

Jon Parr, Deputy Director of the Marine Biological Association and Project Coordinator of Sea Change, elaborates on the importance of creating a more Ocean Literate society and how the project intends to tackle the issue.

1. Sea Change focuses on Ocean Literacy, can you explain, to a broader audience, what Ocean Literacy is?

Sea Change builds on the idea that Ocean Literacy is an understanding of the ocean’s influence on you – and your influence on the ocean.

The concept of Ocean Literacy was developed more than 10 years ago by our American colleagues when hundreds of marine educators and scientists developed the seven fundamental principles of Ocean Literacy. Their aim and passion was to create a more Ocean Literate society that understands the importance of the ocean to humankind, can communicate about the ocean in a meaningful way and is able to make informed and responsible decisions regarding the ocean and its resources.

2. There seems to be a certain disengagement from the sea on the part of many European citizens. Why do you think this is?

I think our modern European life often removes us from engaging directly with the natural world including the ocean. A small percentage of European citizens live and work directly with our seas and ocean and some have never even seen the sea! But we are all affected by it. We all have busy lives and don’t often reflect on how we are influenced by the ocean and how it directly affects us in our everyday lives. Every second breath we take is generated by the ocean! In addition, citizens can see first-hand the destruction of terrestrial habitats but the impact we all have on our ocean is largely hidden beneath the waves.

3. How would you describe Sea Change?

I’d say it is an education project, a behaviour change project, and an outreach project, all rolled into one! We are looking to make a difference and to change behaviour. Education and outreach are an important part of that.

4. Who are you hoping to influence through Sea Change?

It is ambitious, but we hope to influence the whole of Europe, including citizens, school children, policy makers, educators and industry. We all have a responsibility for the ocean and can make a difference. Sea Change will seek to give people the tools to make that difference.

5. What kind of activities and initiatives will Sea Change entail?

Sea Change will define activities that can make a difference, working with groups to deliver in areas that will raise our Ocean Literacy and make a change. We have three areas in which we are concentrating effort: education (working within formal school environments); engagement (working with citizens to explore our relationship with the ocean); and policy (working with those responsible for our ocean and development).

6. The Sea Change Project will work in collaboration with the ResponSEAtable project (www.responseable.eu). How will this collaboration work and how will it benefit the projects?

We want to avoid confusion between the two projects and we are already working very closely to complement each other’s work. We want to create a central online focal point for Ocean Literacy in Europe which will explain the concept and detail some of the activities we are both doing.

7. This project fosters international collaboration. Explain how this collaboration will work and the importance of incorporating it.

We are a partnership spanning nine countries that includes a number of networks (e.g. World Ocean
Network, Ecsite and EUROGEO) that go even further. We also have a strong International Advisory Group of key people behind the development of Ocean Literacy beyond Europe.

8. What will your priorities be for the upcoming months of the project?

The project has already achieved a lot, but now is the time to consider the needs of the key groups and look to set in place actions for the next two years to make a change.

9. What do you envisage the major challenges of the Sea Change project will be?

Realistically I think the main challenge is the size of the task! We also need to be careful to not try to do everything everywhere but instead provide case study “beacons” that show what can be achieved. We know the project is ambitious but this is a real chance to make a difference, especially with two projects, Sea Change and ReponSEAble starting together.

10. In what ways could the Sea Change project eventually benefit society?

Society needs the ocean, and needs to understand it and its importance to us all. We have a major impact on ocean systems so we have to understand this and change our attitude and behaviour towards this vital resource. We live on a blue planet, and we as a society cannot ignore its importance. Sea Change cannot solve the gap in understanding but we can help to give society the tools, show a strong future and close that ‘value-action’ gap.

WHAT IS OCEAN LITERACY?

Most European citizens are not aware of the full extent of the medical, economic, social, political and environmental importance of the sea to Europe and indeed to the rest of the world. Many of us are not aware of how our day-to-day actions can have a cumulative effect on the health of the ocean – a necessary resource that must be protected for all life on the planet Earth to exist.

In other words, European citizens lack a sense of “Ocean Literacy” - an understanding of the ocean’s influence on us and our influence on the ocean.

© Fiona Crouch (MBA)

An Ocean-Literate person:

- Understands the importance of the ocean to humankind
- Can communicate about the ocean in a meaningful way
- Is able to make informed and responsible decisions regarding the ocean and its resources

Learn more on our Facebook page: Facebook: /SeaChangeProjectEU
Can You Be Science Literate Without Being Ocean Literate?
The Ocean Literacy Campaign is changing the way educators and the public think about ocean sciences education: teaching ocean sciences is not just enrichment, but is essential to science literacy. Read about the impact of the Ocean Literacy Campaign here: http://bit.ly/1MZzrD3

Using Art to Increase Ocean Literacy
Living Sculptures in the Sea is a programme that uses art for change – not only in awareness and education, but also directly on the restoration of coral reef habitats, fish stocks, and associated provision of livelihood. For more information, see: http://bit.ly/1QZak3K

The Problem with Overfishing
The increase in fishing efforts over the last 50 years to meet the demand for fish, in addition to unsustainable fishing practices have pushed many fish stocks to the brink of collapse. For more information, see http://bit.ly/1Exzv75

The Economics of Restoring Fish Populations
By switching to a sustainable fisheries management model, within 10 years we could increase profits in the fishing sector by $51 billion a year. For more information, see: http://bloomberg.org/1AYb1aS

HAZMAT Surfing Photos Raise Awareness of Contaminated Oceans
HAZMAT Surfing is a photographic series shot by Michael Dyrland and Mike Marshall, which imagines what life might be like in twenty or twenty-five years, when our waters have become so polluted that they could only be entered wearing full biohazard gear. For more information, see: http://bit.ly/1UC0d7M

Wave and Solar Powered Marine Robots May Soon be Used to Learn More about the Ocean!
Autonomous marine robots containing a ‘hybrid power and propulsion system’ that uses solar and wave powered energy have been developed to carry out measurements on the ocean, even when conditions are less than favourable. Such measurements include wave heights, wind speed, temperatures and information about currents. For more information, see: http://cnb.cx/1FTgOkv

How technology has Shaped Our Understanding of the Ocean
In recent years, innovations and advancements in technology have given researchers, policy makers, and the public an entirely new and detailed underwater view. Scientists and fishery managers can now survey both predictable and unusual parts of the ocean, at different times, and far from shore, to find where fish and other sea life breed, feed, shelter, and live. These efforts are generating a wealth of new science that can better inform fishery management decisions. For more information, see: http://bit.ly/1FTgxOy

Ocean acidification to replace coral with algae
Recent research suggests that increasing ocean acidification results in a dramatic ecosystem change from coral to algae. Coral polyps secrete calcium carbonate exoskeletons and they form coral reefs when in great numbers. When the surrounding water contains too much carbon dioxide, it reacts with the calcium carbonate, leaving less material available for coral to turn into skeletons. Carbon dioxide also makes water more acidic, and calcium carbonate tends to dissolve in acid. For more information, see: http://bit.ly/1TrWo2E

Marine Litterwatch: Combining Modern Technology and Citizen Engagement to Tackle Beach Litter
Litter, plastics in particular, is accumulating in our seas and on coasts. Information and data on marine litter is essential for tackling it. The European Environment Agency has developed Marine LitterWatch mobile app to strengthen Europe’s knowledge base and thus provide support to European policy making. For more, see: http://bit.ly/1OldH69
SEA CHANGE project news issue 1

Ocean Literacy Co-Creation & Participation Protocols Training

The Sea Change Ocean Literacy Co-Creation and Participation Protocols Training took place at the National University of Ireland (NUI), Galway in September 2015. The Ocean Literacy Co-Creation Workshop began the process of creating ownership for a new way of Ocean Literacy thinking. The aim of this interactive workshop was to embed the five Ocean Literacy Co-Creation Principles (the “change”, “creative”, “competitive”, “collective”, “client” principles) and the Ocean Literacy Co-Creation Protocols with the Sea Change Partnership. The Participation Protocols Workshop provided partners with hands on training on the use of the Collective Intelligence Methodology. These guiding principles and protocols emphasise who to engage, what to work on together and how change happens. Together, they form the foundation of successful Ocean Literacy interventions.

For more information on the training please contact Patricia McHugh: patricia.mchugh@nuigalway.ie

Top Ten Tips for Protecting the Ocean

Tip 1: Skip the Straw (or use a biodegradable paper straw instead!)
Tip 2: Ditch cosmetics that contain plastic microbeads. Look out for Polyethylene (PE), polypropylene (PP), polyethylene terephthalate (PET), polymethyl methacrylate (PMMA) and nylon in the ingredient list.
Tip 3: Drink water out of a glass or reusable bottle instead of buying bottled water
Tip 4: Choose metal cutlery over plastic
Tip 5: Purchase wooden toys rather than plastic
Tip 6: Only use real or biodegradable plates
Tip 7: Choose biodegradable cotton buds over plastic
Tip 8: Bring cloth bags to shops and use instead of plastic bags
Tip 9: Compost so that you use fewer bags for refuse
Tip 10: Choose groceries packaged in glass instead of plastic when possible

Sea Change was well represented at the third European Marine Science Educators Association (EMSEA) conference, hosted in Crete, Greece, by the Hellenic Centre for Marine Research (HCMR) and the Cretaquarium from 28 September – 1 October 2015. Project manager Fiona Crouch presented the objectives and plan for Sea Change to the conference participants during the closing session of the conference and Peter Tuddenham of the College of Exploration also presented a poster based on the Ocean Literacy video and booklet developed in collaboration with the European Marine Board.

Representatives from other Sea Change partner organisations and the International Advisory Group also attended the conference and took part in the engaging programme of talks, discussions, workshops and fieldtrips centred on Ocean Literacy in Europe.

The next EMSEA annual conference will be hosted by Titanic Belfast, Northern Ireland, in October 2016.

www.emsea.eu
COP21: Sustainable Innovation Forum (SIF15)
Paris, France
7-8 December 2015
The Sustainable Innovation Forum (SIF15) is the largest business focused event held during the annual Conference of Parties (COP). Building on year-round work from Climate Action and the UN Environment Programme, the two day Forum will convene cross-sector participants from business, government, finance, UN, NGO and civil society to create an unparalleled opportunity to bolster business innovation and bring scale to the emerging green economy.

For more information, see: www.cop21paris.org

2016 Ocean Sciences Meeting
New Orleans, USA
21-26 February 2016
The theme for the 2016 Ocean Sciences Meeting is: Ocean Sciences at the Interface. Complex interactions occur at a variety of interfaces and on a wide range of spatial and temporal scales. These interactions are critical for understanding the world around us and implementing informed policies in a global society. The 2016 Ocean Science Meeting will highlight processes at interfaces and how the work at such interfaces advances the study of ocean sciences and shapes the impact of our research on society.

The full programme will be available online later this month.

To register, see: http://osm.agu.org/2016/registration

For more information, see: http://osm.agu.org/2016

SETAC Europe annual meeting
Nantes, France
22-26 May 2016
Environmental contaminants ignore boundaries and ecosystem limits. Under the general theme Environmental contaminants from land to sea: continuities and interface in environmental toxicology and chemistry, experts from academia, government and industry will share the most recent advanced knowledge in environmental sciences in order to improve chemical risk assessment and support current and future policies.

Deadline for abstract submission is Wednesday 25 November 2015, 23:59 CET.

For more information, see: http://nantes.setac.eu/?contentid=1011&nv=853&pr_id=1011

EMSEA 2016 Conference
Belfast, Northern Ireland
4-7 October 2016
The fourth European Marine Science Educators Association’s (EMSEA) Conference will be organised by Titanic Belfast in Northern Ireland.

The European Marine Science Educators Association (EMSEA) is an informal non-profit organisation which provides a platform for ocean education and promoting ocean literacy within Europe. The rational of EMSEA is educational and scientific.

Registration opens: January 2016.
Conference programme: to be confirmed

Register your interest for updates at: http://event-ful.co.uk/events/emsea2016

Keep up to date with upcoming events on our website:
www.seachangeproject.eu

Thinking of going for a swim in the ocean? Check out the quality of the bathing waters across Europe: http://goo.gl/HexmzP
This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 652644. This output reflects the views only of the author(s), and the European Union cannot be held responsible for any use which may be made of the information contained therein.