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## MESSAGES FROM ECSA / ECSA EVENTS

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### ECSA 2017 - Shanghai, China (Oct 2017)



## ECSA 2017 Where Land Meets Ocean: The Vulnerable Interface

ECSA and the State Key Laboratory of Estuarine and Coastal Research (SKLEC) are pleased to invite you to the ECSA 2017 conference in Shanghai, China to discuss cutting edge research questions and potential solutions for the vulnerable interface between land and ocean.

Conference dates: 16-20 October 2017

Conference venue: Jianguo Hotel, Shanghai, China

## Conference topics:

- Hydrodynamics and coastal dynamics
- Sediment transport and morphodynamics
- Regime shift of estuaries and deltas under changing environment
- Harbors and navigation channels
- Interactions between estuarine/coastal processes and oceanic processes on the shelf
- Pollutants transportation and transformation at estuaries and coasts
- Bio-geochemical processes
- Mechanisms controlling harmful algal blooming
- Blue carbon under multi-stressors
- Reclamation and Exotic species invasion
- Ecosystem restoration
- Ecosystem based coastal management
- Energy and environmental security of coastal cities
- Workshop on Estuarine and Coastal Aquatic Environment Monitoring from Space

Please visit the conference website at <http://ecsa.ecnu.edu.cn/> for more information.

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## **ECSA 57 - Perth, Australia (Sep 2018)**



We are pleased to invite you to ECSA's next major symposium, ECSA 57: *Changing estuaries, coasts and shelf systems - Diverse threats and opportunities*, which will take place from the 3-6 September 2018 in Pan Pacific Perth, Perth, WA, Australia.

The structure and functioning of our estuaries and seas are shifting due to diverse drivers from local to global scales. The resulting threats to these systems are often all too apparent, yet such changes can also present new opportunities. The challenge is to harness these opportunities through new ways of thinking, scientific developments, innovative technology and more effective integration of science and management.

### [Submit your special session proposal](#)

We are inviting delegates to propose and convene special organised sessions for ECSA 57. Selection of session proposals will be highly competitive and priority will be given to sessions that address the overall ECSA 57 theme and are at the cutting-edge of current estuarine and marine science. The deadline is 6 October 2017.

### [Conference topics](#)

Contributions are invited within the following broad topics, covering the diversity of threats and opportunities facing estuarine, coastal and marine ecosystems and the people they support:

- Environment
  - Land - ocean linkages
  - Coastal morphodynamics and sediment transport
  - Oceanography and physical-biological coupling
  - Biogeochemistry, element cycling and greenhouse gas dynamics
- Biodiversity

- Genetic diversity and adaptation
- Population dynamics
- Connectivity (e.g. energy, genes, habitats and disease)
- Ecosystem structure and functioning
- People and management
  - Sustainable natural resource exploitation
  - Marine Protected Areas
  - Aquaculture
  - Societal values
  - Citizen science
  - Ecosystem service delivery
- Integration
  - Socio-ecological dynamics, resilience and regime shifts
  - Integrated management – cumulative risk assessment and tradeoffs
  - Case studies of eco-engineering and ecosystem restoration
  - Effective governance – regional to international scales
  - Integrated observing systems and modelling

The abstract submission will open on 30<sup>th</sup> October 2017.

Please visit the conference website at <http://www.estuarinecoastalconference.com/> for more information.

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## **ECSA/PHSG MPA conference proceedings – call for papers**

The proceeding of our recent conference on Science & Management of Marine Protected Areas (Poole, 15-17 May 2017), organised jointly by ECSA and Poole Harbour Study Group, will be published in a Special Issue of the journal Estuarine, Coastal & Shelf Science (ECSS) on the theme “Marine Protected Areas: Science Policy and Management”, and as contributions to an edited book.

The two outputs are designed to be complementary, with the book allowing a more extensive examination of the subject than can be achieved through a special journal issue. For example, while the journal papers will need to be original empirical or analytical contributions that move the field forward the book will also include much greater consideration of the current state of play, innovative policy formulations and good management practices including case studies with a more general applicability.

### **ECSS Special Issue**

Guest Editors: John Humphreys (Institute of Marine Sciences, University of Portsmouth, UK) and Roger Herbert (Department of Life & Environmental Sciences, Bournemouth University, UK)

The deadline for submission of papers (through Elsevier’s ECSS online submission system) is 31<sup>st</sup> October 2017, with publication scheduled by August 2018.

For further information on the journal and the procedure for submitting a paper please visit the webpage <https://www.journals.elsevier.com/estuarine-coastal-and-shelf-science/call-for-papers/special-issue-on-marine-protected-areas-science-policy-manag>

### **Edited Book**

For those who have expressed an intention to submit a book chapter further information on the book will be circulated shortly.

If you would like some advice or clarification on the best target for a prospective submission please don't hesitate to contact John Humphreys and Roger Herbert at the email address [info@pooleharbourstudygroup.org.uk](mailto:info@pooleharbourstudygroup.org.uk).

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## OTHER FEATURES/EVENTS OF INTEREST

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### Science evaluation of wetland system repair projects in the Great Barrier Reef catchments

Dr Nathan Waltham – Principal Lead Scientist  
TropWATER  
College of Science and Engineering  
James Cook University, Australia

Approximately 70% of coastal wetlands along the Great Barrier Reef (GBR) coastline have been modified or lost completely because of urban and industrial expansion, or agricultural development intensification. Remaining wetlands suffer from poor water quality (hypoxic, excessive nutrients), persistency (that were previously seasonal now dry out), or overgrown with aquatic invasive weeds or support invasive fish species.

Recognising the need to protect and repair wetlands in GBR catchments, Australian and State governments have invested millions into on-ground restoration works, including weed removal, fish barrier upgrades, improvements to agricultural land management practices and community education. While these on-ground efforts have probably improved wetlands, no explicit scientific data is available to evaluate and examine success. The Australian Government recently funded (2017 – 2019) through the [National Environmental Science Programme \(NESP\) Tropical Water Quality Hub](#) a scientific evaluation of wetland restoration sites, in attempt to capture data and assist with future planned restoration projects.



Weed infestation above the bund, before removal (September 2013).

One such example is the Mungalla wetland complex on the north Queensland coast. The degradation of this wetland complex began after an earth bund was constructed in the early 1900's to exclude seawater and create a ponded pasture for grazing. Over time, several grass species were introduced (Alemann grass, *Echinochloa polystachya*; Olive hymenachne, *Hymenachne amplexicaulis*; para grass, *Urochloa mutica*) to the area surrounding the permanent wetland and these rapidly infested the wetland, exacerbated by nutrients flows from a creek (Palm Creek) downstream of a large area of sugar.

As part of a recently completed project, Scientists from CSIRO Land and Water (Townsville) and the Mungalla Aboriginal Corporation for Business, with support from TropWATER (James Cook University), commenced a project to rehabilitate the Mungalla wetlands by removing the bund wall and allowing saltwater water to again connect with the wetland area. Project Lead Scientist Mr Brett Abbott (CSIRO) said that *"the project has included a range of components including fire management, weed spraying, fencing of stock, but the most rewarding that is starting to show some really positive results has been removing the earth bund wall to control invasive aquatic and terrestrial plants in the wetlands"*. *"By removing the bund wall, we have been able to allow saltwater to again return to this area, which has been an important natural control on the invasive plant species"*.



Breaking through the bund - 70yrs of sediment and bund cleared.



Saltwater marsh plants returning to natural state, 2 years after bund removal (2015)



Barra Sheep Station Creek July 2015

Project Leader Dr Nathan Waltham is an aquatic ecologist with TropWATER (James Cook University, Australia) and recently completed a survey of the ecology in the wetlands. “We completed a survey of the fish occupying the wetlands in 2008 and recorded three freshwater fish species, including two invasive species – gambusia (*Gambusia holbrooki*) and tilapia (*Oreochromis mossambicus*)”. “However, in a more recent survey this year we caught 9 species of fish, including three fish species that have an estuary life phase, including the barramundi, which has probably not been recorded in these wetlands in over a hundred years, before the bund wall was built”.

Dr Nathan Waltham is the Principal Lead Scientist for the *Coastal Wetland Repair Evaluation and Monitoring project* funded through the Australian Government National Environment Science Programme – Tropical Water Quality Hub. For more information about this program contact [Dr Nathan Waltham](mailto:Nathan.waltham@jcu.edu.au) on Nathan.waltham@jcu.edu.au.

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## Scientists unlock secrets of red alga immunity



Research conducted into the genetic make-up of a resilient red alga has taken scientists a step closer to breeding disease-resistant seaweed. Researchers at the Scottish Association for Marine Science (SAMS) in Oban, Scotland have established the genetic code for the *Porphyra umbilicalis*, a small, but tough intertidal species that can tolerate a range of conditions and is among the world’s most valuable commercial seaweeds.

The researchers mapped the 13,125 genes in the seaweed – a human has around 20,000 – to help discover what makes the intertidal species so resilient, as they aim to breed marketable seaweed that can withstand threats from common diseases. They examined the red alga’s pathogen receptors – the equivalent of antibodies that recognise diseases and alert the alga to an attack – and found that the alga’s defences are unlike other plants.

Read more: <https://education.sams.ac.uk/news/sams-news-genetic-map-of-porphyra-umbilicalis.html>

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## Anglers asked to get their flapper snaps out



Sea anglers who have fished in a Marine Protected Area (MPA) off Scotland’s west coast could unwittingly hold information wanted by scientists stored on their phones, hard drives or in family albums. Marine scientists studying the world’s largest skate species in the Loch Sunart to the Sound of Jura MPA are asking anglers to share any photographs they have of common skate, sometimes known as flapper skate, which were caught and released in the area during the last 10 years.

The species has suffered large declines in population numbers over recent decades and the fish is the main focus of marine biologists’ research in the MPA. Now Scottish Natural Heritage (SNH), the Scottish Association for Marine Science (SAMS) and the Scottish Sea Angling Conservation Network (SSACN) are working together on a project looking to see if individual skates can be identified by the spot patterns on their backs.

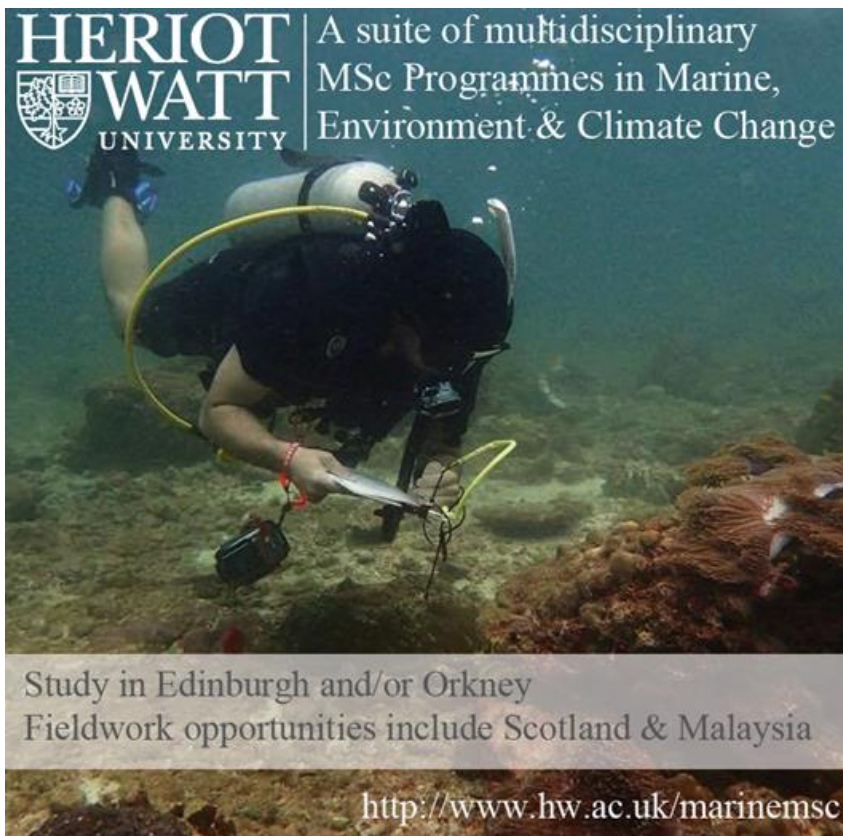
Read more: <https://education.sams.ac.uk/news/sams-news-skate-id-project.html>

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## Marine, Environment and Climate Change MSc programmes at Heriot Watt University



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## Training courses with HR Wallingford, UK

HR Wallingford (Wallingford, UK) are offering a series of 1-2 day training courses including:

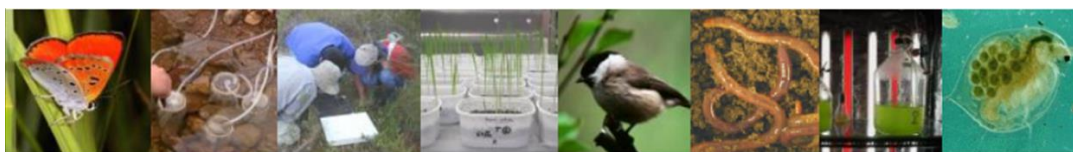
- Coastal processes and management (17-18 October 2017)
- Introduction to flood risk analysis and management (15-16 November 2017)
- Climate change risk assessment and adaptation (dates to be confirmed)

For more information on these and other courses see <http://training.hrwallingford.com/training/classroom-training>

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## Advanced course on Trait Based approaches - Coimbra, Portugal (Sep 2017)



### **Advanced Course on:** ***The use of Trait Based approaches in Community Ecology and Stress Ecology*** **Coimbra, Portugal 25 September – 6 October 2017**

The course is organised by the Instituto do Ambiente Tecnologia e Vida (IATV), and coordinated by José Paulo Sousa and Manuel Augusto Graça, Dep. Life Sciences, University of Coimbra, Portugal.

This course aims at providing updated concepts and methodologies on the use of biological and ecological traits in Community Ecology and Stress Ecology, encompassing terrestrial and freshwater ecosystems. Particular attention will be given to the use of species traits to understand ecological processes, such as niche partitioning, species interactions, community assembly and ecosystem processes, and as tools in bioindication schemes (including indication of ecosystem services and different stressors, e.g., chemicals, climate change).

The course is composed by theoretical, discussion and practical (hands-on) lectures and is targeted to scientists and post-graduate students, as well as to professionals involved in bioindication. It is composed of two complementary but independent modules: module 1 is focusing on major concepts and on terrestrial environments and module 2 focuses on freshwater systems. Participants can attend one or both modules.

Registration at

[https://docs.google.com/forms/d/e/1FAIpQLSdtvRqssQKcjlV6q\\_UHgAGvhFZ87uXRy\\_E35PX58zchivj3dQ/viewform?usp=sf\\_link](https://docs.google.com/forms/d/e/1FAIpQLSdtvRqssQKcjlV6q_UHgAGvhFZ87uXRy_E35PX58zchivj3dQ/viewform?usp=sf_link)

For more information: [jps@zoo.uc.pt](mailto:jps@zoo.uc.pt)

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## EON/ELSI Winter School on Earth-Life Science– Tokyo, Japan (Jan 2018)

Applications for the 2018 EON/ELSI Winter School on Earth-Life Science, taking place in Tokyo, Japan, on January 22<sup>nd</sup> to February 2<sup>nd</sup> are now open.

The training course is organised by The Earth-Life Science Institute (ELSI) of Tokyo Institute of Technology, Japan.

This interdisciplinary training course for graduate students and post-docs will include lectures from experts and hands-on training in field techniques and computational approaches, with applications for everything related to Earth-Life Science, from planets to microbes and beyond. If you are interested in the evolution of planets, chemicals or life, this is the school for you.

For all selected attendees, all onsite costs in Japan will be covered. Travel funding is available for a limited number of attendees, upon request in the application form.

Deadline for application is 15<sup>th</sup> September 2017.

For more information and to apply see <http://elsischool.com>

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## EUROLAG8 – Athens, Greece (Mar 2018)



Dear Colleagues and Friends,

We are pleased to invite you to participate to the 8th European Coastal Lagoons Symposium which will take place in Athens, Greece, from 20-23 March 2018.

The major topics will be:

1. Coastal lagoons evolution, Functioning & Climatic change
2. Biodiversity & Water quality
3. Fisheries and Aquaculture
4. Goods and services, Conservation, Management & Sustainable use
5. European networks and Projects in Transitional areas and Lagoons

Please send your submissions to [abstracts@eurolag8.org](mailto:abstracts@eurolag8.org)

For more information please go to: <http://eurolag8.org>

We kindly ask you to spread the information about the conference among your colleagues.  
We look forward to seeing you in Athens.

Kind regards, on behalf of the Local Organizing Committee  
Sofia Reizopoulou

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## FELLOWSHIPS/JOB POSITIONS/OPPORTUNITIES

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### PhD studentship on effects of noise and pollution on marine invertebrates, Edinburgh Napier University



The Marine Alliance for Science and Technology for Scotland (MASTS) and the Edinburgh Napier University are funding a Ph.D. studentship on “**Effects of Combined Aquatic Noise and Chemical Pollution on Early Stage Marine Invertebrates in Different Temperature Contexts**”



The aim of the proposed PhD project is to quantify the responses of selected marine invertebrates to a hitherto unstudied stressor combination: Noise and chemical pollution, under different temperature contexts. Invertebrates, ubiquitous in the marine environment, perform many ecological roles and are key to an understanding of ecosystemic effects of environmental stressors.

Application deadline is 10<sup>th</sup> September 2017.

Find more information or apply at <https://www.findaphd.com/search/ProjectDetails.aspx?PJID=88217>

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## Job Vacancies (UK)

### DEPUTY CHIEF AND HEAD OF ENFORCEMENT



North Western Inshore Fisheries and Conservation Authority  
Location: NWIFCA Carnforth Office with travel throughout the District, UK  
Contract type: Permanent, based on a 37 hour working week using a flexitime system  
Grade / Salary: £30,758 to £41,025  
Closing date: 31 August 2017

To increase sustainable use of the sea by promoting the objectives of marine protected areas in the District and increasing compliance with fisheries regulations. Manage NWIFCA enforcement. 10 Officers. National and regional inter-agency co-ordination. Report to CEO.

For more information and application see <http://www.nw-ifca.gov.uk/jobs/deputy-chief-officer-head-enforcement/>

### INSHORE FISHERIES AND CONSERVATION OFFICERS (IFCO)



North Western Inshore Fisheries and Conservation Authority  
Location: Carnforth or Liverpool with travel throughout District, UK  
Contract type: Permanent, based on a 37 hour working week using a flexitime system  
Grade / Salary: £20,138 to £27,668  
Closing date: 31 August 2017

Under the direction of the Head of Enforcement to protect the marine environment and promote sustainable use of its resources by increasing compliance with fisheries byelaws and legislation. Fisheries and marine protected area enforcement. Science surveys and data collection. Public liaison. Training provided as required.

For more information and application see <http://www.nw-ifca.gov.uk/jobs/inshore-fisheries-conservation-officer-ifco/>

### INSHORE FISHERIES AND CONSERVATION OFFICER/CREW



North Western Inshore Fisheries and Conservation Authority  
Location: Whitehaven with travel throughout District, UK  
Contract type: Fixed Term 1 Year, based on a 37 hour working week using a flexitime system  
Grade / Salary: £20,138  
Closing date: 31 August 2017

Under the direction of the Head of Enforcement to protect the marine environment and promote sustainable use of its resources by increasing compliance with fisheries byelaws and legislation, particularly on board NWIFCA patrol vessels.

For more information and application see <http://www.nw-ifca.gov.uk/fixed-term-1-year-inshore-fisheries-conservation-officercrew/>

### SENIOR ENVIRONMENTAL CONSULTANT (COASTAL & MARINE)



Royal HaskoningDHV  
Location: London, UK  
Closing date: 31 August 2017

Royal HaskoningDHV are recruiting 2 Senior Environmental Consultant with extensive experience in the marine sector and appropriate knowledge of the regulatory framework and will be responsible for the management and delivery of environmental assessment projects, including the coordination and leadership of multidisciplinary teams. For more information and application see <https://www.networkrecruitment.com/Jobs/Advert/563486?FromSearch=False>

#### SENIOR COASTAL PROCESSES SCIENTIST



Centre for Environment, Fisheries and Aquaculture Science, UK  
Location: Lowestoft, UK

Contract type: Permanent, Flexible working, Full-time, Job share, Part-time

Grade / Salary: Senior Executive Officer, Payband 6

Closing date: 1 September 2017

Job Purpose: To lead and deliver (1) coastal oceanography and geomorphology projects within Cefas' portfolio for commercial and governmental clients, and (2) coastal processes advice on a wide range of issues to assist regulatory decision-making processes. The focus of the work is to develop and deliver the science needed to assess environmental risks to and impacts of coastal developments.

For more information and application see <https://www.civilservicejobs.service.gov.uk/csr/jobs.cgi?jcode=1551629>

#### SOCIAL SCIENCE RESEARCHERS – SEA AND SOCIETY



Plymouth Marine  
Laboratory

Plymouth Marine Laboratory  
Location: Plymouth, UK

Contract type: Full time, or part time on job share basis, 1 x Open Ended Appointment, 1 x Fixed Term Appointment (12 months)

Grade / Salary: £22,404 – £29,874

Closing date: 5 September 2017

PML is seeking to appoint 2 enthusiastic, highly motivated and experienced Social Science Researchers to join our 'Sea and Society' group. You will provide social and economic science support for existing staff to deliver on currently funded projects involving stakeholder engagement and primary data collection, and to support similar projects in the future.

For more information see <https://advanced.advorto.com/PML/VacancyInformation.aspx?VId=19986#.WaBUiojyu70>

#### MARINE GEOARCHAEOLOGIST



Wessex Archaeology  
Location: Salisbury, UK

Grade / Salary: commensurate with skills and experience

Closing date: 8 September 2017 at 5pm

You will work closely with the Marine Geophysics department, using your expertise (and that of your colleagues in the geoarchaeological team) to investigate, model and interpret submerged palaeolandscapes, using data from laboratory analysis of physical samples in conjunction with the remote sensing results.

For more information see <http://www.wessexarch.co.uk/marine-geoarchaeologist>

#### MARINE CONSERVATION OFFICER



Kent Wildlife Trust

Location: Tyland Barn, Maidstone, Kent, UK

Contract type: Full-time fixed term contract for 15 months from October 2017, with potential for extension

Grade / Salary: £23,187 - £31,413 per annum

Closing date: 13 September 2017 at noon

The role will enable the Trust to achieve effective engagement in marine planning issues and deliver biodiversity enhancement. Experience is required of working on Environmental Impact Assessments and UK marine and coastal ecology.

For more information see <http://www.kentwildlifetrust.org.uk/jobs/marine-conservation-officer>



#### SENIOR PERMITTING OFFICER (MARINE LICENSING)

Natural Resources Wales

Location: Cardiff, UK

Contract type: Permanent, Full-time

Grade / Salary: £33,093 - £36,197

Closing date: 15 September 2017

Job Purpose: • To lead/support the assessment of complex marine licence application(s), to ensure that the activities are sustainable for both industry and the surrounding environment. To lead/support the team in working through the planning inspectorate process for nationally significant infrastructure projects (NSIPS). • To represent the Licensing team at stakeholder events relating to their teams work as well as being one of the key contacts in the team to respond to complex permitting queries from both internal and external customers. • To work closely with Marine Regulatory Policy posts within NRW and Welsh Government to improve and maintain Marine Licensing in Wales. • To oversee/support the technical development and resilience of the Marine Licensing Team.

For more information and application see <http://naturalresourceswales.gov.uk/about-us/jobs-and-volunteering/jobs/100241-senior-permitting-officer-marine-licensing/?lang=en>

#### **MARINE LITTER PROJECT COORDINATOR**



OSPAR Commission

Location: London, UK

Contract type: 1-year post, with the potential for an additional 2 years depending on funding, vacant from November 2017 and subject to an initial three-month probation period

Grade / Salary: commensurate with skills and experience

Closing date: 22 September 2017

Project Coordinator for OSPAR's Regional Action Plan on Marine Litter (RAP) in the Secretariat of the OSPAR Commission.

For more information see <https://www.ospar.org/organisation/vacancies>

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Website: <https://ecsa.international/>

ECSA is a registered charity (reg. no. 264006)

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Disclaimer: ECSA is not responsible for faults due to incorrectness of info in this newsletter