ARCoES Researchfish Portfolio

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Sections

Publications

Intercomparison of the Charnock and COARE bulk wind stress formulations for coastal ocean modelling

Publication date	2013
First Named Author	Brown J. M.
Secondary Authors	Amoudry L. O., Mercier F. M., Souza A. J.
Publication Type	Journal Article

Identifiers:

Data Source	crossref

Observations of the swash zone on a gravel beach during a storm using a laser-scanner (Lidar)

Publication date	2013
First Named Author	Almeida L P
Secondary Author	Masselink G: Russell P: Davidsom M: Poate T: McCall R: Blenkinsopp C: Turner I L
Publication Type	Journal Article

Observations of gravel beach dynamics during high energy wave conditions using a laser scanner

Publication date	2015
First Named Author	Almeida L.P.
Secondary Authors	Masselink G., Russell P.E., Davidson M.A.
Publication Type	Journal Article

Identifiers:

Data Source	crossref

Fate and pathways of dredged estuarine sediment spoil in response to variable sediment size and baroclinic coastal circulation

Publication date	2015
First Named Author	Brown Jennifer M.
Secondary Authors	Amoudry Laurent O., Souza Alejandro J., Rees Jon
Publication Type	Journal Article

Identifiers:

Data Source	crossref

The depth-varying response of coastal circulation and water levels to 2D radiation stress when applied in a coupled wave–tide–surge modelling system during an extreme storm

Publication date	2013
First Named Author	Brown Jennifer M.
Secondary Authors	Bolaños Rodolfo, Wolf Judith
Publication Type	Journal Article

Identifiers:

Data Source	crossref

Response of wave-dominated and mixed-energy barriers to storms

Publication date	2014
First Named Author	Masselink Gerd
Secondary Author	van Heteren Sytze
Publication Type	Journal Article

Identifiers:

Data Source	crossref

Swash zone morphodynamics of gravel and mixed sand and gravel beaches during energetic wave conditions

Publication date	2014
First Named Author	Almeida L P
Secondary Author	Masselink G: Russell P E: Davidson M: McCall R: Poate T
Publication Type	Conference Proceeding_Abstract

Modelling storm hydrodynamics on gravel beaches with XBeach-G

Publication date	2014
First Named Author	McCall R.T.
Secondary Authors	Masselink G., Poate T.G., Roelvink J.A., Almeida L.P., Davidson M., Russell P.E.
Publication Type	Journal Article

Identifiers:

Data Source	crossref

Application of flood risk modelling in a web-based geospatial decision support tool for coastal adaptation to climate change

Publication date	2015
First Named Author	Knight P. J.
Secondary Authors	Prime T., Brown J. M., Morrissey K., Plater A. J.
Publication Type	Journal Article

Identifiers:

Data Source	crossref

(2015) Research Consultancy Report No. 46, Assessing long-term coastal flooding risk for Magnox nuclear power stations

Publication date	2015
First Named Author	Knight P. J.
Secondary Authors	Prime, T.;Brown, J. M.;Plater, A. J.
Publication Type	Technical Report

Physical and Economic Impacts of Sea-Level Rise and Low Probability Flooding Events on Coastal Communities

Publication date	2015
First Named Author	Prime T
Secondary Author	Brown J M;Plater A J
Publication Type	Journal Article

UK storms 2014: Gravel beach response

First Named Author	Poate, T

Secondary Authors	Masselink, G;McCall, R;Russell, P;Davidson, M
Publication Type	Conference Proceeding_Abstract

A temporal waterline approach to mapping intertidal areas using X-band marine radar

Publication date	2016
First Named Author	Bell Paul S.

Climate change adaptation frameworks: an evaluation of plans for coastal Suffolk, UK

Publication date	2015
First Named Author	Armstrong J.
Secondary Authors	Wilby R., Nicholls R. J.

Identifiers:

Data Source	WoS

Monitoring and modelling to guide coastal adaptation to extreme storm events in a changing climate

Publication date	2015
First Named Author	Brown J
Publication Type	Other

The impact of tidal lagoons on future flood risk on the North Wirral and Conwy coastline, UK. (NOC Internal Document No.16)

Publication date	2015
First Named Author	Lyddon C

Secondary Author	Plater AJ;Brown J;Prime T;Wolf J
Publication Type	Technical Report

Sandscaping for mitigating coastal flood and erosion risk to energy infrastructure on gravel shorelines: Dungeness flood risk assessment (NOC Consultancy Report No.49)

Publication date	2015
First Named Author	Prime T
Secondary Author	Knight P;Plater AJ;Brown JM
Publication Type	Technical Report

Modeling coastal erosion and sediment transport on the Dungeness Foreland, UK (NOC Consultancy Report No.48)

Publication date	2015
First Named Author	Phelps JJC
Secondary Author	Brown JM;Plater AJ;Barkwith A;Hurst MD;Ellis MA
Publication Type	Technical Report

Use of Facilities and Resources

Facility or Work Name	EPSRC funded flights of the Ribble estuary (Sneddon)
Facility Name	NERC ARSF
Provided Service/Resource	Lidar data collection of the Ribble estuary
Subsequent Impacts	No impacts as of yet as data not delivered by

Collaborations and Partnership

Collaboration Title	Flood risk assessment for Magnox sites
Partner	
Organisation Name [0]	Magnox
Department [0]	Hazards
Contributed Financially [0]	Yes
Contribution Currency [0]	GBP British Pound Sterling
Contribution Amount [0]	40000
In-kind contribution [0]	Yes
In-kind contribution currency [0]	GBP British Pound Sterling
Give an estimate of the in-kind value. [0]	9000
Contributions Made	Flood risk modelling
Partner Contributions	Specification for flood risk modelling. Feedback on methodology. Provision of tide gauge data.
Year Commenced	2014
Year Ended	2015
Resultant Outcomes	Knight et al. (2015) Assessing long-term coastal flooding risk for Magnox nuclear power stations (NOC Research Consultancy Report No. 46)
Categorisation of impact	No impact yet

Formally Governed	No

Collaboration Title	Radar survey
Partner	
Organisation Name [0]	Marlan Maritime Technologies
Contributed Financially [0]	No
In-kind contribution [0]	No
Contributions Made	Liaison with local authority, land owners and MoD regarding permissions to set up survey. Setting the operational requirements of the radar survey.
Partner Contributions	Design, construction of operation of radar survey.
Year Commenced	2012
Year Ended	Still Active
Resultant Outcomes	None as yet.
Categorisation of impact	Economic
Formally Governed	No

Collaboration Title	Sandscaping scoping study
Partner	
Organisation Name [0]	Crown Estate
Department [0]	Energy and Infrastructure
Contributed Financially [0]	No
In-kind contribution [0]	Yes
In-kind contribution	GBP British Pound Sterling

currency [0]	
Give an estimate of the in-kind value. [0]	5000
Organisation Name [1]	Environment Agency
Contributed Financially [1]	No
In-kind contribution [1]	No
In-kind contribution currency [1]	GBP British Pound Sterling
Organisation Name [2]	Royal HaskoningDHV
Department [2]	Rivers, Deltas and Coasts
Contributed Financially [2]	No
In-kind contribution [2]	No
In-kind contribution currency [2]	GBP British Pound Sterling
Organisation Name [3]	The National Grid Co plc
Contributed Financially [3]	No
In-kind contribution [3]	No
In-kind contribution currency [3]	GBP British Pound Sterling
Organisation Name [4]	Natural England
Contributed Financially [4]	No
In-kind contribution [4]	No
In-kind contribution	GBP British Pound Sterling

currency [4]	
Organisation Name [5]	British Geological Survey
Contributed Financially [5]	No
In-kind contribution [5]	No
In-kind contribution currency [5]	GBP British Pound Sterling
Organisation Name [6]	National Oceanography Centre
Contributed Financially [6]	No
In-kind contribution [6]	No
In-kind contribution currency [6]	GBP British Pound Sterling
Contributions Made	a. Provision of flood risk assessment using LISFLOOD-FP for Dungeness Foreland, b. Particle-tracking model for Dungeness Foreland to scope different sandscaping options.
Partner Contributions	Provision of expert knowledge of sandscaping options, guidance on regulatory framework, linkage to stakeholder community
Year Commenced	2014
Year Ended	Still Active
URL	http://www.nerc.ac.uk/funding/application/howtoapply/awards/2014/environ-risks-outcomes.pdf
Resultant Outcomes	Phelps JJC et al. (2015) Modeling coastal erosion and sediment transport on the Dungeness Foreland, UK (NOC Consultancy Report No.48) Prime T et al. (2015) Sandscaping for mitigating coastal flood and erosion risk to energy infrastructure on gravel shorelines: Dungeness flood risk assessment (NOC Consultancy Report No.49)

Categorisation of impact	No impact yet
Formally Governed	Yes

Collaboration Title	Stirling-Lancaster saltmarsh investigations (Christopher Sneddon, Prof David Copplestone, Dr Jackie Pates)
Partner	
Organisation Name [0]	Lancaster University
Contributed Financially [0]	No
In-kind contribution [0]	No
Contributions Made	My (Stirling) research team oversees site selection, research planning, fieldwork and data analysis.
Partner Contributions	My collaborators contribute to research planning, field work and laboratory analysis
Year Commenced	2014
Year Ended	Still Active
Resultant Outcomes	Outputs have been validation of a geostatistical model of saltmarsh contamination. The mapping of surface contaminant concentrations at a managed realignment site.
Categorisation of impact	No impact yet
Formally Governed	No

Collaboration Title	Use of Sandscaping Interventions for Coastal Protection
Partner	

Organisation Name [0]	The National Grid Co plc
Contributed Financially [0]	Yes
Contribution Currency [0]	GBP British Pound Sterling
Contribution Amount [0]	15000
In-kind contribution [0]	Yes
In-kind contribution currency [0]	GBP British Pound Sterling
Give an estimate of the in-kind value. [0]	5000
Organisation Name [1]	Crown Estate
Contributed Financially [1]	No
In-kind contribution [1]	No
Contributions Made	Modeling of sandscaping options for Morecambe Bay for coastal defence and flood mitigation.
Partner Contributions	Input to the design and implementation strategy for sandscaping interventions.
Year Commenced	2016
Year Ended	Still Active
Resultant Outcomes	No outcomes to date.
Categorisation of impact	No impact yet
Formally Governed	No

Further Funding

Funding Scheme	Environmental Risks to Infrastructure Innovation

	Funding call (KE Scheme)
Organisation Name	Natural Environment Research Council (NERC)
Type	Research grant (including intramural programme)
Funding Currency	GBP
Funding Amount	46210
Reference Number	NE/M008061/1
Start Month	October
Start Year	2014
End Month	April
End Year	2015

Funding Scheme	EPSRC Impact Accelerator Account (IAA)
Organisation Name	Engineering and Physical Sciences Research Council (EPSRC)
Type	Research grant (including intramural programme)
Funding Currency	GBP
Funding Amount	40000
Start Month	April
Start Year	2014
End Month	December
End Year	2014

Funding Scheme	EPSRC Waves Across Shore Platforms (WASP)
Organisation Name	Engineering and Physical Sciences Research Council (EPSRC)

Type	Research grant (including intramural programme)
Funding Currency	GBP
Funding Amount	262735
Reference Number	EP/L025191/1
Start Month	Unknown
Start Year	2014
End Month	Unknown
End Year	2016

Funding Scheme	University of Stirling: two awards of 0.5 FTE match funding for project PhD studentship
Organisation Name	University of Stirling
Type	Studentship
Funding Currency	GBP
Funding Amount	60000
Start Month	February
Start Year	2013
End Month	February
End Year	2016

Funding Scheme	EPSRC Impact Accelerator Account (IAA)
Organisation Name	Engineering and Physical Sciences Research Council (EPSRC)
Type	Research grant (including intramural programme)
Funding Currency	GBP

Funding Amount	16000
Start Month	March
Start Year	2016
End Month	December
End Year	2016

Next Destination and Skills

Label	LPA
Proportion of Full Time	1
Previous Role	Research Student
New Role	Post Doctoral Researcher
New Sector	Other Public Sector (e.g. research agency/government)
Year Member Left	2015
Destination Country	France, French Republic
Qualifications Gained	PhD
Month	October
Year	2015

Engagement Activities

Activity Title	Plater (2012)b. Making a case for action and thriving local economies resilient to climate change

Activity Type	A talk or presentation
Recognised Scheme	No
Presentation Type	keynote/invited speaker
How many people?	51 - 100
Geographical Reach	National
Primary Audience	Professional Practitioners
Other Audience	Policymakers/politicians,Industry/Business,Other audiences
Activity Years	2012
Main purpose	To simulate thinking.
Result Description	Invited Presentation and Discussion on developing collaborations between Higher Education, SMEs, Local Authorities and Government Agencies at the Defra Climate Ready Event: Climate Resilient Cities – Linking Research to Practice.
Most important impact?	Plans made for future related activity
URL	http://www.arcc-network.org.uk/climate-resilient-cities-linking-research-to-practice/

Activity Title	Plater (2012)a. Numerical modeling of coastal change and resilience: Decision support for climate change adaptation
Activity Type	A talk or presentation
Recognised Scheme	No
Presentation Type	keynote/invited speaker
How many people?	101 - 500
Geographical Reach	International
Primary Audience	Other audiences

Other Audience	Policymakers/politicians,Professional Practitioners,Postgraduate students
Activity Years	2012
Main purpose	To share information.
Result Description	Invited Conference Presentation at the International Symposium on Climate Change and Human Activities: Coastal Consequences and Responses. State Key Laboratory for Estuarine and Coastal Research and East China Normal University, Shanghai, China, 28-31 October 2012. Conference presentation on the ARCoES modelling framework.
Most important impact?	Not aware of any impact.
URL	http://ccha.sklec.ecnu.edu.cn/picture/article/62/1 f/f4/6a404f304e1ba82a5eaa20f1950f/9199d8a0-87f4-4d 3c-89f4-b73679d530ae.pdf

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Activity Title	Plater, A (2012) Adaptation and Resilience of Coastal Energy Supply (ARCoES) in ARCC newsletter
Activity Type	A magazine, newsletter or online publication
Recognised Scheme	No
Geographical Reach	International
Primary Audience	Media (as a channel to the public)
Activity Years	2012
Result Description	ARCC-CN Newsletter (e-publication), December 2012, Issue 9.
URL	http://www.arcc-network.org.uk/wordpress/wp-conten t/Newsletters/ACN-news-Dec12.pdf

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Activity Title	Fabók, M (2013) Nuclear power futures: Processes, epistemic communities and agency

Activity Type	A talk or presentation
Recognised Scheme	Yes
Description	RGS-IBG Postgraduate Mid-term conference
How many people?	11 - 50
Geographical Reach	National
Primary Audience	Postgraduate students
Other Audience	None
Activity Years	2013
Result Description	Conference presentation at the RGS-IBG Postgraduate Mid-term conference, University of Birmingham, 25-27th March 2013. Conference presentation of progress of social science research on energy transition.

Activity Title	Prime, T (2013) Physical, Operational and Economic Resilience of Coastal Energy Networks
Activity Type	A talk or presentation
Recognised Scheme	No
Presentation Type	paper presentation
How many people?	11 - 50
Geographical Reach	National
Primary Audience	Postgraduate students
Other Audience	Professional Practitioners
Activity Years	2013
Main purpose	To share information.
Result Description	Conference Presentation at YCSEC (Young Coastal Scientists and Engineers Conference) 2013, 25-26th March, University of Aberdeen. Conference poster on ARCoEs project

	studentship research into long-term coastal flood risk at nuclear power station sites 50 Young Coastal Scientists and Engineers attended a 2 day conference to exchange knowledge about each other's research and stimulate discussion. Dissemination and networking with academics and engineering practitioners
Most important impact?	Plans made for future related activity

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Activity Title	Masselink, G (2013) A week in the life of a storm chaser
Activity Type	A magazine, newsletter or online publication
Recognised Scheme	No
Geographical Reach	International
Primary Audience	Media (as a channel to the public)
Activity Years	2013
Main purpose	To share information.
Result Description	Narrative account of ARCoES (and other project) coastal storm monitoring being undertaken by the mobile coastal response unit from the University of Plymouth. http://www.newscientist.com/article/mg21729092.800-a-week-in-the-life-of-a-storm-chaser.html. Summary of a week of storm monitoring for lay audience.
URL	http://www.newscientist.com/article/mg21729092.800-a-week-in-the-life-of-a-storm-chaser.html

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Activity Title	Sneddon, C (2013a) Long-term environmental and health implications of morphological change and sediment transport with respect to contaminants
Activity Type	A talk or presentation
Recognised Scheme	No
Presentation Type	paper presentation

How many people?	51 - 100
Geographical Reach	International
Primary Audience	Professional Practitioners
Other Audience	Industry/Business,Postgraduate students
Activity Years	2013
Main purpose	To share information.
Result Description	Conference presentation at COGER (Co-ordinating Group for Environmental Radioactivity) 2013, 3-5th April 2013 Loughborough University,. I presented the work I was planning to undertake and this stimulated interest in ARCoES
Most important impact?	Decision made or influenced

Activity Title	Fabók, M (2013) Nuclear power futures: Towards an understanding of agency
Activity Type	A talk or presentation
Recognised Scheme	Yes
Description	SPRU (Science and Technology Policy Research Unit)
Presentation Type	paper presentation
Geographical Reach	International
Primary Audience	Postgraduate students
Other Audience	None
Activity Years	2013
Result Description	Conference presentation at the SPRU (Science and Technology Policy Research) DPhil Day, University of Sussex, 1 May 2013. Conference presentation on the progress of social science research looking at energy transitiions.

Activity Title	Brown, J M (2013) Coastal storm impacts (at Shelf Seas Workshop, Mexico)
Activity Type	A talk or presentation
Recognised Scheme	No
How many people?	11 - 50
Geographical Reach	International
Primary Audience	Other academic audiences (collaborators, peers etc.)
Activity Years	2013
Main purpose	To share information.
Result Description	Workshop presentation at the (at Shelf Seas Workshop, Mexico). Researchers from the UK, Brazil, USA and Mexico met to share research interests relating to shelf sea science.
Most important impact?	Increase in requests for further information.

Activity Title	Brown, J M (2013) Wind stress: Which formulation for coastal applications?
Activity Type	A talk or presentation
Recognised Scheme	No
Presentation Type	poster presentation
How many people?	11 - 50
Geographical Reach	International
Primary Audience	Other audiences
Other Audience	Professional Practitioners
Activity Years	2013
Main purpose	To share information.
Result Description	Poster :- Wind stress: Which formulation for

	coastal applications? Discussion during the poster session developed ideas for a publication Poster presentation given at the European Geosciences Union General Assembly (EGU), Vienna, Austria, 7-12 April 2013. In the Oceanography at coastal scales: Modelling, coupling and observations session.
Most important impact?	Plans made for future related activity
URL	http://www.ocean-sci.net/9/721/2013/os-9-721-2013. html

Activity Title	Masselink, G (2014). XBeach-G: a tool for predicting gravel barrier response to extreme storm conditions. EGU
Activity Type	A talk or presentation
Recognised Scheme	No
How many people?	11 - 50
Geographical Reach	International
Primary Audience	Other academic audiences (collaborators, peers etc.)
Activity Years	2014
Main purpose	To share information.
Result Description	Conference presentation at EGU, Vienna, Austria. (abstract EGU2014-1095)
Most important impact?	Increase in requests about (further) participation or involvement.
URL	http://meetingorganizer.copernicus.org/EGU2014/EGU2014-1095.pdf

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Activity Title	Amoudry (2013). A comparison of structured and unstructured grid model performance in the Irish Sea. CERF and Shelf Seas workshop

Activity Type	A talk or presentation
Recognised Scheme	No
How many people?	51 - 100
Geographical Reach	International
Primary Audience	Other academic audiences (collaborators, peers etc.)
Activity Years	2013
Main purpose	To share information.
Result Description	Presented information to international colleagues, which stimulated discussion and questions. (Oral presentation at Conference of the Coastal and Estuarine Research Federation (CERF), San Diego, CA, 3-7 November 2013. In the General session on hydrodynamics and sediment dynamics in estuaries and coastal seas session).
Most important impact?	Increase in requests for further information.

Activity Title	Amoudry (2014). Structured and unstructured grid model performance in the Irish Sea. Marine Sciences SIG
Activity Type	A talk or presentation
Recognised Scheme	No
How many people?	11 - 50
Geographical Reach	National
Primary Audience	Other academic audiences (collaborators, peers etc.)
Activity Years	2014
Main purpose	To share information.
Result Description	Poster presentation. Approximately 50 people

	attended a special interest group to discuss coastal ocean processes. Questions and discussion with academics in other institutions.
Most important impact?	Plans made for future related activity

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Activity Title	Brown J.M. (2013) Seminar: Credible evidence for decision support. (NOC – Southampton series)
Activity Type	A talk or presentation
Recognised Scheme	No
How many people?	11 - 50
Geographical Reach	Regional
Primary Audience	Other academic audiences (collaborators, peers etc.)
Activity Years	2013
Main purpose	To share information.
Result Description	Approximately 15 researchers and data managers attended the seminar
Most important impact?	Not aware of any impact.

Activity Title	Brown et al. (2014). Convenors of Session: Monitoring and modelling to guide coastal adaptation to extreme storm events in a changing climate
Activity Type	Participation in an activity, workshop or similar
Recognised Scheme	No
Presentation Type	workshop facilitator
How many people?	11 - 50
Geographical Reach	International

Primary Audience	Other audiences
Other Audience	Postgraduate students
Activity Years	2014
Main purpose	To simulate thinking.
Result Description	Two oral sessions and a poster session were convened at the European General Assembly, Vienna 2014
Most important impact?	Not aware of any impact.

Activity Title	Sneddon, (2013b). Long-term environmental and health implications of morphological change and sediment transport with respect to contaminants, NNL
Activity Type	A talk or presentation
Recognised Scheme	No
Presentation Type	keynote/invited speaker
How many people?	1 - 10
Geographical Reach	Local
Primary Audience	Professional Practitioners
Other Audience	None
Activity Years	2013
Main purpose	To share information.
Result Description	I presented my work and then engaged in a lengthy discussion about the implications of my work with those attending
Most important impact?	Audience reported change in views, opinions or behaviours

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Activity Title	Sneddon, (2014)a. Long-term environmental and health implications of morphological change and sediment transport with respect to contaminants. EGU
Activity Type	A talk or presentation
Recognised Scheme	No
Presentation Type	poster presentation
How many people?	51 - 100
Geographical Reach	International
Primary Audience	Other audiences
Other Audience	Postgraduate students
Activity Years	2014
Main purpose	To simulate thinking.
Result Description	I talked to people whom where conducting research in similar fields and gained more knowledge of the current direction of the fields research.
Most important impact?	Not aware of any impact.
URL	http://meetingorganizer.copernicus.org/EGU2014/EGU2014-1095.pdf

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Activity Title	Sneddon, (2014)b. Long-term environmental and health implications of morphological change and sediment transport with respect to contaminants, NNL
Activity Type	A talk or presentation
Recognised Scheme	No
Presentation Type	keynote/invited speaker
How many people?	1 - 10
Geographical Reach	Local

Primary Audience	Professional Practitioners
Other Audience	None
Activity Years	2014
Main purpose	To share information.
Result Description	The attendees discussed their work related to saltmarshes and discussed a plan to collaborate on further research related to saltmarshes
Most important impact?	Plans made for future related activity

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Activity Title	Sneddon, (2014)c. Long-term environmental and health implications of morphological change and sediment transport with respect to contaminants. COGER
Activity Type	A talk or presentation
Recognised Scheme	No
Presentation Type	paper presentation
How many people?	51 - 100
Geographical Reach	International
Primary Audience	Postgraduate students
Other Audience	None
Activity Years	2014
Main purpose	To share information.
Result Description	I presented my work which I had conducted over the past year and answered questions concerning it
Most important impact?	Plans made for future related activity

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Activity Title	Stakeholder event (2014) A future vision for the

	coast
Activity Type	A formal working group, expert panel or dialogue
Recognised Scheme	No
How many people?	51 - 100
Geographical Reach	National
Primary Audience	Professional Practitioners
Activity Years	2014
Main purpose	To simulate thinking.
Result Description	Stakeholders conference and workshop attracting ~ 80 participants from across northwest England. Jointly hosted with North West Coastal Forum, Liverpool, 13th January 2014.
Most important impact?	Plans made for future related activity
URL	http://www.arcc-network.org.uk/wordpress/wp-conten t/pdfs/Future-Vision-Coast-schedule.pdf

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Activity Title	Collaboration with Magnox re. flood risk assessment
Activity Type	A formal working group, expert panel or dialogue
Recognised Scheme	No
How many people?	1 - 10
Geographical Reach	National
Primary Audience	Professional Practitioners
Activity Years	2014
Main purpose	To share information.
Result Description	Collaboration with Magnox led to broadening of nuclear sector stakeholder community and number of case studies.

Most important impact?	Colleague/s reported change in views or opinions.

Activity Title	Prime and Knight (2014). Coastal Decision Support Systems
Activity Type	A talk or presentation
Recognised Scheme	No
How many people?	51 - 100
Geographical Reach	National
Primary Audience	Professional Practitioners
Activity Years	2014
Main purpose	To share information.
Result Description	The workshop participants were split up into groups of around 15-20. Each group provided verbal and written feedback on the DSS presentation in terms its online delivery and content, which included suggestions for improvements e.g., Slider Bars have now been introduced to the DSS which allows users to easily view the flood scenarios. Previously this was restricted to clicking through a menu based system.
Most important impact?	Increase in requests about (further) participation or involvement.
URL	http://www.arcc-network.org.uk/a-future-vision-for -the-coast/

Activity Title	Bell, 2014. Presented ARCoES poster at RCUK's Scientific Advisory Committee (SAC)
Activity Type	A formal working group, expert panel or dialogue
Recognised Scheme	Yes

Description	RCUK's Research Councils UK (RCUK) Energy Programme Scientific Advisory Committee (SAC) held on the afternoon of 14 October 2014 at The Palace Hotel in Manchester.
How many people?	11 - 50
Geographical Reach	National
Primary Audience	Professional Practitioners
Activity Years	2014
Main purpose	To share information.
Result Description	No recorded results
Most important impact?	Not aware of any impact.

Activity Title	Almeida, 2014. Use of laser scanner to measure swash hydrodynamics and morphological change under storm conditions. Deltares, Netherlands
Activity Type	A talk or presentation
Recognised Scheme	No
How many people?	11 - 50
Geographical Reach	International
Primary Audience	Other academic audiences (collaborators, peers etc.)
Activity Years	2014
Main purpose	To improve understanding of other's thinking.
Result Description	Collaboration with a researcher from Deltares (Robert McCall)
Most important impact?	Plans made for future related activity

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Activity Title	Almeida, 2014. Swash zone morphodynamics of coarse-grained beaches during energetic wave conditions, ICCE,

	Seoul, South Korea.
Activity Type	A talk or presentation
Recognised Scheme	No
How many people?	101 - 500
Geographical Reach	International
Primary Audience	Other academic audiences (collaborators, peers etc.)
Activity Years	2014
Main purpose	To share information.
Result Description	After his talk at ICCE (South Korea) several people came after to request further information about the research he presented and contact for possible future collaboration.
Most important impact?	Plans made for future related activity
URL	http://www.asce.org/events/EventDetail.aspx?id=23622326820

Activity Title	Masselink 2014. Where has our beach gone? – the science behind how waves and storm impact our coast
Activity Type	A talk or presentation
Recognised Scheme	No
How many people?	11 - 50
Geographical Reach	Regional
Primary Audience	Other academic audiences (collaborators, peers etc.)
Activity Years	2014
Main purpose	To share information.
Result Description	Annual spring lecture to Plymouth Marine Science and Education Foundation, National

	Marine Aquarium, Plymouth.
Most important impact?	Not aware of any impact.

Activity Title	Armstrong 2014. Classifying climate change adaptation frameworks, EGU
Activity Type	A talk or presentation
Recognised Scheme	No
How many people?	11 - 50
Geographical Reach	International
Primary Audience	Other academic audiences (collaborators, peers etc.)
Activity Years	2014
Main purpose	To share information.
Result Description	Poster presentation at EGU, Vienna, 2014
Most important impact?	Not aware of any impact.
URL	http://meetingorganizer.copernicus.org/EGU2014/EGU2014-12850.pdf

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Activity Title	Fabók 2013. From regimes to assemblages? Understanding transitions in the British energy sector
Activity Type	A talk or presentation
Recognised Scheme	No
How many people?	51 - 100
Geographical Reach	International
Primary Audience	Other academic audiences (collaborators, peers etc.)
Activity Years	2013

Main purpose	To improve understanding of other's thinking.
Result Description	Presentation given in the opening session of the conference: 'STS Perspectives on Energy' conference, Lisbon, Portugal, 4-5 November 2013. Questions and answers during the session, and potentially informal discussions
Most important impact?	Increase in requests for further information.

Activity Title	Fabók 2014a. Wylfa power station and the community. Public talk
Activity Type	A talk or presentation
Recognised Scheme	No
How many people?	11 - 50
Geographical Reach	Local
Primary Audience	Participants in your research and patient groups
Activity Years	2014
Main purpose	To share information.
Result Description	Wylfa power station and the community. Public talk given at Cemaes Village Hall, Wales, UK, 10 October 2014. The talk initiated some discussions in the local community during the official consultations of a new nuclear build project, and request was made to further disseminate research results.
Most important impact?	Increase in requests about (further) participation or involvement.

Activity Title	Fabók 2014b. Making the Anglesey Energy Island – Insights from the intersection of politics and geographies. EASST Conference October 2014.
Activity Type	A talk or presentation

Recognised Scheme	No
Geographical Reach	International
Primary Audience	Other academic audiences (collaborators, peers etc.)
Activity Years	2014
Main purpose	To share information.
Result Description	Making the Anglesey Energy Island – Insights from the intersection of politics and geographies. Oral presentation given at the EASST Conference 'Situating Solidarities', Torun, Poland, 17-19 October 2014. Questions and answers during the session, and potentially informal discussions
Most important impact?	Increase in requests for further information.

Activity Title	Fabók 2014c. Low-carbon energy transitions, geography and politics on the ground – Experiences from the Anglesey Energy Island. Sociology Summer Conference
Activity Type	A talk or presentation
Recognised Scheme	No
How many people?	11 - 50
Geographical Reach	National
Primary Audience	Postgraduate students
Activity Years	2014
Main purpose	To share information.
Result Description	Low-carbon energy transitions, geography and politics on the ground – Experiences from the Anglesey Energy Island. Oral presentation given at the Lancaster University Sociology Summer Conference, 30 Junes – 1 July 2014. Questions and answers during the session, and potentially

	informal discussions
Most important impact?	Increase in requests for further information.

Activity Title	Fabók 2014d. Energy infrastructure and the question of politics. Conference 'Helyzet', Budapest
Activity Type	A talk or presentation
Recognised Scheme	No
How many people?	11 - 50
Geographical Reach	National
Primary Audience	Other academic audiences (collaborators, peers etc.)
Activity Years	2014
Main purpose	To share information.
Result Description	Energy infrastructure and the question of politics. Oral presentation given at the Conference of the Public Sociology Collective 'Helyzet' in Budapest, Hungary, 7-8 June 2014. Questions and answers during the session, and potentially informal discussions.
Most important impact?	Increase in requests for further information.

Activity Title	Fabók 2014e. Politicisation/Depoliticisation of nuclear power. CEU Sociology Summer Conference
Activity Type	A talk or presentation
Recognised Scheme	No
Geographical Reach	International
Primary Audience	Postgraduate students
Activity Years	2014

Main purpose	To share information.
Result Description	Politicisation/Depoliticisation of nuclear power. Oral presentation given at the CEU Sociology Summer Conference 'Blurring the Boundaries: Fields of expertise and spaces of intervention in collective/hybrid knowledge production' in Budapest, Hungary, 5-6 June 2014. Presentation in a relevant conference session for an academic audience.
Most important impact?	Not aware of any impact.

Activity Title	Fabók 2014f. Anglesey Energy Island – Low-carbon transitions, politics, geographic scale. SOES PGR Conference, Liverpool
Activity Type	A talk or presentation
Recognised Scheme	No
How many people?	11 - 50
Geographical Reach	Local
Primary Audience	Postgraduate students
Activity Years	2014
Main purpose	To share information.
Result Description	Anglesey Energy Island – Low-carbon transitions, politics, geographic scale. Oral presentation given at the SOES PGR Conference, University of Liverpool, 12-14 May 2014.
Most important impact?	Not aware of any impact.

Activity Title	Fabók 2014g. Low-carbon transitions and the politics of geographic scale – The case of Anglesey Energy Island. SPRU DPhil day
Activity Type	A talk or presentation

Recognised Scheme	No
How many people?	51 - 100
Geographical Reach	National
Primary Audience	Postgraduate students
Activity Years	2014
Main purpose	To share information.
Result Description	Low-carbon transitions and the politics of geographic scale – The case of Anglesey Energy Island. Oral presentation given at the SPRU DPhil Fay, University of Sussex, 7-8 May 2014.
Most important impact?	Increase in requests for further information.

Activity Title	Fabók 2014i. Regimes, assemblages, and a multi-sighted ethnography into the future of British nuclear. STS miniconference
Activity Type	A talk or presentation
Recognised Scheme	No
How many people?	11 - 50
Geographical Reach	Local
Primary Audience	Postgraduate students
Activity Years	2014
Main purpose	To share information.
Result Description	Regimes, assemblages, and a multi-sighted ethnography into the future of British nuclear. Oral presentation given at the STS miniconference, University of Lancaster, 9 January 2014.
Most important impact?	Increase in requests for further information.

Activity Title	Fabók 2014j. Nuclear power and political-economic systems. STS, Hungary
Activity Type	A talk or presentation
Recognised Scheme	No
How many people?	11 - 50
Geographical Reach	Local
Primary Audience	Postgraduate students
Activity Years	2014
Main purpose	To share information.
Result Description	Nuclear power and political-economic systems. Oral presentation given at the 'Science and technology studies (STS) in Hungary' conference in Budapest, Hungary, 5-6 January 2014.
Most important impact?	Increase in requests for further information.

Activity Title	Fabok (2014. Workshop organiser: Pre-conference Doctoral Workshop 'Doing STS - within academia and beyond', EASST
Activity Type	Participation in an activity, workshop or similar
Recognised Scheme	No
How many people?	11 - 50
Geographical Reach	National
Primary Audience	Postgraduate students
Activity Years	2014
Main purpose	To simulate thinking.
Result Description	Workshop organiser: Pre-conference Doctoral Workshop 'Doing STS - within academia and beyond' at the EASST Conference 'Situating Solidarities'. Torun, Poland, 16 October 2014. 30 PhD students attended a workshop discussing

	academic and non-academic activities during and after a PhD and improving various skills through discussions facilitated by senior academics.
Most important impact?	Increase in requests for further information.

Activity Title	Fabok, M. (2014). Conference co-organiser: 'Science and technology studies (STS) in Hungary' conference, Budapest
Activity Type	Participation in an activity, workshop or similar
Recognised Scheme	No
How many people?	11 - 50
Geographical Reach	National
Primary Audience	Other academic audiences (collaborators, peers etc.)
Activity Years	2014
Main purpose	To improve understanding of other's thinking.
Result Description	Conference co-organiser with András Novoszáth: 'Science and technology studies (STS) in Hungary' conference in Budapest, Hungary, 5-6 January 2014. First conference for Hungarian academics working in relation to science and technology studies (STS) with panel discussions and a total of about 40 presentations in parallel thematic workshop sessions.
Most important impact?	Increase in requests about (further) participation or involvement.
URL	https://stsmuhely.wordpress.com/

Activity Title	Prime 2014. Coastal Community Adaptation to Future Potential Climate Change. EGU
Activity Type	A talk or presentation

Recognised Scheme	No
Presentation Type	paper presentation
How many people?	11 - 50
Geographical Reach	International
Primary Audience	Other audiences
Other Audience	Postgraduate students
Activity Years	2014
Main purpose	To share information.
Result Description	During a session entitled Monitoring and modelling to guide coastal adaptation to extreme storm events in a changing climate at the European Geosciences Union, author gave a paper presentation which generated questions and interest.
Most important impact?	Plans made for future related activity
URL	http://meetingorganizer.copernicus.org/EGU2014/EGU2014-1183.pdf

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Activity Title	Spencer 2014. Coastal Energy Infrastructure. ARCoES Stakeholder event
Activity Type	A talk or presentation
Recognised Scheme	No
How many people?	51 - 100
Geographical Reach	National
Primary Audience	Professional Practitioners
Activity Years	2014
Main purpose	To simulate thinking.
Result Description	Presentation at ARCoES Stakeholder event, 13 January 2014, Liner Hotel, Liverpool

Most important impact?	Increase in requests for further information.

Activity Title	Becker, (2014). Redistribution of intertidal sediment contaminants by microphytobenthos. EGU
Activity Type	A talk or presentation
Recognised Scheme	No
Presentation Type	poster presentation
How many people?	51 - 100
Geographical Reach	International
Primary Audience	Postgraduate students
Other Audience	Other audiences
Activity Years	2014
Main purpose	To share information.
Result Description	A poster of my work was presented in the Ecohydrology session at the 2014 EGU conference by my collaborator/fellow PhD student, Chris Sneddon
Most important impact?	Not aware of any impact.
URL	http://meetingorganizer.copernicus.org/EGU2014/EGU2014-6990.pdf

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Activity Title	Becker 2014b. Redistribution of intertidal sediment contaminants by microphytobenthos at COGER
Activity Type	A talk or presentation
Recognised Scheme	No
Presentation Type	paper presentation
How many people?	51 - 100
Geographical Reach	National

Primary Audience	Postgraduate students
Other Audience	Professional Practitioners,Other audiences
Activity Years	2014
Main purpose	To share information.
Result Description	Presentation was attended by approximately 60 people. Following the session I discussed work with people from other institutions (e.g. BGS) working in similar areas
Most important impact?	Decision made or influenced

Activity Title	Becker 2014c. Redistribution of intertidal sediment contaminants by microphytobenthos. Winter Symposium
Activity Type	A talk or presentation
Recognised Scheme	No
Presentation Type	poster presentation
How many people?	101 - 500
Geographical Reach	Local
Primary Audience	Other audiences
Other Audience	Postgraduate students
Activity Years	2014
Main purpose	To share information.
Result Description	Presented a poster at the University of Stirling: department of Biological and Environmental Sciences annual symposium; and discussed research methods and potential resource sharing with other members of department
Most important impact?	Colleague/s reported change in views or opinions.

Activity Title	Becker 2014d. Redistribution of intertidal sediment contaminants by microphytobenthos at NNL
Activity Type	A talk or presentation
Recognised Scheme	No
Presentation Type	keynote/invited speaker
How many people?	1 - 10
Geographical Reach	National
Primary Audience	Professional Practitioners
Other Audience	None
Activity Years	2014
Main purpose	To share information.
Result Description	Presented proposed research to a group at NNL Warrington as one of their lunchtime research presentations, followed by discussion and sharing of expertise
Most important impact?	Increase in requests about (further) participation or involvement.

Activity Title	McCauley 2013. Organiser of 'Going Nuclear' Seminar Series (part 1 Stirling, Liverpool, 2013)
Activity Type	Participation in an activity, workshop or similar
How many people?	101 - 500
Geographical Reach	National
Primary Audience	Professional Practitioners
Other Audience	Policymakers/politicians,Postgraduate students,Other audiences
Activity Years	2013

Result Description	Organiser, invited speaker, and poster presenter at the successful seminar series Going Nuclear: the multi-level politics of nuclear energy; consisted of three events in Stirling, Liverpool and Cambridge. All three events were aimed at both an academic and practitioner audience. We also invited and secured the attendance of postgraduates from related masters and PhD courses at Scottish and English universities. Demand for participation and audience was high with all three sessions filling capacity. We used the first seminar in Stirling to provide an international energy comparative context for the seminar series. In Liverpool, we focused primarily on detailed selected and invited discussions on the central theme of nuclear energy in the UK. We developed, thirdly, a seminar on the specific theme of energy subsidies and the nuclear industry in light of recent events surrounding the strike price agreed at Hinkley Point C . You can find the full report here: http://www.esrc.ac.uk/my-esrc/grants/RES-451-26-08 21/read/keyfindings
Most important impact?	Audience reported change in views, opinions or behaviours
URL	http://goingnuclearseries.wordpress.com

Activity Title	McAuley 2014. Organiser of 'Going Nuclear' seminar series (part 2 Cambridge 2014)
Activity Type	Participation in an activity, workshop or similar
How many people?	101 - 500
Geographical Reach	National
Primary Audience	Professional Practitioners
Other Audience	Policymakers/politicians,Postgraduate students,Other audiences
Activity Years	2014

Result Description	See results from 2013 (duplicated here). Organised and presented at the successful seminar series: Going Nuclear: the multi-level politics of nuclear energy; consisted of three events in Stirling, Liverpool and Cambridge. All three events were aimed at both an academic and practitioner audience. We also invited and secured the attendance of postgraduates from related masters and PhD courses at Scottish and English universities. Demand for participation and audience was high with all three sessions filling capacity. We used the first seminar in Stirling to provide an international energy comparative context for the seminar series. In Liverpool, we focused primarily on detailed selected and invited discussions on the central theme of nuclear energy in the UK. We developed, thirdly, a seminar on the specific theme of energy subsidies and the nuclear industry in light of recent events surrounding the strike price agreed at Hinkley Point C . You can find the full report here: http://www.esrc.ac.uk/my-esrc/grants/RES-451-26-08 21/read/keyfindings
Most important impact?	Audience reported change in views, opinions or behaviours
URL	http://www.esrc.ac.uk/my-esrc/grants/RES-451-26-08 21/read/keyfindings

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Activity Title	Knight et al. (2015) Application of flood risk modelling in a web-based geospatial decision support tool for coastal adaptation to sea-level rise
Activity Type	A talk or presentation
Recognised Scheme	No
How many people?	101 - 500
Geographical Reach	International

Primary Audience	Other academic audiences (collaborators, peers etc.)
Activity Years	2015
Main purpose	To share information.
Result Description	Activity: UK Sea Level Science Meeting, Session: Extremes and Impacts Liverpool Medical Institute, Liverpool, 12-13 March 2015 P.J. Knight, T. Prime, J. Brown, K. Morrissey and A.J. Plater Feedback from talk, attended by research scientists, government agencies and coastal stakeholders, was positive and encouraging
Most important impact?	Increase in requests for further information.

Activity Title	Prime et al. 2015 Vulnerability of Energy Infrastructure due to Sea Level Rise
Activity Type	A talk or presentation
Recognised Scheme	No
How many people?	101 - 500
Geographical Reach	International
Primary Audience	Other academic audiences (collaborators, peers etc.)
Activity Years	2015
Main purpose	To share information.
Result Description	UK Sea Level Science Meeting, Session: Projections Liverpool Medical Institute, Liverpool, 12-13 March 2015 T. Prime, K. Morrissey and A.J. Plater, The presentation was well received. Questions and responses showed that the audience thought that the techniques for "when to renew infrastructure" were really useful for coastal stakeholders
Most important impact?	Increase in requests for further information.

Activity Title	Poate, T, Masselink, G et al. (2015) UK storms 2014: Gravel beach response. Coastal Sediments, ASCE, San Diego, USA.
Activity Type	A talk or presentation
Recognised Scheme	No
How many people?	51 - 100
Geographical Reach	International
Primary Audience	Professional Practitioners
Activity Years	2015
Main purpose	To share information.
Result Description	Paper and presentation
Most important impact?	Not aware of any impact.

Activity Title	Becker (2015a). Environmental Radioactivity and Marine Science, ScienceGrrl Science Fair at MacRobert Arts Centre, University of Stirling
Activity Type	Participation in an activity, workshop or similar
Recognised Scheme	No
How many people?	101 - 500
Geographical Reach	Local
Primary Audience	Public/other audiences
Activity Years	2015
Main purpose	To simulate thinking.
Result Description	As the workshop facilitator: Children aged from about 3 to 12 (and their parents) attended a science fair comprising a range of displays and activities from the Biological and Environmental Sciences and Mathematics departments. Hands

	on activities sparked discussion with children and adults.
Most important impact?	Increase in requests about (further) participation or involvement.

Activity Title	Becker (2015b). Poster presentation at COGER (Co-ordinating Group for Environmental Radioactivity) conference at BGS, Keyworth
Activity Type	A talk or presentation
Recognised Scheme	No
Presentation Type	poster presentation
How many people?	51 - 100
Geographical Reach	National
Primary Audience	Postgraduate students
Other Audience	Professional Practitioners
Activity Years	2015
Main purpose	To share information.
Result Description	Conference was attended by approximately 60 people with the poster on display over all 3 days of the conference. During the poster session I discussed work with people from other institutions (e.g. BGS) working in similar areas
Most important impact?	Increase in requests for further information.

Activity Title	Brown, J. M. et al. (2015) Flood risk uncertainty surrounding a 0.5% annual probability event.
Activity Type	A talk or presentation
Recognised Scheme	No
How many people?	11 - 50

Geographical Reach	International
Primary Audience	Professional Practitioners
Activity Years	2015
Main purpose	To share information.
Result Description	Oral presentation given at The joint 2nd JCOMM Scientific and Technical Symposium on Storm Surges and 14th International Workshop on Wave Hindcasting and Forecasting and 5th coastal hazards symposium, Key West, Florida, USA, 8-13 November, 2015. Other authors: Prime, T., Plater, A.J.
Most important impact?	Increase in requests for further information.

Activity Title	Becker (2015c). Cadmium uptake from sediment by the diatom Cylindrotheca closterium
Activity Type	A talk or presentation
Recognised Scheme	No
Presentation Type	paper presentation
How many people?	101 - 500
Geographical Reach	National
Primary Audience	Other audiences
Other Audience	Professional Practitioners,Postgraduate students
Activity Years	2015
Main purpose	To share information.
Result Description	Oral presentation at MASTS (Marine Alliance for Science and Technology for Scotland) annual science meeting at University of Strathclyde, Glasgow: Conference was attended by approximately 350 people. Immediately following my presentation there were questions from the audience and later a discussion with 2 people

	interested in collaborating in my work.
Most important impact?	Increase in requests about (further) participation or involvement.

Activity Title	Fabok (2015a). Buiding new nuclear, redefining geographies: A multiscalar ethnography of a megainvestment project
Activity Type	A talk or presentation
Recognised Scheme	No
How many people?	1 - 10
Geographical Reach	Local
Primary Audience	Postgraduate students
Activity Years	2015
Main purpose	To share information.
Result Description	University of Liverpool Departmental 'brown bag' seminar event for around 10 postgraduate students and staff members
Most important impact?	Not aware of any impact.

Activity Title	Fabok (2015b). Governing a megainvestment: Understanding an era through a multi-scalar ethnography
Activity Type	A talk or presentation
Recognised Scheme	No
How many people?	11 - 50
Geographical Reach	Regional
Primary Audience	Postgraduate students
Activity Years	2015

Main purpose	To share information.
Result Description	Presentation in the Lancaster University 5th Postgraduate Science and Technology Studies Conference for around 25 postgraduate students and staff members. Interest from audience and questions and discussion followed.
Most important impact?	Not aware of any impact.

Activity Title	Fabok (2015c). Governing a megainvestment
Activity Type	A magazine, newsletter or online publication
Recognised Scheme	No
How many people?	51 - 100
Geographical Reach	Local
Primary Audience	Other academic audiences (collaborators, peers etc.)
Activity Years	2015
Main purpose	To share information.
Result Description	Poster presentation in the Poster Day Online 2015 at the University of Liverpool for a number of postgraduate students and staff members.
Most important impact?	Not aware of any impact.
URL	http://www.liv.ac.uk/pgr-development/poster-day/on line/

Activity Title	Fabok (2015d). Researching a nuclear megainvestment: Three challenges for three years
Activity Type	A talk or presentation
Recognised Scheme	No

How many people?	11 - 50
Geographical Reach	Local
Primary Audience	Postgraduate students
Activity Years	2015
Main purpose	To share information.
Result Description	Presentation at Postgraduate Conference of the School of Environmental Sciences at the University of Liverpool for around 25 of postgraduate students and staff members. Audience expressed interest in topic and asked questions in the Q&A following the presentation.
Most important impact?	Not aware of any impact.

Activity Title	Fabok (2015e) Researching a nuclear megainvestment: An ethnography of Wylfa Newydd
Activity Type	A talk or presentation
How many people?	11 - 50
Geographical Reach	Local
Primary Audience	Postgraduate students
Other Audience	Other audiences
Activity Years	2015
Result Description	Presentation at Planning Seminar Series of the School of Environmental Sciences at the University of Liverpool for around 12 postgraduate students and staff members. Purpose to disseminate postgraduate research outcomes to colleagues and academic researchers. This was followed by questions and discussion.
Most important impact?	Not aware of any impact.

Activity Title	Becker, A.E., Copplestone, D., Tyler, A.N. and Smith, N. (2015). Contaminant uptake from sediment by microphytobenthos
Activity Type	A talk or presentation
How many people?	51 - 100
Geographical Reach	Regional
Primary Audience	Postgraduate students
Other Audience	Other audiences
Activity Years	2015
Result Description	Gave a 12 minute talk at the department of Biological and Environmental Sciences annual symposium and discussed methods and results with other members of the department
Most important impact?	Not aware of any impact.

Activity Title	Becker & Sneddon (2015) Ad hoc talks to public whilst carrying out fieldwork at Lytham St Annes on 17th & 18th October 2015
Activity Type	A talk or presentation
How many people?	11 - 50
Geographical Reach	Local
Primary Audience	Public/other audiences
Other Audience	None
Activity Years	2015
Result Description	Engaged with the general public (walkers/dog walkers, holiday makers, locals and yacht club members, RLNI volunteers) whilst carrying out ground truthing surveys for remote sensing flights. Discussed what we were doing and its

	purpose to small groups (2-4 people) whilst carrying out fieldwork near the jetty at Lytham St Anne's and when processing samples at the yacht club dock. Outcomes were raising general interest and awareness. Yacht club members expressed an interest in results of sediment movement study.
Most important impact?	Increase in requests about (further) participation or involvement.

Activity Title	Sneddon, C.R., Copplestone, D., Tyler, A.N. and Smith, N. (2015a). Long-term environmental and health implications of morphological change and sediment transport with respect to contaminants
Activity Type	A talk or presentation
How many people?	51 - 100
Geographical Reach	Regional
Primary Audience	Postgraduate students
Other Audience	Other audiences
Activity Years	2015
Result Description	Gave a 12 minute talk at the department of Biological and Environmental Sciences annual symposium and discussed project overview and results so far. Answered questions from audience.
Most important impact?	Not aware of any impact.

Activity Title	Sneddon, C.R., Copplestone, D., Tyler, A.N. and Smith, N. (2015b). COGER. Long-term environmental and health implications of morphological change and sediment transport with respect to contaminants

Activity Type	A talk or presentation
How many people?	11 - 50
Geographical Reach	National
Primary Audience	Postgraduate students
Other Audience	Other audiences
Activity Years	2015
Result Description	Gave a 20 minute talk at the annual COGER meeting at Nottingham and discussed project overview and results so far. Responded to questions from audience.
Most important impact?	Not aware of any impact.

Activity Title	Sneddon, C.R., Copplestone, D., Tyler, A.N. and Smith, N. (2015c). Long-term environmental and health implications of morphological change and sediment transport with respect to contaminants
Activity Type	A talk or presentation
How many people?	11 - 50
Geographical Reach	Local
Primary Audience	Postgraduate students
Other Audience	Other audiences
Activity Years	2015
Result Description	Gave a 50 minute talk at a weekly departmental lecture slot and discussed project overview and results so far. Responded to questions from audience.
Most important impact?	Not aware of any impact.

Activity Title	ARCoES decision-suppport system dissemination at National Grid's Annual Leadership Event, 23/24

	November 2015
Activity Type	Participation in an activity, workshop or similar
How many people?	101 - 500
Geographical Reach	National
Primary Audience	Professional Practitioners
Other Audience	Policymakers/politicians,Professional Practitioners,Industry/Business
Activity Years	2015
Result Description	Attendance at National Grid's Annual Leadership Event at the Ricoh Arena to disseminate the ARCoES decision-support system and to obtain feedback on its efficacy for operational/strategic planning. Audience of c.200 professional pracitioners in the energy distribution sector were invite to learn about and feedback on the DSS.
Most important impact?	Increase in requests for further information.

Activity Title	Plater A.J. (2015), Energy and Resilience. RUSI Resilience Conference 2015: Sustaining Resilience - The Need for a Long Term Vision, London, 26-27 Oct 2015
Activity Type	A formal working group, expert panel or dialogue
How many people?	101 - 500
Geographical Reach	International
Primary Audience	Professional Practitioners
Other Audience	Media (as a channel to the public),Policymakers/politicians,Professional Practitioners,Industry/Business,Third sector organisations
Activity Years	2015

Result Description	Presentation of ARCoES research findings to inform debate on future energy security and infrastructure resilience. Audience of more than 100 drawn from a range of policy makers, decision-makers, professional practitioners and business. Debate focussed on the risks to future energy suppply from climate change and other environmental/economic/societal threats.
Most important impact?	Increase in requests about (further) participation or involvement.
URL	https://rusi.org/conference/resilience-conference-2015-sustaining-resilience-need-long-term-vision

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Activity Title	Plater, AJ, Smith, N., Selby I and Dodds D. (2015) Addressing coastal flooding and erosion: partnerships, innovation and funding. BHS National Meeting on Impacts of Flooding on Critical Infrastructure: a Stakeholder-Oriented Approach
Activity Type	A talk or presentation
How many people?	51 - 100
Geographical Reach	National
Primary Audience	Professional Practitioners
Other Audience	Professional Practitioners,Industry/Business,Third sector organisations
Activity Years	2015
Result Description	Invited presentation at the BHS National Meeting on Impacts of Flooding on Critical Infrastructure: a Stakeholder-Oriented Approach. In excess of 50 attendees drawn from professional practitioners and industry with responsibility for addressing risks for flooding and climate change. Debate centred on the mechanisms for supporting and delivering collaborative working with stakeholders.
Most important impact?	Increase in requests about (further) participation or involvement.
URL	https://www.google.co.uk/url?sa=t&rct=j&q=&esrc=s&

source=web&cd=1&ved=0ahUKEwi8tZ_8yrTLAhWFMBoKHbJxCzsQFggdMAA&url=http://www.hydrology.org.uk/dms-files.php?id=1020&action=doc&usg=AFQjCNEVGZVx092rgr3YbMCe-VJmbsDLTA&cad=rja

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Activity Title	Street RB and Plater AJ (2015) Built Environment Design in an Age of Climate Change: Adaptation, Resilience and the Role of Interdisciplinary Research Networks. Presentation at the ESRC DTC workshop on Enhancing Disciplinarity, 30th Jan 2015
Activity Type	A talk or presentation
How many people?	51 - 100
Geographical Reach	National
Primary Audience	Professional Practitioners
Other Audience	Professional Practitioners,Supporters,Postgraduate students
Activity Years	2015
Result Description	Invited joint presentation on the benefits of interdisciplinary working to a mixed audience of c.60 attendees drawn from research partners, local/regional decision-makers, professional practitioners and postgraduate students. Discussion focussed on the challenges and advantages of interdisciplinary working, and plans for future collaboration.
Most important impact?	Plans made for future related activity
URL	https://enhancinginterdisciplinarity.wordpress.com/liverpool-january-2015/

Activity Title	Plater AJ (2015) Mitigation or pre-adaptation? The role of marine science in future-proofing coastal economies. Liverpool Marine Symposium, 28th January 2015

Activity Type	A talk or presentation
How many people?	51 - 100
Geographical Reach	National
Primary Audience	Professional Practitioners
Other Audience	Professional Practitioners,Postgraduate students,Other audiences,Third sector organisations
Activity Years	2015
Result Description	Invited presentation on the research undertaken on the ARCoES and ERIIP Sandscaping projects. Discussion amongst c.70 attendees drawn from professional practitioners, local authorities, environmental regulators and researchers focussed on strategic research for prrotection coastal populations and infrastructure.
Most important impact?	Plans made for future related activity

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Activity Title	Plater AJ, Prime T, Knight P, Morrissey K and Brown JM (2015) Flooding Risk for Coastal Infrastructure: a Stakeholder-Orientated Approach. Invited presentation at the AGU 2015 Fall Meeting, 15-19th December 2015.
Activity Type	A talk or presentation
How many people?	11 - 50
Geographical Reach	International
Primary Audience	Professional Practitioners
Other Audience	Professional Practitioners,Industry/Business,Postgraduate students,Other audiences
Activity Years	2015
Result Description	Invited presentation on ARCoES and ERIIP research, illustrting how research outputs inform decision-

	makers and support stakeholder operational and strategic planning. Discussion across professional and academic audience centred on how stakeholders fed into the design of the research.
Most important impact?	Increase in requests for further information.

Activity Title	Plater AJ (2015) Impacts of Climate Change on Coastal (Nuclear) Energy Infrastructure. Invited presentation at 'Future delivery of energy in a changing climate: Risks and Solutions', Edunburgh 22nd October 2015
Activity Type	Participation in an activity, workshop or similar
How many people?	11 - 50
Geographical Reach	National
Primary Audience	Professional Practitioners
Other Audience	Policymakers/politicians,Professional Practitioners,Industry/Business
Activity Years	2015
Result Description	Presentation of key messages from ARCoES project with some outcomes of ERIIP Sandscaping project. Debate amongst c.40 energy professionals and decision-makers focussed on future energy resilience and how to embed the ARCC research findings into practice and policy.
Most important impact?	Increase in requests for further information.

Activity Title	Plater AJ (2015) Impacts of Sea-level Rise and Storms on Coastal Energy Infrastructure. Invited presentation at Adaptation and Resilience of the UK Energy System to Climate Change: science-policy/practice briefing, London, 12 November 2015
Activity Type	Participation in an activity, workshop or similar
How many people?	11 - 50

Geographical Reach	National
Primary Audience	Policymakers/politicians
Other Audience	Policymakers/politicians,Professional Practitioners,Industry/Business
Activity Years	2015
Result Description	One of three presentations from the ARCC energy projects outlining the challenges to future energy supply from climate change. Discussion amongst c.35 attendees centred on how the research findings will feed into future policy and practice across the energy sector.
Most important impact?	Audience reported change in views, opinions or behaviours
URL	https://www.google.co.uk/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKEwjWu4nc1bTLAhULWxoKHaLFChgQFggcMAA&url=http://www.arcc-network.org.uk/wp-content/pdfs/Energy-participants-attendees.pdf&usg=AFQjCNGW_n66lmOFIHCQ_EpG78rOReAA8A&cad=rja

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Activity Title	Prime T (2015) Modeling the impacts of sea level rise and storms on coastal energy infrastructure. Invited contribution to workshop on identifying ways to ecosystem-based urban coastal climate change adaptation. London, 16th February 2016
Activity Type	A formal working group, expert panel or dialogue
How many people?	51 - 100
Geographical Reach	National
Primary Audience	Professional Practitioners
Other Audience	Policymakers/politicians,Professional Practitioners,Industry/Business
Activity Years	2015
Result Description	Invited participation in workshop to heighten

	awareness and enthusiasm in a new urban coastal climate change adaptation project and gain stakeholder perspectives on the key challenges and opportunities for delivering ecosystem-based approaches to urban climate change adaptation.
Most important impact?	Plans made for future related activity
URL	http://gtr.rcuk.ac.uk/projects?ref=NE/M010546/1

Research Tools and Methods

Material Name	Laser scanner to remotely monitor swash action and morphological change under energetic conditions (Masselink / Almeida)
Material Type	Improvements to research infrastructure
Description	Development of method involving laser scanner to remotely monitor swash action and morphological change under energetic conditions. This methodology is now routinely used by Co-I's research group for their 'storm chasing' activities for monitoring beaches before, during and after storm events
Provided to Others	No
Impact Description	Improved monitoring of beach morphology changes under energetic conditions

Key Findings

Discoveries	To date (project ongoing): a. Flood risk for nuclear power stations and associated energy infrastructure from future sea-level rise; b. Flood risk for NW coast case study (Fleetwood) from future sea-level rise, storms, wave overtopping and high river flows; c. Monitoring data on coastal response to storm events for Sellafield and Hinkley Point case studies d. Good understanding of stakeholder needs for decision-support system (DSS).
Objectives	Partially
Further Details	http://www.liv.ac.uk/geography-and-planning/resear ch/adaptation-and-resilience-of-coastal-energy-sup ply/reports/
Taken Forward	The DSS is targeted specifically for use by users in the energy and coastal management sectors - and has been designed specifically to support operational and strategic decision-making on the potential impacts of future coastal change.
Interest to sectors	Communities and Social Services/ Policy, Education, Energy, Environment, Trans port

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Discoveries	The innovation lies in the use of new modelling tools to explore the viability of novel, strategic interventions to enhance coastal resilience. As an alternative to beach recharge or the maintenance of engineered coastal defences, sandscaping is a means for 'working with natural processes' to reduce coastal erosion and create important coastal habitats. The translation has been achieved by involving stakeholders in the project to outline their concerns and information needs, and to describe current policy requirements and

	constraints. The research was therefore designed to answer important questions in an appropriate way to help support decision making. Bringing together environmental regulatory authorities with partners from coastal engineering and energy sectors outside of a specific development proposal provided the freedom to explore other possibilities in a research-led, theoretical environment. The particle-tracking and CEM models provided project stakeholders with new tools for exploring patterns of sediment transport, changes in coastal erosion rate, and the lifetimes of different potential sandscaping options (i.e. locations, shapes, volumes). In this respect, the outputs provided an innovative means for assessing the likely success and environmental impacts of the large-scale addition of sediment to the coast. The LISFLOOD/XBeach-G modelling was of particular value for the EA as it provided and alternative method for assessing potential flooding from future sea-level rise and storms, thus providing an effective means for cross-validating other studies that they had commissioned previously.
Objectives	Yes
Taken Forward	Emerging impact lies in the modelling tools being applied to a Blackpool case study in a project that involves a wider partnership of stakeholders via EPSRC IAA funding. Here, the modelling is to be combined with exploration of suitable economic frameworks for enabling more effective scoping of sandscaping options. If successful, the resulting 'sandscaping toolbox' will become established as CIRIA guidance for sandscaping. There is considerable interest in this project from coastal engineers, energy and utility sectors, local authorities and environmental regulators. Sandscaping has the potential to be taken forward as a strategic intervention for building 'coastal resilience' in locations that are vulnerable to

	erosion and flooding, particularly where the natural supply of sediment is limited. Simultaneously, establishing an effective economic framework will enable sandscaping to be considered within regional economic strategy rather than simply drawing on funding for climate change adaption/mitigation. The benefits are therefore likely to be realised for coastal communities who might currently be regarded as the likely 'victims' of future sea-level rise and extreme events.
Interest to sectors	Communities and Social Services/ Policy, Energy, Environment, Transport

Narrative Impact

Impacts?	Yes
Findings	Preliminary: (project ongoing) a. The decision-support system (DSS) has been trialled with (i) National Grid, (ii) Magnox, and (iii) coastal stakeholders (local authority, engineers, interest groups). This has highlighted a user need for project outputs to deliver both operational and strategic planning support. b. The future flood risk maps are being taken up by National Grid and Magnox Ltd. as an effective means of decision-support in relation to future investment in infrastructure resilience.
Date Materialised	2014
Type of Impact	Economic
Sectors used	Energy, Environment

Impacts?	Yes
Findings	The main realised impact of this NERC-funded project lies in providing a potential solution for coastal protection at a key location on the Dungeness south shore. The EA meeting on the 24th July 2015 recognized that the Dungeness nuclear power station site is beyond the limits, i.e. down-drift, of the proposed options for Broomhill to Dengemarsh Sewer. Consequently, it is likely to be impacted by any future plans for the adjacent, up-drift coast. Discussion with stakeholders from the Crown Estate, Natural England, National Grid, EDF and the MoD led to one of the project's sandscaping interventions being considered subsequently. In essence, the sandscaping option may offer an effective future defence for the Magnox, EDF and National Grid infrastructure for the next 50 years, reducing coastal erosion and mitigating flood risk whilst working with natural process. The Crown Estate are continuing to act in a co-ordination role to explore the environmental and economic viability of a sandscaping option for Dungeness.
Date Materialised	2015
Type of Impact	Economic, Policy & public services
Sectors used	Energy, Environment

Impacts?	Yes
Findings	The main realised impact of this NERC-funded project lies in providing a potential solution for coastal protection at a key location on the Dungeness south shore. The EA meeting on the 24th July 2015 recognized that the Dungeness nuclear power station site is beyond the limits, i.e. down-drift, of the proposed options for Broomhill to Dengemarsh Sewer. Consequently, it is likely to be impacted by any future plans for

	the adjacent, up-drift coast. Discussion with stakeholders from the Crown Estate, Natural England, National Grid, EDF and the MoD led to one of the project's sandscaping interventions being considered subsequently. In essence, the sandscaping option may offer an effective future defence for the Magnox, EDF and National Grid infrastructure for the next 50 years, reducing coastal erosion and mitigating flood risk whilst working with natural process. The Crown Estate are continuing to act in a co-ordination role to explore the environmental and economic viability of a sandscaping option for Dungeness.
Date Materialised	2015
Type of Impact	Economic, Policy & public services
Sectors used	Energy, Environment