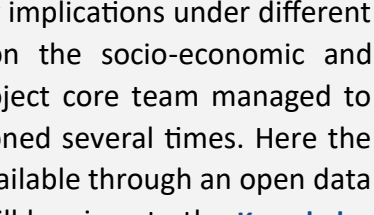




Photo: Mariana Mata Lara (GEO)

European Union's Horizon 2020 Programme GA N° 773782



What is COASTAL about?

COASTAL is an EU funded 4-year multi-actor Horizon 2020 research and innovation action. The goal of the COASTAL project is to formulate and evaluate business solutions and policy recommendations aimed at improving the coastal-rural synergy to foster rural and coastal development while preserving the environment.

[Read more](#) | [Download the project flyer](#)

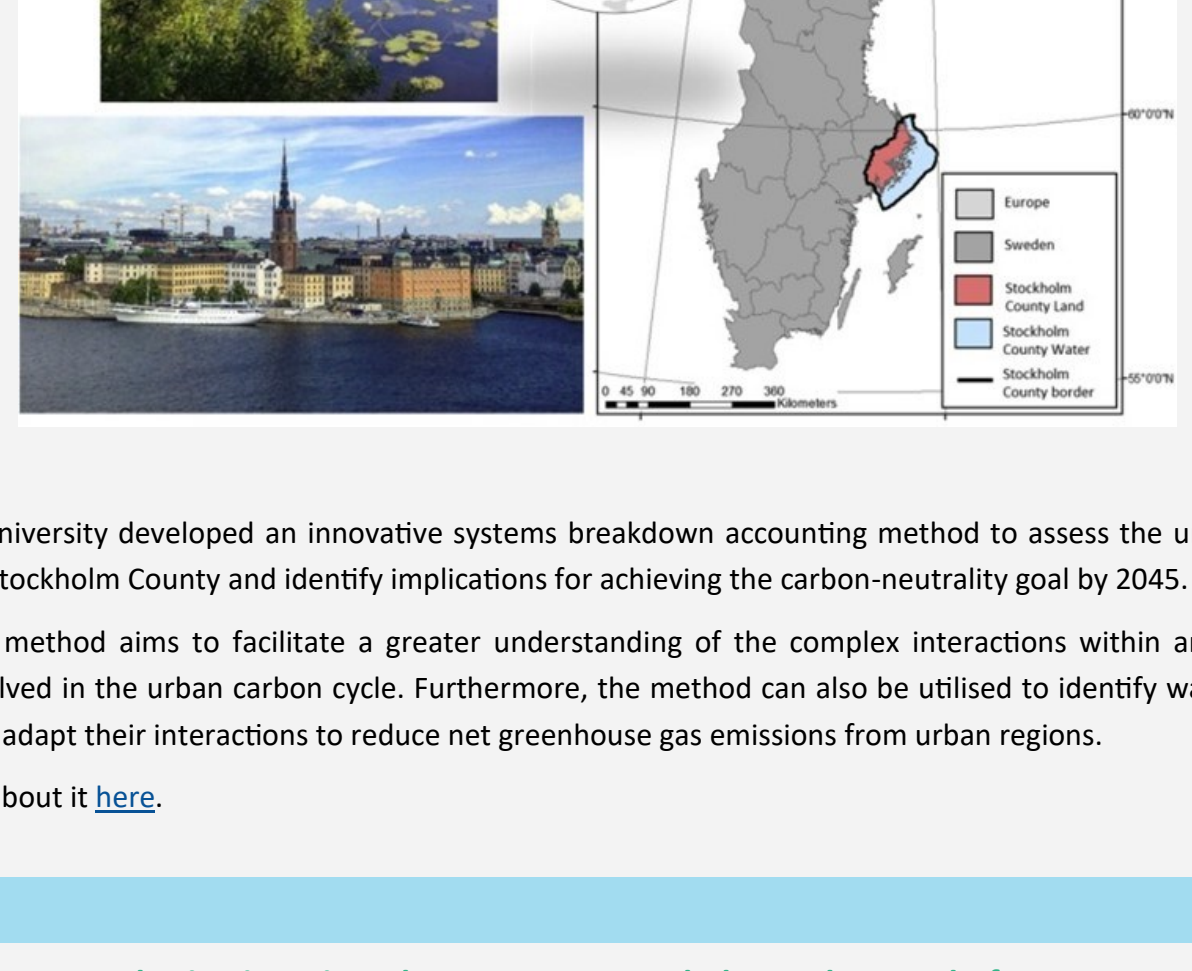
PROJECT UPDATES FROM THE COORDINATOR

In this important, final year of the project the COASTAL partners will work towards making the outcomes of their work exploitable for applications to the study areas of the project and new regions. The modelling of land-sea systems was concluded by the end of 2021 and the priority is now to examine the policy implications under different scenarios, preparing for evidence-based road maps which take into consideration the socio-economic and environmental uncertainties. Despite the difficult conditions of the pandemic the project core team managed to organize the General Assembly meeting in Rochefort (France), which had been postponed several times. Here the partners discussed the progress of the modelling, how to make the project outcomes available through an open data repository, and the planning of the final event in Ostend in October 2022. A key role will be given to the Knowledge Exchange Platform of COASTAL, which will serve as interactive forum for ensuring a durable project legacy. Different target groups at the EU, national and local-regional scale level will be guided to the relevant tools and results, highlighting the value of the COASTAL approach for addressing complex policy problems in a synergistic manner. Several innovative examples for the Swedish Multi-Actor Lab and events spotlighting the project are presented in this newsletter.

Author: Jean-Luc de Kok (VITO)

LATEST UPDATES FROM COASTAL

Finding solutions to complex socio-environmental problems: innovative approach to reduce eutrophication across the Baltic Sea



Eutrophication, the gradual increase in the concentration of nutrients in an aquatic ecosystem, used to be a slow, natural process. However, human intervention left its mark and nowadays we are confronted with various ecological problems caused by the excessive amount of nutrients. These excess nutrients, such as phosphorus or nitrogen, in aquatic ecosystems lead to nutrient pollution, which in turn causes significant ecological degradation.

In the past, various policies and management measures were designed and implemented to mitigate nutrient loads and combat eutrophication in the Baltic Sea region, but with little success.

The lead COASTAL partner for the Swedish MAL3 (Multi-Actor Lab 3), Stockholm University, has developed a quantitative typology approach to nutrient source attribution across the whole Swedish coast of the Baltic Sea. This approach makes it possible to distinguish between active and legacy nutrient sources, a distinction which will help create effective mitigation measures to reduce the adverse impacts of excess nutrients on the aquatic ecosystem.

To find out more about this approach, read the full open access article here: <https://doi.org/10.1002/hyp.14284>

Sweden is in good hands: COASTAL partner develops method to help achieve the goal of carbon-neutrality by 2045

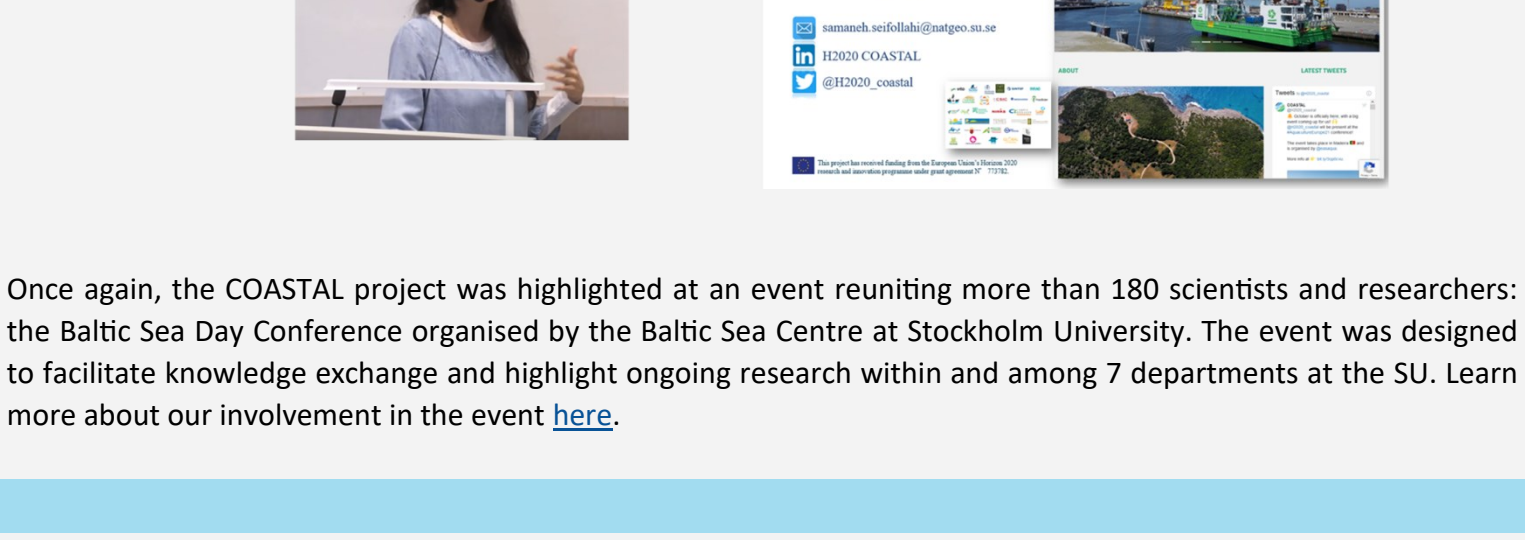


Stockholm University developed an innovative systems breakdown accounting method to assess the urban carbon cycle in the Stockholm County and identify implications for achieving the carbon-neutrality goal by 2045.

This original method aims to facilitate a greater understanding of the complex interactions within and between systems involved in the urban carbon cycle. Furthermore, the method can also be utilised to identify ways in which societies can adapt their interactions to reduce net greenhouse gas emissions from urban regions.

Learn more about it [here](#).

Sharing is caring: the COASTAL Knowledge Exchange Platform



The Knowledge Exchange Platform, connecting all the Multi-Actor Labs within COASTAL, is the core and main legacy of the project. Through this platform, coastal and rural operators and planning agencies will have access to a pool of resources that will help them gain knowledge, come up with solutions, and learn from the experiences of other regions who faced similar problems.

Make sure to keep an eye on us in the following months as we will upload more resources and valuable content to the platform!

LATEST NEWS FROM COASTAL

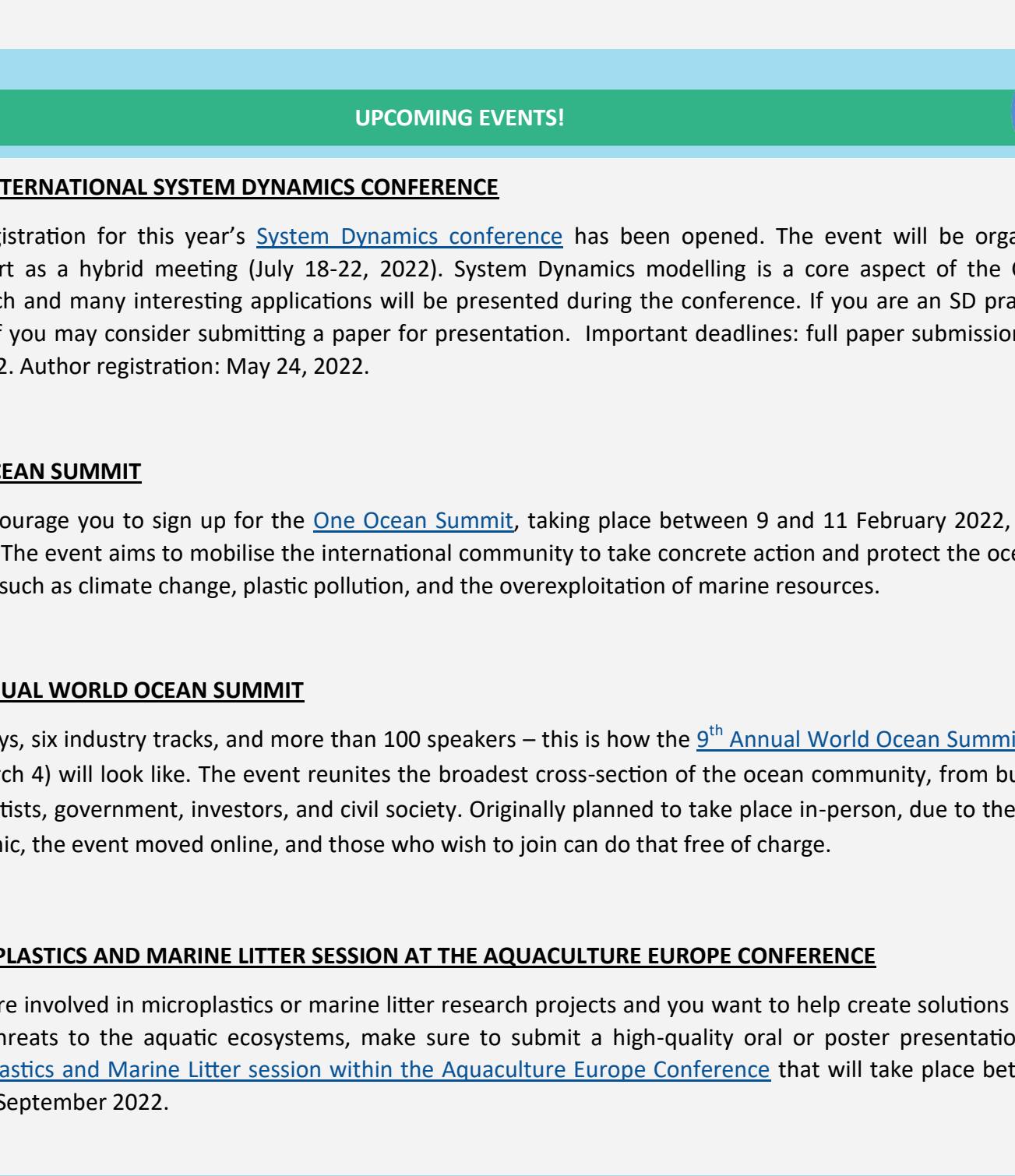
COASTAL presented in two posters during the Aquaculture Europe 2021 conference

This year's Aquaculture Europe event, organised by the European Aquaculture society, took place in Madeira, Portugal, and its focus was the role of aquaculture in the regional development of MADEIRA. The COASTAL project was highlighted in not one but two presentations, by two of the project partners: INRAE (the French National Research Institute for Agriculture, Food, and Environment) and GEONARDO. You can read more about the topics of the presentations [here](#).

COASTAL presentation at the second biennial EU conference on Modelling for Policy Support

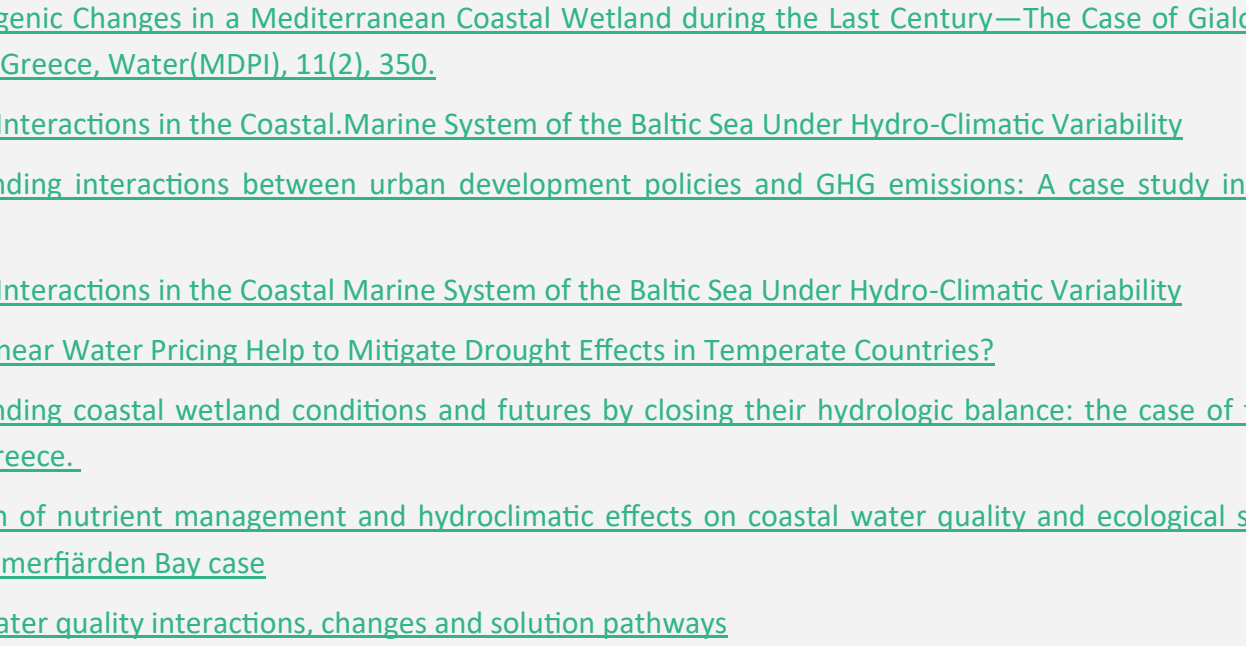
2021 EU Conference on modelling for policy support 26-11-2021

2021-11-26 | 09:30 - 18:00 | [Access](#)



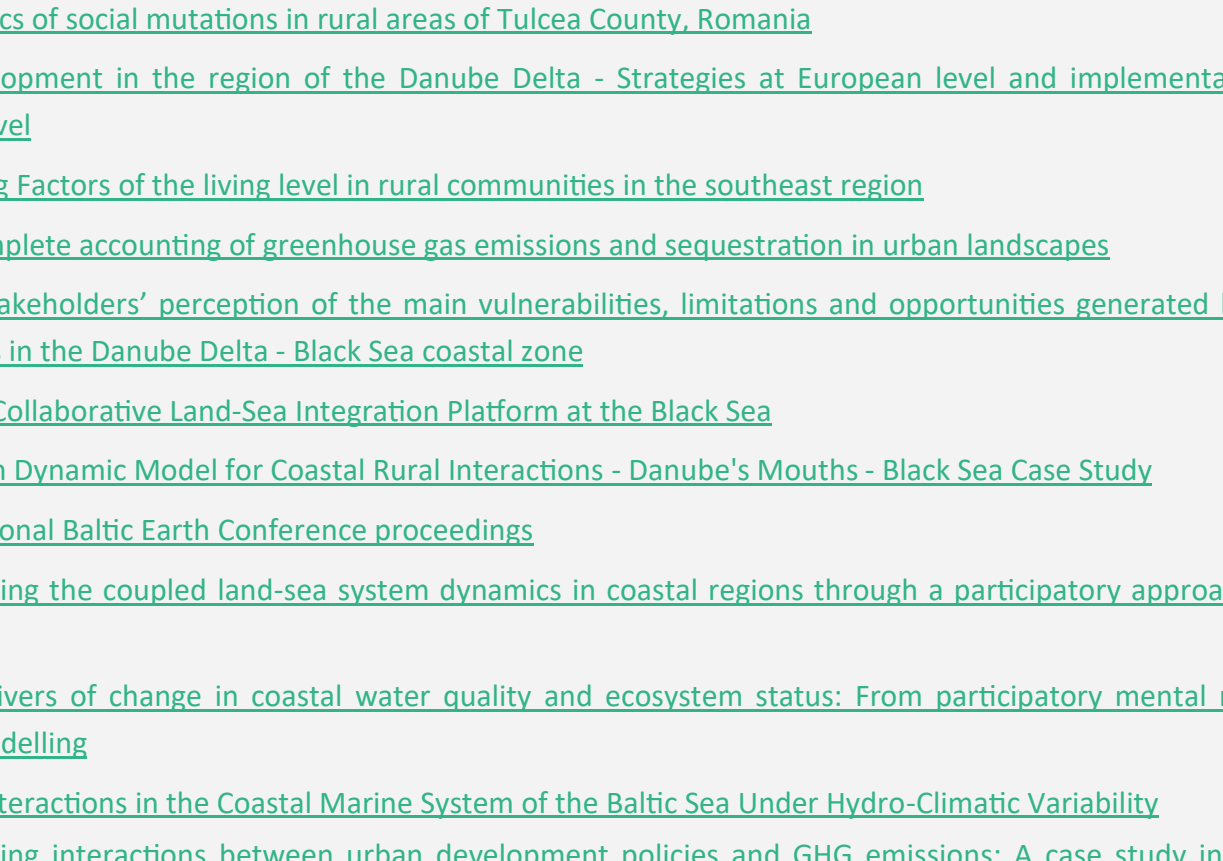
On behalf of all project partners, Sameneh Seifollahi from Stockholm University introduced COASTAL to a large audience made up of researchers and policymakers, who gathered to identify and discuss common challenges and solutions to using models for policy support. The event consisted of 9 sessions and 5 workshops and reunited more than 850 participants. Read about the event in detail [here](#).

COASTAL in the spotlight at the Baltic Sea Day Conference



Once again, the COASTAL project was highlighted at an event reuniting more than 180 scientists and researchers: the Baltic Sea Day Conference organised by the Baltic Sea Centre at Stockholm University. The event was designed to facilitate knowledge exchange and highlight ongoing research within and among 7 departments at the SU. Learn more about our involvement in the event [here](#).

The future is blue: EU Commissioner Sinkevičius reinforces the EC's commitment to protect biodiversity and fight climate change



EU Commissioner for the Environment, Oceans and Fisheries, Virginijus Sinkevičius, made an official visit to Ostend, in Belgium, to engage with local stakeholders and discuss the potential of aquaculture to meet the demand for sustainable food. Pleased with the local initiatives, the Commissioner praised the region of Flanders for rising up to the challenge of making the blue economy a tangible reality and not just "a concept on paper". Read more about the Commissioner's visit [here](#).

Hard work bears fruit: COASTAL-related PhD defense at Stockholm University



Satellite image of algae blooms in the coastal and open sea waters of the Baltic Sea, south west of Stockholm (representing coastal waters links with land, hydroclimate and open sea). Contains modified Copernicus Sentinel data [2019], processed by Yi Shen.

Guillaume Vigouroux, who has worked within the framework of COASTAL on the eutrophication and water quality issues in the Baltic Sea and its coastal areas, has defended his PhD thesis at Stockholm University. The title of his thesis is "Managing coastal eutrophication: Land-sea and hydroclimatic linkages with focus on the Baltic coastal system". More information about this significant achievement [on our website](#).

UPCOMING EVENTS!

2022 INTERNATIONAL SYSTEM DYNAMICS CONFERENCE
The registration for this year's System Dynamics conference has been opened. The event will be organized in Frankfurt as a hybrid meeting (July 18-22, 2022). System Dynamics modelling is a core aspect of the COASTAL approach and many interesting applications will be presented during the conference. If you are an SD practitioner yourself you may consider submitting a paper for presentation. Important deadlines: full paper submission, March 18, 2022. Author registration: May 24, 2022.

ONE OCEAN SUMMIT
We encourage you to sign up for the One Ocean Summit, taking place between 9 and 11 February 2022, in Brest, France. The event aims to mobilise the international community to take concrete action and protect the ocean from threats such as climate change, plastic pollution, and the over-exploitation of marine resources.

9th ANNUAL WORLD OCEAN SUMMIT
Four days, six industry tracks, and more than 100 speakers – this is how the 9th Annual World Ocean Summit (March 1 – March 4) will look like. The event reunites the broadest cross-section of the ocean community, from businesses to scientists, government, investors, and civil society. Originally planned to take place in-person, due to the ongoing pandemic, the event moved online, and those who wish to join can do that free of charge.

MICROPLASTICS AND MARINE LITTER SESSION AT THE AQUACULTURE EUROPE CONFERENCE
If you are involved in microplastics or marine litter research projects and you want to help create solutions to tackle these threats to the aquatic ecosystems, make sure to submit a high-quality oral or poster presentation to the Microplastics and Marine Litter session within the Aquaculture Europe Conference that will take place between 27 and 30 September 2022.

RESOURCES

Did you know you can read all the COASTAL project publications on our website?
If you click on Resources on COASTAL's website, you can view all the different materials the project produced, such as publications, practice abstracts, deliverables, flipbooks, videos etc.

List of publications and downloadable materials:
[Economic Instruments to Combat Eutrophication: A Survey](#) By Jean-Philippe Terreaux and Jean-Marie Lescoffier
[The Baltic Coastal Wetlands Drivers of Water Temperature, Salinity, and Flow to Water for the Large-Scale System of the Baltic Sea](#)
[Scenarios of Nutrient-Related Solute Loading and Transport Fate from Different Land Catchments and Coasts into the Baltic Sea](#), Water (MDPI), 11(7), 1407.
[Anthropogenic Changes in a Mediterranean Coastal Wetland during the Last Century—The Case of Gialova Lagoon, Messinia, Greece](#), Water (MDPI), 11(2), 350.
[Land-Sea Interactions in the Coastal Marine System of the Baltic Sea Under Hydro-Climatic Variability](#)
[Understanding interactions between urban development policies and GHG emissions: A case study in Stockholm Region](#)
[Land-Sea Interactions in the Coastal Marine System of the Baltic Sea Under Hydro-Climatic Variability](#)
[Can Nonlinear Water Pricing Help to Mitigate Drought Effects in Temperate Countries?](#)
[Understanding coastal wetland conditions and futures by closing their hydrologic balance: the case of the Gialova lagoon, Greece.](#)
[Simulation of nutrient management and hydroclimatic effects on coastal water quality and ecological status - The Baltic Himmerfjärden Bay case](#)
[Coastal water quality interactions, changes and solution pathways](#)
[COASTAL-marine solute spreading from different Baltic coastlines](#)
[Dominant Hydro Climatic effects on eutrophication management efficiency in a Swedish coastal bay](#)
[Stakeholder perspectives on sustainable coastal development: A Baltic coast case study](#)
[Connecting research infrastructures, scientific and sectorial networks to support integrated management of Mediterranean coastal and rural areas](#)
[Scenarios of Nutrient-Related Solute Loading and Transport Fate from Different Land Catchments and Coasts into the Baltic Sea](#)
[Understanding the coupled land-sea system dynamics in coastal regions through a participatory approach: A Baltic case study](#)
[Use of co-created causal loop diagrams and fuzzy-cognitive scenario analysis for water quality management](#)
[Trend correlations for coastal eutrophication and its main local and whole-sea drivers – Application to the Baltic Sea](#)
[Tourism Impact Activity Over the Labour Market in the Romania Danube Region County's](#)
[Sustainability, competitiveness and future perspectives for rural development towards bioeconomy-Tulcea county case study](#)
[Drivers for Rural Development of Danube's Delta Region](#)
[The dynamics of social mutations in rural areas of Tulcea County, Romania](#)
[Rural development in the region of the Danube Delta - Strategies at European level and implementation at the National Level](#)
[Determining Factors of the living level in rural communities in the southeast region](#)
[A more complete accounting of greenhouse gas emissions and sequestration in urban landscapes](#)
[Mapping stakeholders' perception of the main vulnerabilities, limitations and opportunities generated by land-sea interactions in the Danube Delta - Black Sea coastal zone](#)
[COASTAL – Collaborative Land-Sea Integration Platform at the Black Sea](#)
[Pilot System Dynamic Model for Coastal Rural Interactions - Danube's Mouths - Black Sea Case Study](#)
[3rd International Baltic Earth Conference proceedings](#)
[Understanding the coupled land-sea system dynamics in coastal regions through a participatory approach: A Baltic case study](#)
[Multiple drivers of change in coastal water quality and ecosystem status: From participatory mental mapping to systems modelling](#)
[Land-Sea Interactions in the Coastal Marine System of the Baltic Sea Under Hydro-Climatic Variability](#)
[Understanding interactions between urban development policies and GHG emissions: A case study in Stockholm Region](#)

WATCH THE LATEST VIDEOS OF COASTAL



JOIN US
Your active engagement is important to ensure that the innovative tools, approaches and policy recommendations we develop reflect the views of those who are directly concerned with improving the coastal-rural synergy to foster rural and coastal development while preserving the environment.

GET INVOLVED IN COASTAL
Participate in national workshops;
Take part in the Multi Actor Labs;

SUBSCRIBE TO OUR NEWSLETTER
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This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement No 773782.

