**SEMINAR ANNOUNCEMENT**

**Evaluating coastal flooding in a climate change scenario: AdriaClim and CASCADE projects**

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Friday 22 September 2023, h.11:15, Room IDRA

Climate change is enhancing sea level rise and storminess effects on coastal systems, affecting the morphology of coastlines and impacting coastal communities and ecosystems. The loss of beach is one of the most damaging consequences of the climate change for coastal cities located along the Adriatic Sea since their economy greatly depends on summer tourism. Moreover, coastlines are strategic areas, densely populated and characterized by the presence of important infrastructures. Considering that people are expected to move towards the coast in the future, such environment will become more and more exposed and vulnerable to climate change. Therefore, it is essential to gain information at an adequate scale in order to identify effective adaptation measures. Adriaclim and Cascade projects aimed at evaluating inland penetration of sea water along the Marche Region using two different approaches: 1) a simple “bathtub” method applied to the entire Marche coastline, to highlight areas likely prone to intense inundation; 2) a more accurate numerical model applied to several test sites, to gain detailed knowledge of inundation perimeters. Both approaches have been applied with forcing conditions provided by the Intergovernmental Panel on Climate Change and the Copernicus Climate Change Service through the RCP8.5 emission scenario projected to 2070.

*PhD.* ***Agnese Baldoni*** *is a Post-Doctoral researcher in hydraulics at the Università Politecnica delle Marche (Italy). Her activity is mainly focused on the analysis of the hydro-morphodynamics evolving at estuaries, recently also considering climate change effects. Some of her research dealt with the evaluation of inundation perimeters for the Marche Region coast in a climate change scenario. With her work, she contributed to the Regional Plan for Adaptation to Climate Change. She is now involved in a project funded by the Department of Defence of the United States, aimed at studying the burial and motion of UXOs in a muddy micro-tidal estuary.*

***All interested people are invited to attend the seminar, in particular Master students in Environmental and Civil Engineering******, PhD students and researchers in water science and engineering.***