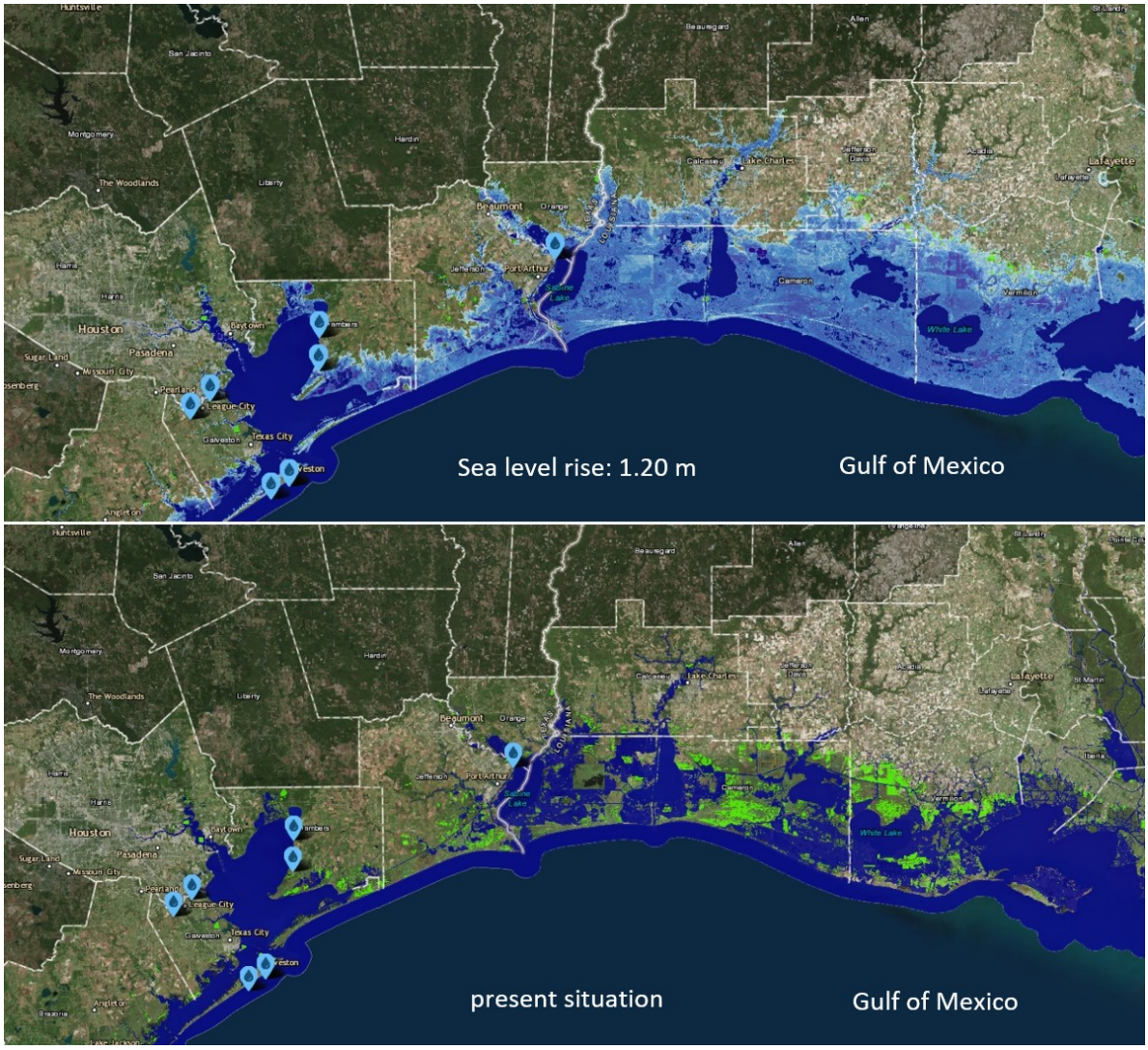
1.1 Interactive flood maps (sea level rise, USA)

OECD GP Activity	UN SF Activity	UN SD Goals / Targets
1. Natural hazards identification and communication, NH (early) warning systems	1. Understanding disaster risk	16.10 Ensure public access to information ...

Classification according to OECD Guiding Principles, UN Sendai Framework Priorities/Activities, and UN SDGs and Targets

Figure 1: Flood-prone areas at the US south coast with a sea level rise of 1.20 meters and present situation



Source: © National Oceanic and Atmospheric Administration

Figure 2: Flood-prone areas of Port Arthur

Source: © National Oceanic and Atmospheric Administration

Short Facts:	Natural Hazard(s) Considered:
Governance approach: Hazard communication **Source:** NOAA (National Oceanic and Atmospheric Administration) **Entry into force:** **Targeted Stakeholders:** Operators, competent authorities **Scope of applicability:** National, regional	• Sea level rise • Flooding **Climate change:** Considered

Description

The main causes of sea level rise are thermal growth of water, ice loss from West Antarctica and Green-land, together with melting of polar ice caps and glaciers. Given that many industrial production plants are located close to the coast, they can be affected by sea level rise in combination with storms (e.g. hurricanes) and heavy rainfall.

Interactive flood maps on the Internet can illustrate flood-prone areas as a function of sea level rise worldwide. One provider of high-quality information about the endangered areas is the National Oceanic and Atmospheric Administration (NOAA).

The maps provide a first impression of the flood-prone areas in the USA. The potentially flooded areas can be viewed at a projected sea level rise of 1 and up to 10 feet. As the picture of Port Arthur shows, satellite images allow a very high resolution. The information can be used for land-use planning and Natech risk assessment.

Good information about at-risk areas around the world is also available on the website flood.firetree.net. The maps on that site are based on data from Google and NASA. Satellite images are also available as an alternative to hazard maps.

Link/Contact:

https://coast.noaa.gov/slr/#/layer/slr/1/-10440624.251711994/3457892.2897673054/8/satellite/none/0.8/2050/interHigh/midAccretion

Comments by the UN/OECD Natech-Steering Group:

Sea level rise due to climate change may have different effects on different coastlines. There are uncertainties in the projections of sea level rise. To evaluate flood risks, the level of floods needs to be added to the (increased) sea level. Maps basing on satellite data provide an overview. A detailed evaluation of sea level rise and flood levels may be required for decisions on the siting of new installations.

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