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<u>Results of the Study of Danger, Vulnerability and Risks in Coastal</u> <u>Municipalities: Holguin Science and Technology for Mitigation</u>

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Coastal municipalities have been affected by extreme meteorological phenomena as an intense drought to torrential rains and hurricanes Ike, Sandy, Mathew and Irma in 2008, 2012, 2016 and 2017, respectively. Between the main affectations caused by these phenomena there were extensive floods, river and dams over flowing which achieve to take measures with a high cost in economic and human resources. This situation, as well as the historical memory of the territory and the indications of National Defense Council, entailed to the accomplishment of the Study of Hazard, Vulnerability and Risks caused by extreme weather phenomena. The study was executed according to the methodology elaborated by the CITMA Group of Risk Evaluation on the basis of scientific and technological investigations such as mathematical modeling, uses of geographic information systems, hydrological modelling. Basic information was obtained from the competent state Organisms in each sphere of the territory. The results shows the distribution in each municipality of hazard, vulnerability and risk of disaster by floods for every Popular Councils, considering probabilities. Finally, the proposed measures are included in the Plan of Disaster Reduction at the municipality for diminishing the vulnerabilities. Coastal flooding due to over-elevation of sea level and waves, caused by hurricanes, cold fronts and other extreme weather events they represent the main danger, due to the potential effects that they cause on the natural heritage and built at the present time and for the 2050-2100.

The state plan for confronting climate change is an integral proposal, which presents a first identification of prioritized areas and places, their effects and actions to be undertaken in each country taking into account the following priorities: Preserve life of people, Physical and food security and Tourism development.