

## **Evaluation of the risks of floods and freshets at the mouths of the rivers of Kolkhety Lowland (Rv. Rioni, Supsa, Natanebi)**

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The coastal zone of the Black Sea of Georgia covers a 330-km-long section. More than 150 large, average and small rivers flow into the sea. Study of the risks of flooding and its consequences is crucial for the Black Sea region of Georgia, particularly on the background of more frequent water catastrophic events.

Basing on the combined investigation of the eustatic and geological processes, the coastal zone of Georgia is divided into three major sections, with its central part, located between the rivers Enguri and Natanebi, subsiding most rapidly. Poti-Supsa coastal zone in the central part is characterized by the highest speed of subsidence (within 4,0–5,6 mm/year). The activation of eustatic processes are followed by the erosion and beach degradation processes, intensification of floodings and movement of the coastal line inland.

On the background of the climatic change, increasing of frequency and severity of the natural disasters (storms, floods and freshets) is observed. These processes are strongly revealed in the areas of river mouths of Kolkheti Lowland, especially when the storms and floods phenomena occur simultaneously.

The article considers the periods of coincidence of the water peak discharge at the river mouths and stormy phenomena and their impact on coastal erosion. The dynamics of floods and freshets was established by evaluating the correlation coefficients between the water peak discharge and its ordinal number of trends in different months of the observed 40-year-long period. Investigation revealed, that, the coincidence of storms with flood phenomena has a random character. For the rivers studied (Rv. Rioni, Supsa and Natanebi), the period of coincidence of the maximum of storms and river discharge is observed from February to April, resulting in the intensification of erosional processes in the area of river mouth.