

Estuarial-deltaic system of the Amur River

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Abstract The Amur River mouth is an estuary-delta type. One of the main features of this estuary is the absence of the above-water delta. In current conditions the Amur River forms intensive underwater delta-sleeves and fairways of the Amur liman. The critical velocity of the stream, in which all sediments of a certain grain size stop moving, is calculated. Curves of the interface of surface level of the river and the sea in the quasi-steady flow of water and in periods of tides are calculated. A graphical relationship between the flow of water in the top of the estuarial area, and a fixed drop of water between the posts at the mouth of the river (Nikolaevsk-on-Amur) and in the near-shore zone (Cape Pronge), allows calculation of the water flow in the tidal estuary of the Amur River without measurement of tidal flow rates.

Key words Amur River; estuary-delta type; runoff; velocity; near-shore zone